

Magnitude and Frequency of Floods in the United States

Part 11. Pacific Slope Basins in California

Volume 2. Klamath and Smith River Basins and Central Valley
Drainage from the East

L. E. YOUNG and R. W. CRUFF

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STEWART L. UDALL, *Secretary*

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William T. Pecora, *Director*

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MAGNITUDE AND FREQUENCY OF FLOODS IN THE UNITED STATES

PART 11. PACIFIC SLOPE BASINS IN CALIFORNIA— KLAMATH AND SMITH RIVER BASINS AND CENTRAL VALLEY DRAINAGE FROM THE EAST

By L. E. YOUNG and R. W. CRUFF

ABSTRACT

This report presents a method for determining the probable magnitude of annual maximum floodflows for any recurrence interval between 1.2 and 50 years for any stream, gaged or ungaged, in the area studied. This report and a companion report (U.S. Geological Survey Water-Supply Paper 1685) cover the region designated as "Part 11" in the series of Geological Survey reports entitled "Surface Water Supply of the United States." The area covered by this report includes the Klamath and Smith River basins and the small streams between them that drain into the Pacific Ocean, plus all streams draining into the Central Valley from the east and those draining into the Central Valley from the west, north of the Cottonwood Creek basin. The area has been divided into four regions of differing flood-frequency characteristics. The flood-frequency relation is undefined in one of these regions—the flat Central Valley—because of the lack of records for unregulated streams within its boundaries.

The hydrologic basin characteristics having the most significant effect on the flood magnitude were drainage area, mean annual precipitation, slope, and altitude. These were used as independent variables to derive equations for determining flood magnitudes for recurrence intervals of 1.2, 2.33, 5, 10, 25, and 50 years. From these equations, flood magnitude-frequency relations can be constructed. The procedure for computing flood magnitude is not applicable at sites where the drainage area is less than 10 square miles or where the usable storage exceeds 4.5 million cubic feet (103 acre-feet) per square mile.

INTRODUCTION

PURPOSE AND SCOPE

This volume is one of a series of flood-frequency reports covering the conterminous United States. The objectives of this report are (1) to present all significant flood-peak data for the region covered by the report and (2) to present relations derived from an analysis of the flood data whereby the flood magnitude and its probability of occur-

rence at any site on any stream in the area, with certain limitations, can be evaluated. The limitations are discussed in the section of the xvreport titled "Selection of gaging-station records."

The area covered by this report, volume 2, and a companion report, volume 1, U.S. Geological Survey Water-Supply Paper 1685, comprises the Pacific slope basins in California and is combined in a single report designated Part 11 in the series of reports published by the Geological Survey entitled, "Surface Water Supply of the United States." The two volumes are needed in the current nationwide series entitled "Magnitude and Frequency of Floods in the United States" because the flood data for Part 11 are too voluminous to be contained in a single report. Figure 1 shows the Part 11 area in the conterminous United States; the area covered by this report is shaded and includes the Klamath and Smith river basins and the small streams between them that drain into the Pacific Ocean, plus all streams draining into the Central Valley from the east and those draining into the Central Valley from the west, north of the Cottonwood Creek basin. The report area, in turn, was divided into four regions. The flood-frequency relation is undefined in one of these regions—the flat Central Valley—because of the lack of records for unregulated streams within its boundaries. The division was not arbitrary; the regional boundaries were established on the basis of topography, physiography, and flood magnitude-frequency characteristics that are described in this study.

The relation between flood peaks and hydrologic characteristics was investigated by a multiple-regression analysis of the data. The hydrologic characteristics that were considered include topographic, climatic, and runoff variables. Statistical tests were applied to eliminate those hydrologic characteristics that were not significant. The equations defined are based on a comprehensive study of all flood data available in the area and provide a means for determining the most probable flood magnitude for any recurrence interval between 1.2 and 50 years, within the scope of the data.

Flood-peak data through the 1965 water year for gaging stations with 5 years or more of record prior to the 1964 water year are tabulated in this report, and, in addition, significantly large flood peaks at miscellaneous sites and at gaging stations with less than 5 years of record are included.

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This report was prepared in the Menlo Park district office of the Water Resources Division, U.S. Geological Survey, under the general direction of Walter Hofmann, district chief for California. Technical guidance and review were furnished by A. Rice Green and M. A.

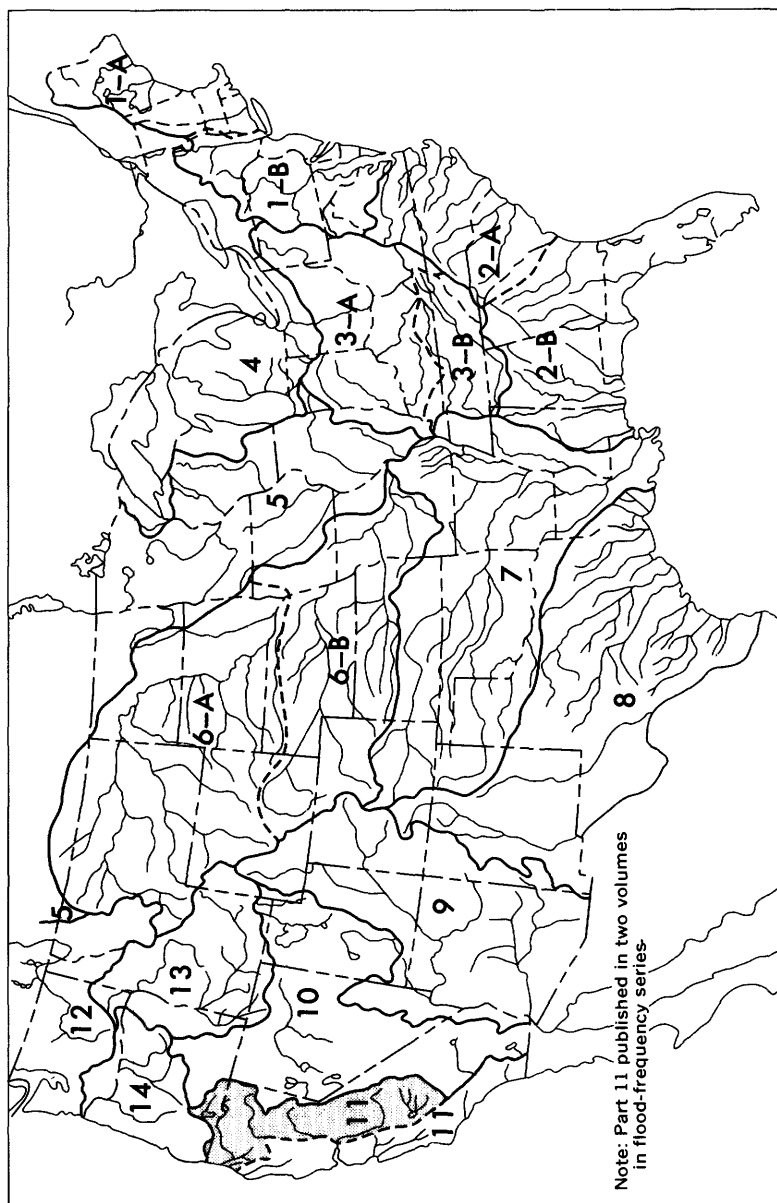


FIGURE 1.—Map of conterminous United States. The area covered by this report is shaded.

Benson, hydrologists, U.S. Geological Survey, Washington, D.C., and S. E. Rantz, hydrologist, U.S. Geological Survey, Menlo Park, Calif. Acknowledgment is made of the contributions to this report, primarily in the assembling of the data, by E. D. Cobb and Maxine A. Rose, hydraulic engineer and engineering technician, respectively, U.S. Geological Survey, Menlo Park, Calif.

The streamflow records used, unless otherwise stated, were collected by the U.S. Geological Survey in cooperation with many Federal, State, county, and municipal agencies. Detailed acknowledgment of cooperation is given in the series of water-supply papers published by the Geological Survey entitled "Surface Water Supply of the United States, Part 11, Pacific slope basins in California."

FLOOD-FREQUENCY ANALYSIS

Flood data can be analyzed as an annual flood series or as a partial-duration series. An annual flood series consists of the highest momentary peak discharge for each water year. A partial-duration series includes all peaks above a selected base discharge, regardless of their relation to a given time period. The two methods have been shown to give virtually the same results for recurrence intervals greater than 10 years (Langbein, 1949). Owing to the fact that most designers are interested in flood magnitudes with recurrence intervals of 10 years or more, the choice of series is of little practical importance. However, because of its relative simplicity, theoretical soundness (Chow, 1950), and the availability of the data, the annual flood series was used for this report.

After selecting the type of flood series, it is necessary to decide on one of the several methods available for analyzing the flood magnitude-frequency relation. In the past the Geological Survey has used a method described by Dalrymple (1960) and now widely known as the index-flood method. However, as a part of the continual appraisal of methodology, another method was investigated and described by Benson (1962 and 1964). This method based on the correlation of flood magnitudes with significant hydrologic variables of the basin has been shown by Cruff and Rantz (1965) to be an improvement over the index-flood method, and consequently was used to define the flood magnitude-frequency relations presented in this report.

SELECTION OF GAGING-STATION RECORDS

The U.S. Geological Survey (1959, 1960, and 1964) compilation reports contain streamflow data collected by the Survey prior to September 30, 1960 for all gaging stations in the Part 11 area. These reports were used to ensure that all available streamflow records were

considered for inclusion in this report. Flood-peak data at miscellaneous sites and at gaging stations are included in the tables of this report. However, only those stations with at least 10 years of record prior to the 1964 water year were considered for use in the flood-frequency analysis.

There are several reasons why some of the gaging-station records that were considered could not be used in the analysis. Obviously, those stations whose annual peak discharges are seriously affected by artificial storage or diversion could not be used. However, where possible, diversion and flow in the stream were combined to provide a usable record of natural flood peaks.

Criteria for deciding when a station with at least 10 years of stream-flow record was not suitable for use in the flood-frequency analysis are listed below.

1. Ten annual momentary maximum discharges not available.
Station records with 10 years of streamflow data do not always contain annual peaks for all 10 years. Also, some of the older records contain daily maximum discharges rather than momentary maximums, and, unless the daily figures could be adjusted to give reliable figures of momentary maximum discharges, they were not used.
2. Less than 25-percent difference between drainage areas of adjacent stations on the same stream, the percentage difference being based on the size of the smaller drainage area. Only the station with the longer record was used unless there was a period of nonoverlapping record. If a nonoverlapping period existed, the shorter record was combined with the longer record by a ratio based on the size of the drainage areas.
3. More than 4.5 million cubic feet (103 acre-feet) of usable storage per square mile (Benson, 1962, p. 8). If record was available for at least 10 years prior to the construction of reservoirs that caused the criterion to be exceeded, the record prior to that time was used.
4. Some special indication of excessive diversion or regulation, even though not exceeding the usable storage criterion. A situation of this kind may arise where the gage is directly below a large reservoir.
5. Drainage areas smaller than 10 square miles. Only a few records are available on streams in this category. A project is presently (1965) underway to obtain data needed to define flood magnitude-frequency relations throughout California for small streams.

After the above criteria were met, records from 147 gaging stations remained for use in the flood-frequency analysis for the area covered by this report. The location of gaging stations not excessively regulated by storage or diversion and with 5 or more years of record prior to the 1964 water year is shown in plate 1. The 147 gaging stations used in the flood-frequency analysis are shown by solid circles, and those tabulated but not used are shown by open circles.

FLOOD FREQUENCY AT A GAGING STATION

Many of the gaging-station records used in this study were short-time samples, but in order to obtain reasonable areal coverage it was necessary that they be used. Whenever possible the time base of these short-term stations was extended by graphically correlating the available annual peak discharges with peak discharges from one or more nearby long-term stations. The correlation, if reasonably good, was then used to estimate annual peaks for the years without record at the short-term station.

When the record of annual peaks for a station was ready for analysis, each peak was assigned an order number according to its magnitude, starting with the largest as number 1. Next, the plotting position or recurrence interval, T , for each of the peaks was computed by the formula

$$T = \frac{n+1}{m}$$

where n = the number of years of record and m = the relative magnitude (order number) of the event.

The recurrence intervals were adjusted, where appropriate, on the basis of historical or qualitative information. For example, several stations in northwestern California have 34 years of record (1932-65), and the 1965 and 1956 peaks are the greatest and the second greatest, respectively, during the period of record. Without considering historical information prior to 1932, the recurrence intervals for these two floods would be 35 and 17.5 years, respectively. However, in 1862 a flood estimated to be about equal in magnitude to the 1956 flood occurred, and local records reaching back to 1853 indicate that the peaks of 1862 and 1956 were exceeded only by the 1965 peak. Therefore, the 1965 peak has an order of magnitude of 1 in at least 112 years, giving it a recurrence interval of 113 years instead of the 35 years originally computed. Furthermore, the two peak discharges that occurred in 1862 and 1956 have orders of magnitude of 2 and 3 in 112 years, giving them recurrence intervals of 56.5 and 37.7 years, respectively. The recurrence intervals for other peaks during the period of record were not adjusted. All recorded peaks were then plotted at their

appropriate recurrence intervals on extreme-value probability paper (Powell, 1943), and a straight line or gentle curve of best fit was drawn by eye. Estimated peaks were not plotted; their only purpose was to adjust the time base (order number) of the recorded peaks. Because the computed recurrence intervals of the larger (less frequent) floods are not as reliable as those of the smaller (more frequent) floods, the larger floods tend to scatter more than the smaller floods when plotted on extreme-value probability paper.

Peak-discharge values were selected from each frequency curve at recurrence intervals of 1.2, 2.33, 5, 10, 25, and 50 years. Flood magnitudes for the four shorter recurrence intervals were available for all sites. However, because of the limitations on extending peak-discharge records by correlation, magnitudes for the 25- and 50-year floods were not available at all sites. The table below lists the number of flood peaks available for analysis for each of the six recurrence intervals. The flood peaks are the dependent variables that were correlated with pertinent hydrologic characteristics.

Recurrence interval (years)	Number of annual peaks		
	Region C	Region D	Region E
1.2-----	112	24	13
2.33-----	112	24	13
5-----	112	24	13
10-----	112	24	13
25-----	103	20	12
50-----	90	19	8

HYDROLOGIC CHARACTERISTICS

The rate of runoff from a basin is affected by its many hydrologic characteristics. It is neither feasible nor desirable to relate peak discharge to all these characteristics, some of which may be relatively unimportant; consequently, it is necessary to determine which of the hydrologic characteristics are significantly related to flood peaks and can also be evaluated numerically. Selection of the hydrologic characteristics used in this study was made on the basis of studies by others (for example, Benson, 1962) in this and other areas, as well as from first-hand knowledge of the area. The hydrologic characteristics considered in this analysis can be classed in three groups: topography, climate, and runoff.

TOPOGRAPHY

Six topographic characteristics were considered in the analysis. They are drainage area, main-channel length, an index of main-channel slope, an index of basin altitude (above mean sea level), percentage of drainage area above an altitude of 5,000 feet, and percentage of drainage area covered by lakes and ponds. Geological Survey topo-

graphic maps of the 7.5- and 15-minute series were used in determining the various topographic characteristics.

The drainage area (A) is the area of the drainage basin, in square miles, measured in a horizontal plane. It is probably the most important of these characteristics. The drainage area for the stations used in the analysis ranges from 12 to 12,100 square miles.

The main-channel length (L) used in the analysis is the length, in miles, of the longest continuous stream channel from the gaging station to the drainage divide. The main-channel length for the stations used in this analysis ranges from 5.4 to 402 miles.

To determine the main-channel slope index (S), points at 10 and 85 percent of the total channel length upstream from the gaging station were located, and the altitude at these points was determined. The channel slope, in feet per mile, was computed as the difference in altitude divided by the distance between the two points. The slope index for the stations used in the analysis ranges from 1.5 to 618 feet per mile.

The basin-altitude index (E) used in the analysis is the average of the altitudes of the two points 10 and 85 percent of the distance along the main channel upstream from the gaging station. It is expressed in thousands of feet. The altitude index for the stations used in the analysis ranges from 0.24 to 9.50. The altitude index is a substitute for the more commonly used mean altitude of the basin. The altitude index was used because a high degree of correlation was found to exist between the altitude index and the mean altitude of the basin and because the altitude index is much easier to compute.

The percentage of the drainage basin above an altitude of 5,000 feet (A_2) was determined by placing a grid over a contour map of the entire drainage basin. The altitudes at the grid intersection points were then listed, and the percentage of the area above 5,000 feet was determined as the percentage of the listed altitudes that were above 5,000 feet. The values for the stations used in the analysis range from 0 to 100 percent.

The percentage of the drainage area covered by lakes and ponds (La), both natural and manmade, was determined by measuring the area of lakes and ponds within the basin and expressing it as a percentage of the drainage area of the basin. The percentage of the area covered by lakes and ponds for the stations used in the analysis ranges from 0 to 7.4 percent.

CLIMATE

Two climatic characteristics were considered for this analysis—mean annual precipitation and rainfall intensity. The mean annual precipitation (P) is the long-term average annual precipitation over the entire basin, in inches. A map with isohyets showing mean annual precipitation was used to determine the basinwide average of

mean annual precipitation for each basin. The map is shown on plate 2. The mean annual precipitation for the basins used in this analysis ranges from 16 to 101 inches.

The rainfall intensity (I) used for the analysis is the 24-hour rainfall, in inches, with a recurrence interval of 25 years. This value was determined for each basin from isohyets presented by the U.S. Weather Bureau (1961). The rainfall intensity for the basins used in the analysis ranges from 2.3 to 10 inches.

RUNOFF

The mean annual runoff (R) in inches was the only runoff characteristic considered. A base period of 30 years (1934–63) was used. For stations that did not have record for the entire base period correlations were made with nearby stations and the mean for the base period was estimated. The mean annual runoff for the stations used in the analysis ranges from 0.55 to 84.1 inches.

MULTIPLE-REGRESSION PROCEDURES

Multiple regression is defined as the relation between one dependent and two or more independent variables. Use of multiple-regression analysis in flood magnitude-frequency studies requires the development of regression equations expressing flood magnitude as a function of hydrologic basin characteristics. Past experience has shown that the logarithms of peak discharges are linearly related to the logarithms of most hydrologic variables. The equations have the empirical form:

$$Q_T = aB^bC^cD^d \dots \quad (1)$$

where

Q_T = discharge corresponding to a recurrence interval of T years;

a = regression constant;

b, c, d = regression coefficients; and

B, C, D = hydrologic characteristics.

The regression equation is derived by correlating the T -year discharges with the corresponding hydrologic characteristics for all sites used in the analysis and computing the regression constant and coefficients by the method of least squares. Statistical tests are made so that those variables having little or no significance can be eliminated from the equation.

Electronic computing techniques allow rapid computation of regression equations, whereas previously computation either by desk calculator or by graphical solution was required. Computation by desk calculator for more than two variables is a slow, tedious process,

and graphical solutions become subjective and often inaccurate for more than three variables. Thus, when numerous variables are used, the multiple-regression analysis is practical only if an electronic computer is available.

The multiple-regression computer program used in this analysis provides a wealth of statistical information. Computer input data consisted of the flood discharges (dependent variables) for each of the selected recurrence intervals of T years and the hydrologic characteristics (independent variables) for the corresponding basins. Among other statistics, the output data consisted of simple correlation coefficients between each pair of variables, a multiple correlation coefficient, the regression equation constant and coefficients, and the standard error of estimate of the logarithms of the dependent variable. The computed values of the dependent variable, based on the derived regression equation, and the departure between the observed and computed values of the dependent variable for each station used in the analysis were also available. The observed values are those T -year floods which were used as input data for the computer.

The computer program used provided for the elimination of the least significant independent variable (hydrologic characteristic) after an equation was derived and recomputation of the data without this variable. This procedure was repeated until only one independent variable remained. This type of analysis made it possible to determine when no further significant improvement in the results was obtained by the use of additional hydrologic characteristics. The following table shows the amount of improvement indicated by the multiple-correlation coefficient and the standard error of estimate of the dependent variable. Improvement is indicated by the approach of the correlation coefficient and standard error to 1.0 and 0, respectively. It is evident from these data that the inclusion of other variables in addition to A , P , and E causes no significant improvement in the correlation coefficient or standard error.

<i>Hydrologic characteristics</i>	<i>Multiple correlation coefficient</i>	<i>Standard error of estimate (percent)</i>
A -----	0. 73	73
A, P -----	. 93	38
A, P, E -----	. 94	35
A, P, E, A_2 -----	. 95	35
A, P, E, A_2, La -----	. 95	36
A, P, E, A_2, La, R -----	. 95	36
A, P, E, A_2, La, R, I -----	. 95	37
$A, P, E, A_2, La, R, I, L$ -----	. 95	37
$A, P, E, A_2, La, R, I, L, S$ -----	. 95	38

REGIONAL ANALYSIS

Because of the lack of long-term records of natural flow for every stream, one must analyze the available data on a regional basis to derive a regression equation for estimating data for ungaged or short-record sites. For multiple-regression analysis, the regions used should be such that the available hydrologic characteristics will correlate reliably with T -year flood peaks within the region.

As a preliminary analysis, the entire area designated Part 11 was used as one flood-frequency region. The results from this analysis were used to determine if the Part 11 area could be used as a single homogeneous flood-frequency region or whether it would be desirable to delineate smaller regions. Also, this analysis was used to eliminate hydrologic characteristics that were found to be insignificant. On the basis of the preliminary analysis, the physiographic regions delineated by Fenneman (1931), and the major drainage divide six flood-frequency regions were delineated. The area covered by this report contains four of these regions (pl. 1): Sierra Nevada (C), lower Klamath River (D), upper Klamath River (E), and Central Valley (F). The remaining two regions (region A and region B) are considered in a companion report, Water-Supply Paper 1685 (Young and Cruff, 1967).

SIERRA NEVADA REGION

The Sierra Nevada region (C) includes those streams in California draining from the east into the Central Valley south of the Butte Creek basin (pl. 1). The climate of the region ranges from semi-humid to humid with seasonal snow cover at the higher altitudes. Altitudes range from a few hundred feet above mean sea level at the base of the foothills to 14,496 feet atop Mount Whitney. Floods within the region are caused by winter frontal-type storms, by summer thunderstorms, and by spring snowmelt. Most of the annual peaks in that part of the region south of the American River result from spring and early summer snowmelt, particularly at the higher altitudes and on the larger streams. Winter frontal-type storms cause relatively few annual peaks in this area, but those few are considerably greater than the snowmelt peaks. Annual peaks resulting from summer thunderstorms are rare and, except for isolated instances, occur only in the extreme southern part of the area.

North of the American River most of the annual peaks result from winter frontal-type storms, except in the extreme upper parts of the basins where snowmelt peaks make up a part of the annual peak series on the smaller streams. Annual peaks resulting from summer thunderstorms occur rarely, if ever, in this region.

LOWER KLAMATH RIVER REGION

The lower Klamath River region (D) includes the Klamath River basin downstream from the Shasta River basin plus those streams draining into the Pacific Ocean between the Klamath River on the south and the Oregon border on the north. Also included are the west-side tributary basins of the Sacramento River north of the Cottonwood Creek basin and the east-side tributary basins of the Sacramento River that lie north of the Feather River basin and south of the Pit and upper McCloud River basins (pl. 1). The region has a humid climate, with snow occurring at high altitudes. The region is characterized by heavy winter precipitation and long summer drought. Altitudes range from near sea level to 14,161 feet atop Mount Shasta. Floods are generally caused by winter frontal-type storms that bring heavy runoff to large areas. A few floods also result from snowmelt.

UPPER KLAMATH RIVER REGION

The upper Klamath River region (E) includes the Klamath River basin upstream from and including the Shasta River basin plus the Goose Lake basin. Also included are the upper McCloud River basin and the Pit River basin upstream from Shasta Lake (pl. 1). The main stem of the Pit River was not used in the analysis because it is so highly regulated. The climate ranges from semihumid to humid. Altitudes range from less than 2,000 feet to 14,161 feet atop Mount Shasta. Much of the region is underlain by volcanic rock which can affect flood peaks because of its storage capacity. Floods are caused by general winter frontal-type storms and by spring snowmelt.

CENTRAL VALLEY REGION

The Central Valley region (F) includes those streams that lie in the low valley region of the San Joaquin and Sacramento Rivers south of Shasta Lake (pl. 1). The flood-frequency relation is undefined in this region because of the lack of records of unregulated streams within its boundaries.

REGRESSION EQUATIONS

Standard multiple-regression techniques as described by Benson (1962 and 1964) were used in analyzing the available flood data. As a result, equations relating floods of selection frequencies to selected hydrologic characteristics have been developed for each flood-frequency region, except region F.

Drainage area, altitude, and mean annual precipitation were used at all selected recurrence intervals from 1.2 to 50 years to derive regression equations for use in regions C and D. The equations for region C are:

$$Q_{1.2} = 0.00624A^{0.82}E^{-0.32}P^{2.23} \quad (2)$$

$$Q_{2.33} = 0.0526A^{0.83}E^{-0.55}P^{1.99} \quad (3)$$

$$Q_5 = 0.183A^{0.83}E^{-0.58}P^{1.81} \quad (4)$$

$$Q_{10} = 0.336A^{0.84}E^{-0.52}P^{1.74} \quad (5)$$

$$Q_{25} = 0.589A^{0.84}E^{-0.43}P^{1.67} \quad (6)$$

$$Q_{50} = 1.41A^{0.83}E^{-0.30}P^{1.49} \quad (7)$$

The equations for region D are:

$$Q_{1.2} = 2.86A^{0.72}E^{-1.28}P^{1.08} \quad (8)$$

$$Q_{2.33} = 17.4A^{0.72}E^{-1.11}P^{0.80} \quad (9)$$

$$Q_5 = 42A^{0.71}E^{-1.02}P^{0.68} \quad (10)$$

$$Q_{10} = 73A^{0.71}E^{-0.98}P^{0.61} \quad (11)$$

$$Q_{25} = 55.7A^{0.74}E^{-0.84}P^{0.67} \quad (12)$$

$$Q_{50} = 75.1A^{0.76}E^{-0.80}P^{0.62} \quad (13)$$

Drainage area and slope were used to derive regression equations for recurrence intervals from 1.2 to 50 years for use in region E. The equations are:

$$Q_{1.2} = 4.23A^{0.68}S^{0.20} \quad (14)$$

$$Q_{2.33} = 8.28A^{0.66}S^{0.25} \quad (15)$$

$$Q_5 = 11.1A^{0.68}S^{0.28} \quad (16)$$

$$Q_{10} = 8.48A^{0.72}S^{0.37} \quad (17)$$

$$Q_{25} = 4.61A^{0.80}S^{0.54} \quad (18)$$

$$Q_{50} = 2.33A^{0.87}S^{0.72} \quad (19)$$

Equations 2 to 19 are shown in nomograph form on figures 2 to 19. Use of the nomographs is described in the section "Illustrative problem."

A summary of the regression equations is shown in table 1. The number of stations used to define the equation, the values of the regression constant and coefficients, the multiple-correlation coefficient, and the standard error are shown for each equation.

The standard error of estimate, here referred to as standard error, is a measure of the departure of the computed flood magnitudes from those observed. The computed standard errors ranged from 48 to 66 percent for region C, from 29 to 41 percent for region D, and from 25 to 64 percent for region E. These percentages are the average of the plus and minus percentages computed from the standard errors in log units.

TABLE 1.—Summary of regression equations

[T =recurrence interval, in years. Number of stations shown is number used to determine regression equation $Q_T = aA^b E^c P^d S^e$. Independent variables: A =drainage area, E =basin-altitude index, P =mean annual precipitation, S =main-channel slope index]

T	Number of stations	Regression constant <i>a</i>	Regression coefficients				Coefficient of multiple correlation	Standard error (percent)
			<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>		
Region C								
[Independent variables: <i>A, E, P</i>]								
1.2-----	112	0.00624	0.82	-0.32	2.23	-----	0.90	66
2.33-----	112	.0526	.83	-.55	1.99	-----	.93	52
5-----	112	.183	.83	-.58	1.81	-----	.93	48
10-----	112	.336	.84	-.52	1.74	-----	.93	48
25-----	103	.589	.84	-.43	1.67	-----	.92	50
50-----	90	1.41	.83	-.30	1.49	-----	.91	54
Region D								
[Independent variables: <i>A, E, P</i>]								
1.2-----	24	2.86	0.72	-1.28	1.08	-----	0.94	41
2.33-----	24	17.4	.72	-1.11	.80	-----	.96	31
5-----	24	42.0	.71	-1.02	.68	-----	.96	30
10-----	24	73.0	.71	-.98	.61	-----	.96	29
25-----	20	55.7	.74	-.84	.67	-----	.96	31
50-----	19	75.1	.76	-.80	.62	-----	.96	35
Region E								
[Independent variables: <i>A, S</i>]								
1.2-----	13	4.23	0.68	-----	-----	0.20	0.88	64
2.33-----	13	8.28	.66	-----	-----	.25	.90	53
5-----	13	11.1	.68	-----	-----	.28	.90	60
10-----	13	8.48	.72	-----	-----	.37	.93	44
25-----	12	4.61	.80	-----	-----	.54	.97	31
50-----	8	2.33	.87	-----	-----	.72	.98	25

The coefficient of multiple correlation is determined by the ratio of the standard error of the estimated values to the standard deviation of the observed or original values of the dependent variable. It is a measure of the effectiveness of independent variables in explaining the variation in the dependent variable. A value of 1.0 would indicate a perfect correlation, whereas a value of 0 would indicate no correlation. The computed coefficients ranged from 0.898 to 0.934 for region C, from 0.941 to 0.964 for region D, and from 0.885 to 0.98 for region E.

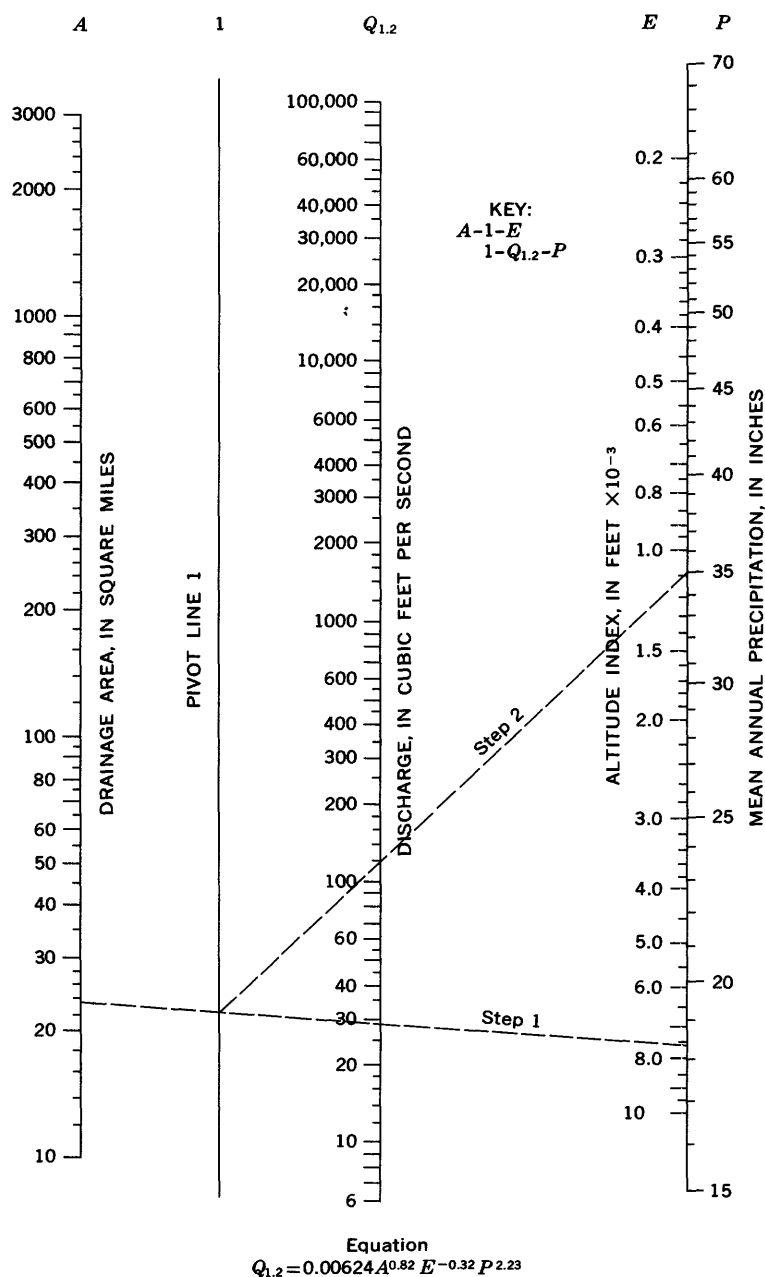


FIGURE 2.—Nomograph for computing 1.2-year flood in region C.

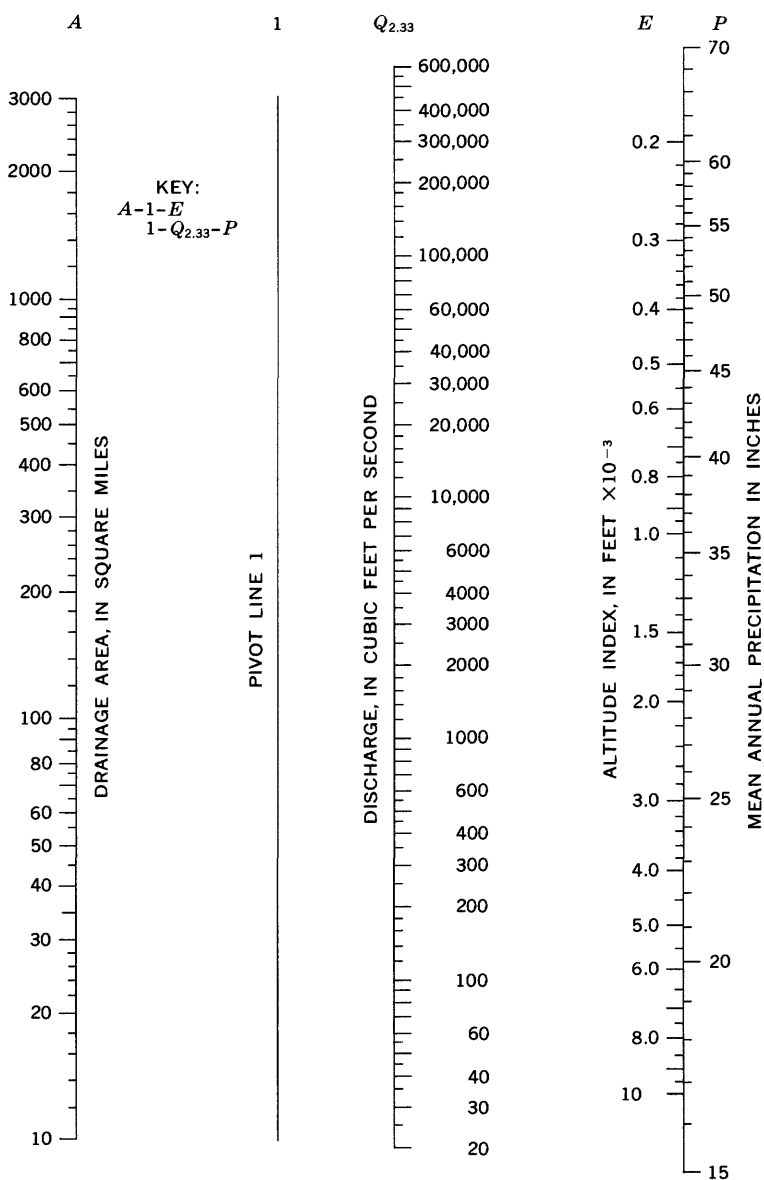
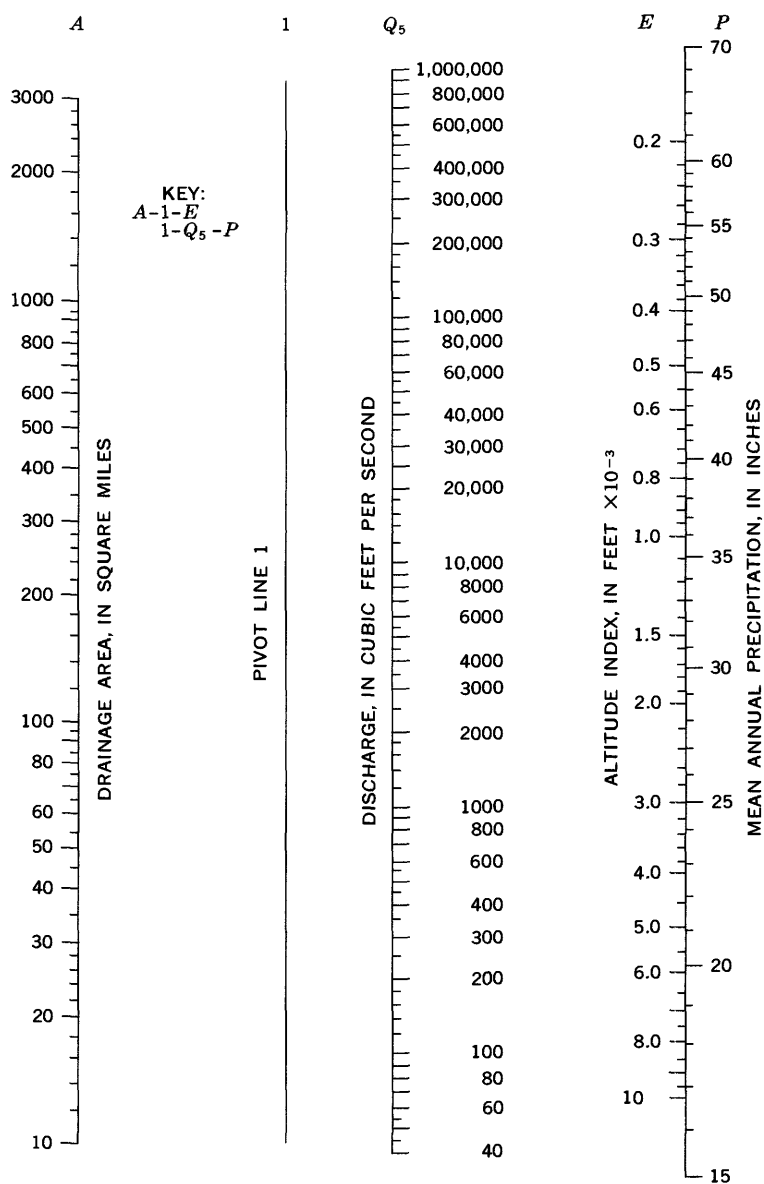


FIGURE 3.—Nomograph for computing 2.33-year flood in region C.



Equation
 $Q_5 = 0.183 A^{0.83} E^{-0.58} P^{1.81}$

FIGURE 4.—Nomograph for computing 5-year flood in region C.

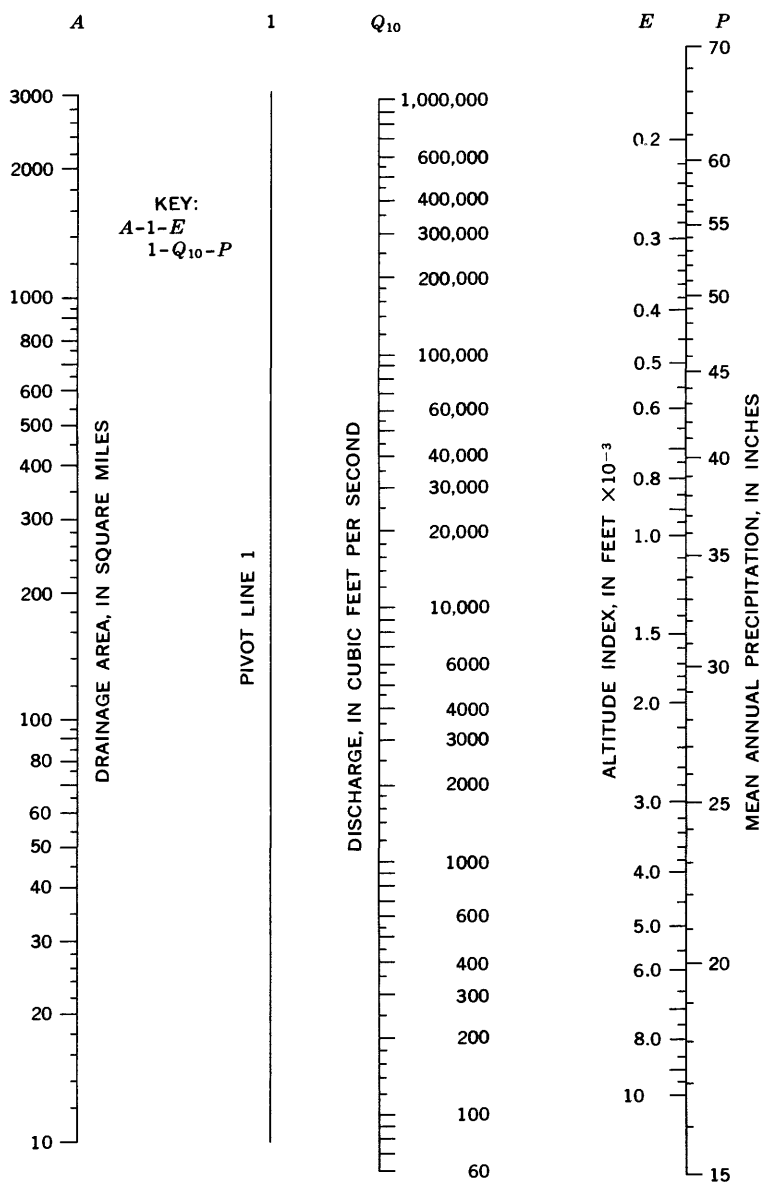


FIGURE 5.—Nomograph for computing 10-year flood in region C.

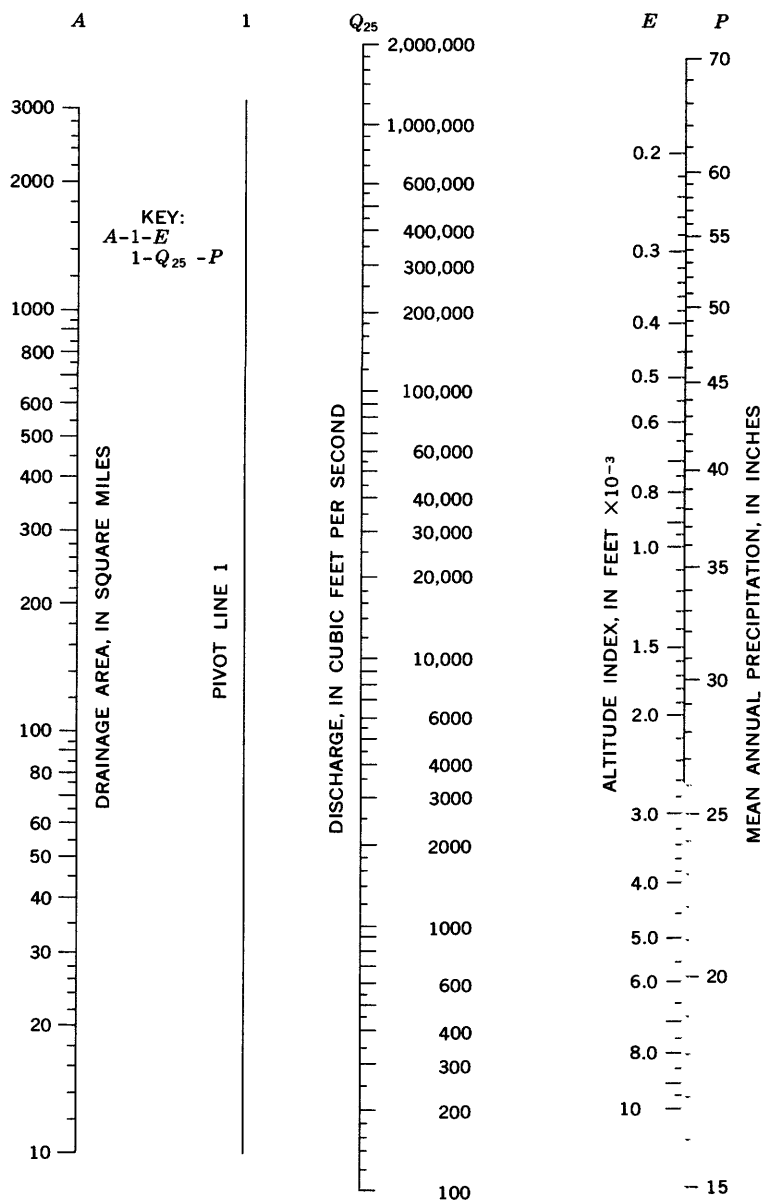
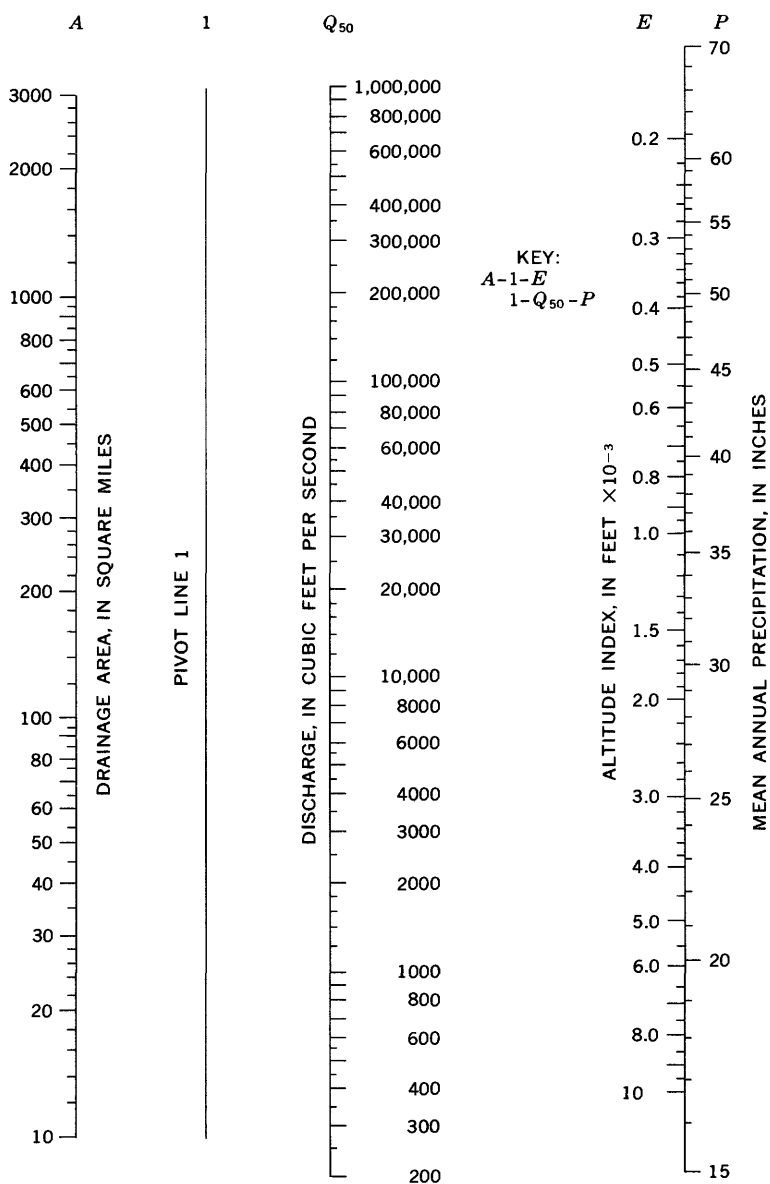


FIGURE 6.—Nomograph for computing 25-year flood in region C.



Equation

$$Q_{50} = 1.41 A^{0.83} E^{-0.30} P^{1.49}$$

FIGURE 7.—Nomograph for computing 50-year flood in region C.

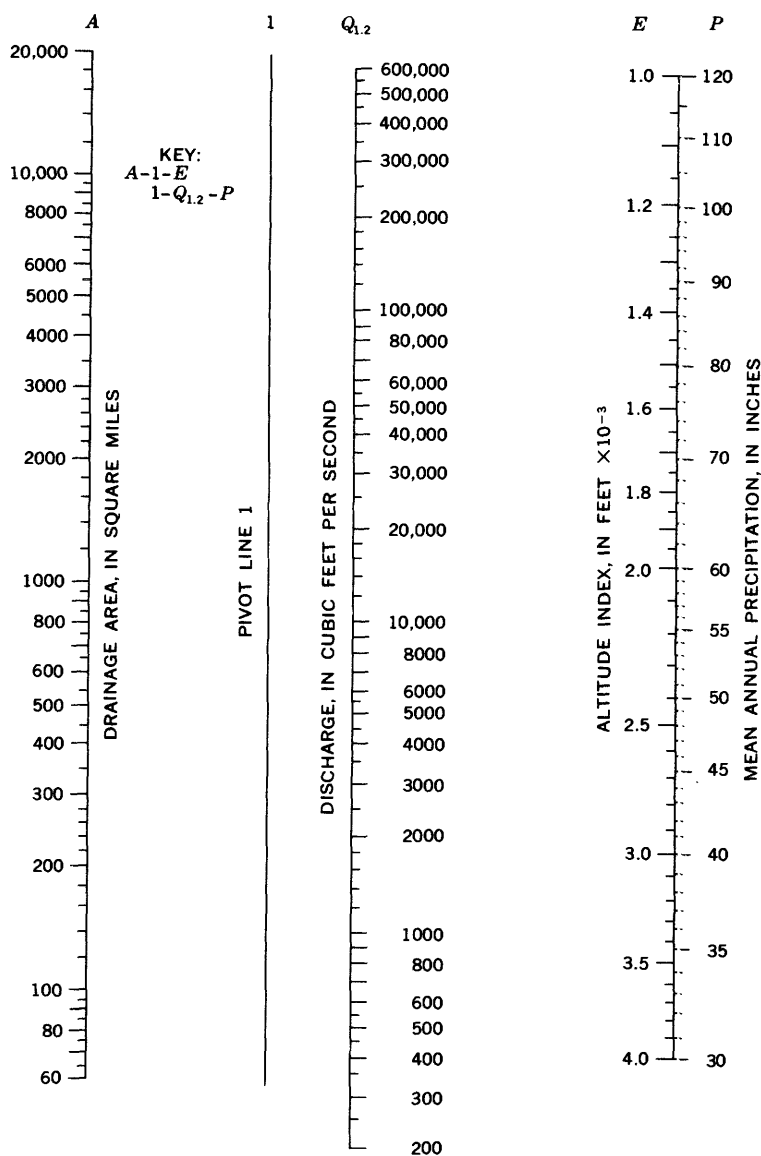
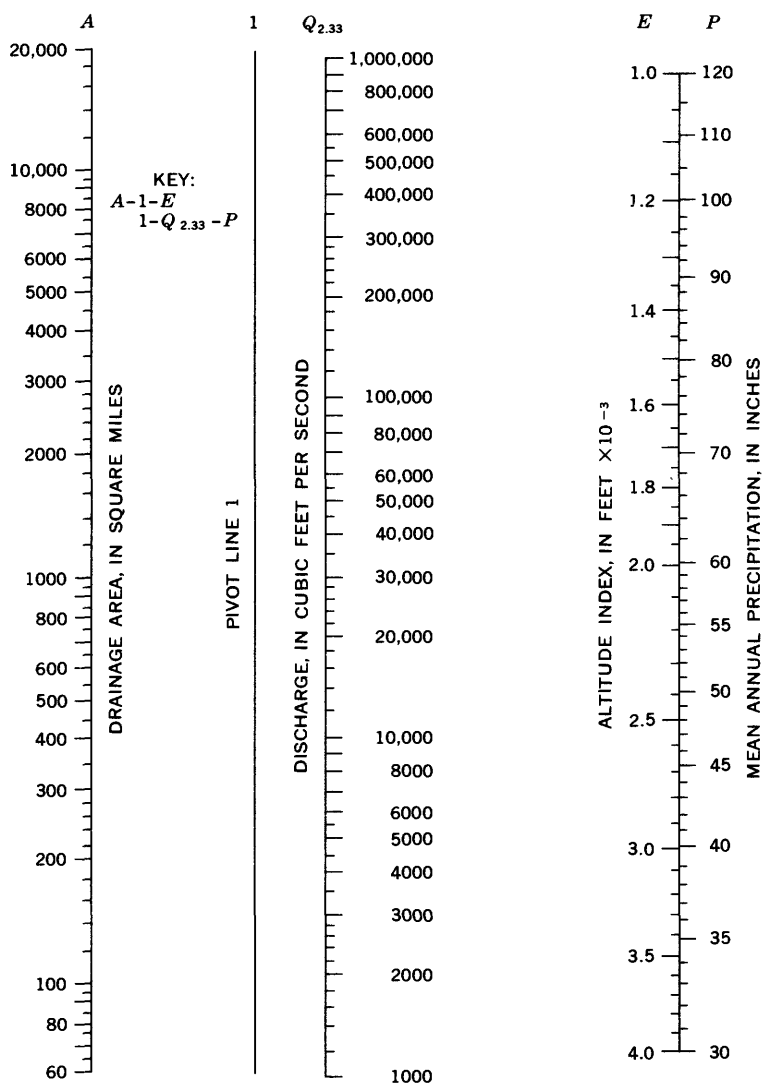


FIGURE 8.—Nomograph for computing 1.2-year flood in region D.



Equation
 $Q_{2.33} = 17.4 A^{0.72} E^{-1.11} P^{0.80}$

FIGURE 9.—Nomograph for computing 2.33-year flood in region D.

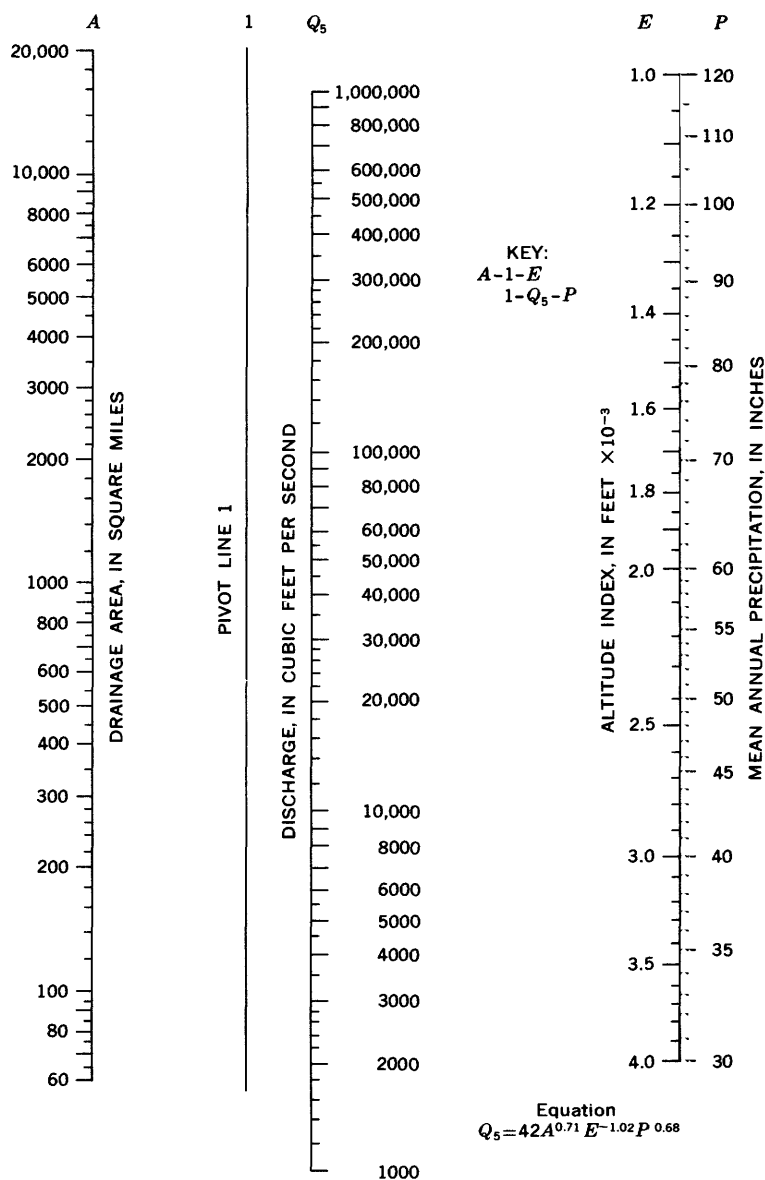


FIGURE 10.—Nomograph for computing 5-year flood in region D.

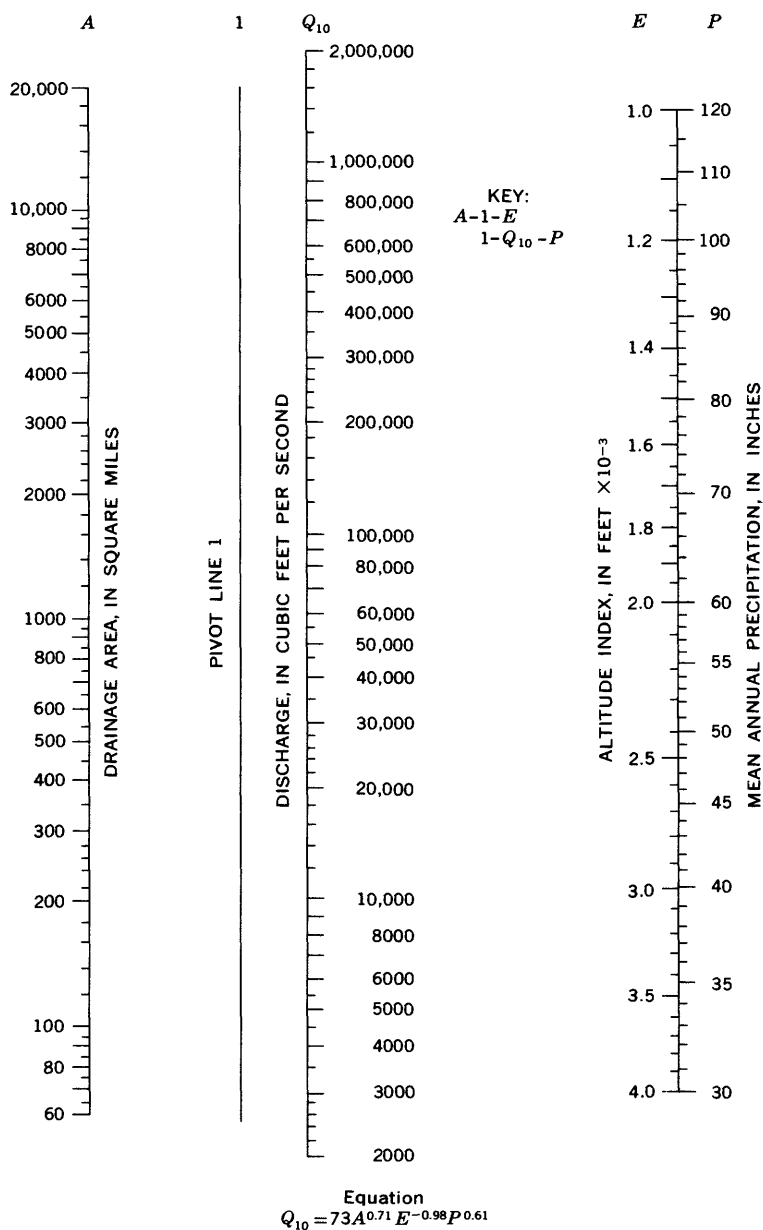


FIGURE 11.—Nomograph for computing 10-year flood in region D.

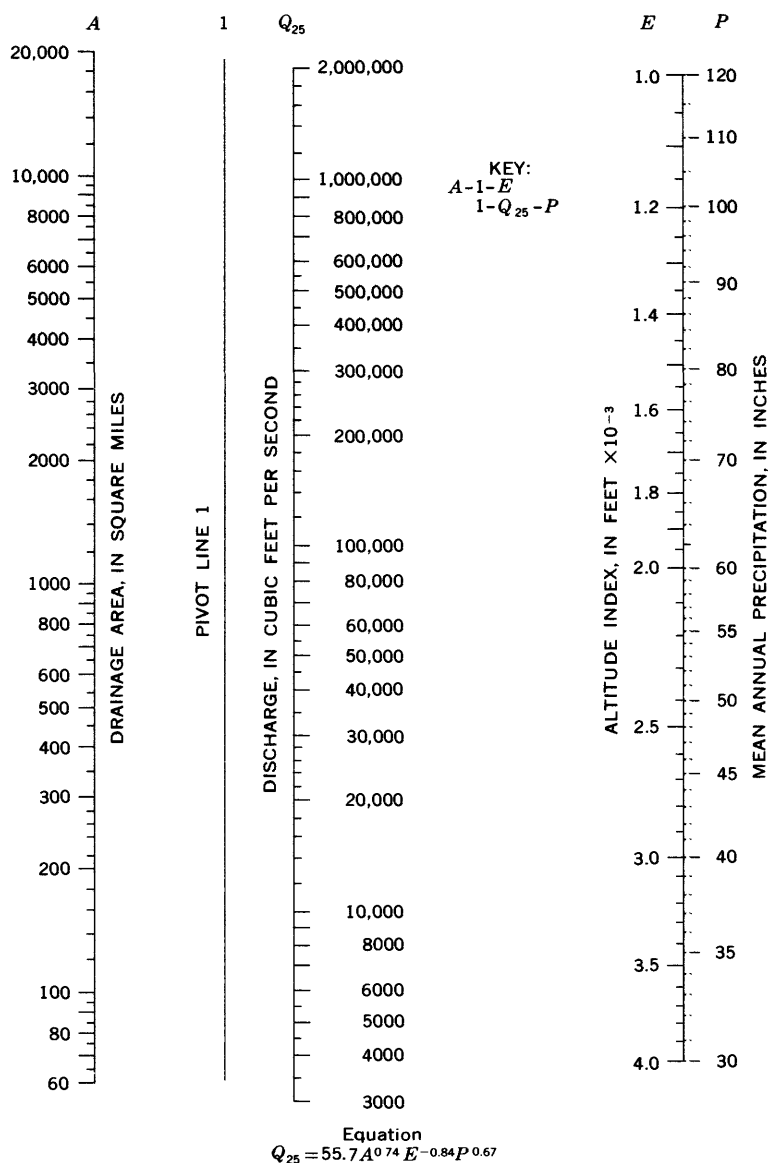


FIGURE 12.—Nomograph for computing 25-year flood in region D.

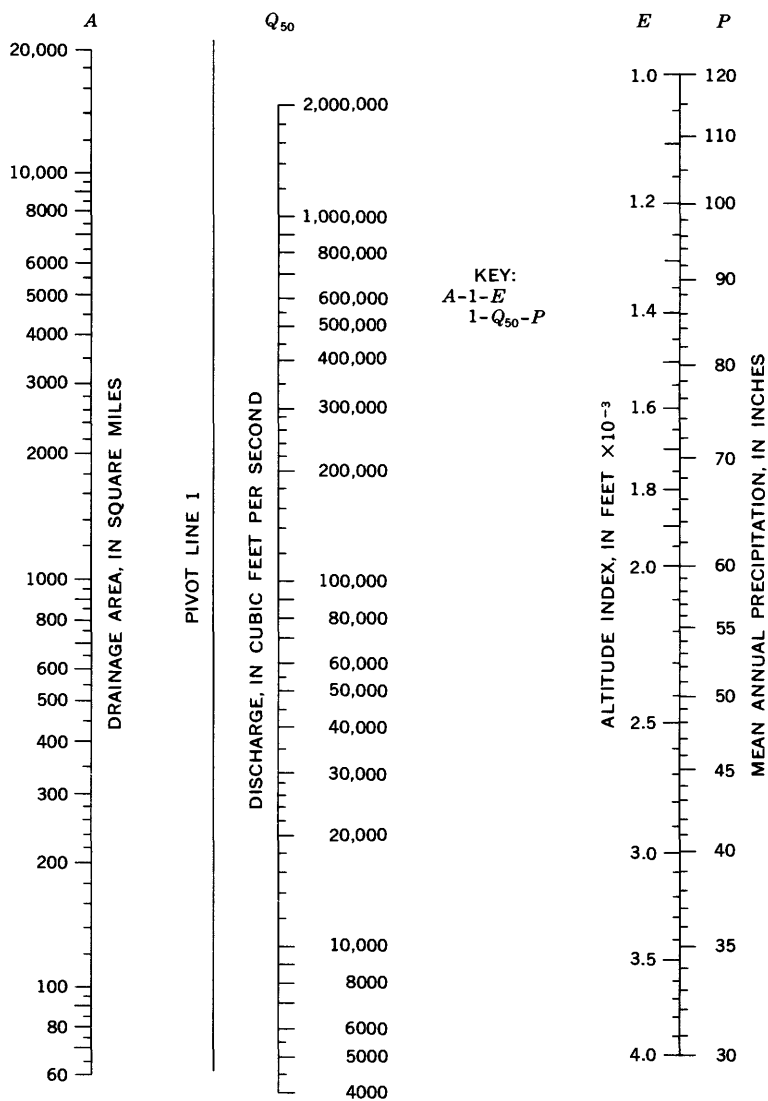


FIGURE 13.—Nomograph for computing 50-year flood in region D.

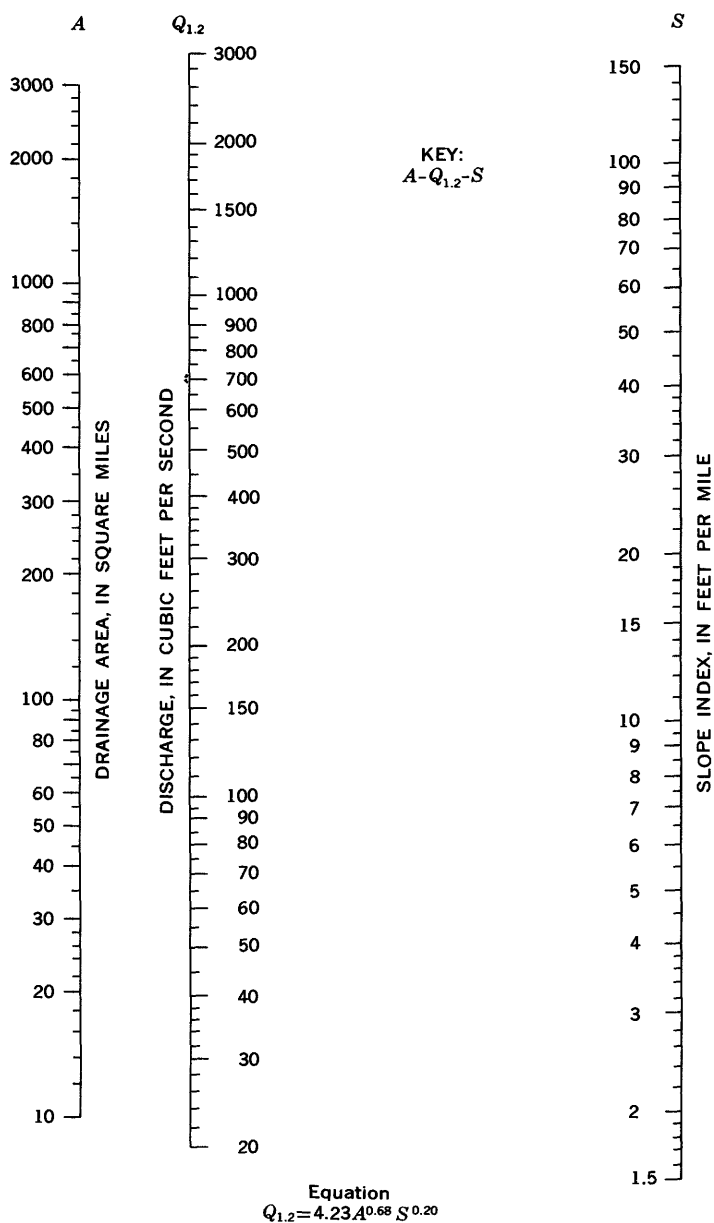


FIGURE 14.—Nomograph for computing 1.2-year flood in region E.

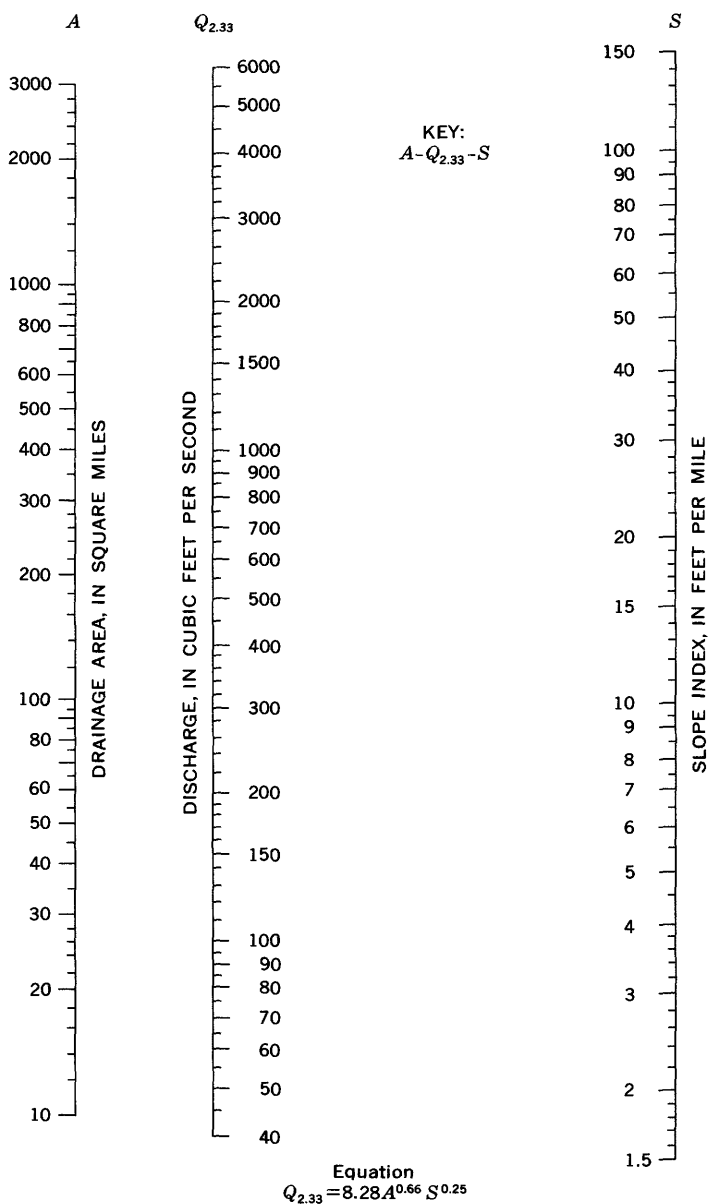


FIGURE 15.—Nomograph for computing 2.33-year flood in region E.

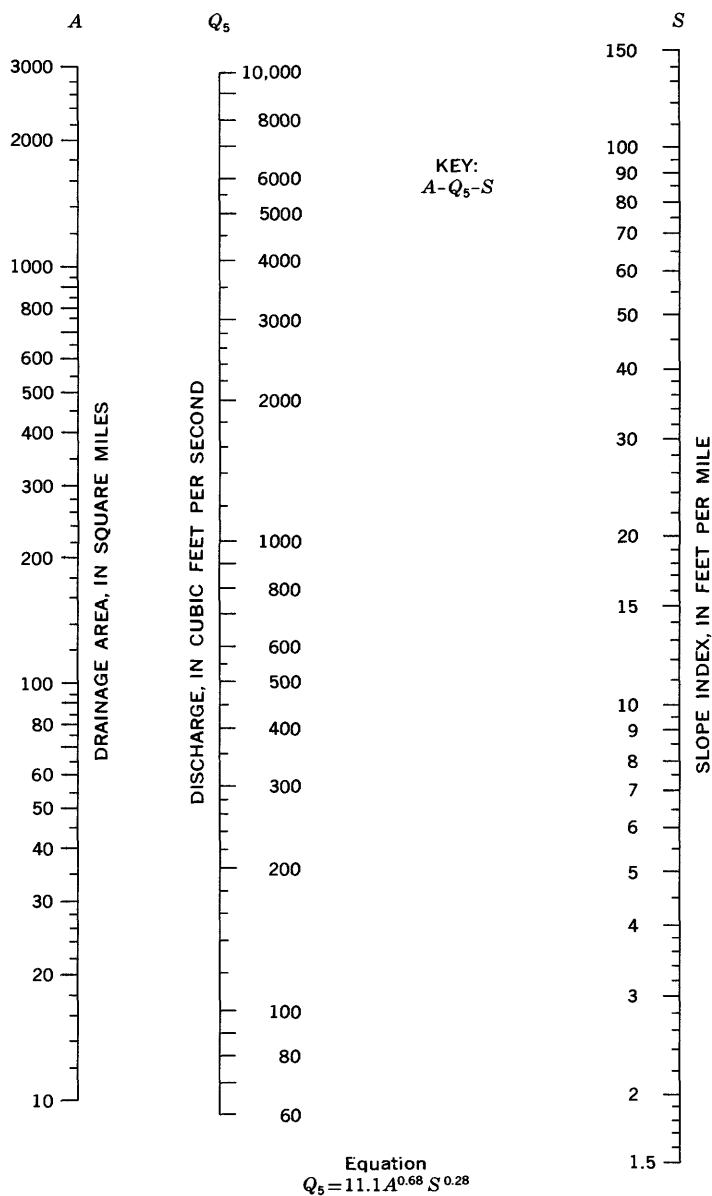


FIGURE 16.—Nomograph for computing 5-year flood in region F.

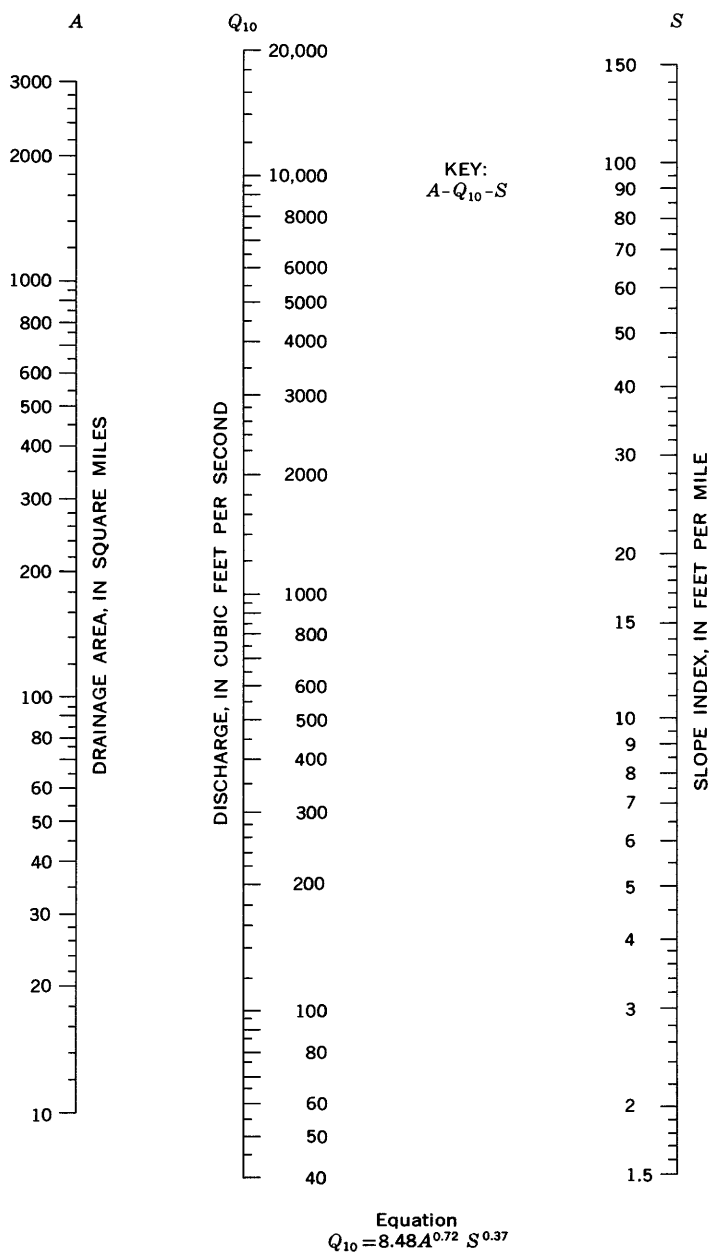


FIGURE 17.—Nomograph for computing 10-year flood in region E.

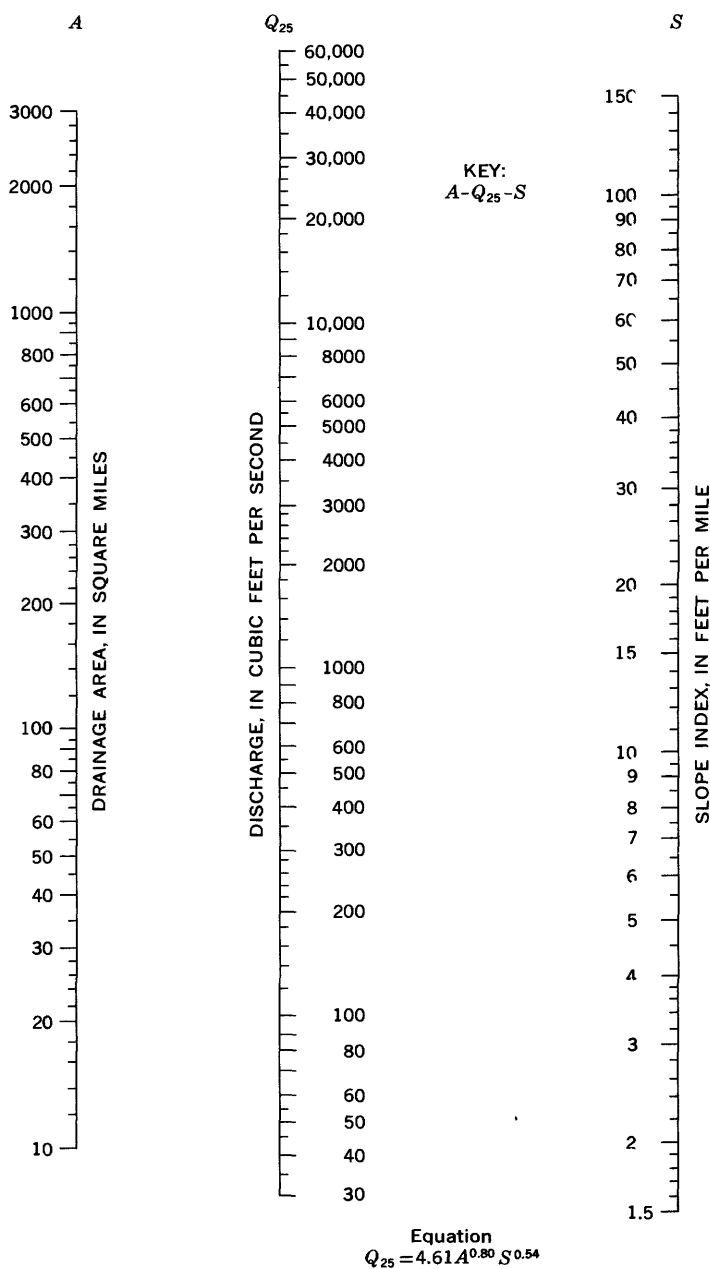


FIGURE 18.—Nomograph for computing 25-year flood in region E.

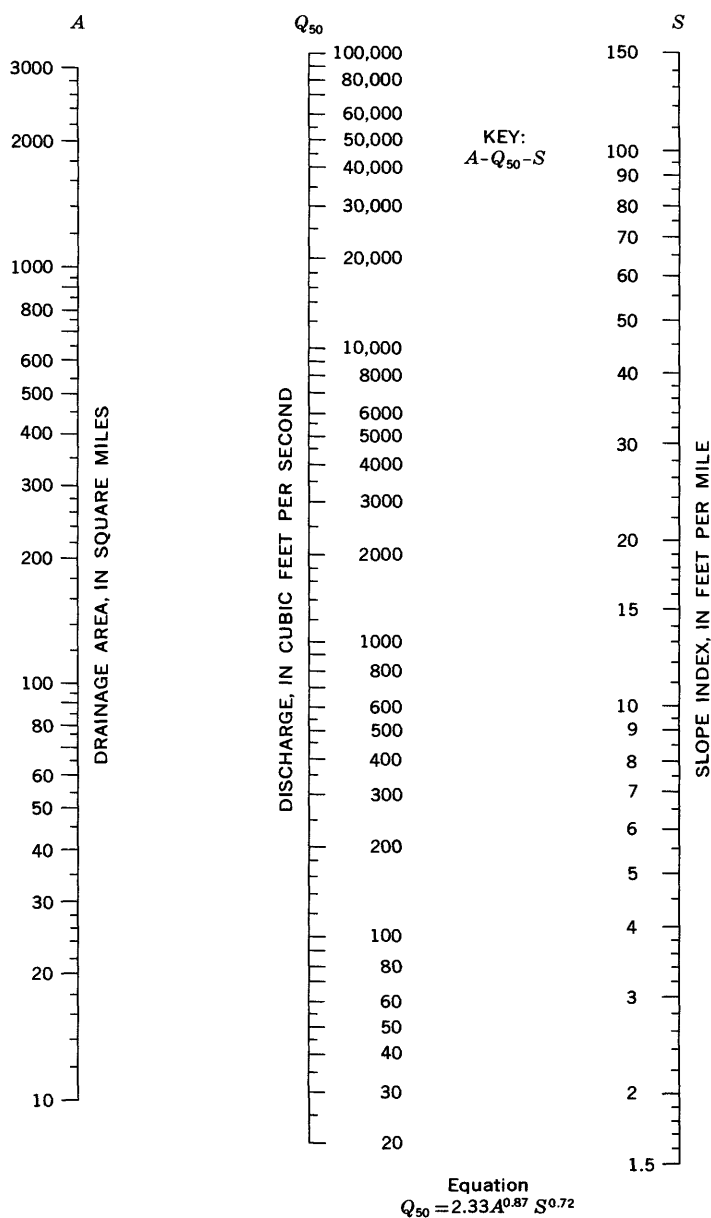


FIGURE 19.—Nomograph for computing 50-year flood in region E.

PROCEDURE FOR ESTIMATING FLOOD FREQUENCY

The equations presented in this report should not be used individually to determine the flood discharge for any selected recurrence interval. Instead, a flood magnitude-frequency relation should be developed by first solving the equations for each flood level (recurrence intervals 1.2, 2.33 . . . 50 years) and then plotting each computed discharge as a function of its frequency on probability paper. Any probability paper with frequency expressed either as recurrence interval, T , or as probability of recurrence, p , where

$$p = \frac{1}{T}$$

can be used. Because of the inherent scatter in the data used to develop the equations, all the plotted points may not lie on a smooth curve. A smooth curve, fitted by eye as closely as possible to the plotted points, should be drawn and used to represent the flood magnitude-frequency relation.

The general procedures in defining a flood-frequency relation for a site, gaged or ungaged, in the report area are:

1. Determine the hydrologic region in which the site is located by referring to plate 1.
2. Determine the significant hydrologic characteristics for the site: A , E , and P , if in regions C or D; or A and S , if in region E. A , S , and E are determined from topographic maps, and P is determined from plate 2.
3. Solve the equations or nomographs, applicable to the region—equations 2–7 if in region C, equations 8–13 if in region D, and equations 14–19 if in region E.
4. Plot the computed flood discharges as a function of their frequencies on probability paper.
5. Draw a smooth curve through the plotted points.

ILLUSTRATIVE PROBLEM

To illustrate the computation procedure, assume that one is interested in the annual peak discharge having a recurrence interval of 50 years at gaging station 11-2380. The method used to determine this discharge is outlined below:

1. Determine the hydrologic region in which the site is located. It is in region C.
2. Determine the significant hydrologic characteristics for the site. In this example A , E , and P are used, where $A = 23.7$ square miles, $E = 7.56$, and $P = 35$ inches.

3. From the equations or nomographs for region C, the discharges for the several recurrence intervals are determined. The nomographs are used by drawing a series of straight lines, as indicated by the key in the nomograph. Figure 2, the nomograph for the 1.2-year flood in region C, is used here to illustrate the procedure. The key given on figure 2 indicates that the first step is to draw a straight line between the A and E scales, intersecting these scales at the appropriate values for the basin under study. The second step, according to the key, is to draw a straight line intersecting the pivot line (1) and the P scale. This line is drawn to intersect the pivot line at the same point as the line from the first step and to intersect the P scale at the appropriate precipitation value. The intercept of this line on the $Q_{1.2}$ scale is the discharge cubic feet per second (cfs). In this way the various discharges were determined, as follows: $Q_{1.2}=110$ cfs, $Q_{2.33}=290$ cfs, $Q_5=500$ cfs, $Q_{10}=800$ cfs, $Q_{25}=1,300$ cfs, and $Q_{50}=2,100$ cfs.
4. Plot the discharges as a function of their recurrence interval, or probability of recurrence, and draw a smooth line through the points. Figure 20 shows the plot for this sample problem.
5. From figure 20 the discharge having a recurrence interval of 50 years is found to be 2,000 cfs.

The graph in figure 20 can also be used to determine the recurrence interval of any known discharge within the limits of the data. For example, from figure 20 the recurrence interval of a flood peak of 1,500 cfs at the gaging station is found to be 30 years.

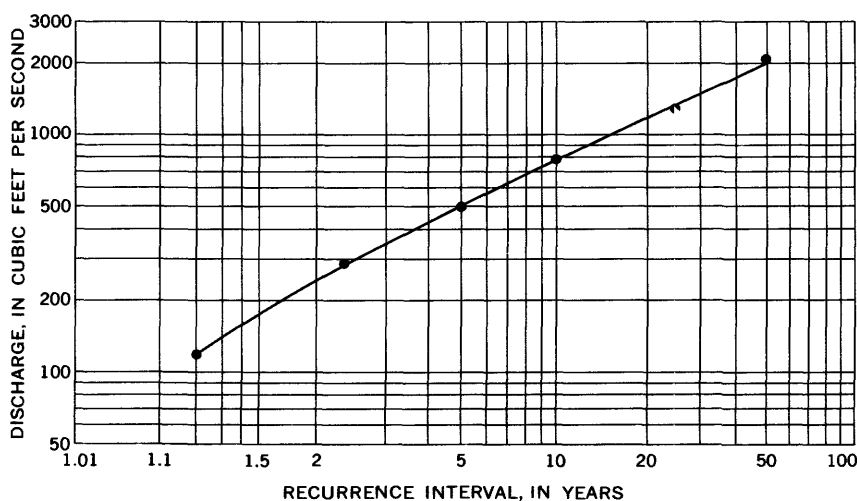


FIGURE 20.—Flood magnitude-frequency curve for stream-gaging station in illustrative problem.

LIMITATIONS

In using the methods presented in this report for determining flood magnitude-frequency relations there are some limitations that should be considered. The limitation of primary importance is that the equations or nomographs apply only to sites within the hydrologic regions for which they were derived. Also, the procedure is not applicable to sites where the usable storage within the basin exceeds 4.5 million cubic feet (103 acre-feet) per square mile or where the site is just downstream from a large reservoir, even though the storage requirement is not exceeded. Furthermore, the procedure should not be used for sites where the drainage area is less than 10 square miles.

The relations were derived on the basis of hydrologic characteristics whose range in magnitude lay within limits imposed by the available data. The limits for region C are: drainage area 12 to 2,307 square miles, altitude index 0.24 to 9.5, and mean annual precipitation 16 to 70 inches. For region D the limits are: drainage area 64 to 12,100 square miles, altitude index 1.50 to 3.42, and mean annual precipitation 31 to 101 inches. For region E the limits are: drainage area 14 to 3,000 square miles and slope index 1.5 to 137 feet per mile.

It is emphasized that the procedures outlined for defining flood-frequency relations are valid only for sites for which the hydrologic characteristics have values within the limits given above; use under any other conditions may lead to erroneous results. The methods presented should be used only for flood magnitude-frequency definition for recurrence intervals ranging between 1.2 and 50 years.

DISCUSSION OF RESULTS

Table 1 indicates that the small floods—those that have a recurrence interval less than 5 years—cannot be estimated as reliably as the large floods. The reason in part is that for small floods the runoff is often generated in only a part of the drainage basin. The large floods usually result from more general storms which cause runoff from most or all of the basin, and therefore more consistent results are obtained for the large floods.

The median of the ratios of observed to computed flood values at each site for the selected T -year floods was used as an indication of the reliability of the regional analysis. As a final step, the median values were plotted on maps for each region and were found to be randomly distributed geographically above and below the value of 1.0. For most stations the variation was within a reasonable range, but for a few stations the median values departed greatly from 1.0. The extreme departures also were randomly distributed geographically above and below the value of 1.0.

For a few stations, flood-frequency relations computed by the regional method will give results considerably different than would be obtained by a single station analysis. For some stations, the difference may be due to a record being too short to give true results when used in a single station analysis. For other stations, the difference may be due to failure to consider some pertinent variable that differs from that of other streams in the region. Furthermore, the variable may be such that it cannot now be readily expressed numerically; for example, the infiltration characteristics of the basin, which in this study were hopefully believed to have been accounted for in the delineation of regional boundaries.

As more gaging stations are installed in different areas where varying hydrologic characteristics will be sampled and as the period of record at existing gaging stations grows longer, more information will be available that will better define the flood magnitude-frequency relation. An example is the December 1964 flood. In some areas this flood was considerably greater than any flood previously recorded; this caused the magnitude-frequency relation for many stations to differ from the relation that would have been obtained had the analysis been made before the flood.

The hydrologic characteristics in the final equations represent the smallest number of easily definable hydrologic characteristics that together best define the peak flows. As it becomes possible to evaluate numerically more hydrologic characteristics (such as geology, soil type, and physiography) it may be possible to use some of these variables for further refinement of the analysis in this report.

FLOOD RECORDS AT GAGING STATIONS AND MISCELLANEOUS SITES

A summary of pertinent data relative to maximum known floods in the report area prior to October 1965 is contained in tables 2, 3, and 4: table 2 for gaging stations used in the analysis, table 3 for gaging stations having more than 5 years of record prior to October 1963 but not used in the analysis, and table 4 for miscellaneous sites and gaging stations having less than 5 years of record prior to October 1963. The stations are listed by their permanent network numbers. Those listed in tables 2 and 3 are shown on plate 1. The part number has been omitted from the number in all tables, it being understood that all the stations are in Part 11. The miscellaneous (M) sites in table 4 have been numbered consecutively in a downstream order beginning with M1.

Following the tables of maximum known floods is a compilation of flood peaks for each of the stations listed in tables 2 and 3. All available annual maximum flood peaks are listed for each station and, in addition, all flood peaks above a selected base discharge are listed for those years for which the data were readily available. For stations where the floodflow is affected by regulation or diversion, or where records are inadequate to define secondary peaks, only the annual maximum flood data are presented.

Underlines in the tabular data have the following significance:

1. A horizontal line in the water-year column indicates discontinuous records.
2. A line across the gage-height column indicates a change in gage datum and thereby shows that the gage heights above and below the line are not comparable. No underlines are used if gage heights have been adjusted to a common datum.
3. Lines across the date and discharge columns indicate a change in site of sufficient magnitude to affect the stage-discharge relation.

Accompanying each list of flood data are descriptive and historical data pertaining to the gage site. These data show the most recent gage location; the type and history of the gage; the drainage area above the gage; a description of how the stage-discharge relation was defined; and when available, the bankfull stage, historical flood data, and other miscellaneous information that might be of use to persons interested in flood magnitude and frequency.

MAXIMUM KNOWN FLOODS

39

		C	229	7.12	47	1927-51, 1956	3,450	Dec. 23, 1955	-	24,000	107	*1.11
2160	North Fork Kings River below Rancheria Creek, Calif.	C	50.7	7.25	46	1922-35	920	Nov. 26, 1926	7.62	2,660	52.5	11
2170	Dinkey Creek at Dinkey Meadows, Calif.	C	19.0	7.79	42	1924-35	330	June 16, 1929	-	860	45.3	9
2175	Deer Creek below East Fork, Calif.	C	133	5.31	42	1920-37	2,050	May 16, 1932	7.02	860	45.3	9
2180	Dinkey Creek at mouth, Calif.....	C	69.9	5.12	35	1951-65	1,130	Dec. 23, 1955	9.21	4,320	32.5	6
2200	Big Creek above Pine Flat Reservoir, Calif.	C	56.1	2.49	28	1954-65	700	Dec. 24, 1955	9.78	10,400	149	*1.53
2205	Sycamore Creek above Pine Flat Reservoir, Calif.	C	1,687	4.01	38	1957-1959	16,200	Nov. 13, 1950	21.0	6,760	120	*1.60
2220	Kings River at Piedra, Calif.....	C			38	1957-1959	16,200	Nov. 13, 1950	21.0	91,000	53.9	44
San Joaquin River basin												
2260	North Fork San Joaquin River below Iron Creek, Calif.	C	35.5	8.74	60	1922-28, 1952-65	1,050	July 24, 1956	d 8.15	3,860	109	20
2265	San Joaquin River at Millier Crossing, Calif.	C	254	6.62	46	1922-28, 1952-65	3,650	Dec. 23, 1955	21.28	16,600	65.4	26
2285	Granite Creek near Cattle Mountain, Calif.	C	47.8	8.28	54	1922-28, 1952-65	1,130	Dec. 23, 1964 (e)	17.00	-	-	-
2305	Deer Creek near Lake Thomas A. Edison, Calif.	C	53.5	9.34	35	1922-65	485	July 26, 1956	7.12	3,140	65.7	11
2315	Mono Creek below Lake Thomas A. Edison, Calif.	C	92.0	9.06	39	1922-65	960	June 2, 1939	8.62	1,680	31.4	13
2325	Jackass Creek near Bass Lake, Calif.	C	12.1	7.80	35	1922-28, 1952-65	158	Dec. 23, 1955	d 11.37	786	65.0	25
2345	Chiquito Creek near Bass Lake, Calif.	C	60.1	6.58	45	1922-28, 1952-65	1,080	Dec. 23, 1955	d 16.38	8,630	144	*1.23
2350	San Joaquin River above Big Creek, Calif.	C	1,050	5.67	39	1922-62	9,900	Dec. 23, 1955	24.75	63,000	60.0	*1.05
2375	Pitman Creek below Tamarack Creek, Calif.	C	22.9	7.82	35	1928-65	263	Dec. 23, 1955	11.20	3,670	160	*1.84
2480	Fine Gold Creek near Friant, Calif.	C	92.6	1.56	25	1937-58	1,050	Mar. 12, 1939	20.4	10,300	111	*1.66
2505	Cottonwood Creek near Friant, Calif.	C	35.7	.89	17	1942-51	320	Jan. 22, 1943	3.89	569	15.9	4
2515	Little Dry Creek near Friant, Calif.	C	57.7	.62	16	1942-56	490	Jan. 25, 1952	-	1,810	31.4	15
2575	Fresno River near Knowles, Calif.	C	133	2.30	34	1912, 1916-65	2,110	Dec. 23, 1955	6.70	-	-	-
2580	Fresno River near Daulton, Calif.	C	259	1.14	26	1936, 1942-65	3,450	Dec. 23, 1955	11.52	13,300	100	*1.12
2590	Chowchilla River at Buchanan dam-site, near Raymond, Calif.	C	235	1.36	26	1931-65	2,600	Dec. 23, 1955	11.64	17,500	67.6	*1.03
2645	Merced River at Happy Isles Bridge, near Yosemite, Calif.	C	181	7.19	54	1916-65	3,800	Dec. 23, 1955	16.50	30,000	128	*2.00
2650	Tenaya Creek near Yosemite, Calif.	C	46.9	6.58	55	1912-58	1,330	Dec. 11, 1937	12.73	9,860	54.5	11
2665	Merced River at Pohono Bridge, near Yosemite, Calif.	C	321	6.44	53	1917-65	6,100	Dec. 23, 1955	10.0	6,900	145	42
2680	South Fork Merced River near El Portal, Calif.	C	241	4.94	56	1951-65	6,100	Dec. 23, 1955	21.52	23,400	72.9	22
									18.70	46,500	193	*1.33

See footnotes at end of table.

Table 2.—Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations—Continued

No.	Gaging station	Flood region	Drainage area (sq mi.)	Altitude index (ft x 10 ⁻³)	Mean annual precip-itation (inches)	Period of known floods (water years)	Areal Q2.33 (cfs)	Date	Maximum flood			
									Gage height (feet)	Cfs	Discharge	Recur-rence interval (years)
San Joaquin River basin--Continued												
2685	Merced River at Bagby, Calif.....	C	911	3.98	49	1923-65	15,800	Dec. 23, 1955	26.80	92,500	102	*1.09
2750	Falls Creek near Hetch Hetchy, Calif.	C	46.0	7.46	60	1916-65	1,460	Nov. 19, 1950, Dec. 23, 1955	9.00	6,660	145	24
2770	Cherry Creek near Hetch Hetchy, Calif.	C	111	6.95	58	1915-55	2,930	Dec. 11, 1937	25.1	18,100	163	*1.11
2810	South Fork Tuolumne River near Oakland Recreation Camp, Calif.	C	87.0	5.10	48	1923-65	1,970	Dec. 23, 1955	10.9	11,900	137	*1.09
2820	Middle Tuolumne River at Oakland Recreation Camp, Calif.	C	73.5	5.36	47	1917-65	1,580	Dec. 23, 1955	11.75	4,920	66.9	14
2865	Woods Creek near Jacksonville, Calif.	C	97.2	1.43	31	1925-65	1,900	Dec. 23, 1955	14.66	14,400	148	*1.56
2880	Tuolumne River above La Grange Dam, near La Grange, Calif.	C	1,532	4.55	45	1862, 1897-1965	19,800	January 1862	-	130,000	84.9	*1.11
2925	Clark Fork Stanislaus River near Dardanelle, Calif.	C	67.5	7.28	47	1951-65	1,250	Nov. 20, 1950	11.88	4,350	64.4	17
2930	Middle Fork Stanislaus River at Sand Bar Flat, near Avery Calif.	C	325	5.50	49	1928-65	5,900	Dec. 11, 1937	21.0	-	-	-
2945	North Fork Stanislaus River near Avery, Calif.	C	163	5.43	54	1915-22, 1929-65	3,950	Dec. 23, 1955	15.0	26,000	80.0	29
3000	Stanislaus River near Knights Ferry, Calif.	C	972	3.26	44	1862, 1904-32	15,500	Jan. 31, 1963	33	36,000	221	*1.51
3050	San Domingo Creek near San Andreas, Calif.	C	27.2	1.88	34	1950-62	640	Jan. 11, 1862	8.24	100,000	103	*1.14
3060	South Fork Calaveras River near San Andreas, Calif.	C	118	2.23	32	1951-65	1,820	Dec. 23, 1955	10.29	2,830	104	32
3065	Calaveritas Creek near San Andreas, Calif.	C	53.0	1.77	34	1951-65	1,170	Dec. 23, 1955	6.65	17,600	149	*1.73
3080	North Fork Calaveras River near San Andreas, Calif.	C	85.6	1.55	34	1951-65	1,920	Apr. 2, 1958	8.65	4,410	83.2	22
3090	Cosgrove Creek near Valley Springs, Calif.	C	21.1	.80	25	1931-65	460	Dec. 23, 1955	12.52	6,200	72.4	17
3095	Calaveras River at Jenny Lind, Calif.	C	393	.84	31	1907-65	7,900	Dec. 23, 1955	8.96	3,240	154	*1.45
3120	Bear Creek near Locketford, Calif.	C	47.6	.24	18	1931-65	930	Jan. 31, 1911	14.0	50,000	127	*1.32
3150	Cole Creek near Mokelumne Peak, Calif.	C	20.4	7.16	60	1928-65	760	Apr. 3, 1958	15.13	2,930	61.6	12
3170	Middle Fork Mokelumne River at West Point, Calif.	C	68.4	3.89	45	1912-65	1,610	Dec. 23, 1964	10.21	6,140	301	*1.43
3175	South Fork Mokelumne River near Railroad Flat, Calif.	C	38.7	4.12	45	1912-34	980	Dec. 23, 1955	8.98	4,320	63.2	10
3185	South Fork Mokelumne River near West Point, Calif.	C	75.1	3.55	43	1934-65	1,700	Jan. 25, 1914	6.9	3,330	86.1	17
								Dec. 23, 1955	14.8	6,920	92.1	25

	C	627	2.40	41	1905-65	11,000	Nov. 21, 1950	24.40	28,800	45.9	9
3235	Mokelumne River below Camarohie Dam, Calif.										
3275	Sutter Creek at Sutter Creek, Calif.	50.8	2.20	36	1922-35	1,130	Dec. 13, 1922, Feb. 6, 1925	7.5	3,100	61.0	11
3295	Dry Creek near Galt, Calif.....	329	1.10	27	1927-33, 1945-65	4,400	Apr. 3, 1958	15.28	24,000	72.9	*1.06
3335	North Fork Cosumnes River near El Dorado, Calif.	205	3.09	45	1912-41, 1949-65	4,400	Dec. 23, 1953	14.8	15,800	77.1	18
3350	Cosumnes River at Michigan Bar, Calif.	536	2.71	41	1907-65	8,900	Dec. 23, 1955	14.59	42,000	78.3	32
3360	Cosumnes River at McConnell, Calif.	724	2.16	37	1936, 1944-65	10,900	Dec. 23, 1955	46.26	54,000	74.6	36
Goose Lake basin											
3410	Thomas Creek near Lakeview, Oreg.	30.0	-	-	1912-19, 1927-31, 1946-58	220	Dec. 22, 1955	6.32	790	26.3	36
Sacramento River basin											
3415	Sacramento River at Castella, Calif.	256	3.42	55	1911-17, 1920-23	5,900	Jan. 2, 1914	13.7	16,000	82.5	16
3420	Sacramento River at Delta, Calif.	425	2.78	62	1945-65	11,900	Dec. 22, 1964	20.10	38,800	91.3	*1.05
3555	Hat Creek near Hat Creek, Calif..	122	-	-	1926-65	800	Dec. 11, 1937	f 7.75	3,320	27.2	20
3655	Squaw Creek above Shasta Lake, Calif.	64.0	1.78	74	1945-65	5,800	Dec. 21, 1955	21.90	17,800	278	49
3675	McCloud River near McCloud, Calif.	358	-	-	1932-65	1,230	Dec. 21, 1955	9.42	11,800	33.0	*1.11
3690	McCloud River at Baird, Calif....	690	2.57	34	1904, 1911-43	11,400	Feb. 16, 1904	-	55,000	79.7	*1.22
3710	Clear Creek at French Gulch, Calif.	115	2.51	58	1951-65	5,000	Dec. 22, 1964	13.70	7,600	66.1	5
3720	Clear Creek near Igo, Calif.....	228	2.11	56	1941-65	9,600	Dec. 21, 1955	13.75	24,500	107	21
3740	Cow Creek near Millville, Calif..	425	1.96	45	1950-65 (g)	14,000	Dec. 27, 1951	23	45,200	106	*1.03
3765	Battle Creek near Cottonwood, Calif.	358	2.61	37	1937-61	7,600	Dec. 11, 1937	15.8	35,000	97.8	*1.23
3775	Paynes Creek near Red Bluff, Calif.	92.7	1.88	31	1950-65	3,550	Dec. 1, 1961	11.33	10,600	114	32
3790	Antelope Creek near Red Bluff, Calif.	123	2.32	36	1938-65	3,950	December 1937	22	-	-	-
3815	Mill Creek near Los Molinos, Calif.	131	2.76	43	1929-65	4,000	Dec. 22, 1956	23.4	11,500	93.5	27
3835	Deer Creek near Vina, Calif.....	208	2.84	47	1912-15, 1921-65	5,700	Dec. 11, 1937	16.6	23,000	176	*1.74
3840	Big Chico Creek near Chico, Calif.	72.5	2.29	63	1951-65	4,200	Dec. 10, 1937	15.36	23,800	114	*1.19
3900	Butte Creek near Chico, Calif....	147	2.62	58	1931-65	5,650	Jan. 5, 1965	14.12	9,580	132	15
3915	Big Grizzly Creek near Portola, Calif.	45.5	5.75	22	1926-32, 1951-65	225	Dec. 22, 1964	8.10	21,200	144	*1.07
3925	Middle Fork Feather River near Clio, Calif.	686	5.14	20	1926-65	1,900	Dec. 22, 1955	-	4,080	89.7	*2.14
3935	Middle Fork Feather River below Sloat, Calif.	819	4.86	24	1941-62	3,250	Feb. 1, 1963	16.19	14,500	21.1	41
							Dec. 23, 1955	19.25	31,200	38.1	*1.24

See footnotes at end of table.

4275	Middle Fork American River at French Meadows, Calif.	C	47.9	5.78	65	1952-65	1,970	Dec. 23, 1955	14.95	-	-	*2.13
4310	Rubicon River near Georgetown, Calif.	C	195	5.41	56	1944-64	4,850	Jan. 31, 1963	-	21,500	449	-
4325	Pilot Creek near Georgetown, Calif.	C	15.1	4.63	60	1947-60	760	Feb. 1, 1963	171	58,000	297	*1.98
4335	Middle Fork American River near Auburn, Calif.	C	612	3.40	59	1912-65	18,000	Nov. 18, 1950	10.84	3,040	201	42
4340	North Fork American River at Rattlesnake Bridge, Calif.	C	998	3.34	60	1928-55	29,500	Dec. 23, 1955	60.4	253,000	413	*2.68
4400	Alder Creek near White Hall, Calif.	C	22.1	5.52	50	1923-65	640	March 1928	30	-	-	-
4410	Silver Creek at Union Valley, Calif.	C	83.0	5.95	59	1925-60	2,550	Nov. 21, 1950	-	115,000	115	31
4415	South Fork Silver Creek near Ice House, Calif.	C	27.5	6.53	58	1925-65	960	Dec. 23, 1955	8.40	5,500	249	*1.50
4420	Silver Creek near Placerville, Calif.	C	177	4.62	58	1922-61	5,200	Dec. 23, 1955	6.71	3,940	143	28
4435	South Fork American River near Camino, Calif.	C	493	3.66	56	1923-65	13,000	Dec. 23, 1955	14.50	27,500	155	42
4460	Weber Creek near Salmon Falls, Calif.	C	97.6	1.78	54	1944-59	4,800	Dec. 23, 1955	32.6	49,800	101	22
4465	American River at Fair Oaks, Calif.	C	1,921	2.52	53	1982-1965	45,000	Apr. 2, 1958	16.05	12,200	125	11
								Nov. 21, 1950	31.85	180,000	93.7	30
Lost River basin												
4840	Miller Creek near Lorella, Oreg..	E +	270	-	-	1910-20	800	Mar. 1, 1910	10.3	5,000	18.5	*1.31
Lower Klamath Lake basin												
4895	Antelope Creek near Tennant, Calif.	E +	18.6	-	-	1953-65	175	Jan. 9, 1953	5.33	-	-	-
								Dec. 22, 1964	4.00	638	34.3	29
Klamath River basin												
4935	Williamson River near Klamath Agency, Oreg.	E +	1,290	-	-	1910, 1955-65	1,110	Mar. 13, 1910	3.7	1,590	1.23	6
4975	Sprague River near Beatty, Oreg.	E +	513	-	-	1914-23, 1954-65	1,270	Dec. 23, 1964	12.19	6,980	13.6	36
4990	Sycan River near Beatty, Oreg....	E +	540	-	-	1912-25	1,280	Apr. 25, 1917	11.25	2,250	4.17	6
5010	Sprague River near Chillicothe, Oreg.	E +	1,580	-	-	1921-65	1,920	Dec. 26, 1964	10.37	14,900	9.43	*2.13
5025	Williamson River below Sprague River, near Chillicothe, Oreg.	E +	3,000	-	-	1917-65	2,880	Dec. 26, 1964	10.56	16,100	5.37	*1.36
5120	Falls Creek at Copco, Calif.....	E +	14.6	-	-	1929-59	180	Dec. 22, 1955	4.35	875	59.9	*1.23
5130	Grizzly Creek near Lilyglen, Oreg.	E +	27.3	-	-	1917-19, 1942-43, 1949-53	220	Mar. 24, 1919	2.53	525	19.0	12
5175	Shasta River near Yreka, Calif....	E +	793	-	-	1934-65	1,540	Dec. 22, 1964	12.92	21,500	271	*2.59
5195	Scott River near Fort Jones, Calif.	D	653	3.32	35	1942-65	8,600	Dec. 22, 1964	25.34	54,600	83.6	*1.55

See footnotes at end of table.

Table 2.-Maximum and mean annual floods and hydrologic characteristics at gaging stations used to define regional flood-frequency relations--Continued

No.	Gaging station	Flood region	Drainage area (sq mi.)	Altitude index (ft x 10 ⁻³)	Mean annual precipitation (inches)	Period of known floods (water years)	Areal Q _{2.33} (cfs)	Date	Maximum flood			
									Gage height (feet)	Cfs	Discharge Cfs per interval (sq mi.) (years)	
Klamath River basin--Continued												
52223	South Fork Salmon River near Forks of Salmon, Calif.	D	252	3.29	58	1954-65	6,400	Dec. 22, 1964	21.73	31,400	125	*1.27
52225	Salmon River at Somesbar, Calif..	D	746	2.14	59	1912-15, 1927-65	22,800	Dec. 22, 1965	43.5	133,000	178	*1.66
52555	Trinity River at Lewiston, Calif.	D	728	2.84	61	1862,1881, 1912-65	17,000	Dec. 22, 1955	27.3	71,600	98.4	*1.15
5270	Trinity River near Burat Ranch, Calif.	D	1,439	2.00	55	1932-40, 1956-65	37,500	Dec. 22, 1955	43.2	172,000	120	*1.33
5285	Hayfork Creek near Hyampom, Calif.	D	378	2.61	40	1954-65	8,300	Dec. 22, 1964	19.14	28,800	76.2	*1.04
5290	South Fork Trinity River near Salyer, Calif.	D	898	2.00	58	1951-65	28,000	Dec. 22, 1964	47.6	95,400	106	40
5300	Trinity River near Hoops, Calif..	D	2,847	1.50	56	1912-18, 1932-65	85,000	Dec. 22, 1964	40.3	231,000	81.1	29
5305	Klamath River near Klamath, Calif.	D	12,100	2.31	42	1862,1881, 1890,1911-26, 1951-65	119,000	Dec. 23, 1964	55.3	557,000	46.0	*1.19
Smith River basin												
5325	Smith River near Crescent City, Calif.	D	609	1.50	101	1927,1932-65	43,500	Dec. 22, 1964	48.5	228,000	374	*1.88
* Ratio of peak discharge to that of 50-year flood. † Slope index used as a hydrologic characteristic in region E. Values of slope index for gaging stations in region E are given below:												
No.	Gaging station	Slope index (ft per mile)										
3410	Thomas Creek near Lakeview, Oreg.	65.2										
3555	Hat Creek near Hat Creek, Calif.	137										
3675	McCloud River near McCloud, Calif.	102										
4840	Miller Creek near Lorella, Oreg.	35.2										
4895	Angelone Creek near Tennant, Calif.	94.8										
4935	Williamson River near Klamath Agency, Oreg.	1.54										
4975	Sprague River near Beatty, Oreg.	45.0										
4990	Sycan River near Beatty, Oreg.	34.1										
5010	Sprague River near Chilcoquin, Oreg.	8.98										
5025	Williamson River below Sprague River, near Chilcoquin, Oreg.	8.71										
5120	Fall Creek at Copco, Calif.	116										
5130	Grizzly Creek near Lillyglen, Oreg.	64.0										
5175	Shasta River near Yreka, Calif.	27.2										
a Flood of 1867 believed to be about 13 ft above the 1937 flood stage of 12.46 ft. b Backwater from Kern River. c Estimated at 1,000 to 1,200 cfs by Alto Irrigation District. d Maximum recorded, no winter record some years. e Date unknown. f Affected by drawdown. g 1937 or 1940. h Backwater from North Yuba River. i Caused by dam failure; discharge unknown. j Backwater from ice.												

a Flood of 1867 believed to be about 13 ft above the 1937 flood stage of 12.46 ft.

b Backwater from Kern River.

c Estimated at 1,000 to 1,200 cfs by Alto Irrigation District.

d Maximum recorded, no winter record some years.

e Date unknown.

f Affected by drawdown.

g 1937 or 1940.

h Backwater from North Yuba River.

i Caused by dam failure; discharge unknown.

j Backwater from ice.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations

No.	Gaging station	Hydro-logic region	Drainage area (sq mi.)	Period of known floods (water years)	Date	Maximum flood		
						Gage height (feet)	Cfs	Discharge Cfs per sq mi
								Recurrence interval (years)
Buena Vista Lake basin								
1853	Golden Trout Creek near Cartago, Calif.....	C	23.6	1957-65	May 31, 1958	-	182	7.71
1854	Little Kern River near Quaking Aspen Camp, Calif.....	C	132	1958-65	Feb. 12, 1954	a 5.24	-	-
1870	Kern River at Kernville, Calif.....	C	1,009	1954-65	Dec. 23, 1955	12.4	7,370	55.8
1880	Kern River at Isabella, Calif.....	C	1,089	1926-35	Nov. 19, 1950	18.4	-	-
1882	South Fork Kern River near Olancha, Calif.....	C	146	1957-65	Dec. 23, 1955	12.73	29,400	29.1
1897	Kelso Creek near Weldon, Calif.....	C	101	1959-65	Nov. 27, 1926	a 5.85	6,570	6.15
1910	Kern River below Isabella Dam, Calif.....	C	2,074	1945-65	Apr. 18, 1958	-	1,280	13.3
1925	Kern River near Democrat Springs, Calif.....	C	2,258	1951-65	May 10, 1958	6.20	39,000	15.3
1940.5	Tumbleweed Creek near Olddale, Calif.....	F	2.40	1959-65	Nov. 19, 1950	30.7	40,000	18.8
1942	Wagon Wheel Creek near Reward, Calif.....	F	1.38	1959-65	Nov. 19, 1950	4.65	104	17.7
1945	Sand Creek near McKittrick, Calif.....	F	.32	1959-65	Feb. 13, 1963	13.44	306	43.3
1948	Shale Creek near Fellows, Calif.....	F	5.86	1959-65	Aug. 14, 1965	6.10	222	22.2
1950	Oil Creek near Taft, Calif.....	F	.35	1959-65	Feb. 17, 1962	10.16	118	43.8
					May 28, 1963	4.92	11	31.4
Tulare Lake basin								
1960.5	Mon Canyon Creek near Oildale, Calif.....	F	2.38	1959-65	Apr. 1, 1964	5.08	35	14.7
2030	Bear Creek near Springville, Calif.....	C	13.5	1911-16	Jan. 25, 1914	5.60	295	21.8
2031	North Fork Tule River at Springville, Calif.....	C	97.6	1957-65	Jan. 31, 1963	10.29	4,800	47.1
2032	Tule River near Springville, Calif.....	C	225	1951, 1956, 1958-63	Nov. 19, 1950	-	25,400	113
2040	South Fork Tule River near Porterville, Calif.....	C	80.3	1911-32	Jan. 26, 1914	8.0	3,170	39.5
2049	Tule River below Success Dam, Calif.....	C	393	1951-65	Nov. 19, 1950	26.0	32,000	81.4
2087.5	East Fork Kaweah River near Three Forks, Calif.....	C	85.8	1953-55, 1958-65	Feb. 1, 1963	17.9	2,850	33.2
2099	Kaweah River at Three Rivers, Calif.....	C	418	1956, 1959-65	Dec. 23, 1955	17.9	30,900	73.9
2101	South Fork Kaweah River at Three Rivers, Calif.....	C	86.7	1956, 1959-65	Feb. 1, 1963	9.5	2,440	28.1
2130	Kings River near Hume, Calif.....	C	835	1922-36, 1951-58	Feb. 1, 1963	15.53	38,000	45.5
2142	Fleming Creek near Blackcap Mountain, Calif.....	C	15.0	1956-65	Dec. 23, 1955	a 5.28	800	53.3
2144	Post Central Creek near Blackcap Mountain, Calif.....	C	27.9	1956-65	Feb. 14, 1962	a 8.01	1,400	50.2
2158	Teakettle Creek at site No. 3 near Patterson Mountain, Calif.....	C	.86	1958-65	Dec. 23, 1955	7.81	99	115
2158.1	Teakettle Creek tributary No. 7 near Patterson Mountain, Calif.....	C	.11	1958-65	Apr. 16, 1958	-	10	90.9
2158.2	Teakettle Creek tributary No. 2 near Patterson Mountain, Calif.....	C	.85	1958-65	Jan. 31, 1963	5.77	54	63.5

* Ratio of peak discharge to that of 50-year flood. a Backwater from ice.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations--Continued

No.	Gaging-station	Hydro-logic region	Drainage area (sq mi)	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
							Cfs	Cfs per sq mi	Recurrence interval (years)
San Joaquin River basin--Continued									
2700	Merced River at Exchequer, Calif.....	C	1,037	1902-64	Jan. 31, 1911	23.3	47,700	46.0	11
2715	Merced River near Livingston, Calif.....	F	1,259	1922-23, 1926-40, 1942-44	Feb. 12, 1938	19.44	11,100	8.82	-
2725	Merced River near Stevinson, Calif.....	F	1,274	1941-65	Dec. 5, 1950	18.05	13,600	10.7	-
2740	San Joaquin River near Newman, Calif.....	F	9,990	1868, 1886, 1911, 1914-65	Mar. 7, 1938	21.7	-	-	-
2765	Tuolumne River near Hetch Hetchy, Calif.....	C	457	1915-65	June 1, 1943	13.90	33,000	3.30	-
2780	Eleanor Creek near Hetch Hetchy, Calif.....	C	78.4	1915-65	Nov. 19, 1950	14.95	12,900	28.2	-
2783	Cherry Creek near Early Intake, Calif.....	C	226	1915-65	Feb. 1, 1963	14.50	11,700	149	-
2795	South Fork Tuolumne River at Italian Flat, near Sequoia, Calif.....	C	66.7	1925-33	Mar. 27, 1928	4.45	16,500	73.0	1
2815	Middle Tuolumne River near Mather, Calif.....	C	51.6	1925-29, 1933	Mar. 25, 1928	4.00	810	15.7	2
2825	South Fork Tuolumne River near Buck Meadows, Calif.....	C	164	1917-21	Jan. 18, 1921	7.75	3,160	19.3	2
2830	Tuolumne River near Bucks Meadow, Calif.....	C	924	1911-36	Jan. 30, 1911	15.4	45,200	48.9	12
2850	North Fork Tuolumne River above Dyer Creek, near Tuolumne, Calif.....	C	69.2	1956-65	December 1955	10.7	-	-	-
2860	Tuolumne River near Jacksonville, Calif.....	C	1,343	1924-34	Jan. 31, 1963	-	4,130	59.7	10
2900	Tuolumne River at Modesto, Calif.....	F	1,893	1895, 1940-65	Mar. 25, 1928	12.38	35,300	26.3	-
2920	Middle Fork Stanislaus River at Kennedy Meadows, near Dardanelle, Calif.....	C	47.5	1939-65	Dec. 9, 1950	69.19	57,000	30.3	-
2927	Middle Fork Stanislaus River at Hells Half Acre Bridge, Calif.....	C	287	1956-65	Nov. 20, 1950	6.66	1,700	35.8	-
2935	North Fork Stanislaus River below Silver Creek, Calif.....	C	27.8	1950-65	Dec. 23, 1955	17.72	26,600	92.7	-
2940	Highland Creek below Spicer Meadows Reservoir, Calif.....	C	42.4	1950-65	Nov. 20, 1950	11.17	2,790	100	-
2965	South Fork Stanislaus River at Strawberry, Calif.....	C	44.8	1912-16, 1939-65	Jan. 31, 1963	11.88	9,860	232	-
2980	South Fork Stanislaus River near Long Barn, Calif.....	C	66.9	1938-65	Nov. 21, 1950	9.25	3,900	87.0	-
3035	San Joaquin River near Vernalis, Calif.....	C	14,010	1924, 1930-65	Nov. 21, 1950	9.3	4,900	73.2	-
3055	San Antonio Creek near San Andreas, Calif.....	F	46.6	1950-59	Dec. 9, 1950	27.75	79,000	5.64	-
3070	Esperanza Creek near Mokelumne Hill, Calif.....	C	16.7	1952-59	Dec. 23, 1955	5.66	2,500	53.6	14
3075	Jesus Maria Creek near Mokelumne Hill, Calif.....	C	34.7	1950-59	Dec. 23, 1955	6.78	3,060	183	*1.28
3085	Murray Creek near San Andreas, Calif.....	C	23.5	1951-59	Dec. 23, 1955	7.63	5,490	158	*1.53
3145	North Fork Mokelumne River below Salt Springs Dam, Calif.....	C	170	1927-65	Nov. 21, 1950	6.82	1,700	72.3	13
3155	Bear River at Pardoe Camp, Calif.....	C	33.0	1928-51	Nov. 20, 1950	17.20	16,000	94.1	-
3160	Bear River near Salt Springs Dam, Calif.....	C	48	1951-65	Nov. 20, 1950	12.62	7,100	215	-
3165	North Fork Mokelumne River near West Point, Calif.....	C	273	1917-18, 1924-32	Dec. 24, 1964	11.8	11,000	229	-
3180	Licking Fork Mokelumne River near Railroad Flat, Calif.....	C	6.32	1912-17	Mar. 25, 1928	17.2	15,500	56.8	-
					Apr. 25, 1917	3.22	51	8.07	-

2158.3	Teakettle Creek tributary No. 2A near Patterson Mountain, Calif.	C	0.27	1958-65	Feb. 1, 1963	6.89	35	130	-
2158.4	Teakettle Creek tributary No. 1 near Patterson Mountain, Calif.	C	.77	1958-65	Feb. 1, 1963	8.21	117	152	-
2165	North Fork Kings River above Dinkey Creek, at Balch Camp, Calif.	C	250	1920-30, 1961-65	Feb. 1, 1963	613.24	14,000	56.0	-
2185	Kings River below North Fork, Calif.	C	1,342	1950-65	Dec. 23, 1955	23.08	85,800	63.5	50
2215	Kings River below Pine Flat Dam, Calif.	C	1,545	1954-65	May 3, 1958	9.35	12,700	8.22	-
2217	Mill Creek near Piedra, Calif.	C	120	1958-65	Mar. 22, 1958	7.29	5,000	41.7	20
San Joaquin River basin									
2300	South Fork San Joaquin River near Florence Lake, Calif.	C	171	1922-65	June 6, 1940	15.38	4,320	25.3	-
2320	South Fork San Joaquin River near Hoffman Meadow, Calif.	C	424	1922-28	June 5, 1922	15.21	5,930	14.0	5
2370	Big Creek below Huntington Lake, Calif.	C	81.1	1925-65	June 23, 1925	10.3	2,040	25.2	-
2390	Pitman Creek at Big Creek, Calif.	C	23.7	1922-28	June 1, 1922	3.53	1,110	46.8	18
2395	Big Creek near mouth, near Big Creek, Calif.	C	131	1923-31	June 23, 1925	6.25	2,600	19.8	-
2415	Stevenson Creek at Shaver, Calif.	C	29.4	1917, 1923-28	Nov. 27, 1926	3.65	1,390	47.3	-
2420	San Joaquin River above Willow Creek, near Auberry, Calif.	C	1,295	1951-65	Dec. 23, 1955	54.2	73,200	56.5	-
2440	North Fork Willow Creek near Bass Lake, Calif.	-	50.8	1940-65	Feb. 11, 1941	5.85	847	16.7	-
2465	Willow Creek at mouth, near Auberry, Calif.	C	130	1951-65	Dec. 23, 1955	28.5	15,700	121	-
2470	San Joaquin River below Kerckhoff powerhouse, near Prather, Calif.	C	1,485	1937-39, 1943-65	Dec. 23, 1955	51.0	92,200	62.1	-
2510	San Joaquin River below Friant, Calif.	C	1,675	1908-65	Dec. 11, 1937	23.8	77,200	45.1	-
2516	Little Dry Creek at mouth, near Friant, Calif.	C	77.7	1957-61	Mar. 22, 1958	4.3	5,000	64.4	*1.39
2525	San Joaquin River at Herndon, Calif.	F	1,802.4	1895-1901	Nov. 22, 1900	14.0	33,000	18.3	-
2535.1	Cantua Creek near Cantua Creek, Calif.	F	46.4	1958-65	Apr. 2, 1958	3.34	3,751	16.2	-
2598	East Fork Chowchilla River near Ahwamee, Calif.	C	57.8	1958-65	Jan. 31, 1963	10.34	3,710	64.2	10
2599	West Fork Chowchilla River near Mariposa, Calif.	C	33.8	1958-65	Apr. 3, 1958	8.67	3,580	107	50
2599.2	Middle Fork Chowchilla River near Nipinawasse, Calif.	C	12.3	1959-65	Feb. 1, 1963	10.10	1,280	104	44
2602	Bear Creek near Cathays Valley, Calif.	C	24.6	1958-65	Feb. 1, 1963	10.07	2,520	102	41
2604.8	Mariposa Creek near Cathays Valley, Calif.	C	66.0	1958-65	Apr. 3, 1958	11.62	-	-	-
2628	Los Banos Creek near Los Banos, Calif.	F	159	1956-65	Feb. 1, 1963	-	5,290	80.2	*1.42
2655	Mercer River at Yosemite, Calif.	C	236	1912-17	Dec. 23, 1955	11.07	11,400	71.7	-
2660	Yosemite Creek at Yosemite, Calif.	C	42.7	1912-18	June 9, 1917	9.4	4,620	18.6	2
2673	South Fork Merced River at Wawona, Calif.	C	100	1956-65	June 8, 1917	10.0	1,500	35.1	4
2765	South Fork Merced River near Wawona, Calif.	C	131	1912-21	Dec. 23, 1955	12	15,000	150	38
					Jan. 26, 1914	7.2	5,770	28.8	2

* Ratio of peak discharge to that of 50-year flood.

b Backwater from Dinkey Creek.

c Backwater.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations--Continued

No.	Gaging station	Hydro-logic region	Drainage area (sq mi.)	Period of known floods (water years)	Date	Maximum flood			
						Gage height (feet)	Cfs	Discharge	
								Cfs per sq mi.	Recurrence interval (years)
San Joaquin River basin--Continued									
3195	Mokelumne River near Mokelumne Hill, Calif.....	C	544	1901, 1904, 1928-63	Dec. 3, 1950	18.5	33,700	61.9	-
3255	Mokelumne River at Woodridge, Calif.....	F	660	1926-65	Nov. 22, 1950	29.58	27,000	40.8	-
3270	Sutter Creek near Sutter Creek, Calif.....	C	48.1	1936-41, 1961-65	Feb. 22, 1936	8.00	-	-	47
3280	Dry Creek near Lone, Calif.....	C	270	1912, 1926-32	Jan. 31, 1963	11.9	5,770	120	-
3280	Goose Creek near Elliott, Calif.....	C	8.44	1928-33	Mar. 25, 1928	6.00	14,000	51.8	13
3300	North Fork Cosumnes River at Cosumnes Mine, Calif.....	C	36.9	1949-53	Feb. 6, 1932	6.00	7,726	86.0	20
3315	Camp Creek near Camino, Calif.....	C	33.0	1949-56	Nov. 21, 1950	9.50	3,940	107	-
3325	Sly Park Creek near Pollock Pines, Calif.....	C	17.8	1949-55	Dec. 23, 1955	6.24	3,260	98.8	14
3330	Camp Creek near Somerset, Calif.....	C	62.6	1955-65	Dec. 3, 1950	6.53	1,050	57.9	4
3342	Middle Fork Cosumnes River near Somerset, Calif.....	C	107	1956-65	Dec. 23, 1964	12.50	6,040	96.5	-
3343	South Fork Cosumnes River near River Pines, Calif.....	C	64.3	1958-65	Dec. 23, 1955	18.1	-	-	25
3345	Cosumnes River near Plymouth, Calif.....	C	429	1952-60	Feb. 1, 1963	10.90	5,540	86.2	21
					Dec. 23, 1955	20.96	33,500	78.1	27
Goose Lake basin									
3395	Drews Creek near Lakeview, Oreg.....	E	212	1909-65	Mar. 1, 1910	-	3,000	14.2	*1.68
3405	Cottonwood Creek near Lakeview, Oreg.....	E	32.0	1909-19, 1925-65	Mar. 27, 1928	3.84	430	13.1	-
Sacramento River basin									
3425	Sacramento River at Antler, Calif.....	D	461	1911, 1920-41	Feb. 28, 1940	21.0	58,000	126	50
3435	North Fork Pit River near Alturas, Calif.....	D	203	1932, 1956-65	December 1955	12	-	-	-
3455	South Fork Pit River near Likely, Calif.....	E	247	1932-65	Oct. 24, 1962	5.55	2,550	12.5	4
3475	Pine Creek near Alturas, Calif.....	E	23.5	1919-31	Apr. 27, 1932	3.50	1,520	6.16	-
3485	Pit River near Canby, Calif.....	E	1,431	1904-5, 1932-65	Feb. 10, 1921	15.0	13,000	9.09	-
3490	Pit River near Lookout, Calif.....	E	1,585	1959-65	Mar. 6, 1904	19.39	8,170	5.15	-
3505	Ash Creek at Adin, Calif.....	E	258	1904-5, 1952, 1959-65	Oct. 14, 1962	14.40	2,880	11.2	33
3520	Pit River near Bleber, Calif.....	E	2,475	1904-8, 1914, 1922-26, 1952-65	Oct. 13, 1962	14.40	2,880	11.2	-
3535	Bear Creek near Dana, Calif.....	E	-	1922-26	Mar. 19, 1907	-	33,800	13.7	-
3537	Fall River near Dana, Calif.....	E	-	1922-26	Feb. 6, 1925	6.0	562	-	-
3550	Pit River at Fall River Mills, Calif.....	E	3,651	1922-51	Dec. 23, 1964	12.62	3,910	-	-
3605	Burney Creek near Burney, Calif.....	E	88.8	1912-13, 1921-22, 1959-65	Dec. 12, 1937	11.8	28,600	7.84	9
3665	Pit River near Ydabpom, Calif.....	D	5,350	1911-43	Jan. 31, 1963	14.35	1,350	15.2	-
3680	McCloud River above Shasta Lake, Calif.....	D	604	1946-65	Dec. 22, 1964	24.20	65,000	12.1	30
					Dec. 10, 1937	24.20	45,200	74.9	-
					Dec. 22, 1955	28.20	-	-	-

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3695	Sacramento River at Kennett, Calif.....	D	6,580	1904-16,1926-42	Feb. 28, 1940	38.2	182,000	27.7	-
3705	Sacramento River at Keswick, Calif.....	D	6,486	1939-65	Feb. 26, 1940	47.2	186,000	28.7	-
3722	South Cow Creek near Millville, Calif.....	D	77.3	1956-65	December 1955	12.5	-	-	-
3732	Oak Run Creek near Oak Run, Calif.....	D	11.0	1958-65	May 18, 1957	7.05	5,720	74.0	8
3733	Little Cow Creek near Ingot, Calif.....	D	60.6	1958-65	Apr. 6, 1963	7.05	9,270	136	-
3780	Sacramento River near Red Bluff, Calif.....	F	9,300	1879-1965	Dec. 22, 1964	17.10	291,000	153	*1.08
3890	Sacramento River at Butte City, Calif.....	F	-	1941-65	Feb. 28, 1940	38.9	170,000	31.3	-
3895	Sacramento River at Colusa, Calif.....	F	-	1941-65	Feb. 8, 1942	96.9	49,000	-	-
3905	Sacramento River below Wilkins Slough, Calif.....	F	-	1939-65	Feb. 8, 1942	69.20	-	-	-
3930	Middle Fork Feather River at Sloat, Calif.....	C	775	1914-27	Feb. 25, 1927	10.1	28,800	15.1	14
3940	Middle Fork Feather River near Nelson Point, Calif.....	C	883	1924-32	Mar. 27, 1928	16.0	11,700	23.9	23
3950	South Fork Feather River near La Porte, Calif.....	C	25.4	1928-33	Mar. 26, 1928	7.00	2,600	102	6
4011.5	Red Clover Creek near Denesee, Calif.....	C	122	1928-65	Feb. 1, 1963	9.49	7,870	64.5	*2.19
4012	Indian Creek near Taylorsville, Calif.....	C	533	1956-65	Dec. 23, 1955	11.5	-	-	-
4013	Lights Creek near Taylorsville, Calif.....	C	57.6	1958-62	Feb. 1, 1963	-	30,200	56.7	*1.58
4019	Spanish Creek near Quincy, Calif.....	C	69.1	1959-63	Feb. 24, 1958	6.84	2,120	36.8	12
4025	Spanish Creek at Keddie, Calif.....	C	194	1912-33	Jan. 31, 1963	10.30	11,000	159	30
4045	North Fork Feather River at Pulga, Calif.....	C	1,953	1936-65	Mar. 26, 1928	15.5	11,000	56.7	8
4053	West Branch Feather River near Paradise, Calif..	C	113	1958-65	Dec. 22, 1964	35.80	73,000	37.4	-
4065	West Branch Feather River near Yankee Hill, Calif.	C	149	1931-65	Dec. 22, 1964	26.2	26,300	233	25
4070	Feather River at Oroville, Calif.....	C	3,626	1879-86,1902-65	Dec. 11, 1937	30.3	21,400	144	12
4085	Middle Yuba River at Milton, Calif.....	C	39.8	1926-65	Mar. 19, 1937	39.3	230,000	83.4	-
4087	Middle Yuba River near Alleghany, Calif.....	C	96.3	1958-65	Jan. 31, 1963	5.25	10,200	256	*1.70
4100	Middle Yuba River near North San Juan, Calif....	C	198	1912-41	Jan. 31, 1965	18.95	23,700	246	*1.47
4115	North Yuba River at Goodyears Bar, Calif.....	C	221	1911-31	Mar. 26, 1928	15.3	26,000	131	28
4120	Rock Creek at Goodyears Bar, Calif.....	C	8.98	1911-35	Mar. 26, 1928	15.6	28,000	127	23
4135	North Yuba River below Bullards Bar Dam, Calif..	C	487	1941-65	Mar. 25, 1928	10.0	1,600	178	-
4139	Upper Castle Creek at Soda Springs, Calif.....	C	3.96	1958-63	Feb. 1, 1965	42.0	-	-	-
4145	Canyon Creek above Jackson Creek, near Cisco, Calif.	C	16.7	1926-30	Dec. 22, 1964	-	91,600	188	-
4150	Jackson Creek at mouth, near Cisco, Calif.....	C	5.53	1926-30	Jan. 31, 1963	-	1,300	328	-
4175	South Yuba River at Jones Bar, near Grass Valley, Calif.	C	310	1941-48,1956, 1960-65	Mar. 25, 1928	8.35	3,200	192	-
4180	Yuba River at Englebright Dam, Calif.....	C	1,109	1942-65	Mar. 25, 1928	5.30	1,270	230	-
4335	Deer Creek near Smartville, Calif.....	C	84.6	1928,1936-65	December 1955	30.7	53,600	173	-
4345	Deer River at Van Trent, Calif.....	C	265	1905-27	Dec. 26, 1964	-	171,000	154	-
4345	Tray Creek near Wheatland, Calif.....	C	99.9	1947-62	Mar. 14, 1909	14.5	14,000	165	16
4361	Feather River at Nicolaus, Calif.....	C	5,823	1944-65	Jan. 23, 1955	13.45	29,600	112	27
4261.1	Union Creek tributary No. 3 near Soda Springs, Calif.	C	.65	1959-64	Dec. 23, 1955	d 51.60	357,000	60.3	-
4261.2	Union Creek tributary No. 5A near Soda Springs, Calif.	C	.39	1959-64	Feb. 1, 1963	5.00	242	372	-
4261.2	Union Creek tributary No. 5A near Soda Springs, Calif.	C	.39	1959-64	Jan. 31, 1963	3.96	135	346	-

* Ratio of peak discharge to that of 50-year flood.
d Occurred at different time than peak discharge.

Table 3.--Maximum floods at gaging stations not used to define regional flood-frequency relations--Continued

No.	Gaging station	Hydro-logic region	Drainage area (sq mi.)	Period of known floods (water years)	Date	Gage height (feet)	Maximum flood		
							Cfs	Cfs per sq mi.	Recurrence interval (years)
Sacramento River basin--Continued									
4261.3	Onion Creek tributary No. 2 near Soda Springs, Calif.	C	0.48	1958-64	Jan. 31, 1963	3.72	116	242	-
4261.4	Onion Creek tributary No. 1 near Soda Springs, Calif.	C	.19	1958-64	Jan. 31, 1963	2.75	55	289	-
4261.6	Onion Creek tributary No. 7 near Soda Springs, Calif.	C	.80	1959-64	Jan. 31, 1963	5.32	181	226	-
4262	North Fork Forbes Creek near Dutch Flat, Calif..	C	1.68	1956-65	December 1955	6.40	-	-	-
4264	North Shitrtail Creek near Dutch Flat, Calif.....	C	9.10	1956-65	Feb. 1, 1963	7.56	200	119	-
4270	North Fork American River at North Fork Dam, Calif.	C	343	1942-65	Dec. 22, 1964	11.87	1,780	196	-
4280	Rubicon River at Rubicon Springs, near Meeks Bay, Calif.	C	31.4	1956-65	Dec. 23, 1964	14.28	65,400	191	*1.21
4305	South Fork Rubicon River at mouth, near George-town, Calif.	C	56.9	1956-62	Feb. 1, 1963	19.2	11,500	366	*1.98
4332	Rubicon River near Foresthill, Calif.....	C	311	1938, 1951-65	Dec. 23, 1955	74	83,000	267	*1.73
4333	Middle Fork American River near Foresthill, Calif.	C	534	1959-65	Dec. 23, 1964	69.0	1 310,000	581	*3.53
4360	Silver Fork of South Fork American River near Kyburz, Calif.	C	107	1925-44	Dec. 11, 1937	8.30	5,450	50.9	-
4395	South Fork American River near Kyburz, Calif....	C	193	1923-65	Dec. 23, 1964	10.92	17,400	90.2	-
4405	Plum Creek near Riverton, Calif.....	C	7.32	1923-39	Mar. 25, 1928	4.10	635	86.7	-
4445	South Fork American River near Placerville, Calif.	C	600	1912-20, 1965	Jan. 25, 1914	19.0	-	-	-
4450	South Fork American River at Coloma, Calif.....	C	631	1928-41	Dec. 23, 1964	20.5	47,300	78.8	-
4455	South Fork American River near Lotus, Calif.....	C	673	1951-65	Dec. 11, 1937	20.5	38,500	61.0	9
4470	American River at Sacramento, Calif.....	C	1,938	1944-59	Dec. 23, 1955	21.37	71,800	107	33
					Nov. 21, 1950	45.73	8176,000	90.8	28
Lost River basin									
4850	Lost River at Olene, Oreg.....	E	1,590	1905-11	Feb. 7, 1907	18.5	9,600	6.04	*1.23
4370	Lost River at Wilson Bridge, near Olene, Oreg....	E	1,620	1913-20	Apr. 25, 1917	73.24	2,920	1.90	4
Klamath River basin									
4940	Williamson River above Spring Creek, near Klamath Agency, Oreg.	E	1,330	1913-25	Apr. 27, 1917	6.8	2,500	1.88	40
4945	Williamson River at Chiloquin, Oreg.....	E	1,400	1904, 1912-16	April or May 1904	9.0	-	-	-
4985	Long Creek near Silver Lake, Oreg.....	E	40	1918-23, 1927-29	Apr. 16, 1913	-	2,520	1.80	21
					May 19, 1920	3.61	3,307	7.68	2

Table 4.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations

No.	Stream and vicinity	Location		Flood region	Drainage area (sq mi)	Areal Q _{2.33} (cfs)	Maximum Flood		Recur- rence interval (years)
		Latitude	Longitude				Date	Cfs	
Tulare Lake basin									
22113	Dry Creek near Lemon Cove, Calif.	36°25'30"	119°01'20"	C	80.4	730	Feb. 1, 1963	1,600	6
22125	South Fork Kings River near Cedar Grove, Calif.	36°48'25"	118°44'55"	C	409	3,750	Dec. 23, 1955	13,900	16
San Joaquin River basin									
2475	Big Sandy Creek near Auberry, Calif.	37°03'10"	119°32'30"	C	27.4	415	Nov. 19, 1950	1,540	19
M17	Bear Creek near Planada, Calif.	37°20'00"	120°18'50"	F	161	-	Dec. 11, 1937	6,220	-
2605.2	Mariposa Creek near Le Grand, Calif.	37°16'50"	120°09'45"	F	111	-	Dec. 11, 1937	3,160	-
2693	Maxwell Creek at Coulterville, Calif.	37°42'58"	120°11'20"	C	17.0	465	Dec. 22, 1964	1,770	104
2835	Clavey River near Buck Meadows, Calif.	37°54'00"	120°04'15"	C	144	2,600	Feb. 1, 1963	19,200	42
2845	Big Creek near Groveland, Calif.	37°51'28"	120°12'02"	C	24.7	680	Feb. 1, 1963	4,530	*1.27
2847	North Fork Tuolumne River near Long Barn, Calif.	38°05'55"	120°06'00"	C	23.1	620	Dec. 23, 1955	2,560	111
2943	North Fork Stanislaus River below Ganns damsite, Calif.	38°24'05"	120°06'40"	C	111	2,600	Jan. 31, 1963	21,000	*1.40
3168	Forest Creek near Willseyville, Calif.	38°24'10"	120°26'45"	C	20.8	550	Dec. 24, 1964	1,770	15
3283	Dry Creek above Sutter Creek, near Ione, Calif.	38°24'54"	120°54'18"	C	70.8	1,500	Jan. 6, 1965	7,300	103
M19	Cajon Creek near Sloughhouse, Calif.	-	-	C	23.7	600	Dec. 23, 1955	2,480	105
3357	Deer Creek near Sloughhouse, Calif.	38°33'06"	121°06'30"	C	46.0	1,100	Oct. 13, 1962	6,560	*1.31
3368.8	Morrison Creek near Sacramento, Calif.	38°29'57"	121°27'04"	F	48.6	-	Oct. 14, 1962	1,320	27.2
Sacramento River basin									
3672	McCloud River below Big Springs, near McCloud, Calif.	41°13'40"	122°02'45"	E	340	1,190	Dec. 21, 1955	10,100	29.7
3673	Angel Creek near McCloud, Calif.	41°11'40"	122°03'25"	E	16.8	-	Dec. 20, 1955	2,000	119
3677	McCloud River above Panther Creek, near McCloud, Calif.	41°08'10"	122°04'40"	E	420	1,260	Dec. 22, 1955	12,800	*1.24
3735	Little Cow Creek at Palo Cedro, Calif.	40°33'50"	122°13'40"	D	145	5,600	Jan. 15, 1956	13,700	94.5
3741	Bear Creek near Millville, Calif.	40°31'50"	122°08'30"	D	75.6	2,280	Dec. 1, 1961	3,140	41.5
M23	Salt Creek near Red Bluff, Calif.	40°12'45"	122°07'40"	D	30.6	-	Dec. 19, 1955	3,160	103
M24	Little Antelope Creek near Red Bluff, Calif.	40°10'45"	122°05'42"	D	38.2	-	Dec. 19, 1955	3,410	89.3
3825.5	Deer Creek below Slate Creek, near Deer Creek Meadows, Calif.	40°14'00"	121°27'50"	D	69.4	1,310	Dec. 22, 1964	7,900	*1.39
M25	Pine Creek near Chico, Calif.	39°53'50"	121°52'20"	D	20.9	-	Jan. 15, 1956	2,130	102
M26	Mud Creek near Chico, Calif.	39°49'35"	121°49'45"	D	22.4	-	Jan. 15, 1956	1,890	84.4
M27	Little Chico Creek near Chico, Calif.	39°44'00"	121°46'20"	D	25.4	-	Dec. 22, 1955	1,680	66.1
3897	Butte Creek at Butte Meadows, Calif.	40°04'05"	121°34'25"	D	44.4	-	Dec. 22, 1964	4,290	96.6
M28	Dry Creek near Oroville, Calif.	39°38'15"	121°35'30"	C	17.7	870	Dec. 22 or 23, 1955	2,120	120

* Ratio of peak discharge to that of 50-year flood.

Table 4.--Peak discharges at miscellaneous sites and unusual floods at short-term gaging stations--Continued

No.	Stream and vicinity	Location		Flood region	Drainage area (sq mi.)	Areal Q _{2.33} (cfs)	Maximum flood			
		Latitude	Longitude				Date	Discharge		
								Cfs	Cfs per sq mi	Recur- rence interval (years)
Sacramento River basin--Continued										
3953	Lost Creek above Sly Creek Reservoir, Calif..	39°37'05"	121°05'19"	C	14.1	1,020	Dec. 22, 1964	5,640	400	*1.24
4011.8	Little Grizzly Creek near Tennessee, Calif.....	40°00'55"	120°45'10"	C	29.6	390	Dec. 23, 1964	1,600	54.1	20
4104	Haypress Creek near Sierra City, Calif.....	39°33'50"	120°32'50"	C	18.2	320	Jan. 31, 1965	3,100	170	*1.48
4133	Slate Creek below diversion dam, near Strawberry Valley, Calif.	39°36'52"	121°03'04"	C	49.4	2,700	Dec. 22, 1964	13,100	266	*1.07
4171	Pooman Creek near Washington, Calif.....	39°21'36"	120°48'24"	C	23.2	1,100	Dec. 22, 1964	6,090	263	*1.16
4207	Dry Creek near Browns Valley, Calif.....	39°15'25"	121°20'35"	C	87.1	3,500	Jan. 5, 1965	4,810	55.2	3
4225	Bear River near Colfax, Calif.....	39°07'45"	120°57'35"	C	105	4,000	Nov. 20, 1950	9,620	91.6	10
4318	Pilot Creek above Stumpy Meadows Reservoir, Calif.	38°53'41"	120°34'02"	C	11.7	590	Dec. 23, 1964	2,380	203	30
4331	Long Canyon Creek near French Meadows, Calif.	39°01'16"	120°30'53"	C	18.0	870	Dec. 23, 1964	4,690	261	*1.11
Klamath River basin										
5166	Cottonwood Creek near Hornbrook, Calif.....	41°55'00"	122°33'45"	E	89.8	570	Dec. 22, 1964	5,480	61.0	*1.47
M30	Little Shasta River near Little Shasta, Calif.	41°44'30"	122°19'40"	E	54.9	-	Dec. 22, 1955	1,430	26.0	-
5180.5	East Fork Scott River at Callahan, Calif.....	41°18'15"	122°46'35"	D	110	1,880	Dec. 22, 1964	7,200	65.5	36
5182	South Fork Scott River near Callahan, Calif..	41°17'45"	122°48'32"	D	42.5	-	Dec. 22, 1955	3,320	78.1	-
5223.5	North Fork Salmon River at Sawyers Bar, Calif.	41°18'00"	123°08'00"	D	135	3,500	Dec. 22, 1955	19,200	142	*1.30
5274	New River at Denny, Calif.....	40°56'45"	123°22'55"	D	173	5,900	Dec. 22, 1964	60,000	347	*2.73
5298	Willow Creek at Willow Creek, Calif.....	40°55'39"	123°38'11"	D	43.3	-	Dec. 22, 1964	17,000	393	-

* Ratio of peak discharge to that of 50-year flood.

1853. Golden Trout Creek near Cartago, Calif.

Location.--Lat 36°22'20", long 118°17'15", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.10, T.18 S., R.34 E., on right bank 0.5 mile upstream from Tunnel ranger station and 15 miles west of Cartago.

Drainage area.--23.6 sq mi.

Gage.--Recording. Altitude of gage is 9,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 120 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 50 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Jan. 14, 1957	a3.66	-	1961	Aug. 22, 1961	2.49	24
	May 18, 1957	3.01	62				
	May 27, 1957	3.04	65	1962	Feb. 11, 1962	a3.94	-
1958	May 10, 1958	3.14	74		May 8, 1962	3.36	94
	May 31, 1958	4.05	182		June 2, 1962	3.38	96
1959	Feb. 12, 1959	a5.24	-	1963	Feb. 1, 1963	a4.45	60
	Apr. 19, 1959	2.71	39		May 21, 1963	3.62	123
1960	Jan. 1, 1960	a3.46	-		June 13, 1963	3.60	121
	Apr. 6, 1960	2.54	29		Aug. 8, 1963	2.95	58
1961	Dec. 8, 1960	a2.77	-	1964	Apr. 15, 1964	2.92	56
				1965	May 18, 1965	3.44	104

a Annual maximum stage; backwater from ice.

1854. Little Kern River near Quaking Aspen Camp, Calif.

Location.--Lat 36°08'05", long 118°26'10", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.20 S., R.33 E., on left bank 600 ft upstream from mouth and 5 miles east of Quaking Aspen Camp.

Drainage area.--132 sq mi.

Gage.--Recording. Datum of gage is 4,682 ft (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 860 cfs and extended on basis of slope-area measurement at 7,370 cfs.

Bankfull stage.--12 ft.

Historical data.--Probable high-water mark of Dec. 23, 1955, flood was found to be 12.4 ft.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	12.4	-	1963	Feb. 1, 1963	9.19	7,370
1958	Apr. 20, 1958	4.77	845		Mar. 28, 1963	3.38	454
	May 9, 1958	5.07	1,010		May 21, 1963	3.88	690
	May 19, 1958	5.24	1,100		June 2, 1963	3.59	575
	June 18, 1958	4.52	720	1964	Jan. 22, 1964	a3.25	-
1959	Feb. 16, 1959	3.38	291		May 20, 1964	2.74	317
1960	May 11, 1960	3.38	294	1965	Dec. 24, 1964	4.40	1,060
1961	Aug. 11, 1961	3.06	198		Apr. 30, 1965	3.44	533
1962	Feb. 9, 1962	5.03	986		May 19, 1965	3.79	705
	Apr. 15, 1962	4.18	572		May 31, 1965	3.69	655
	May 5, 1962	4.43	678		June 6, 1965	3.66	640
					June 12, 1965	3.53	575

e Annual maximum stage; backwater from ice.

1860. Kern River near Kernville, Calif.

Location.--Lat 35°56'00", long 118°29'10", in NE $\frac{1}{4}$ sec.14, T.23 S., R.32 E., on left bank 3 miles upstream from Salmon Creek and 15 miles north of Kernville.

Drainage area.--848 sq mi.

Gage.--Nonrecording prior to Sept. 14, 1913; recording thereafter. Prior to Apr. 1, 1913, at site 0.2 mile downstream at different datum. Apr. 1, 1913, to Feb. 20, 1922, at present site at datum 5.00 ft higher. Datum of gage is 3,542.3 ft above mean sea level (river profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 6,200 cfs and extended above on basis of computed flow over dam at 27,200 cfs. Gage heights for measurements at site 0.2 mile downstream adjusted to present datum.

Historical data.--High-water marks, believed to be for the flood of 1867, were found by the U.S. Corps of Engineers at a stage of about 13 ft above the peak stage of February 1937.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Peaks are affected by diversion 1 mile above station by Kern River No. 3 Canal (capacity, about 700 cfs) beginning Mar. 7, 1921. Peaks for the years 1912-13 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 4, 1912	4.3	3,330	1939	May 14, 1939	7.60	1,440
1913	May 24, 25, 1913	3.1	1,920	1940	May 25, 1940	9.62	3,480
1914	June 4, 1914	4.6	3,680	1941	June 14, 1941	11.14	5,510
1915	June 9, 1915	4.94	4,090	1942	June 6, 1942	9.57	3,400
1916	Jan. 17, 1916	8.8	11,500	1943	Jan. 22, 1943	12.57	8,310
1917	June 17, 1917	4.70	3,800	1944	June 8, 1944	8.54	2,310
1918	May 5, 1918	2.79	1,850	1945	Feb. 2, 1945	10.98	5,700
1919	May 29, 1919	5.1	4,290	1946	May 9, 1946	8.78	2,440
1920	May 21, 1920	4.49	3,560	1947	Nov. 23, 1946	9.08	2,770
1921	June 8, 1921	3.98	3,000	1948	May 17, 1948	7.98	1,660
1922	June 5, 1922	9.83	3,920	1949	May 28, 1949	7.93	1,420
1923	May 17, 1923	8.48	2,500	1950	June 1, 1950	8.78	2,420
1924	May 11, 1924	6.50	780	1951	Nov. 19, 1950	17.50	27,000
1925	June 13, 1925	8.10	1,920	1952	May 30, 1952	10.27	6,140
1926	May 20, 1926	8.17	1,960	1953	Apr. 27, 1953	9.03	3,120
1927	Nov. 26, 1926	10.35	4,420	1954	May 21, 1954	8.60	2,600
1928	May 30, 1928	7.67	1,460	1955	June 8, 1955	8.60	2,500
1929	May 25, 1929	7.37	1,240	1956	Dec. 23, 1955	17.55	27,200
1930	June 13, 1930	8.01	1,730	1957	June 6, 1957	9.02	3,030
1931	May 7, 1931	6.16	610	1958	May 23, 1958	9.79	4,300
1932	June 22, 1932	9.38	3,030	1959	May 13, 1959	5.76	509
1933	June 15, 1933	9.59	3,250	1960	May 12, 1960	6.35	925
1934	Apr. 20, 1934	7.20	1,080	1961	Aug. 24, 1961	4.56	308
1935	June 8, 1935	9.68	2,920	1962	June 22, 1962	8.77	2,700
1936	May 19, 1936	9.27	2,980	1963	Feb. 1, 1963	16.85	24,000
1937	Feb. 6, 1937	12.46	8,600	1964	May 20, 1964	-	1,100
1938	Mar. 2, 1938	11.68	7,000	1965	Dec. 27, 1964	8.96	3,420

1870. Kern River at Kernville, Calif.

Location.--Lat 35°45'15", long 118°25'25", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.25 S., R.33 E., on right bank 300 ft downstream from highway bridge at new town of Kernville, 1.1 miles upstream from Caldwell Creek, 8.9 miles upstream from Isabella Dam, and 41 miles northeast of Bakersfield.

Drainage area.--1,009 sq mi.

Gage.--Recording. Datum of gage is 2,621.57 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above on basis of slope-area measurements at 28,800 and 29,400 cfs.

Bankfull stage.--18 ft.

Historical data.--Nov. 19, 1950, flow not determined; probably 33,000 cfs (+1,000 cfs) at gage height 18.4 ft. High-water mark was reported by Mr. Patterson, local water service owner.

Remarks.--Slight regulation at times by operation of Kern River No. 3 Canal and powerplant. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	18.4	-	1958	June 19, 1958	9.32	4,910
1954	Jan. 25, 1954	7.87	2,630	1959	May 13, 1959	6.01	1,090
	Apr. 28, 1954	7.69	2,430	1960	Feb. 2, 1960	7.30	2,180
	May 9, 1954	7.96	2,730		Feb. 8, 1960	7.16	2,040
	May 21, 1954	8.58	3,220	1961	May 26, 1961	5.39	670
1955	May 30, 1955	8.04	2,760		Feb. 8, 1962	8.68	3,880
	June 8, 1955	8.36	3,120	1962	May 7, 1962	8.50	3,460
1956	Dec. 23, 1955	16.20	29,400		June 22, 1962	8.73	3,550
	Jan. 25, 1956	10.73	7,760	1963	Feb. 1, 1963	16.76	28,800
	May 24, 1956	8.64	3,860		May 24, 1963	8.02	3,040
	July 21, 1956	7.25	2,140		June 3, 1963	8.32	3,430
	July 27, 1956	7.27	2,160		June 20, 1963	9.52	5,250
1957	May 19, 1957	8.68	3,920	1964	May 21, 1964	6.73	1,680
	June 5, 1957	8.62	3,830		Dec. 24, 1964	9.29	4,860
	June 13, 1957	7.64	2,550	1965	Dec. 27, 1964	10.37	6,840
	June 20, 1957	7.15	2,040		May 1, 1965	7.38	2,310
	June 28, 1957	7.14	2,030		May 20, 1965	7.95	2,800
1958	Feb. 25, 1958	7.51	2,090		June 12, 1965	8.68	3,740
	Apr. 22, 1958	8.67	3,900				
	May 10, 1958	9.07	4,510				
	May 22, 1958	9.64	5,470				

1880. Kern River at Isabella, Calif.

Location.--Lat 35°40'00", long 118°27'30", in SW $\frac{1}{4}$ sec.17, T.26 S., R.33 E., 0.5 mile upstream from South Fork Kern River and 0.5 mile north of Isabella.

Drainage area.--1,069 sq mi.

Gage.--Recording. Prior to Jan. 26, 1926, at site 400 ft upstream at different datum. Altitude of gage is 2,490 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,130 cfs.

Remarks.--Peaks may be affected by diversion above station for irrigation and power. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	May 20, 1926	10.02	1,600	1931	May 7, 1931	8.79	722
1927	Nov. 27, 1926	12.73	6,570	1932	June 22, 1932	11.23	3,040
1928	May 29, 1928	9.71	1,680	1933	June 15, 1933	11.08	2,860
1929	May 19, 1929	9.45	1,360	1934	May 12, 1934	8.36	462
1930	June 13, 1930	9.92	1,850	1935	June 8, 1935	11.04	2,880

1882. South Fork Kern River near Olancho, Calif.

Location.--Lat 36°11'00", long 118°07'40", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.20 S., R.36 E., on left bank 50 ft upstream from small unnamed left bank tributary, 2.0 miles downstream from Snake Creek, and 9.7 miles southwest of Olancho.

Drainage area.--146 sq mi.

Gage.--Recording. Altitude of gage is 7,840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 930 cfs.

Bankfull stage.--6 ft.

Remarks.--Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Apr. 14, 1957	2.87	192	1961	Mar. 23, 1961	1.71	34
	Apr. 28, 1957	3.16	265		Apr. 9, 1962	b5.74	-
	May 19, 1957	3.58	384	1962	Apr. 25, 1962	4.58	780
1958	Apr. 22, 1958	-	(a)		Feb. 1, 1963	5.37	1,240
	Apr. 28, 1958	-	(a)	1963	Mar. 28, 1963	2.83	172
	Apr. 18, 1958	b5.85	-		Apr. 7, 1963	3.29	278
	May 10, 1958	5.50	1,280		Apr. 15, 1963	3.09	229
	May 19, 1958	5.14	1,070		May 4, 1963	3.80	435
					June 13, 1963	3.26	270
1959	Dec. 24, 1958	b2.73	-	1964	Mar. 22, 1964	b2.62	-
	Apr. 5, 1959	2.65	146		Apr. 11, 1964	2.55	123
1960	Mar. 7, 1960	b3.10	-	1965	Dec. 24, 1964	-	250
	Mar. 18, 1960	2.40	127		Apr. 30, 1965	3.87	486
1961	Dec. 14, 1960	b2.13	-				

a Discharge unknown; exceeded base.

b Annual maximum stage; backwater from ice.

1895. South Fork Kern River near Onyx, Calif.

Location.--Lat 35°44', long 118°10', in SW $\frac{1}{4}$ sec.24, T.25 S., R.35 E., on left bank three-quarters of a mile north of State Highway 178, 1.4 miles upstream from Canebrake Creek, and 5 miles northeast of Onyx.

Drainage area.--530 sq mi.

Gage.--Nonrecording prior to Aug. 31, 1914; recording thereafter. Prior to Apr. 17, 1936, at site 140 ft upstream. Altitude of gage is 2,900 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 916 cfs prior to Apr. 17, 1936; below 3,000 cfs thereafter.

Bankfull stage.--7 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 180 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Jan. 25, 1914	7.1	a2,430	1941	May 12, 1941	6.10	2,860
1930	Feb. 22, 1930	3.98	532	1942	Apr. 23, 1942	3.99	982
				1947	Nov. 23, 1946	b4.29	776
1931	Mar. 22, 1931	2.56	118		Apr. 18, 1948	3.32	340
1932	Apr. 20, 1932	5.10	880	1949	Apr. 13, 1949	3.56	434
1933	Apr. 16, 1933	3.66	384		May 17, 1949	-	184
1934	Mar. 29, 1934	2.80	176				
1935	Apr. 24, 1935	4.18	560	1950	Feb. 6, 1950	3.91	595
1936	Apr. 24, 1936	4.88	1,170		Mar. 24, 1950	-	200
1937	Feb. 6, 1937	6.50	3,130		Apr. 4, 1950	-	351
1938	Mar. 2, 1938	6.69	3,450		Apr. 10, 1950	-	247
1939	Apr. 9, 1939	3.81	701		Apr. 21, 1950	-	386
1940	Apr. 15, 1940	3.72	651				

a Maximum observed; peak discharge was greater and may have exceeded that of 1938.

b Occurred at different time than peak discharge.

Peak stages and discharges of South Fork Kern River near Onyx, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	5.88	2,180	1957	Apr. 28, 1957	3.07	252
	Dec. 4, 1950	3.58	449		May 19, 1957	3.50	412
1952	Dec. 5, 1951	3.10	261	1958	Feb. 25, 1958	3.68	507
	Dec. 29, 1951	4.34	888		Mar. 17, 1958	2.99	227
	Jan. 25, 1952	3.76	539		Mar. 22, 1958	3.14	284
	Feb. 2, 1952	3.24	308		May 10, 1958	5.49	1,830
	May 3, 1952	5.93	2,230	1959	Apr. 3, 1959	2.70	156
	May 15, 1952	5.78	2,090		Feb. 2, 1960	3.06	243
	July 28, 1952	3.07	252	1960	Feb. 8, 1960	2.87	198
1953	Jan. 13, 1953	3.02	236		Aug. 23, 1961	2.28	76
	Apr. 28, 1953	3.51	417	1962	Feb. 11, 1962	4.39	913
1954	Jan. 24, 1954	3.13	264		Apr. 18, 1962	4.51	998
	Feb. 13, 1954	3.09	251	1963	Feb. 1, 1963	6.79	3,460
	Mar. 9, 1954	2.96	213		Feb. 10, 1963	3.50	415
	Apr. 18, 1954	4.29	808		Mar. 28, 1963	3.72	520
1955	Apr. 2, 1955	2.83	184		May 4, 1963	3.71	515
1956	Dec. 24, 1955	5.73	2,050	1964	Oct. 19, 1963	2.82	185
	Jan. 27, 1956	4.17	776		Dec. 27, 1964	3.40	375
	Mar. 26, 1956	3.63	473	1965	May 1, 1965	3.97	659
	Apr. 10, 1956	3.54	430				
	Apr. 26, 1956	3.58	449				
1957	Apr. 14, 1957	2.84	186				

1897. Kelso Creek near Weldon, Calif.

Location--Lat 35°34'10", long 118°15'05", in NW¹ sec.20, T.27 S., R.35 E., on left bank 0.5 mile upstream from Woolstaff Creek and 7 miles southeast of Weldon.

Drainage area--101 sq mi.

Gage--Recording. Altitude of gage is 3,180 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 7 cfs and extended above on basis of slope-area measurement at 1,180 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Low peaks may be affected by small temporary diversion dam about 1 mile upstream. Water diverted for irrigation. Base for partial-duration series, 10 cfs. Only annual peaks are shown in the years 1959-63.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 6, 1959	1.35	2.5	1964	Oct. 15, 1963	2.57	10
1960	May 22, 1960	1.59	7.3		Oct. 17, 1963	3.09	32
1961	Aug. 23, 1961	6.00	1,180	1965	Aug. 15, 1965	6.20	1,340
1962	Feb. 11, 1962	3.36	108		Aug. 16, 1965	3.32	26
1963	May 31, 1963	2.83	18				

^a Occurred Feb. 9, 1962.

1900. South Fork Kern River at Isabella, Calif.

Location.--Lat 35°39'33", long 118°27'36", in NW¹ sec.20, T.26 S., R.33 E., at Isabella, 0.2 mile upstream from mouth.

Drainage area.--982 sq mi.

Gage.--Recording. Datum of gage is 2,484.3 ft above mean sea level (from river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 2,340 cfs and extended above on basis of area-velocity study.

Remarks.--Low peaks may be affected by many diversions upstream for irrigation and much return flow. Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 130 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1930	May 5, 1930	1.97	229	1946	Oct. 8, 1945	4.97	967
1931	Feb. 6, 1931	.67	20	1947	Nov. 24, 1946	4.59	748
1932	Apr. 18, 1932	3.27	675	1948	Apr. 12, 1948	3.43	163
1933	Apr. 17, 1933	a2.12	130	1949	Apr. 24, 1949	3.36	121
1934	Jan. 2, 1934	1.50	62	1950	Feb. 7, 1950	4.48	677
1935	Apr. 25, 1935	2.88	230		Apr. 21, 1950	3.95	230
1936	Apr. 25, 1936	4.40	916	1951	Nov. 19, 1950	c12.4	1,200
1937	Feb. 7, 1937	b7.30	4,100	1952	Dec. 30, 1951	5.48	876
1938	Mar. 3, 1938	6.46	4,010		Jan. 26, 1952	5.37	778
1939	Apr. 10, 1939	3.42	560		Feb. 2, 1952	4.60	379
1940	Apr. 23, 1940	3.67	550		Mar. 2, 1952	3.86	154
1941	May 12, 1941	6.57	2,890		Apr. 7, 1952	5.41	590
1942	Apr. 24, 1942	4.15	748		May 4, 1952	7.48	2,410
1943	Mar. 9, 1943	c6.99	2,990		May 21, 1952	7.37	2,030
1944	May 4, 1944	4.65	805				
1945	Feb. 2, 1945	4.98	1,100				

a Occurred June 8, 1933.

b Occurred Feb. 6, 1937.

c Backwater from Kern River.

1910. Kern River below Isabella Dam, Calif.

(Published as "below Isabella dam site" prior to October 1952)

Location.--Lat 35°38'30", long 118°28'55", in S¹ NW¹ sec.30, T.26 S., R.33 E., on right bank 200 ft downstream from highway bridge, 0.6 mile downstream from Isabella Dam, and 1.6 miles southwest of Isabella.

Drainage area.--2,074 sq mi.

Gage.--Recording prior to Mar. 12, 1952, and subsequent to Sept. 18, 1953; nonrecording Mar. 13, 1952, to Sept. 17, 1953. Prior to Mar. 12, 1953, at site 0.6 mile upstream at different datum. Datum of gage is 2,435.07 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 35,000 cfs prior to Mar. 12, 1953; defined by current-meter measurements below 3,600 cfs thereafter.

Bankfull stage.--16 ft.

Remarks.--Peaks regulated by Isabella Reservoir (capacity, 569,700 acre-ft) beginning Apr. 15, 1954. Peaks affected by diversions to Borel Canal (capacity, greater than 630 cfs) beginning in 1910; also by numerous irrigation diversions and return flow above station. Only annual peaks are shown.

Peak stages and discharges of Kern River below Isabella Dam, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	May 4, 1945	8.78	3,420	1956	June 26, 1956	11.06	2,580
1946	May 7, 1946	8.47	2,960	1957	June 22, 1957	8.45	1,320
1947	Nov. 23, 1946	8.75	3,160	1958	June 28, 1958	15.14	4,260
1948	Apr. 10, 1948	7.77	1,790	1959	June 24, 1959	8.48	1,420
1949	May 27, 1949	7.49	1,560	1960	June 26, 1960	8.14	1,210
1950	Feb. 6, 1950	10.28	3,990	1961	Mar. 6, 1961	6.38	460
1951	Nov. 19, 1950	23.4	39,000	1962	June 24, 1962	8.63	1,500
1953	Apr. 28, 1953	12.8	3,480	1963	Aug. 25, 1963	10.08	2,160
1954	Jan. 25, 1954	8.83	1,480	1964	Oct. 10, 1963	8.87	1,610
1955	June 9, 1955	8.13	1,140	1965	Aug. 5, 1965	8.62	1,490

1925. Kern River near Democrat Springs, Calif.

Location.--Lat 35°31'20", long 118°40'40", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.6, T.23 S., R.31 E., on left bank 1.0 mile southwest of Democrat Springs and 2.1 miles upstream from Cow Creek.

Drainage area.--2,258 sq mi.

Gage.--Recording. Altitude of gage is 1,850 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,700 cfs and extended above on basis of computation of flow over dam at 40,000 cfs (basic data for computation furnished by Southern California Edison Co.).

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and several discharge measurements furnished by Southern California Edison Co. Peaks regulated by Isabella Reservoir (capacity, 569,700 acre-ft) beginning in April 1954. Peaks are affected by diversions to Kern River Conduit No. 1, beginning in June 1950. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	30.7	40,000	1959	June 24, 1959	9.91	1,510
1952	May 30, 1952	17.75	8,820	1960	June 23, 1960	9.28	1,260
1953	Apr. 28, 1953	13.15	3,520	1961	Nov. 14, 1960	7.41	603
1954	June 24, 1954	9.72	1,450	1962	June 23, 1962	10.16	1,670
1955	June 10, 1955	9.78	1,270	1963	Aug. 25, 1963	10.99	2,090
1957	June 6, 1957	10.23	1,630	1964	Oct. 2, 1963	9.11	1,190
1958	June 12, 1958	13.68	3,960	1965	July 9, 1965	9.58	1,380

a Occurred Mar. 16, 1955.

1930. Kern River below Kern Canyon powerhouse, near Bakersfield, Calif.
(Published as Kern River near Bakersfield prior to Oct. 1, 1953)

Location--Lat 35°26'10", long 118°48'50", in NW¼SE¼ sec.1, T.29 S., R.29 E., on left bank 1 mile downstream from Kern Canyon powerhouse, 1.3 miles upstream from Cottonwood Creek, and 11 miles northeast of Bakersfield.

Drainage area--2,307 sq mi.

Gage--Recording. Prior to Oct. 1, 1953, at site 11 miles downstream at different datum. Altitude of gage is 650 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 31,000 cfs prior to Oct. 1, 1953; defined by current-meter measurements below 3,970 cfs thereafter.

Bankfull stage--10 ft.

Remarks--Peaks regulated by Isabella Reservoir (capacity, 569,700 acre-ft) beginning in 1954 and by powerplants beginning about 1910. Low peaks may be affected by many diversions upstream for irrigation. Complete record prior to 1954 furnished by Kern County Land Co. Water-stage-recorder graph subsequent to 1953 furnished by Pacific Gas and Electric Co. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1895	May 17, 1895	-	5,580	1931	May 8, 1931	-	1,120
1896	June 10, 1896	-	3,610	1932	May 22, 1932	-	3,730
1897	May 24, 1897	-	5,340	1933	June 16, 1933	-	3,770
1898	Apr. 28, 1898	-	1,340	1934	May 12, 1934	-	914
1899	Mar. 26, 1899	-	4,930	1935	June 9, 1935	-	3,380
1900	May 28, 1900	-	1,970	1936	May 19, 1936	-	4,170
1901	May 19, 1901	-	4,420	1937	Feb. 7, 1937	9.12	20,000
1902	Apr. 8, 1902	-	3,760	1938	Mar. 3, 1938	9.24	14,600
1903	May 14, 1903	-	3,370	1939	Apr. 10, 1939	3.11	2,030
1904	June 4, 1904	-	3,170	1940	Feb. 26, 1940	4.55	5,450
1905	June 15, 1905	-	3,250	1941	May 12, 1941	7.74	8,520
1906	June 21, 1906	-	9,680	1942	June 12, 1942	4.40	4,060
1909	Jan. 14, 1909	-	11,900	1943	Mar. 9, 1943	10.87	21,700
1910	Dec. 10, 1909	-	7,560	1944	June 9, 1944	3.58	3,070
1911	Jan. 31, 1911	-	5,380	1945	Feb. 2, 1945	7.46	9,370
1912	June 4, 1912	-	3,220	1946	May 7, 1946	3.99	3,520
1913	May 25, 1913	-	1,980	1947	Nov. 24, 1946	4.15	3,810
1914	Jan. 26, 1914	-	18,300	1948	May 28, 1948	2.79	2,210
1915	June 10, 1915	-	4,250	1949	May 29, 1949	2.87	2,130
1916	Jan. 18, 1916	-	18,000	1950	Feb. 7, 1950	4.85	4,590
1917	June 19, 1917	-	4,330	1951	Nov. 19, 1950	14.2	36,000
1918	June 21, 1918	-	3,480	1952	May 31, 1952	6.80	8,530
1919	May 30, 1919	-	4,300	1953	Apr. 28, 1953	3.67	3,800
1920	Apr. 16, 1920	-	4,460	1954	Jan. 25, 1954	9.32	2,120
1921	June 12, 1921	-	3,550	1955	June 12, 1955	9.28	2,080
1922	May 8, 1922	-	5,300	1956	June 26, 1956	10.24	3,130
1923	Apr. 7, 1923	-	3,280	1957	June 11, 1957	9.39	2,040
1924	May 10, 1924	-	1,070	1958	June 12, 1958	11.47	4,360
1925	May 30, 1925	-	2,820	1959	June 24, 1959	9.73	1,940
1926	Apr. 27, 1926	-	3,460	1960	June 23, 1960	8.93	1,720
1927	Feb. 19, 1927	-	6,570	1961	Nov. 14, 1960	7.65	620
1928	May 31, 1928	-	2,060	1962	June 14, 1962	9.67	2,380
1929	May 20, 1929	-	2,000	1963	July 16, 1963	9.73	2,330
1930	June 24, 1930	-	2,420	1964	Oct. 1, 1963	9.18	1,890

1940.5 Tumbleweed Creek near Oildale, Calif.

Location--Lat 35°27'55", long 119°01'30", in NW $\frac{1}{4}$ sec.25, T.28 S., R.27 E., at culvert on county road, 3.2 miles north of Oildale.

Drainage area--2.40 sq mi.

Gage--Crest-stage gage. Altitude of gage is 765 ft (from topographic map).

Stage-discharge relation--Defined by culvert computations.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	-	-	0	1962	Feb. 8, 1962	2.54	12
1960	Jan. 10, 1960	-	.1	1963	Feb. 13, 1963	4.65	104
				1964	-	-	0
1961	Nov. 5, 1960	2.86	18	1965	Apr. 1965	-	.1

1942. Wagon Wheel Creek near Reward, Calif.

Location--Lat 35°19'25", long 119°44'30", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.30 S., R.21 E., at culvert on private road, 3.5 miles west of Reward.

Drainage area--1.38 sq mi.

Gage--Crest-stage gage. Altitude of gage is 2,105 ft (from topographic map).

Stage-discharge relation--Defined by culvert computations.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	9.05	52	1962	Feb. 19, 1962	9.92	76
1960	Feb. 1, 1960	6.97	6	1965	-	-	.2
				1964	January 1964	8.65	40
1961	Nov. 27, 1960	9.55	64	1965	Aug. 14, 1965	13.44	306

1945. Sand Creek near McKittrick, Calif.

Location--Lat 35°19'25", long 119°37'35", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.30 S., R.22 E., at culvert on State Highway 33, 1.2 miles north of McKittrick.

Drainage area--0.32 sq mi.

Gage--Crest-stage gage. Altitude of gage is 900 ft (from topographic map).

Stage-discharge relation--Defined by culvert computations.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	5.85	9.5	1962	Feb. 17, 1962	6.10	14
1960	-	-	0	1963	Mar. 28, 1963	-	.1
				1964	-	-	0
1961	Nov. 5, 1960	6.03	12	1965	-	-	0

1948. Shale Creek near Fellows, Calif.

Location.--Lat 35°13'15", long 119°34'05", in NW $\frac{1}{4}$ sec.24, T.31 S., R.22 E., at culvert on State Highway 33, 3.2 miles northwest of Fellows.

Drainage area.--5.86 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,255 ft (from topographic map).

Stage-discharge relation.--Defined by culvert computations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	8.53	58	1962	Feb. 19, 1962	10.16	118
1960	-	-	0	1963	May 20, 1963	6.20	.1
				1964	May or June 1964	7.28	20
1961	Nov. 5, 1960	8.56	57	1965	(a)	7.29	17

a March or April 1965.

1950. Oil Creek near Taft, Calif.

Location.--Lat 35°09'40", long 119°29'45", in NW $\frac{1}{4}$ sec.10, T.32 S., R.23 E., at culvert on State Highway 33, 2.5 miles northwest of Taft.

Drainage area.--0.35 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 1,060 ft (from topographic map).

Stage-discharge relation.--Defined by culvert computations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	3.96	2.5	1962	Feb. 19, 1962	4.19	4.2
1960	Mar. 28, 1960	-	.1	1963	May 28, 1963	4.92	11
				1964	Nov. 21, 1963	4.49	6.9
1961	Nov. 6, 1960	4.34	5.5	1965	Apr. 4, 1965	4.27	4.9

TULARE LAKE BASIN

1980.5 Mon Canyon Creek near Oildale, Calif.

Location.--Lat 35°31'45", long 118°58'25", in NW $\frac{1}{4}$ -NW $\frac{1}{4}$ sec.4, T.28 S., R.28 E., at culvert on county road, 8 miles northeast of Oildale.

Drainage area.--2.38 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 640 ft (from topographic map).

Stage-discharge relation.--Defined by culvert computations.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	-	0.2	1962	Dec. 2, 1961	-	.2
1960	Apr. 27, 1960	-	.1	1963	Sept. 18, 1963	4.54	33
				1964	Apr. 1, 1964	5.08	35
1961	Nov. 5, 1960	-	.1	1965	Dec. 27, 1964	-	1

1995. White River near Ducor, Calif.

Location.--Lat 35°48'50", long 118°55'45", in NE $\frac{1}{4}$ sec.27, T.24 S., R.28 E., 500 ft downstream from bridge at Gillam Ranch, 3 miles downstream from Coho Creek, and 8 miles southeast of Ducor.

Drainage area.--92.9 sq mi (revised).

Gage.--Recording. Prior to Oct. 1, 1946, at site 500 ft upstream at different datum. Altitude of gage is 695 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs and extended above on basis of slope-area measurement at 1,300 cfs prior to Oct. 1, 1946; defined by current-meter measurements below 150 cfs thereafter.

Bankfull stage.--9 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1948. Pase for partial-duration series, 30 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Mar. 9, 1943	-	2,300	1952	Jan. 16, 1952	3.37	442
1945	Feb. 2, 1945	6.35	1,300		Jan. 25, 1952	2.58	190
1946	Jan. 5, 1946	1.52	71		Mar. 1, 1952	2.95	328
1947	Nov. 23, 1946	2.11	71		Mar. 7, 1952	2.59	219
1948	Apr. 10, 1948	2.53	111		Mar. 10, 1952	3.42	567
1949	Mar. 23, 1949	1.97	22		Mar. 15, 1952	4.60	980
1950	Feb. 11, 1950	1.85	45		Mar. 20, 1952	2.14	294
1951	Nov. 19, 1950	3.73	584	1953	Mar. 27, 1952	-	(a)
	Dec. 4, 1950	1.80	74		Dec. 2, 1952	1.75	42
	Jan. 19, 1951	1.76	69		Dec. 8, 1952	2.16	50
	Mar. 6, 1951	1.53	43		Dec. 20, 1952	1.95	35
1952	Dec. 30, 1951	2.64	206		Dec. 31, 1952	2.58	166
					Jan. 8, 1953	2.42	132
					Jan. 14, 1953	-	140
					Mar. 20, 1953	1.80	78
					Mar. 29, 1953	1.46	44
					Apr. 28, 1953	2.20	123

a Unknown; exceeded base.

2000. Deer Creek at California Hot Springs, Calif.

Location.--Lat 35°52'45", long 118°40'42", in sec.31, T.23 S., R.31 E., at forest supervisor's headquarters, 1 mile west of California Hot Springs, Tulare County.

Drainage area.--16.8 sq mi (revised).

Gage.--Nonrecording. Altitude of gage is 2,960 ft, revised (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 250 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges of Deer Creek at California Hot Springs, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Mar. 8, 1911	1.40	55	1925	Feb. 8, 1925	1.94	128
1912	May 14, 1912	-	40	1926	Apr. 5, 1926	1.20	35
1913	Feb. 24, 1913	.84	18	1927	Feb. 18, 1927	2.40	255
1915	May 4, 1915	1.75	94	1928	Mar. 25, 1928	2.20	190
1916	Jan. 17, 1916	2.8	385	1929	Dec. 18, 1928	2.24	205
1917	Feb. 22, 1917	1.4	55	1930	Feb. 22, 1930	1.40	53
1918	Mar. 27, 1918	1.2	36	1931	Nov. 16, 1930	1.12	27
1919	Oct. 1, 1918	1.4	53	1932	Feb. 7, 1932	1.60	69
1920	Apr. 15, 1920	3.1	490	1934	Dec. 13, 1933	1.0	21
1921	Mar. 13, 1921	1.40	55	1935	Apr. 8, 1935	2.00	142
1922	Feb. 11, 1922	1.40	40				
1923	Apr. 6, 1923	2.45	265				

2020. North Fork of Middle Fork Tule River near Springville, Calif.

Location.--Lat 36°10'29", long 118°41'41", in sec.23, T.20 S., R.30 E. (unsurveyed), on right bank 1.2 miles upstream from mouth, 2.2 miles downstream from Hossack Creek, and 7.4 miles northeast of Springville.

Drainage area.--39.3 sq mi.

Gage.--Recording. Altitude of gage is 2,920 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 330 cfs and extended above on basis of critical-depth determination at 12,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and several discharge measurements furnished by Pacific Gas and Electric Co. Peaks are affected by diversion to Pacific Gas and Electric Co. conduit (capacity, about 75 cfs since beginning of record. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Jan. 10, 1940	5.35	469	1953	Apr. 27, 1953	6.02	468
1941	Dec. 27, 1940	5.22	416	1954	Jan. 24, 1954	4.75	138
1942	Jan. 25, 1942	4.76	263	1955	Feb. 16, 1955	5.35	232
1943	Mar. 9, 1943	7.39	2,200	1956	Dec. 23, 1955	12.47	12,400
1944	May 8, 1944	4.12	154	1957	May 19, 1957	6.71	1,860
1945	Feb. 1, 1945	6.29	1,190	1958	May 21, 1958	4.16	395
1946	Dec. 25, 1945	4.80	340	1959	Feb. 16, 1959	4.29	101
1947	Nov. 23, 1946	5.28	545	1960	Feb. 1, 1960	4.95	210
1948	Apr. 10, 1948	5.10	460	1961	Mar. 6, 1961	2.70	11
1949	Apr. 22, 1949	4.09	126	1962	Feb. 8, 1962	4.72	169
1950	Feb. 6, 1950	5.05	440	1963	Feb. 1, 1963	9.67	5,460
1951	Nov. 19, 1950	13.06	11,000	1964	May 19, 1964	3.37	72
1952	Dec. 30, 1951	5.54	644	1965	Dec. 27, 1964	5.74	824

a Occurred May 9, 19, 1958.

2030. Bear Creek near Springville, Calif.

Location.--Lat 36°12'08", long 118°45'36", in sec.7, T.20 S., R.30 E., at Bear Creek ranger station, 150 ft upstream from Rancheria Creek, 3.0 miles upstream from mouth, and 6 miles northeast of Springville.

Drainage area.--13.5 sq mi (revised).

Gage.--Nonrecording. Altitude of gage is 2,060 ft, revised (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 42 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 31, 1911	4.20	180	1915	May 4, 1915	3.00	87
1912	Nov. 10, 1911	2.10	34				
1913	Feb. 24, 1913	2.00	30	1916	Jan. 17, 1916	4.50	200
1914	Jan. 25, 1914	5.60	295				

2031. North Fork Tule River at Springville, Calif.

Location.--Lat 36°08'22", long 118°48'15", in SE $\frac{1}{4}$ sec.35, T.20 S., R.29 E., on left bank 0.1 mile upstream from Middle Fork Tule River, three-quarters of a mile northeast of Springville, and 12.9 miles northeast of Porterville.

Drainage area.--97.6 sq mi.

Gage.--Recording. Altitude of gage is 1,040 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 700 cfs.

Bankfull stage.--16 ft.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	May 19, 1957	9.27	2,070	1962	Feb. 9, 1962	7.52	698
1958	Apr. 3, 1958	8.74	1,590	1963	Jan. 31, 1963	10.29	4,600
1959	Feb. 16, 1959	6.45	235	1964	Apr. 1, 1964	6.62	313
1960	Feb. 2, 1960	7.40	505	1965	Dec. 27, 1964	8.61	1,490
1961	Dec. 2, 1960	5.16	50				

2032. Tule River near Springville, Calif.

Location.--Lat 36°05'41", long 118°50'09", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.21 S., R.29 E., on left bank 15 ft upstream from highway bridge, 2 miles southwest of Springville, and 4 miles downstream from North Fork.

Drainage area.--225 sq mi.

Gage.--Recording. Altitude of gage is 800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,200 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Peak discharge for the flood of Nov. 19, 1950, was 25,400 cfs, based on records for downstream station. Flood of Dec. 23, 1955, reached a stage of 13.7 ft (discharge, 21,300 cfs, based on records for downstream station).

Remarks.--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges of Tule River near Springville, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	-	25,400	1962	Feb. 10, 1962	5.59	1,460
1956	Dec. 23, 1955	13.7	21,300	1963	Jan. 31, 1963	10.80	10,100
1958	Jan. 26, 1958	5.42	1,280	1963	Apr. 7, 1963	5.56	1,260
	Feb. 25, 1958	5.38	1,240		1964	Nov. 15, 1963	4.35
	Mar. 17, 1958	5.67	1,630	Apr. 1, 1964		4.83	630
	Mar. 22, 1958	6.16	2,430		1965	Nov. 12, 1964	4.48
	Apr. 3, 1958	6.70	3,400	Dec. 24, 1964		6.10	1,790
	Apr. 21, 1958	5.18	1,020	Dec. 27, 1964		7.27	3,330
1959	Feb. 16, 1959	4.82	716	Jan. 7, 1965		5.38	1,050
	1960	Feb. 2, 1960	5.87	1,950	Jan. 24, 1965	5.22	916
Apr. 9, 1965					4.83	630	
Apr. 21, 1965					4.75	580	
					1961	Dec. 2, 1960	3.76

2035. Tule River near Porterville, Calif.

Location.--Lat 36°05', long 118°55', in NW $\frac{1}{4}$ sec.25, T.21 S., R.28 E., on downstream side of highway bridge, 1 mile upstream from South Fork and 6 miles east of Porterville.

Drainage area.--253 sq mi (revised).

Gage.--Nonrecording prior to Oct 1, 1930; recording thereafter. Prior to Oct. 1, 1930, 75 ft downstream at different datum. Altitude of gage is 580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs prior to Oct. 1, 1930; by current-meter measurements below 7,200 cfs and extended above on basis of slope-area measurements at 11,000, 12,500, 24,200, and 25,500 cfs thereafter.

Bankfull stage.--6 ft.

Remarks.--Peaks for the years 1902-30, 1943, and Feb. 1, 1945, are maximum observed. Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Apr. 7, 1902	7.2	3,400	1929	Mar. 22, 1929	3.80	468
1903	Jan. 28, 1903	7.6	3,800	1930	Feb. 23, 1930	4.30	604
1904	Mar. 23, 1904	6.3	2,560	1931	Jan. 2, 1931	3.19	369
1905	Mar. 19, 1905	4.2	960		Dec. 28, 1931	10.1	5,800
1906	Mar. 15, 1906	10.0	9,000		Jan. 29, 1933	7.15	1,670
1907	Apr. 2, 1907	6.0	2,260		Dec. 13, 1933	4.75	580
1908	Feb. 22, 1908	4.7	1,270		Apr. 8, 1935	8.9	4,360
1909	Jan. 14, 1909	9.5	7,720	1936	Feb. 13, 1936	10.55	12,500
1910	Dec. 8, 1909	9.8	8,440		Feb. 6, 1937	9.60	12,000
1911	Jan. 31, 1911	7.0	3,340		Dec. 11, 1937	9.5	11,300
1912	Apr. 12, 1912	2.5	260		Mar. 27, 1939	5.90	1,450
1913	Apr. 1, 1913	2.55	248		Jan. 11, 1940	9.63	7,490
1914	Jan. 25, 1914	10.8	11,400	1941	Feb. 12, 1941	8.06	3,750
1915	May 4, 1915	5.3	1,740		Jan. 25, 1942	6.45	1,640
1916	Jan. 17, 1916	11.0	12,000		Mar. 9, 1943	11.3	15,500
1917	Dec. 24, 1916	8.2	5,120		Mar. 5, 1944	5.20	865
1918	Mar. 18, 1918	4.0	900	1945	Nov. 12, 1944	-	1,150
1919	Feb. 27, 1919	4.3	1,070		Feb. 1, 1945	11.1	12,600
1920	Apr. 15, 1920	7.30	3,450		Feb. 2, 1945	-	7,330
1921	Mar. 14, 1921	3.65	657		Mar. 15, 1945	-	2,880
	Feb. 11, 1922	7.7	4,300		Mar. 23, 1945	-	1,060
1923	Apr. 6, 1923	7.50	3,360		Mar. 26, 1945	-	1,710
1924	Apr. 11, 1924	2.55	255	1946	Dec. 25, 1945	7.53	2,230
1925	Apr. 4, 1925	4.00	580		Nov. 23, 1946	7.69	2,390
1926	Apr. 8, 1926	4.36	750	1947	Dec. 27, 1946	-	1,160
1927	Feb. 18, 1927	10.00	6,400				
1928	Mar. 25, 1928	6.0	1,430				

TULARE LAKE BASIN

Peak stages and discharges of Tule River near Porterville, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1948	Apr. 10, 1948	8.63	3,600	1954	Mar. 24, 1954	5.06	1,020
1949	Apr. 23, 1949	3.89	379	1955	Feb. 17, 1955	6.20	1,620
1950	Feb. 6, 1950	7.45	2,160	1956	Dec. 6, 1955	5.12	1,050
1951	Nov. 19, 1950	13.75	25,500		Dec. 23, 1955	11.80	24,200
	Dec. 4, 1950	9.32	5,260		Dec. 26, 1955	5.32	1,510
	Jan. 19, 1951	5.44	1,060		Jan. 25, 1956	8.00	6,830
1952	Dec. 5, 1951	5.53	1,220	1957	May 19, 1957	7.00	4,430
	Dec. 30, 1951	8.4	3,600	1958	Jan. 25, 1958	4.78	1,220
	Jan. 15, 1952	7.00	2,190		Jan. 26, 1958	5.08	1,500
	Jan. 25, 1952	8.25	3,600		Feb. 25, 1958	4.88	1,360
	Feb. 2, 1952	5.55	1,220		Mar. 17, 1958	5.30	1,730
	Mar. 1, 1952	5.80	1,350		Mar. 22, 1958	5.73	2,280
	Mar. 10, 1952	5.75	1,320		Apr. 1, 1958	5.90	2,530
	Mar. 15, 1952	6.80	2,010		Apr. 3, 1958	6.20	3,000
1953	Jan. 13, 1953	5.68	1,240		Apr. 21, 1958	4.62	1,090
	Jan. 27, 1953	7.64	2,860	1959	Feb. 16, 1959	4.00	650
1954	Jan. 25, 1954	6.82	2,050	1960	Feb. 2, 1960	5.10	1,520

2040. South Fork Tule River near Porterville, Calif.
(Published as "near Porterville" prior to 1916)

Location--Lat 36°02', long 118°47', in Tule Indian Reservation, 2 miles downstream from Rocky Creek, 8 miles upstream from mouth, and 14 miles south-east of Porterville, Tulare County.

Drainage area--80.3 sq mi.

Gage--Nonrecording. Prior to July 18, 1916, at site 70 ft upstream at different datum. Altitude of gage is 1,100 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 770 cfs prior to July 18, 1916; below 300 cfs thereafter.

Bankfull stage--Not subject to overflow.

Remarks--All peaks except those for the years 1916 and 1928 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 31, 1911	3.5	640	1922	Feb. 11, 1922	3.7	430
1912	Apr. 26, 1912	-	120	1923	Apr. 6, 1923	5.4	1,360
1913	Mar. 29, May 28, 1913	-	49	1924	Apr. 11, 1924	1.72	50
1914	Jan. 26, 1914	8.0	3,170	1925	Feb. 8, 1925	3.9	604
1915	May 18, 1915	3.0	452	1927	Feb. 18, 1927	6.0	1,540
1916	Jan. 27, 1916	7.0	2,280	1928	Mar. 24, 25, 1928	4.10	630
1917	Dec. 23, 1916	3.4	435	1929	Mar. 22, 1929	3.00	231
1918	Mar. 19, 1918	2.4	151	1930	Feb. 23, 1930	2.76	180
1919	Mar. 2, 1919	3.0	300	1931	Nov. 17, 1930	3.10	260
1920	Apr. 15, 1920	4.8	1,030	1932	Dec. 28, 1931	7.0	2,340

2045. South Fork Tule River near Success, Calif.

Location.--Lat 36°02'30", long 118°51'25", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.22 S., R.29 E., on left bank 0.5 mile upstream from Crew Creek, 4 miles southeast of Success, and 5 miles upstream from mouth.

Drainage area.--109 sq mi.

Gage.--Recording. At site 0.4 mile downstream at different datum prior to June 26, 1951. Altitude of gage is 770 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs and extended above on basis of slope-area measurement at 7,100 cfs prior to June 26, 1951; defined throughout range by current-meter measurements thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Low peaks may be affected by diversions for irrigation of about 1,600 acres. Diversions began prior to 1931. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 2, 1931	2.30	132	1952	Mar. 10, 1952	6.05	650
1932	Dec. 28, 1931	5.2	1,800		Mar. 15, 1952	6.35	775
1933	Jan. 29, 1933	3.18	407		Mar. 19, 1952	5.78	500
1934	Dec. 13, 1933	2.40	160		Mar. 27, 1952	5.75	485
1935	Apr. 8, 1935	4.67	1,200				
1936	Feb. 13, 1936	4.80	1,300	1953	Jan. 13, 1953	6.37	785
1937	Feb. 6, 1937	6.36	3,370		Apr. 27, 1953	6.43	818
1938	Mar. 2, 1938	6.75	2,960	1954	Jan. 24, 1954	6.23	766
1939	Mar. 27, 1939	5.31	582				
1940	Jan. 11, 1940	6.52	2,590	1956	Jan. 25, 1956	9.04	3,100
1941	Feb. 12, 1941	4.64	967	1957	May 19, 1957	6.96	1,120
1942	Jan. 25, 1942	3.92	609				
1943	Mar. 9, 1943	8.24	6,210	1958	Jan. 25, 1958	5.71	463
1944	Mar. 5, 1944	3.57	564		Feb. 25, 1958	5.73	471
1945	Feb. 1, 1945	5.35	1,960		Mar. 17, 1958	6.78	1,010
1946	Dec. 25, 1945	3.24	441		Mar. 21, 1958	6.48	818
1947	Nov. 23, 1946	3.49	550		Apr. 3, 1958	6.97	1,120
1948	Apr. 10, 1948	4.31	1,030	1959	Feb. 17, 1959	4.83	182
1949	Mar. 23, 1949	2.24	126	1960	Feb. 2, 1960	6.05	611
1950	Feb. 6, 1950	3.74	635	1961	Dec. 2, 1960	4.21	75
1951	Nov. 19, 1950	8.35	7,100	1962	Feb. 8, 1962	5.44	343
	Dec. 4, 1950	2.83	765	1963	Feb. 1, 1963	7.75	1,780
1952	Dec. 5, 1951	5.76	490	1964	Apr. 1, 1964	5.11	245
	Dec. 30, 1951	6.69	974	1965	Dec. 24, 1964	5.84	503
	Jan. 16, 1952	6.32	830		Dec. 27, 1964	6.42	782
	Jan. 25, 1952	7.15	1,280		Jan. 7, 1965	5.17	260
	Mar. 1, 1952	5.92	576		Jan. 24, 1965	5.50	365

TULARE LAKE BASIN

2049. Tule River below Success Dam, Calif.
(Published as "at Worth Bridge, near Porterville" prior to 1960)

Location.--Lat 36°03'23", long 118°55'22", in SW $\frac{1}{4}$ sec.35, T.21 S., R.28 E., on right bank 1,000 ft downstream from Success Dam and 5 miles east of Porterville.

Drainage area.--393 sq mi.

Gage.--Recording. Prior to October 1960 at site 0.5 mile downstream at different datum. Datum of gage is 536.00 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 11,300 cfs and extended above on basis of studies of upstream peaks and a measurement made by timing drift at 23,500 cfs prior to October 1960; defined by current-meter measurements below 1,200 cfs thereafter.

Bankfull stage.--14 ft.

Historical data.--Flood of Nov. 19, 1950, reached a stage of 26 ft, from flood-marks (discharge, 32,000 cfs, estimated from discharge records at upstream stations).

Remarks.--Peaks regulated by Success Reservoir (capacity, 83,900 acre-ft) since October 1960. Low peaks prior to October 1960 may be affected by diversion upstream for irrigation of about 10,500 acres. Only annual peaks are shown subsequent to September 1960. Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	26.0	32,000	1958	Jan. 26, 1958	14.33	1,330
1954	Jan. 25, 1954	16.35	3,110		Feb. 25, 1958	14.37	1,450
	Feb. 14, 1954	14.56	984		Mar. 17, 1958	15.17	2,880
	Mar. 24, 1954	14.72	1,130		Mar. 22, 1958	15.50	3,420
1955	Jan. 1, 1955	14.47	906		Apr. 3, 1958	16.10	4,600
	Feb. 17, 1955	16.06	2,880		Apr. 21, 1958	14.07	1,270
1956	Dec. 6, 1955	15.35	1,860		May 12, 1958	13.82	1,030
	Dec. 9, 1955	14.83	1,260		May 19, 1958	13.72	938
	Dec. 23, 1955	21.65	27,000	1959	Feb. 17, 1959	13.51	738
	Dec. 26, 1955	13.91	1,770	1960	Feb. 2, 1960	14.40	1,640
	Jan. 25, 1956	17.07	12,200		Apr. 4, 1961	4.42	127
	May 4, 1956	12.08	908		Feb. 10, 1962	7.63	1,390
	May 9, 1956	12.09	910		Jan. 31, 1963	9.25	2,980
1957	May 19, 1957	15.42	5,750		Nov. 1, 1963	6.02	496
					Dec. 23, 1964	7.29	1,200
1958	Jan. 25, 1958	14.34	1,340				

2065. Middle Fork Kaweah River near Potwisha Camp, Calif.

Location.--Lat 36°30'45", long 118°47'25", in NW $\frac{1}{4}$ sec.25, T.16 S., R.29 E., on right bank 0.7 mile southeast of Potwisha Camp and 0.9 mile upstream from confluence with Marble Fork Kaweah River.

Drainage area.--102 sq mi.

Gage.--Recording. Prior to October 1955, at datum 0.70 ft higher. Altitude of gage is 2,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurements at 17,500 and 46,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Peaks affected by diversion to Middle Fork No. 3 conduit (capacity, about 65 cfs) for power development since beginning of record. Only annual peaks are shown.

Peak stages and discharges of Middle Fork Kaweah River near Potwisha Camp, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 6, 1950	8.19	894	1958	May 19, 1958	7.83	1,350
1951	Nov. 19, 1950	15.70	17,500	1959	Feb. 16, 1959	7.23	999
1952	Dec. 29, 1951	9.15	1,680	1960	Feb. 1, 1960	7.37	1,060
1953	Apr. 27, 1953	8.97	1,500	1961	Aug. 11, 1961	5.31	262
1954	May 19, 1954	8.20	870	1962	May 5, 1962	6.98	860
1955	Feb. 16, 1955	8.58	1,160	1963	Feb. 1, 1963	13.52	11,800
1956	Dec. 23, 1955	29.00	46,800	1964	May 20, 1964	6.39	636
				1965	Dec. 23, 1964	9.00	2,370

2080. Marble Fork Kaweah River at Potwisha Camp, Calif.

Location.--Lat 36°31'10", long 118°48'10", in SE $\frac{1}{4}$ sec.23, T.16 S., R.29 E., on left bank 0.1 mile north of Potwisha Camp and 0.3 mile upstream from confluence with Middle Fork Kaweah River.

Drainage area.--51.4 sq mi.

Gage.--Recording. Altitude of gage is 2,150 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 12,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and most measurements furnished by Southern California Edison Co. Peaks may be affected by diversion to Marble Fork Kaweah River No. 3 conduit (capacity, about 85 cfs) for power development, beginning in 1948. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	10.1	4,000	1959	Feb. 16, 1959	4.91	339
1952	May 27, 1952	6.39	1,150	1960	May 11, 1960	5.22	414
1953	Apr. 27, 1953	6.24	1,080	1961	May 24, 1961	3.94	160
1954	May 19, 1954	5.18	651	1962	May 5, 1962	6.15	748
1955	June 7, 1955	5.37	715	1963	Feb. 1, 1963	8.94	3,830
1956	Dec. 23, 1955	13.4	12,500	1964	May 20, 1964	4.97	355
1957	May 19, 1957	7.67	1,900	1965	Aug. 15, 1965	6.62	2,370
1958	May 22, 1958	7.27	1,220				

2087.3 East Fork Kaweah River near Three Rivers, Calif.

Location.--Lat 36°27'05", long 118°47'15", in NW $\frac{1}{4}$ sec.14, T.17 S., R.29 E., on left bank just downstream from diversion dam and 6.6 miles east of Three Rivers.

Drainage area.--85.8 sq mi.

Gage.--Recording. Prior to Sept. 30, 1955, at site 200 ft downstream at different datum. Altitude of gage is 2,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 780 cfs.

Remarks.--Records furnished by Southern California Edison Co. and reviewed by Geological Survey. Peak discharges are adjusted to include upstream diversion through East Fork Kaweah No. 1 conduit. Only annual peaks are shown.

Peak stages and discharges of East Fork Kaweah River near Three Rivers, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Apr. 27, 1953	-	1,080	1961	May 17, 1961	-	259
1954	Jan. 24, 1954	-	654	1962	May 5, 1962	-	782
1955	Feb. 16, 1955	-	1,120	1963	Feb. 1, 1963	-	2,850
1958	May 22, 1958	-	1,100	1964	May 20, 1964	-	480
1959	Feb. 16, 1959	-	557	1965	Dec. 23, 1964	-	1,530
1960	Feb. 1, 1960	-	870				

2095. North Fork Kaweah River at Kaweah, Calif.

Location.--Lat 36°29', long 118°55', in SE $\frac{1}{4}$ sec.34, T.16 S., R.28 E., 1.2 miles upstream from Mannikin Creek, 1.5 miles north of Kaweah, and 3 miles upstream from mouth.

Drainage area.--129 sq mi.

Gage.--Nonrecording prior to Oct. 26, 1933; recording thereafter. Prior to Oct. 26, 1933, at site 1 mile downstream at different datum. Datum of gage is 1,027.7 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs prior to Oct. 26, 1933; defined below 3,200 cfs and extended above on basis of slope-area measurement at 21,500 cfs thereafter.

Remarks.--Peaks for the years 1911, 1913, 1919-21, 1925-31 and 1933 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 31, 1911	5.60	2,710	1944	Mar. 4, 1944	5.20	1,220
1913	Apr. 1, 1913	1.96	196	1945	Feb. 1, 1945	8.50	5,550
1914	Jan. 25, 1914	10.2	7,400	1946	Dec. 22, 1945	5.01	1,070
1915	Apr. 30, 1915	3.4	940		Dec. 25, 1945	-	950
1916	Jan. 17, 1916	8.4	5,380		Mar. 30, 1946	-	737
1917	Feb. 21, 1917	6.0	3,050	1947	Nov. 20, 1946	-	1,580
1918	Mar. 18 or 19, 1918	3.5	900		Nov. 23, 1946	6.59	2,680
1919	Feb. 11, 1919	2.50	360	1948	Apr. 10, 1948	6.40	2,460
1920	Apr. 17, 1920	4.22	1,500	1949	Apr. 21, 1949	4.02	469
1921	Mar. 13, 1921	3.55	1,040	1950	Feb. 6, 1950	5.69	1,670
1922	Feb. 11, 1922	4.50	1,740	1951	Nov. 19, 1950	10.85	10,800
1923	Apr. 6, 1923	5.8	2,860		Dec. 4, 1950	7.79	4,230
1924	Apr. 11, 1924	1.98	182		Jan. 18, 1951	5.24	1,220
1925	Nov. 9, 1924	3.70	1,080	1952	Dec. 5, 1951	4.69	784
1926	Apr. 8, 1926	3.45	730		Dec. 29, 1951	6.57	2,590
1927	Feb. 16, 1927	7.6	4,650		Jan. 15, 1952	6.19	2,150
1928	Mar. 27, 1928	3.70	915		Jan. 25, 1952	6.80	2,890
1929	June 16, 1929	3.50	780		Feb. 2, 1952	5.15	1,140
1930	May 3, 1930	2.67	326		Mar. 15, 1952	4.78	846
1931	Nov. 17, 1930	2.43	250		Apr. 6, 1952	4.62	738
1932	Dec. 28, 1931	7.28	4,200		Apr. 25, 1952	4.88	916
1933	May 29, 1933	2.58	340		May 19, 1952	5.07	1,070
1934	Dec. 13, 1933	5.30	1,220	1953	Jan. 13, 1953	4.97	986
1935	Apr. 8, 1935	7.02	3,240		Apr. 27, 1953	6.48	2,490
1936	Feb. 2, 1936	6.47	2,430	1954	Jan. 24, 1954	5.48	1,430
1937	Feb. 6, 1937	9.1	6,200		Feb. 13, 1954	4.58	712
1938	Dec. 11, 1937	11.0	11,200		Mar. 9, 1954	4.57	706
1939	Apr. 2, 1939	4.50	1,700	1955	Jan. 1, 1955	4.87	909
1940	Feb. 26, 1940	6.48	2,550		Feb. 16, 1955	6.78	2,860
1941	Feb. 11, 1941	6.23	2,260				
1942	Apr. 4, 1942	5.60	1,580				
1943	Jan. 21, 1943	8.68	5,870				

Peak stages and discharges of North Fork Kaweah River at Kaweah, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	14.1	21,500	1958	Mar. 22, 1958	5.03	1,060
	Jan. 25, 1956	-	(a)		Apr. 3, 1958	6.24	2,160
	May 4, 1956	4.67	942		Apr. 20, 1958	4.72	862
1957	May 19, 1957	7.46	3,790		May 9, 1958	4.82	922
					May 22, 1958	4.94	998
1958	Dec. 17, 1957	4.51	745	1959	Feb. 16, 1959	5.34	1,280
	Feb. 25, 1958	4.79	904				
	Mar. 16, 1958	5.15	1,140	1960	Feb. 1, 1960	4.77	778

a Unknown; exceeded base.

2099. Kaweah River at Three Rivers, Calif.

Location--Lat 36°26'38", long 118°54'09", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.13, T.17 S., R.28 E., on right bank opposite schoolhouse in Three Rivers, 0.25 mile downstream from North Fork Kaweah River.

Drainage area--418 sq mi.

Gage--Recording. Datum of gage is 809.62 ft above mean sea level, datum of 1929.

Stage-discharge relation--Defined by current-meter measurements below 5,800 cfs and extended above on basis of slope-area measurement at 30,900 cfs.

Remarks--Only annual peak is shown for 1956. Base for partial-duration series, 1,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	17.9	-	1963	Apr. 14, 1963	6.85	3,120
1959	Feb. 16, 1959	7.36	3,400		May 9, 1963	7.12	3,480
1960	Feb. 1, 1960	7.16	3,030		May 21, 1963	6.78	2,700
1961	Dec. 2, 1960	5.97	1,160		June 17, 1963	6.88	2,900
1962	Feb. 9, 1962	8.12	6,180	1964	May 20, 1964	6.39	1,970
	Apr. 18, 1962	6.81	2,340	1965	Dec. 23, 1964	8.45	6,050
	Apr. 23, 1962	6.71	2,160		Dec. 27, 1964	8.43	5,990
	May 5, 1962	7.14	3,140		Jan. 5, 1965	6.47	1,900
	June 2, 1962	6.80	2,540		Jan. 7, 1965	7.24	3,090
	June 9, 1962	6.65	2,270		Jan. 24, 1965	6.53	1,980
1963	Feb. 1, 1963	13.68	30,900		Apr. 30, 1965	6.68	2,190
	Apr. 7, 1963	6.65	2,620		Mar. 17, 1965	6.97	2,630
					June 5, 1965	7.02	2,710
					Aug. 15, 1965	6.50	1,940

2100. South Fork Kaweah River near Three Rivers, Calif.

Location--Lat 36°22'30", long 118°51'20", in SE $\frac{1}{4}$ sec.8, T.18 S., R.29 E., 500 ft upstream from Cinnamon Creek, 4 $\frac{1}{2}$ miles southeast of Three Rivers, and 5 miles upstream from Kaweah River.

Drainage area--66.5 sq mi (revised).

Gage--Nonrecording. Altitude of gage is 1,600 ft, revised (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 480 cfs.

Remarks--Peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges of South Fork Kaweah River near Three Rivers, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 30, 1912	4.2	426	1919	May 5, 1919	3.9	328
1913	May 17, 1913	3.85	290	1920	Apr. 16, 1920	4.3	525
1914	Jan. 25, 1914	5.77	1,460	1921	June 8, 1921	4.0	372
1915	June 1, 1915	4.6	600	1922	Feb. 11, 1922	4.3	525
1916	Jan. 17, 1916	6.3	1,880	1923	Apr. 6, 1923	4.0	372
1917	June 6, 1917	4.7	750	1924	May 1, 1924	3.34	140
1918	Mar. 19, 1918	3.6	217				

2101. South Fork Kaweah River at Three Rivers, Calif.

Location.--Lat 36°25'00", long 118°54'48", in SE¹ sec.26, T.17 S., R.28 E., on right bank 200 ft upstream from unnamed tributary, 0.5 mile upstream from mouth, and 1.8 miles southwest of Three Rivers.

Drainage area.--86.7 sq mi.

Gage.--Recording. Datum of gage is 807.22 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Bankfull stage.--14 ft.

Remarks.--Only annual peak is shown for 1956. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	9.5	-	1963	Feb. 1, 1963	4.95	2,440
1959	Feb. 16, 1959	2.92	286		May 23, 1963	3.58	528
1960	May 11, 1960	3.05	292	1964	May 19, 1964	3.34	403
1961	Apr. 18, 1961	2.48	132	1965	Dec. 24, 1964	3.57	522
1962	Feb. 10, 1962	3.71	618		Dec. 27, 1964	3.76	658
					June 6, 1965	3.55	504

2105. Kaweah River near Three Rivers, Calif.

Location.--Lat 36°24', long 118°57', in SW $\frac{1}{4}$ sec.33, T.17 S., R.28 E., on left bank 2.5 miles downstream from South Fork and 3 miles southwest of Three Rivers Post Office.

Drainage area.--519 sq mi.

Gage.--Nonrecording prior to July 1, 1929; recording thereafter. Prior to Jan. 31, 1936, at site 2 miles upstream at different datum. Feb. 1, 1936, to Aug. 24, 1939, at datum 2.68 ft higher and Aug. 25, 1939, to July 9, 1951, at datum 1.68 ft higher. Datum of gage is 611.1 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs and extended above on basis of velocity-area study prior to Jan. 31, 1936; defined by current-meter measurements below 10,200 cfs and extended above on basis of slope-area measurements at 52,000 and 80,700 cfs thereafter.

Bankfull Stage.--Not subject to overflow.

Remarks.--Low peaks may be affected by power regulation on Middle and East Forks. Peaks for the years 1905-8, 1910-29 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 23, 1904	9.0	5,280	1947	Nov. 20, 1946	-	3,680
1905	Oct. 11, 1904	8.00	3,080		Nov. 23, 1946	10.25	10,200
1906	Mar. 12, 1906	11.6	12,200	1948	Apr. 10, 1948	8.90	7,130
1907	Mar. 25, 1907,	8.6	4,340		May 6, 1948	-	2,660
	Apr. 1, 1907,				May 15, 1948	-	3,380
1908	Apr. 29, 1908	7.2	1,760		May 26, 1948	-	3,250
1909	Jan. 13, 1909	12.0	11,700		June 8, 1948	-	2,440
1910	Dec. 9, 1909	7.2	13,500	1949	Apr. 22, 1949	-	2,250
1911	Jan. 29, 1911	10.5	7,580		May 26, 1949	5.83	2,500
1912	May 30, 1912	8.0	2,700	1950	Feb. 6, 1950	6.93	3,860
1913	May 23, 1913	7.2	1,690		Apr. 22, 1950	-	2,250
1914	Jan. 25, 1914	13.0	13,300		Apr. 27, 1950	-	2,370
1915	June 1, 1915	8.6	3,600		May 20, 1950	-	2,570
1916	Jan. 17, 1916	13.5	14,700		May 30, 1950	-	2,660
1917	Feb. 21, 1917	10.0	6,270	1951	Oct. 27, 1950	5.92	2,590
1918	Mar. 19, 1918	7.1	1,570		Nov. 19, 1950	17.8	52,000
1919	May 29, 1919	8.1	2,830		Dec. 4, 1950	-	(a)
1920	Apr. 16, 1920	9.8	5,850		Dec. 7, 1950	-	(a)
1921	June 7, 1921	8.46	3,190		May 26, 1951	5.78	2,480
1922	May 31, 1922	8.85	3,690	1952	Dec. 5, 1951	7.62	2,950
1923	Apr. 6, 1923	9.90	6,060		Dec. 30, 1951	9.63	6,340
1924	May 1, 1924	6.90	1,200		Jan. 15, 1952	8.97	5,130
1925	May 27, 1925	8.0	2,210		Jan. 25, 1952	10.23	8,470
1926	May 5, 1926	8.0	2,210		Feb. 2, 1952	7.39	2,640
1927	Feb. 18, 1927	11.8	10,100		Mar. 15, 1952	7.63	2,960
1928	Mar. 27, 1928	8.80	3,140		Apr. 6, 1952	7.14	2,320
1929	June 16, 1929	9.45	3,780		Apr. 25, 1952	7.56	2,860
1930	Feb. 22, 1930	8.80	3,060		May 27, 1952	9.08	6,030
1931	May 6, 1931	7.43	1,570	1953	Jan. 13, 1953	7.04	2,310
1932	Dec. 28, 1931	11.84	8,900		Apr. 27, 1953	9.77	7,660
1933	June 14, 1933	9.07	3,620		June 15, 1953	7.12	2,420
1934	Dec. 13, 1933	8.10	2,230	1954	Jan. 24, 1954	8.15	4,080
1935	Apr. 8, 1935	11.76	8,900		May 8, 1954	7.51	2,980
1936	Feb. 13, 1936	7.86	8,000		May 20, 1954	7.44	2,860
1937	Feb. 6, 1937	12.65	18,900	1955	Feb. 17, 1955	9.28	6,480
1938	Dec. 11, 1937	16.0	33,300		May 22, 1955	7.28	2,650
1939	Apr. 2, 1939	4.29	1,950		May 29, 1955	7.21	2,550
1940	Feb. 26, 1940	9.56	8,510		June 7, 1955	7.45	2,900
1941	Apr. 4, 1941	8.73	6,820	1956	Dec. 23, 1955	22.24	80,700
1942	May 21, 1942	7.20	4,170		Dec. 26, 1955	8.60	7,000
1943	Jan. 22, 1943	12.55	17,000		Jan. 25, 1956	11.36	16,500
1944	Mar. 4, 1944	6.25	3,100		May 4, 1956	7.07	3,770
1945	Feb. 2, 1945	12.00	15,200		May 9, 1956	6.27	2,500
1946	Dec. 22, 1945	6.65	3,480		May 23, 1956	7.29	4,140

a Unknown; exceeded base.

TULARE LAKE BASIN

Peak stages and discharges of Kaweah River near Three Rivers, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	May 19, 1957	11.06	15,300	1958	May 9, 1958	7.20	4,040
	June 3, 1957	7.13	3,870		May 19, 1958	7.78	5,170
	June 13, 1957	6.07	2,260		June 17, 1958	6.86	3,480
1958	Dec. 17, 1957	6.19	2,550	1959	Feb. 16, 1959	6.98	3,670
	Feb. 25, 1958	6.50	2,980		Feb. 1, 1960	6.76	3,320
	Mar. 16, 1958	6.68	3,140	1961	Dec. 2, 1960	5.01	1,340
	Mar. 22, 1958	6.90	3,380				
	Mar. 31, 1958	6.46	2,760				
	Apr. 3, 1958	8.13	5,930				

2120. Sand Creek near Orange Cove, Calif.

Location.--Lat 36°37'35", long 119°14'45", in NW $\frac{1}{4}$ sec.15, T.15 S., R.25 E., 3.8 miles east of Orange Cove.

Drainage area.--26.8 sq mi (revised).

Gage.--Recording. Altitude of gage is 490 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs and extended above on basis of slope-area measurements at 410 and 749 cfs.

Historical data.--Flood of Mar. 9, 1943, was estimated at 1,000 to 1,200 cfs by Alta Irrigation District.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947, and for 1956. Base for partial-duration series, 10 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Mar. 9, 1943	-	(a)	1952	Feb. 2, 1952	2.03	51
1945	Feb. 2, 1945	4.00	410	Feb. 11, 1952	1.86	39	
				Feb. 17, 1952	1.55	23	
1946	Mar. 30, 1946	2.60	113	Feb. 21, 1952	1.45	20	
1947	Dec. 27, 1946	2.38	82	Mar. 1, 1952	1.65	28	
				Mar. 7, 1952	2.88	160	
1948	Apr. 10, 1948	1.47	19	Mar. 10, 1952	3.05	189	
1949	Mar. 4, 1949	1.07	8.8	Mar. 15, 1952	4.05	425	
				Mar. 19, 1952	2.93	168	
				Apr. 10, 1952	3.35	237	
1950	Mar. 24, 1950	2.02	48	1953	Dec. 7, 1952	1.65	25
1951	Nov. 19, 1950	2.87	158	Dec. 31, 1952	1.75	26	
	Dec. 4, 1950	2.68	129	Jan. 8, 1953	1.96	47	
	Jan. 11, 1951	1.19	12	Jan. 14, 1953	2.21	64	
	Jan. 18, 1951	1.56	23	Jan. 21, 1953	1.52	19	
	Feb. 12, 1951	1.56	23	Apr. 27, 1953	2.83	143	
1952	Dec. 30, 1951	2.88	150	1954	Jan. 25, 1954	1.70	28
	Jan. 12, 1952	1.92	45	Feb. 14, 1954	1.81	34	
	Jan. 15, 1952	2.74	142	Feb. 18, 1954	2.02	48	
	Jan. 18, 1952	2.00	48	Mar. 24, 1954	1.82	34	
	Jan. 20, 1952	1.45	20	Mar. 30, 1954	1.73	29	
	Jan. 24, 1952	4.12	446				
				1956	Dec. 23, 1955	4.81	749

a Discharge, between 1,000 and 1,200 cfs.

2130. Kings River near Hume, Calif.

Location.--Lat 36°50'50", long 118°53'50", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.35, T.12 S., R.28 E., on right bank 0.9 mile downstream from Ten Mile Creek, 1.2 miles downstream from confluence of South and Middle Forks, and 3.8 miles north of Hume.

Drainage area.--835 sq mi.

Gage.--Recording. Prior to Dec. 31, 1936, at datum about 4.5 ft higher. Datum of gage is 2,142.7 ft above mean sea level (from river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 9,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Nov. 19, 1950, reached a stage of 13.25 ft, from floodmarks, discharge estimated at 19,200 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 4, 1922	8.67	11,700	1953	July 7, 1953	7.45	3,870
1923	June 11, 1923	7.30	7,880				
1924	May 9, 1924	5.15	3,410	1954	Apr. 23, 1954	7.93	4,670
1925	May 25, 1925	7.31	7,880		May 8, 1954	9.22	7,180
					May 19, 1954	9.82	8,570
1926	May 19, 1926	7.13	7,380		June 23, 1954	8.00	4,800
1927	May 16, 1927	8.08	10,500				
1928	May 29, 1928	6.47	5,940	1955	May 13, 1955	7.72	4,060
1929	June 16, 1929	6.92	7,020		May 22, 1955	9.14	6,690
1930	June 13, 1930	6.80	6,780		May 30, 1955	9.44	7,340
					June 7, 1955	10.53	9,990
1931	May 7, 1931	5.51	4,000				
1932	June 23, 1932	8.17	9,900	1956	Dec. 23, 1955	15.53	38,000
1933	June 14, 1933	8.21	9,900		May 4, 1956	9.83	6,160
1934	May 11, 1934	4.75	2,740		May 24, 1956	11.38	9,740
1935	June 8, 1935	7.97	9,370		June 10, 1956	10.99	8,580
					July 22, 1956	10.18	6,550
1936	May 13, 1936	7.36	7,870		July 26, 1956	9.39	4,880
1951	Nov. 19, 1950	13.25	19,200	1957	May 6, 1957	8.67	3,560
					May 19, 1957	10.60	7,600
1952	May 3, 1952	8.48	5,700		May 28, 1957	9.14	4,210
	May 30, 1952	10.99	11,700		June 4, 1957	11.64	10,200
	June 5, 1952	11.12	12,100		June 13, 1957	10.38	6,750
	June 18, 1952	9.90	8,760		June 26, 1957	10.12	6,140
	July 5, 1952	9.10	6,920				
	July 30, 1952	9.25	7,250	1958	Apr. 21, 1958	9.27	4,450
					May 9, 1958	10.59	7,280
1953	Apr. 27, 1953	8.12	5,020		May 22, 1958	12.06	11,600
	May 23, 1953	7.35	3,710		June 19, 1958	11.88	10,900
	June 16, 1953	8.91	6,540		June 23, 1958	11.74	10,500

2135. Kings River above North Fork, Calif.

Location.--Lat 36°51'45", long 119°07'25", in NE $\frac{1}{4}$ sec.27, T.12 S., R.26 E., on left bank at Rogers Crossing, 0.9 mile upstream from North Fork and 2.9 miles south of Balch Camp.

Drainage area.--952 sq mi.

Gage.--Recording. Prior to December 1928, at site 0.5 mile downstream at different datum. Datum of gage is 1,003.5 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 8,400 cfs prior to December 1958; defined below 11,000 cfs and extended above on basis of slope-area measurement at 59,100 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 6,300 cfs.

Peak stages and discharges of Kings River above North Fork, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	May 17, 1927	10.50	11,200	1954	May 9, 1954	5.95	6,990
1928	May 29, 1928	8.15	6,260	1954	May 19, 1954	6.33	8,370
1932	June 23, 1932	7.23	11,600	1955	May 23, 1955	5.88	6,750
1933	June 15, 1933	7.23	10,900	1955	May 30, 1955	6.06	7,380
1934	May 11, 1934	4.70	3,060	1955	June 8, 1955	6.94	10,800
1935	June 4, 1935	6.81	9,160	1956	Dec. 23, 1955	16.26	59,100
1936	May 14, 1936	6.38	7,680	1956	Jan. 25, 1956	5.75	6,950
1937	Feb. 6, 1937	7.86	13,400	1956	May 24, 1956	6.76	10,600
1938	Dec. 11, 1937	12.02	34,600	1956	June 10, 1956	6.45	9,420
1939	May 30, 1939	5.24	4,600	1956	June 19, 1956	5.90	7,460
1940	May 25, 1940	6.62	9,100	1956	July 22, 1956	5.64	6,580
1941	June 17, 1941	7.05	10,800	1957	May 19, 1957	6.61	10,000
1942	June 11, 1942	6.70	9,420	1957	June 5, 1957	7.05	11,600
1943	Jan. 21, 1943	7.30	11,800	1957	June 14, 1957	6.26	8,430
1944	June 8, 1944	5.95	6,710	1958	May 10, 1958	6.02	7,520
1945	Feb. 2, 1945	7.80	13,900	1958	May 22, 1958	7.58	15,700
1946	May 7, 1946	6.22	7,650	1958	June 19, 1958	7.25	12,100
1947	Nov. 23, 1946	6.20	7,580	1959	Feb. 16, 1959	5.17	4,600
1947	May 6, 1947	-	6,810	1960	May 12, 1960	5.35	5,100
1948	May 27, 1948	5.90	6,540	1961	May 25, 1961	4.31	2,850
1949	May 27, 1949	5.91	6,570	1962	May 6, 1962	6.33	8,370
1950	May 31, 1950	6.30	7,940	1962	June 22, 1962	6.48	8,940
1951	Nov. 19, 1950	12.23	36,200	1963	Feb. 1, 1963	10.85	29,000
1951	Dec. 3, 1950	-	-	1963	May 22, 1963	5.82	7,740
1951	May 27, 1951	6.43	8,410	1963	June 20, 1963	7.08	12,200
1952	May 20, 1952	6.88	10,100	1964	May 21, 1964	5.26	6,080
1952	May 31, 1952	7.60	13,000	1965	Dec. 24, 1964	7.05	11,700
1952	June 6, 1952	7.74	13,600	1965	May 19, 1965	5.81	7,650
1952	June 19, 1952	6.85	8,850	1965	June 1, 1965	5.64	7,110
1952	July 6, 1952	5.93	6,640	1965	June 12, 1965	6.33	9,320
1953	June 16, 1953	5.76	6,070				

2140. North Fork Kings River below Meadow Brook, Calif.

Location.--Lat 37°04'53", long 118°51'43", in NE $\frac{1}{4}$ sec.12, T.10 S., R.28 E., on left bank 800 ft downstream from Nichols Canyon, 0.6 mile downstream from Meadow Brook, 3.9 miles west of Blackcap Mountain, 5.9 miles east of Court-right Dam, and 23 miles southeast of town of Huntington Lake.

Drainage area.--37.7 sq mi.

Gage.--Recording. Datum of gage is 8,144.66 ft above mean sea level, unadjusted (levels by Pacific Gas & Electric Co.).

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas & Electric Co. Only annual peaks are shown prior to Oct. 1, 1956. Base for partial-duration series, 400 cfs.

Peak stages and discharges of North Fork Kings River below Meadow Brook, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 4, 1922	5.02	1,060	1959	May 12, 1959	4.30	534
1923	June 10, 1923	4.68	725		Sept. 19, 1959	4.17	455
1924	May 8, 1924	3.89	379	1960	May 11, 1960	4.37	568
1925	May 26, 1925	4.58	680	1961	May 22, 1961	3.89	341
1926	May 19, 1926	4.58	680	1962	May 5, 1962	4.54	671
1927	May 16, 1927	4.82	970		June 9, 1962	4.67	759
1928	May 28, 1928	4.33	621		June 19, 1962	4.53	684
1929	June 16, 1929	4.49	733	1963	Feb. 1, 1963	-	850
1930	May 27, 1930	4.33	621		June 1, 1963	4.80	860
1931	May 6, 1931	4.08	480		June 17, 1963	5.26	1,280
1932	June 21, 1932	4.83	997	1964	May 19, 1964	4.28	520
1933	June 14, 1933	4.93	1,090	1965	Dec. 23, 1964	5.00	1,030
1934	Apr. 20, 1934	3.70	304		May 17, 1965	4.49	639
1935	June 3, 1935	5.05	1,200		June 5, 1965	4.56	684
1956	Dec. 23, 1955	5.85	2,000		June 11, 1965	4.83	731
1957	May 18, 1957	4.07	416		June 22, 1965	4.20	480
	June 4, 1957	5.18	1,200		July 16, 1965	4.72	541
1958	May 9, 1958	4.33	546		Aug. 15, 1965	4.61	717
	May 22, 1958	5.21	1,230				
	June 23, 1958	5.06	1,080				

2142. Fleming Creek near Blackcap Mountain, Calif.

Location.--Lat 37°05'55", long 118°51'40", in SE¹ sec. 36, T.9 S., R.28 E., on left bank 0.9 mile upstream from mouth, 4.2 miles west of Blackcap Mountain, and 23 miles southeast of town of Huntington Lake.

Drainage area.--15.0 sq mi.

Gage.--Recording. Altitude of gage is 8,590 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 160 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas & Electric Co. Only annual peak is shown for 1956. Base for partial-duration series, 110 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	3.5	800	1962	May 5, 1962	2.33	269
1957	May 6, 1957	2.01	182		May 22, 1962	1.85	146
	May 18, 1957	1.69	114		June 2, 1962	2.44	304
	June 3, 1957	2.62	368		June 9, 1962	2.43	300
1958	May 9, 1958	2.12	242		June 21, 1962	2.43	300
	May 21, 1958	2.42	376	1963	Feb. 1, 1963	-	(b)
	June 23, 1958	2.61	452		May 21, 1963	2.44	304
1959	Apr. 30, 1959	1.96	170		June 2, 1963	2.49	322
	May 12, 1959	2.22	223		June 17, 1963	2.71	404
1960	Mar. 31, 1960	a3.18	-		June 26, 1963	2.41	294
	Apr. 21, 1960	1.87	150	1964	Apr. 10, 1964	a2.69	-
	May 11, 1960	2.22	236		May 19, 1964	2.24	242
	June 1, 1960	1.76	127		May 31, 1964	2.09	202
1961	Jan. 5, 1961	a1.96	-	1965	Dec. 23, 1964	2.47	314
	Apr. 16, 1961	1.73	126		Apr. 30, 1965	2.10	205
	May 17, 1961	1.86	155		May 17, 1965	2.45	308
	May 22, 1961	1.85	153		May 31, 1965	2.46	311
1962	Feb. 14, 1962	a5.28	-		June 5, 1965	2.57	350
	Apr. 23, 1962	1.85	146		June 12, 1965	2.56	346
					June 22, 1965	2.22	266
					Aug. 16, 1965	2.26	236

a Annual maximum stage; backwater from ice.

b Discharge unknown; exceeded base.

2144. Post Corral Creek near Blackcap Mountain, Calif.

Location.--Lat 37°06'25", long 118°53'45", in NW $\frac{1}{4}$ sec.35, T.9 S., R.28 E., on right bank 1.6 miles upstream from mouth, 6.2 miles west of Blackcap Mountain, and 20 miles southeast of town of Huntington Lake.

Drainage area.--27.9 sq mi.

Gage.--Recording. Altitude of gage is 8,145 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 390 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas & Electric Co. Only annual peak is shown for 1956. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	4.7	1,400	1962	June 2, 1962	4.18	944
1957	May 6, 1957	3.45	485		June 9, 1962	4.18	944
	May 18, 1957	3.32	420		June 22, 1962	3.87	726
	June 4, 1957	4.57	1,270	1963	Feb. 1, 1963	-	(b)
1958	Apr. 16, 1958	a8.01	-		May 21, 1963	-	(b)
	May 9, 1958	3.55	538		May 29, 1963	a4.81	-
	May 20, 1958	4.40	1,120		June 2, 1963	-	(b)
	June 18, 1958	4.50	1,210		June 17, 1963	4.61	1,310
					June 26, 1963	3.58	554
1959	Apr. 30, 1959	3.34	434	1964	May 15, 1964	3.56	543
	May 12, 1959	3.60	568		May 19, 1964	3.74	644
1960	Apr. 9, 1960	3.35	435	1965	Dec. 23, 1964	3.79	674
	May 11, 1960	3.68	609		Apr. 30, 1965	3.48	500
1961	May 17, 1961	2.84	237		May 18, 1965	4.21	968
					May 31, 1965	4.10	880
1962	Apr. 2, 1962	a5.72	-		June 5, 1965	4.34	1,070
	May 5, 1962	3.93	764		June 11, 1965	4.39	1,110
					June 22, 1965	3.70	620

a Annual maximum stage; backwater from ice.

b Discharge unknown; exceeded base.

2145. Helms Creek at Sand Meadows, Calif.

Location.--Lat 37°05'50", long 118°58'20", in SE $\frac{1}{4}$ sec.36, T.9 S., R.27 E., at lower end of Sand Meadows, 0.8 mile downstream from Dusy Creek and 4.1 miles upstream from mouth.

Drainage area.--34.7 sq mi.

Gage.--Recording. Altitude of gage is 8,030 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 980 cfs.

Remarks.--Prior to 1936, water-stage-recorder graph and some discharge measurements furnished by San Joaquin Light & Power Corp. Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas & Electric Co. for 1956-58. Only annual peaks are shown 1923-35. Base for partial-duration series, 250 cfs.

Peak stages and discharges of Helms Creek at Sand Meadows, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	May 15, 1923	5.40	990	1956	Dec. 23, 1955	10.5	7,600
1924	May 2, 1924	3.81	243		Apr. 9, 1956	4.10	330
1925	May 5, 1925	4.98	740		Apr. 24, 1956	4.39	441
					May 3, 1956	4.79	630
1926	May 3, 1926	5.12	852		May 22, 1956	5.75	1,180
1927	May 16, 1927	5.58	1,140		July 23, 1956	4.74	605
1928	Apr. 30, 1928	4.78	670	1957	May 6, 1957	4.70	620
1929	June 16, 1929	5.38	1,020		May 18, 1957	5.19	884
1930	May 19, 1930	4.27	438		June 3, 1957	-	(a)
1931	May 2, 1931	3.98	323	1958	May 22, 1958	5.93	1,330
1932	May 26, 1932	5.38	1,020		June 18, 1958	5.28	938
1933	May 28, 1933	5.16	870				
1934	Apr. 14, 1934	3.91	298				
1935	May 22, 1935	5.43	1,050				

a Discharge unknown; exceeded base.

2150. North Fork Kings River near Cliff Camp, Calif.

Location.--Lat 36°59'38", long 118°58'50", in NE¼NW¼ sec.12, T.11 S., R.27 E., on right bank at Cliff Camp Bridge, 1 mile northwest of Cliff Camp, 1.2 miles downstream from Wishon Dam, and 2 miles downstream from Woodchuck Creek.

Drainage area.--181 sq mi.

Gage.--Recording. Prior to Nov. 24, 1922, at site 1 mile upstream at different datum. Datum of gage is 6,143.95 ft above mean sea level, adjustment of 1912 (levels by San Joaquin Light and Power Corp.).

Stage-discharge relation.--Defined by current-meter measurements below 4,700 cfs prior to Nov. 24, 1952; defined below 4,200 cfs and extended above on basis of velocity-area studies thereafter.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Wishon Reservoir (capacity, 128,600 acre-ft) beginning Dec. 5, 1957, and Courtright Reservoir (capacity, 129,900 acre-ft) beginning Oct. 17, 1958. Low peaks may be affected by diversion for power from Wishon Reservoir since Dec. 10, 1958. Only annual peaks are shown prior to Oct. 1, 1947, 1952 (gage-height record incomplete), and after 1958 when regulation began. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 4, 1922	10.6	6,030	1945	June 12, 1945	11.45	4,010
1923	May 15, 1923	11.40	4,280	1946	Oct. 30, 1945	12.65	5,280
1924	May 8, 1924	7.75	1,340	1947	May 2, 1947	11.0	3,600
1925	May 25, 1925	10.25	3,160	1948	May 15, 1948	10.8	3,720
1926	May 3, 1926	10.45	3,380		May 26, 1948	-	3,570
1927	May 16, 1927	12.20	5,080		June 8, 1948	-	2,640
1928	Apr. 30, 1928	9.90	2,960	1949	May 13, 1949	-	2,960
1929	June 16, 1929	11.98	4,880		May 26, 1949	10.25	3,100
1930	May 27, 1930	9.17	2,440	1950	Apr. 26, 1950	-	2,910
1931	May 6, 1931	8.40	1,880		May 20, 29, 1950	10.40	3,230
1932	May 16, 1932	11.40	4,300	1951	Nov. 19, 1950	15.20	9,210
1933	May 28, 1933	11.17	3,910		Dec. 3, 1950	11.18	4,480
1934	Apr. 14, 1934	7.90	1,430		May 26, 1951	9.83	3,160
1935	June 3, 1935	11.85	4,500	1952	June 5, 1952	12.49	5,880
1936	May 13, 1936	11.30	4,000	1953	Apr. 27, 1953	9.73	2,710
1937	May 14, 1937	12.80	5,500	1954	Apr. 23, 1954	9.20	2,590
1938	Dec. 11, 1937	18.0	14,000		May 8, 1954	10.20	3,900
1939	Apr. 21, 1939	8.97	1,900		May 18, 1954	10.70	4,000
1940	May 10, 1940	11.5	4,100				
1941	June 5, 1941	12.20	4,760				
1942	May 24, 1942	11.95	4,510				
1943	May 24, 1943	11.70	4,260				
1944	May 8, 1944	10.04	2,790				

Peak stages and discharges of North Fork Kings River near Cliff Camp, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	May 12, 1955	9.22	2,610	1957	May 18, 1957	12.10	5,270
	May 22, 1955	10.40	3,700		June 3, 1957	11.20	4,280
	May 29, 1955	10.37	3,670	1958	May 28, 1958	11.75	4,680
	June 7, 1955	10.45	3,750		Feb. 16, 1959	5.23	375
1956	Dec. 23, 1955	16.8	11,900	1960	Feb. 8, 1960	3.95	116
	May 4, 1956	13.66	7,130		Nov. 15, 1960	3.59	67
	May 22, 1956	12.28	5,480	1962	June 27, 1962	9.72	2,810
	May 26, 1956	11.36	4,460		June 20, 1963	7.90	1,430
	June 9, 1956	10.75	3,810	1964	Nov. 15, 1963	3.99	122
					Dec. 23, 1964	4.78	278
1957	May 6, 1957	9.50	2,610	1965			

2155. Rancheria Creek near Smith Meadow, Calif.

Location.--Lat 36°57'05", long 118°58'15", in SE $\frac{1}{4}$ sec.24, T.11 S., R.27 E., at trail crossing, 0.7 mile downstream from Little Rancheria Creek, 1.5 miles north of Smith Meadow, and 2 $\frac{1}{2}$ miles south of Cliff Camp.

Drainage area.--21.3 sq mi.

Gage.--Recording. Altitude of gage is 6,480 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 325 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by San Joaquin Light and Power Corp. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	May 25, 1925	4.54	278	1931	May 2, 1931	3.57	117
1926	May 4, 1926	4.56	335	1932	May 26, 1932	5.02	380
	May 16, 1927	5.45	426	1933	May 31, 1933	4.79	344
1928	Nov. 10, 1927	4.65	290	1934	Apr. 27, 1934	3.5	122
1930	May 27, 1930	4.06	198	1935	June 3, 1935	5.41	480

2158. Teakettle Creek at site No. 3, near Patterson Mountain, Calif.

Location.--Lat 36°57'40", long 119°01'35", in NE $\frac{1}{4}$ sec.21, T.11 S., R.27 E., 1.6 miles east of Patterson Mountain, 1.8 miles upstream from mouth, and 2.9 miles north of Black Rock Reservoir.

Drainage area.--0.86 sq mi.

Gage.--Recording. Datum of gage is 6,701.4 ft above mean sea level (levels by U.S. Forest Service).

Stage-discharge relation.--Permanent. Flow over weir computed by Cone formula: $Q = 2.49H^{2.48}$ (H = gage height -4).

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges of Teakettle Creek at site No.3, near Patterson Mountain, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 23, 1958	6.05	15	1962	Feb. 9, 1962	5.76	10
1959	Feb. 16, 1959	6.24	18	1963	Feb. 1, 1963	7.81	99
1960	Apr. 6, 1960	5.10	3.2	1964	Nov. 6, 1963	5.7 ^c	10
				1965	Dec. 23, 1964	2.15	17
1961	Dec. 1, 1960	5.45	6.2				

2158.1. Teakettle Creek tributary No. 7 near Patterson Mountain, Calif.

Location.--Lat 36°57'45", long 119°01'20", in NW¹/₄ NW¹/₄ sec.22, T.11 S., R.27 E., 0.3 mile upstream from junction with Teakettle Creek, 1.9 miles east of Patterson Mountain, and 3.0 miles north of Black Rock Reservoir.

Drainage area.--0.11 sq mi.

Gage.--Recording. Altitude of gage is 6,800 ft (from topographic map).

Stage-discharge relation.--Permanent. Flow over weir computed by Cone formula $Q = 2.49H^{2.48}$ (H = gage height -4).

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Dec. 16, 1957	5.33	5.0	1961	Dec. 1, 1960	4.44	0.3
1959	Feb. 16, 1959	4.63	.8	1962	Feb. 9, 1962	5.25	4.3
1960	May 1, 1960	4.54	.5	1963	Jan. 31, 1963	5.77	10

2158.2. Teakettle Creek tributary No. 2 near Patterson Mountain, Calif.

Location.--Lat 36°57'35", long 119°02'00", in SE¹/₄ NW¹/₄ sec.21, T.11 S., R.27 E., 0.8 mile upstream from junction with Teakettle Creek, 1.2 miles east of Patterson Mountain, and 2.8 miles north of Black Rock Reservoir.

Drainage area.--0.85 sq mi.

Gage.--Recording. Datum of gage is 6,903.4 ft above mean sea level (levels by U.S. Forest Service).

Stage-discharge relation.--Permanent. Flow over weir computed by Cone formula; $Q = 2.49H^{2.48}$ (H = gage height -2).

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 30, 1958	3.98	14	1962	May 7, 1962	3.48	6.6
1959	Feb. 16, 1959	3.64	8.4	1963	Jan. 31, 1963	5.35	54
1960	May 11, 1960	3.01	2.6	1964	Nov. 6, 1963	3.56	7.5
				1965	Dec. 23, 1964	1.95	13
1961	Dec. 1, 1960	3.48	3.6				

2158.3. Teakettle Creek tributary No. 2A near Patterson Mountain, Calif.

Location.--Lat 36°57'25", long 119°01'50", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.21, T.11 S., R.27 E., 0.1 mile upstream from junction with Teakettle Creek tributary No. 2, 1.8 miles east of Patterson Mountain, and 2.6 miles north of Black Rock Reservoir.

Drainage area.--0.27 sq mi.

Gage.--Recording. Datum of gage is 6,920 ft above mean sea level (levels by U.S. Forest Service).

Stage-discharge relation.--Permanent. Flow over weir computed by Cone formula; $Q = 2.49H^{2.48}$ (H = gage height -4).

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 22, 1958	5.38	5.5	1962	Feb. 9, 1962,	5.03	2.7
1959	Feb. 16, 1959	4.97	2.3		May 5, 1962		
1960	Feb. 8, 1960	4.70	1.0	1963	Feb. 1, 1963	6.89	35
				1964	Nov. 6, 1963	5.29	4.6
1961	Dec. 1, 1960	4.91	2.0	1965	Dec. 23, 1964	1.49	6.7

2158.4. Teakettle Creek tributary No. 1 near Patterson Mountain, Calif.

Location.--Lat 36°57'00", long 119°01'10", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.27, T.11 S., R.27 E., 0.2 mile upstream from confluence with Teakettle Creek, 2.1 miles north of Black Rock Reservoir, and 2.2 miles east of Patterson Mountain.

Drainage area.--0.77 sq mi.

Gage.--Recording. Datum of gage is 6,403.7 ft above mean sea level (levels by U.S. Forest Service).

Stage-discharge relation.--Permanent. Flow over weir computed by Cone formula; $Q = 2.49H^{2.48}$ (H = gage height -4).

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by the U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 22, 1958	5.99	14	1962	Feb. 9, 1962	5.72	9.6
1959	Feb. 16, 1959	5.58	7.8	1963	Feb. 1, 1963	8.21	117
1960	Feb. 8, 1960	5.49	6.7	1964	Nov. 6, 1963	5.60	8.0
				1965	Dec. 24, 1964	1.96	13
1961	Dec. 1, 1960	5.51	6.9				

2160. North Fork Kings River below Rancheria Creek, Calif.

Location.--Lat 36°55'40", long 119°00'30", in SE $\frac{1}{4}$ sec.34, T.11 S., R.27 E., 1 mile upstream from Balch diversion dam and 1 mile downstream from Rancheria Creek.

Drainage area.--229 sq mi.

Gage.--Recording. Datum of gage is 4,153.20 ft above mean sea level, adjustment of 1912 (levels by San Joaquin Light and Power Corp.).

Stage-discharge relation.--Defined by current-meter measurements below 3,700 cfs and extended above to 21,000 cfs by computations of peak flow over Balch diversion and afterbay dams, 1 mile and 7 miles, respectively, below station.

Historical data.--Flood of Dec. 23, 1955, discharge 24,600 cfs, determined by computation of peak flow over a dam.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Only annual peaks are shown prior to Oct 1, 1946, and for 1951 and 1956. Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	May 16, 1927	12.6	5,910	1946	Oct. 30, 1945	13.05	6,540
1928	Apr. 30, 1928	9.66	2,990				
1929	June 16, 1929	12.45	5,690	1947	Nov. 23, 1946	-	2,940
1930	May 27, 1930	8.97	2,400		May 2, 1947	10.57	3,630
1931	May 6, 1931	8.25	1,750	1948	May 6, 1948	-	2,470
1932	May 17, 1932	11.55	4,820		May 15, 1948	10.70	3,760
1933	May 31, 1933	10.97	4,150		May 26, 1948	-	3,730
1934	Dec. 13, 1933	8.20	1,660		June 8, 1948	-	2,750
1935	June 3, 1935	11.90	5,260				
1936	May 13, 1936	11.25	4,560	1949	May 2, 1949	-	2,600
1937	May 14, 1937	13.10	6,510		May 13, 1949	-	3,160
1938	Dec. 11, 1937	23	21,000		May 26, 1949	10.11	3,200
1939	Apr. 21, 1939	8.75	2,130	1950	Apr. 26, 1950	-	3,100
1940	May 10, 1940	11.24	4,560		May 20, 1950	-	3,410
1941	June 5, 1941	11.95	5,140		May 29, 1950	10.35	3,420
1942	May 24, 1942	11.70	4,840	1951	Nov. 19, 1950	20.0	18,000
1943	Jan. 21, 1943	12.15	5,380				
1944	May 8, 1944	10.00	2,990	1956	Dec. 23, 1955	-	24,600
1945	Feb. 2, 1945	12.65	6,020				

2165. North Fork Kings River above Dinkey Creek, at Balch Camp, Calif.
(Published as "above Dinkey Creek" prior to October 1962)

Location.--Lat 36°54'10", long 119°07'15", in NW $\frac{1}{4}$ sec.10, T.12 S., R.26 E., on left bank 100 ft downstream from bridge at Balch Camp, 200 ft upstream from Dinkey Creek, and 9.3 miles east of Trimmer.

Drainage area.--250 sq mi.

Gage.--Recording. Prior to Sept. 30, 1930, at datum 1.00 ft higher. Altitude of gage is 1,240 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Courtright Reservoir (capacity, 129,900 acre-ft) beginning Oct. 17, 1958, Wishon Reservoir (capacity, 128,600 acre-ft) beginning Dec. 5, 1957, Black Rock Reservoir (capacity, 1,000 acre-ft), Balch afterbay (capacity, 125 acre-ft), and Haas and Balch powerplants. Only annual peaks are shown.

Peak stages and discharges of North Fork Kings River above Dinkey Creek, at Balch Camp, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	May 19, 1920	11.80	5,480	1928	Apr. 30, 1928	10.10	3,140
1921	June 7, 1921	10.95	4,260	1929	June 16, 1929	11.90	5,740
1922	June 4, 1922	12.18	6,080	1930	May 23, 1930	9.39	2,380
1923	May 15, 1923	11.45	4,890	1961	July 2, 1961	4.65	905
1924	May 8, 1924	8.43	1,530	1962	June 27, 1962	6.58	2,460
1925	May 25, 1925	11.50	5,030	1963	Feb. 1, 1963	a13.24	14,000
1926	May 5, 1926	10.67	4,070	1964	Nov. 6, 1963	a2.47	50
1927	May 16, 1927	12.0	5,900	1965	Dec. 23, 1964	-	1,620

a Backwater from Dinkey Creek.

2170. Dinkey Creek at Dinkey Meadow, Calif.

Location.--Lat 37°03', long 119°09', in NW $\frac{1}{4}$ sec.21, T.10 S., R.26 E., at lower end of Dinkey Meadow, 0.5 mile upstream from Bear Creek and 11 miles upstream from mouth.

Drainage area.--50.7 sq mi.

Gage.--Recording. Prior to Oct.9, 1923, at site 600 ft upstream at different datum. Altitude of gage is 5,440 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs prior to Oct. 9, 1923; below 2,600 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 1, 1922	4.30	1,220	1929	June 16, 1929	6.90	2,060
1923	Apr. 6, 1923	5.60	1,220	1930	Apr. 9, 1930	4.25	445
1924	Apr. 10, 1924	4.00	300	1931	Apr. 29, 1931	4.26	445
1925	Nov. 9, 1924	6.38	1,230	1932	May 16, 1932	5.83	1,260
1926	Apr. 24, 1926	5.38	830	1933	May 28, 1933	5.57	1,060
1927	Nov. 26, 1926	7.62	2,660	1934	Dec. 13, 1933	5.90	1,300
1928	Nov. 10, 1927	6.55	1,780	1935	Apr. 8, 1935	6.15	1,480

2175. Deer Creek below East Fork, Calif.

Location.--Lat 37°00'10", long 119°03'50", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.6, T.11 S., R.27 E., about 200 ft downstream from East Fork Deer Creek, 3.2 miles upstream from mouth, and 18.5 miles southeast of Huntington Lake.

Drainage area.--19.0 sq mi.

Gage.--Recording. Altitude of gage is 6,700 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 300 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Apr. 30, 1924	5.10	132	1930	May 19, 1930	5.22	173
1925	Nov. 9, 1924	6.54	650	1931	Apr. 30, 1931	5.29	190
1926	May 3, 1926	5.89	396	1932	May 16, 1932	7.02	860
1927	May 15, 1927	6.21	494	1933	May 31, 1933	6.20	490
1928	Nov. 9, 1927	6.19	486	1934	Apr. 8, 1934	5.05	134
1929	June 16, 1929	7.00	860	1935	June 3, 1935	6.26	458

2180. Dinkey Creek at mouth, Calif.

Location--Lat 36°55', long 119°08', in sec.3, T.12 S., R.26 E. (unsurveyed), half a mile upstream from mouth and a half mile northwest of Balch Camp.

Drainage area--133 sq mi.

Gage--Recording. Altitude of gage is 1,310 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,000 cfs.

Historical data--Flood of Dec. 11, 1937, which destroyed station, exceeded that of Feb. 13, 1937.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1920	May 19, 1920	9.20	2,230	1929	June 16, 1929	10.4?	3,150
1921	Apr. 29, 1921	8.14	1,270	1930	Apr. 8, 1930	7.2"	755
1922	May 24, 1922	9.94	2,900	1931	Apr. 30, 1931	7.18	730
1923	Apr. 6, 1923	10.48	3,500	1932	Feb. 7, 1932	9.75	2,370
1924	Apr. 10, 1924	6.70	555	1933	May 28, 1933	8.7?	1,530
1925	Nov. 9, 1924	10.57	3,360	1934	Dec. 13, 1933	9.2'	1,930
1926	Apr. 24, 1926	8.58	1,510	1935	Apr. 8, 1935	9.9'	2,460
1927	Nov. 26, 1926	10.41	3,150	1936	Feb. 22, 1936	9.35	1,980
1928	Nov. 10, 1927	9.78	2,550	1937	Feb. 13, 1937	11.67	4,320

2185. Kings River below North Fork, Calif.

Location--Lat 36°52'30", long 119°08'30", in NE $\frac{1}{4}$ sec.21, T.12 S., R.26 E., on right bank 0.8 mile downstream from North Fork, 2.4 miles southwest of Balch Camp, and 8.5 miles southeast of Trimmer.

Drainage area--1,342 sq mi.

Gage--Recording. Datum of gage is 942.42 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation--Defined by current-meter measurements below 18,000 cfs and extended above on basis of slope-area measurement at 85,270 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Peaks regulated by Courtright Reservoir (capacity, 129,900 acre-ft) beginning in 1958 and Wishon Reservoir (capacity, 128,600 acre-ft) beginning in 1957. Only annual peaks are shown in 1950 and 1958-62 after regulation began. Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Nov. 19, 1950	21.6	74,200	1956	Dec. 23, 1955	23.08	85,200
1952	Dec. 29, 1951	10.00	12,300		Dec. 26, 1955	9.95	12,100
	Jan. 25, 1952	8.79	8,470		Jan. 25, 1956	9.35	10,100
	May 3, 1952	9.72	11,300		May 4, 1956	10.53	14,100
	May 14, 1952	10.78	15,000		May 24, 1956	11.15	16,300
	May 20, 1952	11.18	16,400		June 10, 1956	10.28	15,200
	May 30, 1952	12.22	20,300		June 29, 1956	9.38	10,200
	June 6, 1952	12.03	19,600	1957	May 19, 1957	12.42	21,100
	June 18, 1952	10.47	13,900		June 5, 1957	10.27	13,400
	July 4, 1952	9.14	9,480		June 14, 1957	9.07	9,590
1953	Apr. 27, 1953	9.99	12,200		June 20, 1957	8.59	8,150
	June 16, 1953	8.99	9,030	1958	June 19, 1958	11.17	16,500
1954	Mar. 9, 1954	8.78	8,440	1959	Feb. 16, 1959	8.29	7,310
	Apr. 24, 1954	8.84	8,610	1960	May 12, 1960	7.63	5,720
	May 19, 1954	10.32	13,400	1961	Dec. 2, 1960	6.39	3,620
1955	May 23, 1955	9.74	11,400	1962	Feb. 9, 1962	9.49	10,700
	May 30, 1955	9.87	11,800	1963	Feb. 1, 1963	-	41,800
	June 8, 1955	10.64	14,500	1964	May 21, 1964	-	6,570
				1965	Dec. 24, 1964	-	16,700

2200. Big Creek above Pine Flat Reservoir, Calif.

Location.--Lat 36°55'05", long 119°14'45", in NE $\frac{1}{4}$ sec.4, T.12 S., R.25 E., on right bank 2.4 miles upstream from mouth and 2.7 miles northeast of Trimmer.

Drainage area.--69.9 sq mi.

Gage.--Recording. Datum of gage is 962.04 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 1,170 cfs and extended above on basis of slope-area measurement at 10,400 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--High-water marks found in 1953, at about 9.0 ft, probably for November 1950.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	November 1950	9.0	-	1958	Apr. 3, 1958	6.40	2,800
1954	Jan. 24, 1954	4.44	1,220	1959	Feb. 16, 1959	5.10	1,220
	Feb. 13, 1954	4.60	1,400	1960	Feb. 1, 1960	4.58	838
	Feb. 17, 1954	3.63	612		Feb. 8, 1960	4.87	1,040
	Mar. 30, 1954	3.80	710	1961	Dec. 1, 1960	4.39	724
1955	Jan. 1, 1955	3.28	442		Feb. 9, 1962	6.10	2,340
1956	Dec. 23, 1955	9.21	10,400	1962	Feb. 15, 1962	4.07	555
	Dec. 26, 1955	5.36	1,460		Feb. 1, 1963	9.00	9,600
	Jan. 23, 1956	5.03	1,160	1963	Feb. 10, 1963	4.59	844
	Jan. 25, 1956	7.30	4,500		Apr. 15, 1963	4.38	718
	Feb. 23, 1956	4.19	615	1964	Nov. 15, 1963	4.21	625
1957	Feb. 23, 1957	4.08	560		Nov. 12, 1964	3.99	516
	Feb. 25, 1957	4.58	838	1965	Dec. 23, 1964	5.50	1,930
	May 19, 1957	5.89	2,050		Dec. 27, 1964	5.31	1,700
1958	Dec. 16, 1957	4.68	906		Jan. 6, 1965	5.46	1,880
	Feb. 4, 1958	5.05	1,230		Jan. 24, 1965	4.54	820
	Feb. 25, 1958	5.67	1,860				
	Mar. 16, 1958	5.38	1,480				
	Mar. 22, 1958	5.45	1,550				

2205. Sycamore Creek above Pine Flat Reservoir, Calif.

Location.--Lat 36°55'15", long 119°18'30", in NW $\frac{1}{4}$ sec.1, T.12 S., R.24 E., on right bank 0.1 mile downstream from Little Dry Creek, 1.7 miles northwest of Trimmer, and 4.8 miles upstream from mouth.

Drainage area.--56.1 sq mi.

Gage.--Recording. Datum of gage is 1,141.96 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 2,900 cfs and extended above on basis of slope-area measurement at 6,760 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges of Sycamore Creek above Pine Flat Reservoir, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 24, 1954	3.58	686	1959	Feb. 11, 1959	4.81	1,370
	Feb. 14, 1954	4.20	1,000		Feb. 16, 1959	4.96	1,470
	Mar. 24, 1954	2.54	504	1960	Feb. 1, 1960	4.26	1,030
	Mar. 30, 1954	3.75	765		Feb. 8, 1960	4.28	1,040
1955	Jan. 1, 1955	3.45	628	1961	Dec. 1, 1960	2.67	343
	Feb. 27, 1955	3.15	503	1962	Jan. 20, 1962	3.54	668
1956	Dec. 24, 1955	9.78	6,760		Feb. 10, 1962	5.40	1,500
	Dec. 27, 1955	4.38	1,300		Feb. 16, 1962	4.74	1,080
	Jan. 23, 1956	5.07	1,800		Mar. 6, 1962	3.98	880
	Jan. 25, 1956	7.97	4,650	1963	Jan. 31, 1963	7.56	3,310
	Feb. 23, 1956	3.68	889		Feb. 10, 1963	4.90	1,100
	May 9, 1956	2.82	488		Mar. 28, 1963	3.83	562
1957	Feb. 25, 1957	3.49	646		Apr. 15, 1963	3.60	480
	May 19, 1957	5.13	1,590		Apr. 20, 1963	4.00	630
1958	Dec. 16, 1957	3.72	750	1964	Nov. 15, 1963	4.08	720
	Jan. 26, 1958	4.59	1,220	1965	Nov. 12, 1964	3.26	410
	Jan. 30, 1958	2.88	408		Dec. 23, 1964	4.95	1,190
	Feb. 4, 1958	5.12	1,280		Dec. 27, 1964	4.96	1,150
	Feb. 19, 1958	2.80	349		Jan. 7, 1965	5.21	1,320
	Feb. 25, 1958	6.40	2,250		Jan. 24, 1965	3.92	569
	Mar. 15, 1958	5.00	1,510		Apr. 8, 1965	3.79	516
	Mar. 22, 1958	6.96	3,140		Apr. 10, 1965	4.49	864
	Mar. 30, 1958	3.88	840		Apr. 15, 1965	4.06	635
	Apr. 3, 1958	7.54	3,630				
	Apr. 6, 1958	4.52	1,180				

2215. Kings River below Pine Flat Dam, Calif.

Location.--Lat 36°49'50", long 119°20'05", in NW $\frac{1}{4}$ sec.2, T.13 S., R.24 E., on right bank 3,200 ft downstream from Pine Flat Dam and 2.9 miles northeast of Piedra.

Drainage area.--1,545 sq mi.

Gage.--Recording. Prior to Oct. 1, 1956, at site 0.2 mile downstream at datum 3.48 ft lower. Datum of gage is 556.97 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 7,920 cfs prior to Oct. 1, 1956; below 11,300 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Numerous discharge measurements furnished by Kings River Water Association. Peaks completely regulated by Pine Flat Reservoir (capacity, 1,013,400 acre-ft) beginning Dec. 4, 1951, Courtright Reservoir (capacity, 129,900 acre-ft) beginning Oct. 17, 1958, and Wishon Reservoir (capacity, 128,600 acre-ft) beginning Dec. 5, 1957. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	July 9, 1954	6.58	6,260	1960	June 20, 1960	6.98	5,640
1955	June 28, 1955	6.57	6,230				
1956	June 11, 1956	7.67	10,400	1961	July 6, 1961	7.09	5,900
	June 27, 1957	8.19	9,270	1962	June 25, 1962	7.65	7,460
1957	June 27, 1957	8.19	9,270	1963	June 20, 1963	8.26	9,090
1958	May 3, 1958	9.35	12,700	1964	June 25, 1964	7.29	6,460
1959	June 18, 1959	7.34	6,630	1965	June 24, 1965	7.59	7,210

2217. Mill Creek near Piedra, Calif.

Location--Lat 36°49'05", long 119°20'25", in NE $\frac{1}{4}$ sec.10, T.13 S., R.24 E., on left bank 150 ft upstream from road bridge, 0.7 mile upstream from mouth, and 2.3 miles east of Piedra.

Drainage area--120 sq mi.

Gage--Recording. Prior to July 14, 1958, at site 150 ft upstream at same datum. Altitude of gage is 550 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,620 cfs prior to July 14, 1958; below 1,550 cfs thereafter.

Bankfull stage--10 ft.

Remarks--Base for partial-duration series, 250 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Jan. 26, 1958	4.12	566	1962	Mar. 6, 1962	4.49	584
	Feb. 3, 1958	4.66	1,080		Mar. 9, 1962	3.95	298
	Feb. 25, 1958	5.76	2,670	1963	Jan. 31, 1963	6.68	3,120
	Mar. 16, 1958	5.32	1,590		Feb. 10, 1963	5.19	1,160
	Mar. 22, 1958	7.29	5,000		Apr. 7, 1963	4.55	645
	Apr. 1, 1958	7.05	4,500		Apr. 15, 1963	3.86	279
1959	Feb. 16, 1959	4.15	565	1964	Apr. 2, 1964	3.84	271
1960	Feb. 2, 1960	3.46	167	1965	Dec. 27, 1964	5.16	1,080
1961	Jan. 27, 1961	2.74	25		Jan. 5, 1965	5.25	1,160
1962	Feb. 11, 1962	5.94	2,160		Jan. 7, 1965	5.25	1,160
	Feb. 16, 1962	4.84	812		Jan. 24, 1965	3.97	358
	Feb. 20, 1962	4.51	591		Apr. 10, 1965	4.47	605
					Apr. 13, 1965	4.32	530

2220. Kings River at Piedra, Calif.
(Published as "near Sanger" prior to 1924)

Location--Lat 36°49'02", long 119°23'08", in NW $\frac{1}{4}$ sec.8, T.13 S., R.24 E., 0.5 mile downstream from highway bridge at Piedra, 2 miles downstream from Mill Creek, and 12 miles northeast of Sanger.

Drainage area--1,687 sq mi.

Gage--Nonrecording prior to Apr. 17, 1903, and Jan. 30, 1914, to Jan. 14, 1920; recording Apr. 18, 1903, to Jan. 25, 1914, Jan. 15, 1920, and thereafter. Prior to Feb. 7, 1931, at site 1,000 ft upstream at different datum. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 21,600 cfs prior to Feb. 7, 1931; defined by current-meter measurements below 30,000 cfs and extended above on basis of slope-area measurement at 91,000 cfs thereafter.

Bankfull stage--11 ft.

Remarks--Peaks completely regulated by Pine Flat Reservoir (capacity, 1,013,400 acre-ft) beginning Dec. 4, 1951, Courtright Reservoir (capacity, 129,900 acre-ft) beginning in 1958 and Wishon Reservoir (capacity, 128,600 acre-ft) beginning in 1957. Peaks for the years 1897-99, 1901, 1902, 1905, and 1906 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1947, and subsequent to 1952, after regulation began. Base for partial-duration series, 8,500 cfs.

Peak stages and discharges of Kings River at Piedra, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1897	May 24, 1897	12.4	17,800	1935	Apr. 8, 1935	11.65	20,100
1898	Dec. 8, 1897	9.8	8,140				
1899	Mar. 25, 1899	13.8	24,000	1936	Feb. 22, 1936	12.38	24,600
1900	Jan. 3, 1900	11.6	14,600	1937	Feb. 6, 1937	13.9	34,800
				1938	Dec. 11, 1937	19.94	80,000
1901	Jan. 7, 1901	15.8	33,200	1939	Apr. 22, 1939	7.47	6,500
1902	Apr. 7, 1902	13.1	20,800	1940	Feb. 26, 1940	10.51	14,800
1904	Mar. 23, 1904	12.8	19,500	1941	June 6, 1941	11.28	17,900
1905	June 13, 1905	10.65	10,800	1942	May 26, 1942	10.95	16,600
				1943	Jan. 21, 1943	16.25	46,900
1906	Mar. 15, 1906	14.1	25,400	1944	May 9, 1944	8.94	9,950
1907	June 4, 1907	12.80	19,500	1945	Feb. 2, 1945	16.57	49,300
1909	Jan. 14, 1909	15.1	32,800	1946	Oct. 30, 1945	10.80	16,500
1910	Dec. 9, 1909	16.5	44,800	1947	Nov. 23, 1946	11.00	17,300
1911	Jan. 31, 1911	14.85	30,500	1948	Apr. 10, 1948	9.80	13,000
1912	June 6, 1912	-	15,700		May 7, 1948	-	9,100
1913	May 23, 1913	-	8,900		May 17, 1948	-	12,600
1914	Jan. 25, 1914	21.8	59,700		May 27, 1948	-	12,300
1915	June 1, 1915	13.3	18,500		June 9, 1948	-	8,900
1918	Jan. 17, 1916	19.0	45,400	1949	May 14, 1949	-	9,920
1917	Feb. 22, 1917	13.2	17,900		May 27, 1949	9.60	11,500
1918	June 12-14, 1918	12.0	13,500				
1919	May 29, 1919	12.0	13,200	1950	Apr. 27, 1950	-	10,400
1920	May 20, 1920	12.95	17,000		May 21, 1950	-	11,300
					May 30, 1950	10.05	12,900
1921	June 12, 1921	12.7	15,600	1951	Nov. 19, 1950	21.0	91,000
1922	June 5, 1922	14.02	19,900		Dec. 4, 1950	15.0	36,800
1923	May 16, 1923	12.54	13,600		Dec. 7, 1950	8.61	8,630
1924	May 9, 1924	9.07	5,210		May 27, 1951	9.89	12,300
1925	May 29, 1925	11.89	11,300				
1926	May 5, 1926	11.97	11,600	1952	June 6-7, 1952	10.86	15,500
1927	Feb. 18, 1927	14.28	19,200	1953	Apr. 27, 1953	8.35	7,950
1928	Mar. 27, 1928	11.42	10,200	1954	June 21, 1954	7.67	6,350
1929	June 16, 1929	12.94	14,700	1955	June 29, 1955	7.39	5,880
1930	May 28, 1930	10.68	8,430				
1931	May 7, 1931	7.58	6,250	1956	Dec. 23, 1955	8.89	9,380
1932	Dec. 28, 1931	12.12	23,800	1957	June 27, 1957	8.61	8,640
1933	June 15, 1933	10.38	14,900	1958	June 23, 1958	10.07	12,900
1934	Dec. 13, 1933	7.68	6,690	1959	June 17, 1959	7.84	6,800

SAN JOAQUIN RIVER BASIN

2260. North Fork San Joaquin River below Iron Creek, Calif.

Location--Lat 37°36'50", long 119°14'00", in SE¹ sec.4, T.4 S., R.25 E., on right bank 0.8 mile downstream from Iron Creek and 27 miles northeast of town of Bass Lake.

Drainage area--35.5 sq mi.

Gage--Recording. Altitude of gage is 6,800 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,100 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown.

SAN JOAQUIN RIVER BASIN

Peak stages and discharges of North Fork San Joaquin River below Iron Creek, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 27, 1922	7.24	2,000	1956	July 24, 1956	a8.15	3,860
1923	June 10, 1923	6.82	1,200	1957	June 3, 1957	a6.93	1,490
1924	May 8, 1924	6.09	574	1958	June 18, 1958	a7.02	1,630
1925	July 19, 1925	7.02	1,630	1959	May 12, 1959	6.57	947
				1960	May 11, 1960	6.53	1,000
1926	May 19, 1926	6.72	1,220				
1927	June 12, 1927	6.80	1,320	1961	Aug. 21, 1961	7.84	2,990
1928	May 26, 1928	6.47	950	1962	June 21, 22, 1962	7.00	1,500
				1963	June 17, 1963	7.24	1,630
1952	July 30, 1952	a6.83	1,360	1964	June 14, 1964	6.49	921
1953	June 18, 1953	a6.52	992	1965	Dec. 23, 1964	7.60	2,490
1954	May 18, 1954	a6.79	1,310				
1955	June 9, 1955	7.00	1,600				

a Maximum recorded, no winter records available.

2265. San Joaquin River at Miller Crossing, Calif.
(Published as Middle Fork San Joaquin River at Miller Bridge
prior to October 1954)

Location.--Lat 37°30'35", long 119°11'50", in NE¹ sec. 11, T.5 S., R.25 E., on right bank 2.4 miles downstream from North Fork San Joaquin River, 4.6 miles east of Clover Meadow ranger station, and 23 miles northeast of town of Bass Lake.

Drainage area.--254 sq mi.

Gage.--Recording. Altitude of gage is 4,570 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs and extended above on basis of contracted-opening measurement at 16,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and several discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 4, 1922	17.68	6,200	1956	June 10, 1956	16.55	4,880
1923	June 10, 1923	16.43	4,080		June 28, 1956	16.34	4,560
1924	May 8, 1924	14.26	1,720		July 24, 1956	16.77	5,210
1925	May 25, 1925	16.35	4,080				
1926	May 4, 1926	16.08	3,640	1957	May 6, 1957	14.62	2,400
1927	May 16, 1927	17.10	5,160		May 18, 1957	17.02	5,610
1928	Mar. 25, 1928	15.50	2,900		June 3, 1957	16.67	5,060
					June 13, 1957	15.18	3,030
1952	-	14.87	2,660		June 25, 1957	15.20	3,050
	May 27, 1952	17.10	5,740				
	June 18, 1952	15.91	3,950	1958	May 18, 1958	16.93	5,470
	July 3, 1952	15.30	3,170		June 18, 1958	16.78	5,230
	July 27, 1952	14.64	2,400				
	July 30, 1952	15.29	3,160	1959	Apr. 30, 1959	14.33	2,130
					May 12, 1959	14.72	2,520
1953	Apr. 25, 1953	14.87	2,660	1960	May 12, 1960	14.92	2,720
	June 18, 1953	15.45	3,360		June 2, 1960	14.42	2,200
1954	Mar. 9, 1954	14.56	2,320	1961	May 24, 1961	13.80	1,650
	Apr. 24, 1954	-	(a)				
	May 8, 1954	15.60	3,550	1962	Feb. 9, 1962	14.58	2,380
	May 18, 1954	16.04	4,140		Apr. 14, 1962	14.57	2,350
					Apr. 23, 1962	14.60	2,380
1955	May 12, 1955	14.79	2,580		May 5, 1962	15.85	3,880
	May 21, 1955	15.81	3,820		June 2, 1962	16.13	4,260
	May 29, 1955	15.85	3,880		June 9, 1962	16.15	4,290
	June 7, 1955	16.76	5,200		June 21, 1962	16.10	4,220
1956	Dec. 23, 1955	21.28	16,600	1963	Feb. 1, 1963	18.32	8,120
	Apr. 24, 1956	14.39	2,170		May 8, 1963	15.53	3,420
	May 4, 1956	15.51	3,430		May 21, 1963	16.18	4,330
	May 22, 1956	16.55	4,880		June 2, 1963	15.98	4,050

a Discharge unknown; exceeded base.

Peak stages and discharges of San Joaquin River at Miller Crossing, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	June 17, 1963	16.93	5,470	1965	Dec. 23, 1964	19.00	9,680
	June 27, 1963	15.27	3,130		Apr. 29, 1965	14.94	2,740
	July 7, 1963	14.62	2,400		May 17, 1965	15.96	4,020
1964					June 11, 1965	16.52	4,850
	May 19, 1964	15.07	2,890	1965	June 21, 1965	15.63	3,590
	May 25, 1964	14.91	2,710		July 5, 1965	15.15	2,990
	May 31, 1964	14.53	2,510		July 17, 1965	17.07	5,690
	June 14, 1964	14.39	2,170		Aug. 15, 1965	16.59	4,940

2285. Granite Creek near Cattle Mountain, Calif.

Location.--Lat 37°31'35", long 119°15'30", in NE¹ sec.5, T.5 S., R.25 E., on right bank 0.7 mile downstream from confluence of East and West Forks of Granite Creek, 1.6 miles northwest of Cattle Mountain, and 21 miles northeast of town of Bass Lake.

Drainage area.--47.8 sq mi.

Gage.--Recording. Altitude of gage is 6,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Highest water mark 17.00 ft, date unknown.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 27, 1922	8.83	2,210	1956	May 22, 1956	a11.92	1,790
1923	May 16, 1923	8.44	1,480	1957	May 18, 1957	a8.62	1,920
1924	May 2, 1924	7.45	625	1958	May 18, 1958	a8.56	1,840
1925	May 25, 1925	8.33	1,540	1959	May 11, 1959	a7.81	1,020
				1960	May 11, 1960	a7.74	938
1926	May 3, 1926	8.37	1,390				
1927	May 16, 1927	8.50	1,560	1961	Apr. 4, 1961	a7.37	652
1928	Apr. 30, 1928	8.01	980	1962	June 2, 1962	a8.18	1,400
				1963	June 15, 1963	a8.39	1,590
1952	June 5, 1952	a8.62	1,920	1964	May 12, 1964	a7.55	780
1953	June 18, 1953	a7.86	1,070	1965	Dec. 23, 1964	a9.49	3,140
1954	May 18, 1954	a8.48	1,750				
1955	June 7, 1955	a8.37	1,610				

a Maximum recorded; no winter gage-height records available.

b Occurred during winter of 1955-56, from high-water mark in well, probably due to backwater from ice.

2300. South Fork San Joaquin River near Florence Lake, Calif.
(Published as "near Lake Florence" prior to October 1925)

Location.--Lat 37°16'20", long 118°57'50", in SE $\frac{1}{4}$ sec.36, T.7 S., R.27 E., on left bank just downstream from spillway of Florence Lake Dam and 6 miles upstream from Bear Creek.

Drainage area.--171 sq mi.

Gage.--Recording. Altitude of gage is 7,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,900 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Peaks regulated by Florence Lake (capacity, 64,400 acre-ft) beginning in April 1925 and affected by diversion into Ward tunnel (capacity about 2,000 cfs) beginning in 1925, for use in Big Creek powerplants. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 4, 1922	13.75	3,460	1945	July 8, 1945	11.69	954
1923	June 10, 1923	13.1	2,410				
1924	May 8, 1924	12.10	1,310	1946	Nov. 25, 1945	10.97	582
1925	May 28, 1925	12.80	2,120	1947	Nov. 22, 1946	9.46	11
				1948	Apr. 9, 1948	9.20	4
1926	May 22, 1926	10.99	764	1949	July 4, 1949	9.54	13
1927	June 14, 1927	13.37	2,700	1950	Nov. 23, 1949	10.58	264
1928	June 4, 1928	12.63	1,820				
1929	May 27, 1929	8.26	13	1951	June 25, 1951	13.09	1,570
1930	Nov. 7, 1929	9.21	100	1952	Nov. 6, 1952	14.54	2,810
				1953	Aug. 12, 1953	9.68	25
1931	Aug. 11, 1931	9.88	230	1954	July 17, 1954	9.51	11
1932	June 24, 1932	14.54	3,190	1955	Jan. 18, 1955	9.21	-
1933	Nov. 5, 1932	9.76	282		July 22, 1955	8.98	9.0
1934	Apr. 19, 1934	10.64	464				
1935	June 22, 1935	14.0	2,690	1956	July 25, 1956	13.87	2,180
				1957	July 27, 1957	9.21	12
1936	June 26, 1936	13.15	2,060	1958	June 18, 1958	14.34	2,710
1937	June 4, 1937	14.10	3,000	1959	Aug. 9, 1959	9.80	77
1938	July 27, 1938	14.65	3,210	1960	July 4, 1960	8.87	7.7
1939	Jan. 17, 1939	9.40	172				
1940	June 6, 1940	15.38	4,320	1961	Aug. 6, 1961	9.43	15
				1962	July 24, 1962	9.31	13
1941	July 15, 1941	14.32	2,990	1963	July 13, 1963	12.28	1,120
1942	July 7, 1942	12.50	1,490	1964	Aug. 6, 1964	9.55	20
1943	Nov. 6, 1942	10.15	266	1965	July 17, 1965	9.47	16
1944	Nov. 14, 1943	9.40	102				

a Annual maximum stage; backwater from ice.

2305. Bear Creek near Lake Thomas A. Edison, Calif.
(Published as "near Vermilion Valley" prior to October 1954)

Location.--Lat 37°20'20", long 118°58'20", in SW $\frac{1}{4}$ sec.12, T.7 S., R.27 E. (unsurveyed), on right bank 0.2 mile upstream from diversion dam, 1.7 miles upstream from mouth, 2.1 miles south of Lake Thomas A. Edison, and 2.4 miles northeast of Mono Hot Springs.

Drainage area.--53.5 sq mi.

Gage.--Recording. Altitude of gage is 7,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 950 cfs and extended above on basis of computation of flow over dam at 1,530 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 440 cfs.

Peak stages and discharges of Bear Creek near Lake Thomas A. Edison, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 4, 1922	5.97	857	1954	May 8, 1954	5.16	470
1923	June 10, 1923	5.63	656		May 20, 1954	5.33	556
1924	May 8, 1924	5.14	435		June 23, 1954	5.12	450
1925	May 28, 1925	5.72	707				
1926	May 19, 1926	5.78	743	1955	May 22, 1955	5.25	525
1927	June 16, 1927	5.91	821		May 29, 1955	5.48	649
1928	May 28, 1928	5.66	673		June 9, 1955	6.06	976
1929	May 18, 1929	5.29	480	1956	Dec. 23, 1955	6.62	1,330
1930	June 11, 1930	5.37	520		June 28, 1956	6.11	1,010
					July 26, 1956	7.12	1,680
1931	May 6, 1931	4.99	400				
1932	June 22, 1932	5.84	844	1957	June 4, 1957	6.37	1,160
1933	June 13, 1933	5.86	856		June 25, 1957	5.80	800
1934	May 12, 1934	4.76	296				
1935	June 3, 1935	5.62	721	1958	May 10, 1958	5.19	455
					May 22, 1958	6.09	974
1936	July 21, 1936	6.90	1,530		June 23, 1958	6.22	1,050
1937	May 14, 1937	5.81	846		July 7, 1958	6.05	950
1938	June 2, 1938	6.45	1,230		Aug. 15, 1958	6.06	956
1939	May 30, 1939	5.02	400				
1940	June 29, 1940	5.97	922	1959	Feb. 13, 1959	5.36	-
					May 12, 1959	5.04	384
1941	June 5, 1941	5.99	934				
1942	June 14, 1942	5.70	760	1960	May 11, 1960	5.14	410
1943	May 27, 1943	5.95	910				
1944	June 7, 1944	5.41	600	1961	June 16, 1961	5.02	394
1945	June 13, 1945	5.85	850				
				1962	May 5, 1962	5.26	510
1946	May 6, 1946	5.43	612		June 9, 1962	5.64	704
1947	May 22, 1947	5.56	683		June 21, 1962	5.78	788
1948	May 15, 1948	-	500	1963	June 2, 1963	5.52	600
	May 26, 1948	5.41	600		June 18, 1963	5.49	1,190
	June 11, 1948	-	530		June 27, 1963	5.53	605
					July 8, 1963	5.55	615
1949	May 27, 1949	-	540				
	June 11, 1949	5.44	615	1964	May 20, 1964	5.33	520
1950	May 29, 1950	5.51	656	1965	Dec. 23, 1964	5.58	738
					May 17, 1965	5.24	560
1951	Nov. 19, 1950	5.56	683		June 5, 1965	5.51	696
	May 26, 1951	6.05	970		June 11, 1965	5.62	762
	June 15, 1951	5.72	772		June 22, 1965	5.15	515
					July 5, 1965	5.20	540
1952	June 4, 1952	5.86	856		July 16, 1965	5.12	500
	July 25, 1952	5.38	593		Aug. 11, 1965	5.72	822
					Aug. 17, 1965	5.27	575
1953	June 22, 1953	5.30	553				

a Annual maximum stage; backwater from ice.

2315. Mono Creek below Lake Thomas A. Edison, Calif.
(Published as "near Vermilion Valley" prior to October 1954)

Location.--Lat 37°21'40", long 118°59'25", in SW $\frac{1}{4}$ sec.35, T.6 S., R.27 E. (unsurveyed), on left bank 0.6 mile upstream from diversion dam, 1 mile downstream from Lake Thomas A. Edison, and 1.9 miles northeast of Mono Hot Springs.

Drainage area.--92.0 sq mi.

Gage.--Recording. Altitude of gage is 7,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,450 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Peaks regulated by Lake Thomas A. Edison (capacity, 125,000 acre-ft) beginning Oct. 12, 1954. Only annual peaks are shown prior to Oct. 1, 1947, and 1955-62 after regulation began. Base for partial-duration series, 540 cfs.

SAN JOAQUIN RIVER BASIN

Peak stages and discharges of Mono Creek below Lake Thomas A. Edison, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 6, 1922	8.18	1,390	1949	June 11, 1949	7.31	916
1923	June 10, 1923	7.40	940				
1924	May 8, 1924	6.47	488	1950	Apr. 26, 1950	-	555
1925	May 28, 1925	7.61	1,060		May 30, 1950	7.61	1,110
					June 20, 1950	-	674
1926	May 19, 1926	7.55	1,030				
1927	June 16, 1927	8.09	1,420	1951	Nov. 19, 1950	7.50	1,030
1928	May 28, 1928	7.62	1,110		May 27, 1951	8.05	1,380
1929	May 24, 1929	6.97	750		June 15, 1951	7.61	1,100
1930	June 11, 1930	7.17	848				
				1952	June 5, 1952	8.00	1,340
1931	May 6, 1931	6.53	525		June 18, 1952	7.53	1,050
1932	June 22, 1932	8.10	1,420		July 5, 1952	7.13	816
1933	June 13, 1933	8.01	1,350		July 25, 1952	6.83	660
1934	May 12, 1934	6.26	404				
1935	June 11, 1935	7.78	1,230	1953	June 19, 1953	7.26	888
					July 6, 1953	6.72	591
1936	June 24, 1936	7.55	1,060		July 17, 1953	7.03	762
1937	May 14, 1937	7.79	1,210				
1938	June 2, 1938	8.62	1,760	1954	May 9, 1954	6.95	720
1939	May 30, 1939	6.60	540		May 21, 1954	7.32	922
1940	May 24, 1940	7.66	1,130		June 3, 1954	6.88	685
					June 22, 1954	6.94	715
1941	June 19, 1941	8.11	1,420				
1942	June 15, 1942	7.73	1,170	1955	Aug. 2-5, 1955	6.18	340
1943	May 27, 1943	8.14	1,440				
1944	June 8, 1944	7.20	855	1956	July 12, 1956	7.85	1,240
1945	June 21, 1945	8.04	1,370		June 26-27, 1957	6.93	702
				1957	Apr. 9-11, 1958	6.57	505
1946	May 6, 1946	7.30	910		Oct. 27, 1958	6.48	460
1947	May 22, 1947	7.43	988	1959	Nov. 3, 1959	6.58	520
1948	May 16, 1948	-	725	1961	Oct. 26, 27, 1960	6.41	440
	May 27, 1948	7.17	838		Feb. 27, 1962	6.60	505
	June 13, 1948	-	828	1963	July 14, 1963	6.76	623
				1964	Oct. 7, 1963	6.59	520
1949	May 27, 1949	-	850	1965	Feb. 13, 14, 1965	6.47	455

2320. South Fork San Joaquin River near Hoffman Meadow, Calif.

Location.--Lat 37°25'00", long 119°08'40", in sec.8, T.6 S., R.26 E., 2 miles upstream from Hoffman Creek and 3 miles east of Hoffman Meadow.

Drainage area.--424 sq mi.

Gage.--Recording. Altitude of gage is 5,390 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,500 cfs.

Remarks.--Peaks regulated by Florence Lake (usable capacity, 64,400 acre-ft), beginning in April 1925. Peaks may be affected by diversion from Florence Lake and, beginning in November 1927, diversions from Bear and Mono Creeks through Ward tunnel into Huntington Lake for use in Big Creek powerplants. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 5, 1922	15.21	5,930	1926	May 22, 1926	12.36	2,450
1923	June 11, 1923	13.97	4,190	1927	June 14, 1927	14.54	4,870
1924	May 9, 1924	12.25	2,290	1928	June 4, 1928	12.32	2,370
1925	May 29, 1925	13.90	4,070				

2325. Jackass Creek near Bass Lake, Calif.
(Published as "near Jackass Meadow" prior to 1963)

Location.--Lat 37°29'20", long 119°18'10", in SW¹ sec.13, T.5 S., R.24 E., on left bank 1.6 miles east of Jackass Meadow, 10 miles upstream from West Fork, and 18 miles northeast of town of Bass Lake.

Drainage area.--12.1 sq mi.

Gage.--Recording. Altitude of gage is 6,900 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 190 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	May 24, 1922	9.58	418	1956	Dec. 23, 1955	a11.37	786
1923	May 9, 1923	8.94	312	1957	May 18, 1957	a10.48	564
1924	Apr. 10, 1924	6.91	68	1958	May 18, 1958	a9.71	462
1925	May 4, 1925	8.42	208	1959	Sept. 19, 1959	a7.48	136
				1960	May 11, 1960	a7.39	128
1926	Apr. 24, 1926	8.50	220				
1927	May 13, 1927	8.95	277	1961	Apr. 3, 1961	a6.91	85
1928	Mar. 25, 1928	9.92	426	1962	May 5, 1962	a8.74	296
				1963	Feb. 1, 1963	10.10	540
1952	June 17, 1952	a7.83	152	1964	Nov. 15, 1963	a8.05	188
1953	Apr. 27, 1953	9.81	435	1965	Dec. 23, 1964	10.17	554
1954	May 8, 1954	a8.30	204				
1955	May 21, 1955	a8.21	193				

a Maximum recorded; no gage heights available for some winter periods.

2345. Chiquito Creek near Bass Lake, Calif.
(Published as "near Arnold Meadows" prior to Oct. 1, 1952)

Location.--Lat 37°24'45", long 119°22'50", in NE¹ sec.18, T.6 S., R.24 E., on right bank 0.5 mile downstream from Beasore Creek, 0.6 mile southwest of Arnold Meadow, and 12 miles northeast of town of Bass Lake.

Drainage area.--60.1 sq mi.

Gage.--Recording. Altitude of gage is 4,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 8,630 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown prior to Oct. 1, 1957. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	May 24, 1922	8.63	1,100	1958	Apr. 21, 1958	7.16	587
1923	May 9, 1923	7.69	825		May 10, 1958	8.54	1,210
1924	Apr. 10, 1924	6.18	235		May 18, 1958	9.26	1,610
1925	May 4, 1925	6.97	528				
1926	Apr. 16, 1926	7.15	608	1959	Feb. 16, 1959	7.37	668
1927	May 16, 1927	7.70	825		Sept. 19, 1959	7.15	575
1928	Mar. 25, 1928	8.53	1,080	1960	May 11, 1960	6.47	341
1952	May 27, 1952	9.13	1,470	1961	Apr. 4, 1961	6.12	238
1953	Apr. 27, 1953	7.79	800				
1954	May 8, 1954	a7.02	497	1962	Apr. 14, 1962	7.13	567
1955	May 21, 1955	6.90	455		Apr. 23, 1962	7.18	587
					May 5, 1962	7.74	818
1956	Dec. 23, 1955	a16.38	8,630				
1957	May 19, 1957	9.76	1,910	1963	Feb. 1, 1963	13.93	5,660

a Maximum recorded; no gage-height record available for some winter periods.

Peak stages and discharges of San Joaquin River above Big Creek, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 11, 1958	15.11	9,430	1960	Feb. 8, 1960	8.66	962
	May 21, 1958	16.29	12,900				
	June 18, 1958	16.03	12,000	1961	Dec. 1, 1960	8.15	735
	July 7, 1958	13.77	6,480		May 6, 1962	13.22	5,500
1959	Feb. 16, 1959	13.51	5,920				
	Sept. 19, 1959	12.74	4,760				

2370. Big Creek below Huntington Lake, Calif.

Location.--Lat 37°13'10", long 119°12'50", in NW $\frac{1}{4}$ sec.23, T.8 S., R.25 E., on right bank 1,200 ft upstream from Grouse Creek and 1 mile downstream from Huntington Lake.

Drainage area.--81.1 sq mi.

Gage.--Recording. Prior to Oct. 1, 1942, at datum 1.00 ft lower and from Oct. 1, 1942, to Sept. 30, 1948, at datum 1.00 ft higher. Altitude of gage is 6,600 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph furnished by Southern California Edison Co. Peaks regulated by Huntington Lake (usable capacity, 89,200 acre-ft) beginning in 1913. Low peaks may be affected by diversion for power development at Big Creek powerhouse No. 1. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	June 23, 1925	10.3	2,040	1946	July 5, 1946	2.99	159
1926	May 31, 1926	8.60	1,290	1947	Nov. 23, 1946	1.83	17
	July 24, 1927	5.97	338	1948	May 6, 1948	1.63	6.7
	June 10, 1928	6.19	398	1949	Apr. 24, 1949	2.43	4.7
				1950	Apr. 22, 1950	2.31	4.1
1930	July 7, 1930	6.59	525	1951	June 28, 1951	3.16	48
1931	May 13, 1931	2.60	2.5	1952	July 26, 1952	5.12	331
1932	Aug. 4, 1932	3.64	29	1953	Apr. 27, 1953	2.63	6.7
1933	Oct. 24, 1932	3.57	23	1954	Mar. 9, 1954	2.70	9.6
1934	Dec. 13, 1933	3.00	8	1955	Nov. 15, 1954	2.08	3.1
1935	July 15, 1935	3.46	18		Feb. 6, 1955		
1936	July 22, 1936	4.25	68	1956	July 23, 1956	4.00	151
1937	Oct. 15, 1936	3.90	40	1957	May 18, 1957	2.67	8.2
1938	Dec. 11, 1937	3.67	28	1958	July 16, 1958	3.84	124
1939	Oct. 15, 1938	2.84	2.9	1959	Feb. 16, 1959	2.82	14
1940	July 6, 1940	3.43	16	1960	July 9, 1960	2.05	3.0
1941	July 23, 1941	3.64	18	1961	Dec. 1, 1960	2.70	7.8
				1962	Feb. 9, 1962	2.81	13
				1963	July 9, 1963	3.06	32
1943	Jan. 21, 1943	1.87	20	1964	Nov. 15, 1963	2.58	5.5
1944	May 5, 1944	1.42	4.6	1965	Dec. 23, 1964	2.93	21
1945	July 13, 1945	3.08	171				

2375. Pitman Creek below Tamarack Creek, Calif.

Location.--Lat 37°11'55", long 119°12'45", in NW¹ sec.35, T.8 S., R.25 E., on right bank 0.8 mile downstream from confluence of Tamarack Creek and South Fork Tamarack Creek, 1.4 miles upstream from mouth, and 1.9 miles east of town of Big Creek.

Drainage area.--22.9 sq mi.

Gage.--Recording. Altitude of gage is 7,005 ft (from Southern California Edison Co. contour map).

Stage-discharge relation.--Defined by current-meter measurements below 350 cfs and extended above on basis of slope-area measurement at 3,220 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 25, 1928	5.43	421	1953	Apr. 27, 1953	5.59	334
1929	June 16, 1929	5.83	551				
1930	May 19, 1930	4.43	195	1954	Mar. 9, 1954	a6.33	-
					Apr. 23, 1954	5.46	306
1931	Apr. 30, 1931	4.05	152		May 8, 1954	6.11	455
1932	May 16, 1932	5.93	605		May 11, 1954	5.73	365
1933	May 28, 1933	5.51	455				
1934	Apr. 14, 1934	4.07	151	1955	May 12, 1955	5.26	266
1935	May 23, 1935	5.94	605		May 21, 1955	6.00	428
					May 28, 1955	5.45	304
1936	May 4, 1936	5.76	532		June 6, 1955	5.19	252
1937	May 13, 1937	6.44	885				
1938	Dec. 11, 1937	9.65	2,960	1956	Dec. 23, 1955	11.20	3,670
1939	Apr. 20, 21, 1939	4.51	220		Apr. 24, 1956	5.69	287
1940	May 9, 1940	5.77	510		May 4, 1956	7.14	686
					May 22, 1956	7.18	702
1941	May 22, 1941	7.12	758				
1942	May 25, 1942	7.75	932	1957	May 6, 1957	5.53	255
1943	Apr. 28, 1943	7.00	700		May 18, 1957	7.95	1,040
1944	May 22, 1944	5.82	385		June 1, 1957	5.48	245
1945	May 3, 1945	6.47	548				
				1958	May 10, 1958	6.38	494
1946	Oct. 30, 1945	6.72	618		May 22, 1958	7.67	975
1947	May 2, 1947	5.44	302		June 17, 1958	6.25	455
1948	May 6, 1948	-	261	1959	Apr. 30, 1959	5.05	196
	May 16, 1948	6.03	435				
	May 26, 1948	-	406	1960	May 11, 1960	5.24	227
	June 8, 1948	-	269				
				1961	Apr. 16, 1961	4.62	138
1949	Apr. 15, 1949	a6.48	-				
	May 6, 1949	-	256	1962	Apr. 23, 1962	5.66	309
	May 13, 1949	6.05	440		May 5, 1962	6.68	574
	May 25, 1949	-	376		May 22, 1962	5.50	266
					June 2, 1962	6.08	400
1950	Apr. 26, 1950	-	332				
	May 17, 1950	5.68	354	1963	Feb. 1, 1963	8.37	1,340
					May 8, 1963	6.64	574
1951	Nov. 19, 1950	10.77	3,220		May 21, 1963	6.53	539
	Dec. 3, 1950	8.49	1,400				
	Dec. 6, 1950	6.52	566	1964	May 13, 1964	5.25	225
	Dec. 14, 1950	5.04	228		May 25, 1964	5.70	318
1952	May 5, 1952	5.51	316	1965	Dec. 24, 1964	6.81	634
	May 18, 1952	6.65	605		Apr. 30, 1965	6.17	432
	May 27, 1952	7.31	834		May 17, 1965	6.86	651
					May 30, 1965	6.40	500
1953	Apr. 24, 1953	5.08	233				

a Annual maximum stage; backwater from ice.

2380. Pitman Creek at Big Creek, Calif.

Location.--Lat 37°12'10", long 119°14'00", in SE $\frac{1}{4}$ sec.28, T.8 S., R.25 E., 0.2 mile upstream from mouth and 0.5 mile east of Big Creek.

Drainage area.--23.7 sq mi.

Gage.--Recording. Altitude of gage is 5,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Maximum daily discharge, June 17, 1911, 1,280 cfs.

Remarks.--Water-stage-recorder graph and several discharge measurements furnished by Southern California Edison Co. Low peaks may be affected by diversion for power and water supply beginning in 1912. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 1, 1922	3.53	1,110	1926	May 4, 1926	2.17	548
1923	May 15, 1923	2.48	690	1927	May 16, 1927	2.55	711
1924	Apr. 16, 1924	1.00	134	1928	Nov. 10, 1927	1.44	290
1925	May 4, 1925	2.00	488				

2385. Big Creek near mouth, near Big Creek, Calif.

Location.--Lat 37°12'30", long 119°19'30", in NW $\frac{1}{4}$ sec.26, T.8 S., R.24 E., 0.5 mile upstream from mouth and 5 miles west of Big Creek.

Drainage area.--131 sq mi.

Gage.--Recording. Altitude of gage is 2,560 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks almost completely regulated by Huntington Lake (usable capacity, 89,200 acre-ft) beginning Apr. 11, 1913. Peaks are affected by diversion of most of the flow, including importations around station through Southern California Edison Co.'s powerplant No. 8, since beginning of record. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	July 5, 1923	4.45	890	1928	Sept. 13, 1928	4.52	920
1924	Jan. 2, 1924	3.82	540	1929	July 12, 1929	4.62	985
1925	June 23, 1925	6.25	2,600	1930	July 25, 1930	4.42	827
1926	May 30, 1926	5.38	1,520	1931	Nov. 14, 1930	1.98	46
1927	Apr. 24, 1927	5.15	1,340				

2415. Stevenson Creek at Shaver, Calif.

Location.--Lat 37°08'50", long 119°18'40", in SW $\frac{1}{4}$ sec.13, T.9 S., R.24 E., just downstream from Shaver Lake Dam and three-quarters of a mile west of Shaver.

Drainage area.--29.4 sq mi.

Gage.--Recording. Prior to Sept. 5, 1927, at site 100 ft upstream at different datum. Altitude of gage is 5,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 850 cfs prior to Sept 5, 1927; below 54 thereafter.

Remarks.--Peaks regulated by Shaver Lake (capacity, 5,500 acre-ft) beginning prior to 1905. Most of flow diverted for power purposes and transport of lumber. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	May 7, 1917	2.44	471	1926	Mar. 17, 1926	3.04	872
				1927	Nov. 27, 1926	3.65	1,390
1923	May 8, 1923	1.83	209	1928	Oct. 11, 1927	3.01	64
1924	Apr. 6, 1924	.55	9.9				
1925	Feb. 6, 1925	.83	19				

2420. San Joaquin River above Willow Creek, near Auberry, Calif.

Location.--Lat 37°08'40", long 119°27'00", in SW $\frac{1}{4}$ sec.15, T.9 S., R.23 E., on right bank 1,000 ft downstream from diversion dam, 0.4 mile upstream from Willow Creek, and 4.2 miles northeast of Auberry.

Drainage area.--1,295 sq mi.

Gage.--Recording. Altitude of gage is 1,180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs and extended above on basis of computed flow over dam.

Historical data.--Estimated discharge for flood of Nov. 18, 1950, 40,000 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Peaks regulated by nine powerplants and six reservoirs with combined capacity of about 559,900 acre-ft, most of which have been in operation since beginning of record. Peaks may be affected by diversion above station for power purposes. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	-	40,000	1959	Feb. 17, 1959	10.34	2,070
1952	Dec. 29, 1951	22.67	15,100	1960	Jan. 6, 1960	7.36	508
1953	Apr. 27, 1953	16.25	6,550				
1954	May 9, 1954	14.75	5,080	1961	July 21, 1961	4.21	34
1955	June 8, 1955	15.12	5,510	1962	May 6, 1962	14.46	5,240
				1963	Feb. 1, 1963	23.15	14,500
1956	Dec. 23, 1955	54.2	73,200	1964	Aug. 18, 1964	4.25	36
1957	May 19, 1957	24.45	15,300	1965	June 7, 1965	13.55	4,600
1958	June 18, 1958	21.52	11,800				

2440. North Fork Willow Creek near Bass Lake, Calif.

(Published as Willow Creek below Crane Valley Reservoir prior to October 1944, and as "below Crane Valley Reservoir" October 1944 to September 1954)

Location.--Lat 37°17'20", long 119°31'45", in SE $\frac{1}{4}$ sec.26, T.7 S., R.22 E., on right bank 1,500 ft downstream from Bass Lake spillway and 2.5 miles southeast of town of Bass Lake.

Drainage area.--50.8 sq mi.

Gage.--Recording. Altitude of gage is 3,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Bass Lake (capacity, 45,400 acre-ft) beginning in 1901. Peaks may be affected by diversion to Soquel ditch (capacity, 60 cfs) during March-July and October, and importation from Browns Creek ditch since beginning of record. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	May 26, 1940	3.75	255	1953	Dec. 9, 1952	3.47	218
1941	Feb. 11, 1941	5.85	847	1954	Jan. 24, 1954	1.53	7.9
1942	June 1, 1942	4.64	478	1955	Feb. 9, 1955	3.59	234
1943	Mar. 12, 1943	4.93	557	1956	Jan. 4, 1956	5.28	660
1944	Sept. 27, 1944	3.17	155	1957	May 18, 1957	2.04	35
1945	Mar. 15, 1945	3.72	264	1958	Apr. 21, 1958	3.93	294
1946	Sept. 17, 1946	3.36	198	1959	June 25, 1959	3.40	188
1947	Nov. 22, 1946	3.20	171	1960	Feb. 8, 1960	1.82	20
1948	Apr. 9, 1948	1.35	8.3	1961	Dec. 1, 1960	1.33	3.1
1949	Nov. 13, 23, 1948	3.27	166	1962	Feb. 9, 1962	2.31	16
1950	Jan. 11, 1950	3.19	169	1963	Sept. 6, 1963	3.62	174
1951	Dec. 8, 1950	3.04	146	1964	Nov. 15, 1963	2.07	5.1
1952	May 26, 1952	4.50	392	1965	June 1, 1965	4.98	447

a Occurred Oct. 1, 1948.

2465. Willow Creek at mouth, near Auberry, Calif.

Location.--Lat 37°09'10", long 119°27'30", in NE $\frac{1}{4}$ sec.16, T.9 S., R.23 E., on left bank 40 ft upstream from bridge, 0.4 mile upstream from mouth, 1.3 miles downstream from Whiskey Creek, and 4.3 miles northeast of Auberry.

Drainage area.--130 sq mi.

Gage.--Recording. Datum of gage is 1,174.69 ft above mean sea level (levels by Southern California Edison Co.).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs. A maximum discharge of 12,000 cfs estimated on basis of rate of inflow into Bass Lake.

Historical data.--Estimated discharge for flood of Nov. 18, 1950, 5,000 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Southern California Edison Co. Peaks regulated by Bass Lake (capacity, 45,400 acre-ft) beginning in 1901 and by diversion to Pacific Gas and Electric Co. conduit No. 1. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	-	5,000	1959	Feb. 16, 1959	10.00	1,180
1952	Jan. 25, 1952	10.45	1,380	1960	Feb. 8, 1960	9.58	962
1953	Jan. 13, 1953	9.06	749	1961	Dec. 2, 1960	8.48	590
1954	Jan. 24, 1954	10.25	1,280	1962	Feb. 9, 1962	10.56	1,490
1955	Feb. 17, 1955	7.82	360	1963	Feb. 1, 1963	19.06	7,450
1956	Dec. 23, 1955	28.5	15,700	1964	Nov. 15, 1963	8.71	608
1957	May 18, 1957	12.96	2,930	1965	Dec. 23, 1964	15.70	4,940
1958	Apr. 3, 1958	11.65	2,140				

2470. San Joaquin River below Kerckhoff powerhouse, near Prather, Calif.
(Published as San Joaquin River below Kerckhoff powerhouse
prior to Oct. 1, 1962)

Location.--Lat 37°04'45", long 119°33'35", in NW $\frac{1}{4}$ sec.10, T.10 S., R.22 E., on left bank 1.1 miles downstream from Kerckhoff powerhouse and 1.4 miles upstream from Big Sandy Creek.

Drainage area.--1,485 sq mi.

Gage.--Recording. Datum of gage is 563.4 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 20,000 cfs and extended above on basis of records for San Joaquin River above Willow Creek, near Auberry and Willow Creek at mouth, near Auberry.

Remarks.--Water-stage-recorder graph Telemark readings, and some discharge measurements furnished by Southern California Edison Co. Peaks regulated by 12 powerplants and 8 reservoirs with total usable capacity of about 609,300 acre-ft. Earliest storage began in 1901 at Bass Lake. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 6, 1937	33.6	32,000	1953	Apr. 27, 1953	22.50	11,000
1938	Dec. 11, 1937	46.5	75,000	1954	Mar. 9, 1954	22.42	10,900
				1955	June 8, 1955	a20.35	8,200
1943	Jan. 21, 1943	35.0	35,700	1956	Dec. 23, 1955	51.0	92,200
1944	May 9, 1944	19.03	6,890	1957	May 19, 1957	29.80	24,600
1945	Feb. 2, 1945	36.2	39,100	1958	June 19, 1958	a25.30	14,700
1946	Dec. 22, 1945	26.8	17,700	1959	Feb. 17, 1959	18.28	6,160
1947	Nov. 23, 1946	26.15	16,600	1960	June 22, 1960	15.02	3,460
1948	May 27, 1948	21.68	9,880				
1949	May 27, 1949	20.40	8,340	1961	Aug. 21, 1961	13.32	2,290
1950	May 31, 1950	19.03	6,890	1962	May 6, 1962	22.20	10,600
				1963	Feb. 1, 1963	32.20	30,300
1951	Nov. 19, 1950	38.40	48,100	1964	June 26, 1964	16.15	4,330
1952	June 5, 1952	25.86	16,100	1965	Dec. 23, 1964	20.76	8,750

a Stage-discharge relation affected by backwater from Millerton Lake.

2480. Fine Gold Creek near Friant, Calif.

Location.--Lat 37°04'00", long 119°38'50", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.10 S., R.21 E., on right bank 1,500 ft downstream from Willow Creek and 5.5 miles northeast of Friant.

Drainage area.--92.6 sq mi.

Gage.--Recording. Altitude of gage is 620 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	Feb. 6, 1937	16.45	6,780	1945	Mar. 15, 1945	-	1,680
1938	Mar. 12, 1938	20.4	10,300		Mar. 23, 1945	-	1,010
1939	Mar. 27, 1939	3.55	238		Mar. 26, 1945	-	1,360
1940	Jan. 25, 1940	13.53	4,550				
1941	Feb. 12, 1941	-	4,000	1946	Dec. 22, 1945	-	636
1942	Dec. 30, 1941	9.34	1,950		Dec. 25, 1945	-	514
1943	Jan. 21, 1943	14.56	5,320		Mar. 30, 1946	6.55	942
1944	Mar. 4, 1944	4.98	548	1947	Dec. 27, 1946	7.93	1,480
1945	Feb. 2, 1945	13.63	4,630	1948	Apr. 10, 1948	5.95	810
	Feb. 3, 1945	-	1,570				

Peak stages and discharges of Fine Gold Creek near Friant, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 4, 1949	6.58	1,010	1955	Jan. 1, 1955	4.75	334
1950	Feb. 5, 1950	5.67	726	1956	Dec. 23, 1955	17.94	7,450
1951	Nov. 19, 1950	15.58	6,110		Dec. 26, 1955	8.12	1,370
	Dec. 4, 1950	14.00	4,900		Jan. 23, 1956	6.52	831
	Jan. 18, 1951	7.22	1,140		Jan. 25, 1956	13.38	3,940
1952	Dec. 29, 1951	7.88	1,310	1957	May 19, 1957	4.97	407
	Jan. 15, 1952	9.22	1,860	1958	Feb. 3, 1958	8.87	1,660
	Jan. 25, 1952	10.80	2,730		Feb. 25, 1958	9.79	2,050
	Mar. 16, 1952	9.03	1,790		Mar. 16, 1958	13.83	4,230
	Mar. 18, 1952	7.14	1,050		Mar. 22, 1958	13.12	3,800
1953	Dec. 31, 1952	5.30	615		Apr. 3, 1958	13.52	4,040
	Jan. 13, 1953	6.76	1,050		Apr. 6, 1958	8.02	1,330
1954	Feb. 14, 1954	5.06	548				

2505. Cottonwood Creek near Friant, Calif.

Location--Lat 37°00'05"N, long 119°43'10"W, in SE $\frac{1}{4}$ sec.6, T.11 S., R.21 E., 1 mile upstream from mouth and 1 mile northwest of Friant.

Drainage area--35.7 sq mi (revised).

Gage--Recording. Altitude of gage is 355 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 400 cfs.

Remarks--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 5 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Dec. 31, 1941	a3.88	283	1950	Mar. 24, 1950	-	56
1943	Jan. 22, 1943	3.89	569		Apr. 9, 1950	-	39
1944	Mar. 4, 1944	1.46	43	1951	Nov. 19, 1950	2.71	136
1945	Feb. 2, 1945	2.33	158		Dec. 4, 1950	3.14	214
1946	Mar. 30, 1946	1.37	37		Dec. 7, 1950	2.61	103
1947	Dec. 27, 1946	1.61	60		Dec. 14, 1950	2.25	57
1948	Apr. 10, 1948	.94	5		Jan. 11, 1951	2.47	98
1949	Mar. 23, 1949	.89	4		Jan. 16, 1951	2.11	58
1950	Jan. 28, 1950	-	5.8		Jan. 18, 1951	3.19	223
	Feb. 4, 1950	2.56	112		Feb. 5, 1951	2.31	76
	Feb. 10, 1950	-	18		Feb. 12, 1951	3.50	305
					Mar. 1, 1951	1.66	23
					Mar. 5, 1951	1.96	41
					Apr. 29, 1951	1.66	13

a Occurred Dec. 27, 1941, backwater from temporary dam.

2510. San Joaquin River below Friant, Calif.
(Published as "near Pollasky" prior to December 1908 and as "near Friant"
January 1909 to September 1938)

Location.--Lat 36°59'04", long 119°43'24", in SW $\frac{1}{4}$ sec.7, T.11 S., R.21 E., on left bank 0.5 mile west of Friant, 1.5 miles downstream from Cottonwood Creek, 2 miles downstream from Friant Dam, and at mile 268.1.

Drainage area.--1,675 sq mi.

Gage.--Nonrecording prior to Nov. 9, 1913; recording thereafter. Prior to Nov. 9, 1913, at site 4.5 miles upstream at different datum. Nov. 10, 1913, to Sept. 30, 1938, at site 2.5 miles upstream at different datum. Datum of gage is 294.00 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 22,300 cfs prior to Nov. 9, 1913; defined below 24,500 cfs and extended above on basis of surface-velocity measurement at 73,500 cfs for period Nov. 10, 1913, to Sept. 30, 1938; defined by current-meter measurements over entire range thereafter.

Bankfull stage.--18 ft.

Remarks.--Some discharge measurements furnished by Bureau of Reclamation. Peaks regulated by 12 powerplants and 8 reservoirs with total usable capacity of about 609,300 acre-ft (earliest storage began in 1901) and by Millerton Lake (usable capacity, 503,200 acre-ft) beginning in December 1942. Peaks may be affected by diversion for irrigation through Friant-Madera and Friant-Kern Canals (combined capacity, about 5,400 cfs) beginning in 1943 and 1949 respectively. Peaks for the years 1908-13 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1908	Apr. 30, May 1, 1908	-	7,020	1938	Dec. 11, 1937	23.8	77,200
1909	Jan. 14, 1909	-	26,800	1939	Apr. 5, 1939	7.64	4,700
1910	Dec. 30, 1909	-	30,700	1940	Mar. 27, 1940	12.2	13,400
1911	Jan. 31, 1911	-	38,800	1941	Feb. 12, 1941	13.52	16,800
1912	June 5, 1912	-	15,300	1942	May 26, 1942	10.97	10,500
1913	May 25, 1913	-	6,610	1943	Jan. 23, 1943	11.29	11,200
1914	Jan. 25, 1914	21.72	60,000	1944	Apr. 7, 1944	5.99	2,640
1915	June 1, 1915	13.05	15,900	1945	June 15-18, 1945	8.89	6,540
1916	Mar. 20, 1916	13.4	17,000	1946	May 7-11, 1946	8.90	6,560
1917	June 4, 1917	13.25	15,600	1947	Apr. 23-26, 1947	6.38	3,020
1920	May 20, 1920	12.67	14,000	1948	June 30, 1948	7.29	4,220
1921	June 12, 1921	13.08	15,300	1949	June 18, 1949	7.87	5,000
1922	June 7, 1922	14.48	20,500	1950	Apr. 29, 1950	6.16	2,750
1923	May 16, 1923	12.41	13,100	1951	Dec. 18, 1950	7.84	5,050
1924	May 9, 1924	9.6	6,120	1952	Apr. 14, 1952	9.64	8,000
1925	May 26, 1925	11.85	11,500	1953	May 13, 1952		
1926	May 5, 1926	10.90	9,150	1954	Oct. 16, 1952	5.03	1,640
1927	May 17, 1927	12.77	14,300	1954	May 21, 1954	5.86	2,510
1928	Mar. 25, 1928	12.35	13,100	1955	Nov. 29, 1954	4.30	1,030
1929	June 16, 1929	12.06	12,300	1956	Jan. 5, 1956	9.00	7,120
1930	May 21, 1930	9.20	5,290	1957	Oct. 25, 1956	4.34	1,090
1931	Apr. 22, 1931	7.99	3,380	1958	Apr. 6, 1958	9.28	7,570
1932	Feb. 7, 1932	14.50	20,500	1959	Aug. 13, 1959	2.83	254
1933	June 14, 1933	10.78	8,900	1960	June 16, 1960	3.26	407
1934	Dec. 13, 1933	9.25	5,290	1961	Dec. 10, 1960	4.19	973
1935	Apr. 8, 1935	13.16	15,700	1962	Feb. 11, 1962	3.91	764
1936	Feb. 22, 1936	15.7	25,000	1963	June 20, 1963	5.73	2,500
1937	Feb. 6, 1937	18.2	36,400	1964	Aug. 10, 1964	2.62	183
				1965	July 10, 1965	2.70	215

2515. Little Dry Creek near Friant, Calif.

Location.--Lat 36°56'25", long 119°40'50", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.28, T.11 S., R.21 E., on left bank 3.5 miles southeast of Friant and 4 miles upstream from mouth.

Drainage area.--57.7 sq mi.

Gage.--Recording. Datum of gage is 357.02 ft above mean sea level (levels by State of California).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 180 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Dec. 29, 1941	3.85	740	1952	Jan. 25, 1952	5.65	1,810
1943	Jan. 22, 1943	2.94	257		Feb. 2, 1952	2.92	198
1944	Feb. 22, 1944	3.62	639		Mar. 7, 1952	2.86	217
1945	Feb. 1, 1945	4.58	1,530		Mar. 11, 1952	2.85	232
					Mar. 15, 1952	4.90	1,170
1946	Mar. 30, 1946	2.61	174		Mar. 18, 1952	4.45	861
					Apr. 10, 1952	3.42	200
1947	Dec. 27, 1946	2.78	227	1953	Dec. 31, 1952	3.55	370
1948	Apr. 10, 1948	2.66	171		Jan. 7, 1953	2.87	186
1949	Mar. 4, 1949	2.07	53		Jan. 14, 1953	3.11	245
1950	Feb. 4, 1950	3.37	306	1954	Mar. 30, 1954	2.55	99
1951	Nov. 19, 1950	3.70	430	1955	Jan. 18, 1955	2.94	110
	Dec. 3, 1950	3.99	556	1956	Dec. 24, 1955	6.70	1,760
	Jan. 11, 1951	2.90	193		Dec. 27, 1955	4.72	509
	Jan. 18, 1951	3.15	256		Dec. 31, 1955	3.91	235
	Feb. 12, 1951	3.00	217		Jan. 16, 1956	3.71	182
					Jan. 23, 1956	4.20	320
1952	Jan. 15, 1952	4.23	682		Jan. 25, 1956	5.96	1,260

a Occurred June 21, 1949.

2516. Little Dry Creek at mouth, near Friant, Calif.

Location.--Lat 36°56'05", long 119°43'45", in NW $\frac{1}{4}$ sec.31, T.11 S., R.21 E., on left bank 150 ft upstream from highway bridge, 1.2 miles upstream from mouth, and 3.8 miles south of Friant.

Drainage area.--77.7 sq mi (includes 6.1 sq mi due to Big Dry to Little Dry diversion channel).

Gage.--Recording. Altitude of gage is 300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs.

Remarks.--Peaks are affected by diversions up to 700 cfs from Big Dry Creek to Little Dry Creek above station at times during floods. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Feb. 25, 1957	0.55	9.4	1960	Feb. 10, 1960	0.91	62
1958	Mar. 22, 1958	4.3	5,000				
1959	Feb. 12, 1959	1.38	206	1961	-	-	0

2525. San Joaquin River at Herndon, Calif.

Location.--Lat 36°50'35", long 119°55'55", in SE $\frac{1}{4}$ sec.31, T.12 S., R.19 E., at Southern Pacific Railroad bridge, 0.9 mile northwest of Herndon, 10.9 miles northwest of Fresno, and 21.7 miles downstream from Friant.

Drainage area.--1,802 sq mi.

Gage.--Nonrecording. Altitude of gage is 225 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 16,000 cfs.

Bankfull stage.--13 ft.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1895	May 16, 1895	10.03	20,000	1899	Mar. 25, 1899	12.0e	24,400
1896	May 29, 1896	10.20	18,800	1900	Jan. 3, 1900	12.0	24,800
1897	Feb. 2, 1897	11.0	20,400	1901	Nov. 22, 1900	14.0	33,000
1898	Apr. 26, 1898	6.25	6,090				

2533.1. Cantua Creek near Cantua Creek, Calif.

Location.--Lat 36°24'00", long 120°25'55", in SE $\frac{1}{4}$ sec.34, T.17 S., R.14 E., 150 ft below road ford and 9.2 miles southwest of Cantua Creek.

Drainage area.--46.4 sq mi.

Gage.--Crest-stage gage. Altitude of gage is 660 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 33 cfs and extended above on basis of slope-area measurements at 60 and 751 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 2, 1958	3.34	751	1962	Feb. 9, 1962	2.44	472
1959	Feb. 16, 1959	3.15	690	1963	Feb. 9, 1963	1.69	254
1960	Feb. 1, 1960	.66	59	1964	Nov. 20, 1963	.83	82
				1965	Jan. 7, 1965	1.03	113
1961	-	-	0				

2575. Fresno River near Knowles, Calif.

Location.--Lat 37°14'15", long 119°46'25", in NW $\frac{1}{4}$ sec.15, T.8 S., R.20 E., on left bank at Fresno Crossing, 0.1 mile downstream from Bean Gulch and 6 miles northeast of Knowles.

Drainage area.--133 sq mi.

Gage.--Nonrecording prior to June 13, 1930; recording thereafter. Prior to Jan. 14, 1931, at datum 0.34 ft lower. Datum of gage is 1,086.4 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 6,010 cfs and extended above on basis of slope-area measurement at 13,300 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for the years 1912, 1916-30 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 590 cfs.

Peak stages and discharges of Fresno River near Knowles, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 6, 1912	1.60	219	1951	Nov. 19, 1950	9.31	8,540
1916	Jan. 17, 1916	5.6	3,300		Dec. 4, 1950	7.30	5,800
1917	Feb. 21, 1917	6.0	3,800		Jan. 18, 1951	3.81	1,550
1918	Mar. 19, 1918	4.5	2,100	1952	Dec. 29, 1951	3.70	1,110
1919	Feb. 11, 1919	3.8	1,480		Jan. 16, 1952	4.28	1,570
1920	Apr. 15, 1920	3.40	1,180		Jan. 25, 1952	5.05	2,400
1921	Jan. 18, 1921	3.60	1,320		Mar. 15, 1952	4.26	1,550
1922	Feb. 11, 1922	4.8	2,400		Mar. 19, 1952	3.88	1,240
1923	Apr. 6, 1923	3.68	1,380	1953	Jan. 13, 1953	3.29	849
1924	Mar. 27, 1924	1.5	164	1954	Jan. 25, 1954	3.24	819
1925	Feb. 6, 1925	3.00	920		Feb. 14, 1954	2.88	620
1926	Feb. 14, 1926	3.50	1,250	1955	Apr. 22, 1955	2.30	337
1927	Feb. 4, 15, 1927	4.0	1,600	1956	Dec. 23, 1955	11.52	13,300
1928	Mar. 27, 1928	4.0	1,600		Dec. 27, 1955	4.41	1,660
1929	Apr. 5, 1929	1.60	179		Jan. 15, 1956	3.21	778
1930	Feb. 23, 24, 1930	1.80	255		Jan. 23, 1956	4.19	1,480
1931	Nov. 17, 1930	1.73	228		Jan. 25, 1956	7.09	4,740
1932	Feb. 6, 1932	5.08	3,050		Feb. 23, 1956	3.20	680
1933	Mar. 17, 1933	2.09	265	1957	May 19, 1957	3.82	1,250
1934	Feb. 23, 1934	2.28	364	1958	Feb. 3, 1958	4.09	1,450
1935	Apr. 8, 1935	4.06	1,880		Feb. 25, 1958	3.44	971
1936	Feb. 22, 1936	5.30	3,220		Mar. 16, 1958	5.12	2,450
1937	Feb. 6, 1937	8.16	6,880		Mar. 22, 1958	4.85	2,160
1938	Mar. 12, 1938	8.67	7,630		Mar. 24, 1958	3.22	828
1939	Sept. 25, 1939	2.67	590		Apr. 3, 1958	7.47	5,520
1940	Jan. 26, 1940	4.48	2,200	1959	Feb. 16, 1959	3.51	1,020
1941	Feb. 11, 1941	5.39	3,150	1960	Feb. 8, 1960	3.15	785
1942	Dec. 29-30, 1941	4.09	1,810		Mar. 27, 1960	3.08	743
1943	Jan. 22, 1943	5.76	3,570	1961	Dec. 2, 1960	2.31	352
1944	Mar. 4, 1944	3.75	1,480	1962	Feb. 10, 1962	5.29	2,640
1945	Feb. 2, 1945	6.79	4,940		Feb. 16, 1962	3.71	1,160
1946	Dec. 22, 1945	-	1,310		Mar. 7, 1962	2.87	673
	Dec. 25, 1945	-	760	1963	Feb. 1, 1963	7.36	5,180
	Mar. 30, 1946	3.74	1,470		Feb. 10, 1963	2.93	648
1947	Nov. 20, 1946	-	760		Mar. 28, 1963	3.80	1,230
	Nov. 23, 1946	3.13	934		Apr. 15, 1963	2.86	660
	Dec. 27, 1946	-	774	1965	Dec. 23, 1964	5.59	3,000
1948	Apr. 10, 1948	4.30	2,020				
1949	Mar. 4, 1949	3.47	1,220				
1950	Feb. 6, 1950	3.25	1,030				

2580. Fresno River near Daulton, Calif.

Location.--Lat 37°05'50", long 119°53'20", in NW¹ sec. 3, T.10 S., R.19 E., on left bank 0.5 mile downstream from Willow Creek and 5.3 miles southeast of Daulton.

Drainage area.--259 sq mi.

Gage.--Recording. Prior to Sept. 27, 1946, at site 300 ft downstream. Prior to Sept. 28, 1949, at datum 3.37 ft higher, and Sept. 28, 1949, to Mar. 19, 1963, at datum 1.0 ft higher. Altitude of gage is 385 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,800 cfs prior to Sept. 27, 1946; below 6,400 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Discharge for flood of Mar. 3, 1938, 15,000 cfs, from U.S. Bureau of Reclamation records.

Remarks.--Records for 1941-44 furnished by Bureau of Reclamation. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 600 cfs.

SAN JOAQUIN RIVER BASIN

Peak stages and discharges of Fresno River near Daulton, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Mar. 3, 1938	-	15,000	1956	Dec. 31, 1955	3.38	1,190
1942	Dec. 29, 1941	4.82	2,580	1956	Jan. 16, 1956	3.42	1,220
1943	Jan. 22, 1943	5.73	3,620	1956	Jan. 23, 1956	4.48	1,800
1944	Mar. 4, 1944	4.63	2,670	1956	Jan. 25, 1956	7.53	6,520
1945	Feb. 2, 1945	7.10	8,090	1956	Feb. 23, 1956	3.68	1,160
1946	Mar. 30, 1946	3.88	2,460	1956	Apr. 27, 1956	3.23	714
1947	Dec. 27, 1946	3.18	1,600	1956	May 4, 1956	3.14	643
1948	Apr. 6, 1948	-	676	1957	May 19, 1957	4.29	1,360
1948	Apr. 10, 1948	4.02	2,470	1958	Feb. 3, 1958	4.86	1,960
1949	Mar. 4, 1949	3.05	1,510	1958	Feb. 25, 1958	4.75	1,840
1950	Feb. 6, 1950	4.82	1,180	1958	Mar. 16, 1958	6.53	4,430
1951	Nov. 19, 1950	10.36	10,700	1958	Mar. 22, 1958	6.86	5,060
1951	Dec. 4, 1950	9.49	8,540	1958	Mar. 27, 1958	4.15	1,240
1951	Dec. 7, 1950	4.30	1,070	1958	Apr. 3, 1958	9.18	10,400
1951	Dec. 14, 1950	3.73	684	1958	Apr. 6, 1958	5.96	4,060
1951	Jan. 19, 1951	5.38	1,970	1959	Feb. 11, 1959	3.13	618
1951	Feb. 12, 1951	4.13	884	1959	Feb. 16, 1959	3.91	1,180
1952	Dec. 30, 1951	4.93	1,310	1960	Feb. 9, 1960	3.16	616
1952	Jan. 13, 1952	3.94	669	1961	Dec. 2, 1960	2.47	257
1952	Jan. 15, 1952	6.52	3,180	1962	Feb. 11, 1962	6.80	5,340
1952	Jan. 25, 1952	7.80	5,020	1962	Feb. 15, 1962	4.72	2,320
1952	Mar. 11, 1952	3.84	744	1962	Mar. 7, 1962	3.59	1,320
1952	Mar. 16, 1952	7.35	4,520	1962	Mar. 23, 1962	2.56	646
1952	Mar. 19, 1952	6.35	3,180	1963	Feb. 1, 1963	7.23	6,290
1952	Apr. 7, 1952	3.78	708	1963	Feb. 10, 1963	3.05	1,060
1952	Apr. 11, 1952	3.82	732	1963	Mar. 28, 1963	5.22	2,040
1952	Apr. 24, 1952	3.94	806	1963	Apr. 15, 1963	4.07	890
1953	Dec. 31, 1952	4.50	1,200	1963	Apr. 22, 1963	3.92	740
1953	Jan. 14, 1953	4.45	1,080	1963	Apr. 26, 1963	3.87	710
1954	Jan. 25, 1954	3.90	723	1964	Nov. 21, 1963	2.78	278
1954	Feb. 14, 1954	3.88	673	1965	Dec. 23, 1964	6.73	3,460
1955	May 8, 1955	a2.74	333	1965	Dec. 27, 1964	4.95	1,390
1956	Dec. 23, 1955	11.64	17,500	1965	Jan. 6, 1965	6.15	2,650
1956	Dec. 27, 1955	5.00	2,860	1965	Jan. 24, 1965	3.88	838
				1965	Apr. 10, 1965	4.90	1,380

a Occurred Jan. 18, 1955.

2588. East Fork Chowchilla River near Ahwahnee, Calif.

Location.--Lat 37°20'10", long 119°48'55", in NW¹SW¹ sec.8, T.7 S., R.20 E., on right bank 1.1 miles upstream from mouth and 5.5 miles west of Ahwahnee.

Drainage area.--57.8 sq mi.

Gage.--Recording. Altitude of gage is 980 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,790 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 3, 1958	9.88	3,290	1962	Feb. 9, 1962	9.09	2,620
1959	Feb. 16, 1959	6.55	803	1963	Jan. 31, 1963	10.34	3,710
1960	Feb. 8, 1960	6.26	696	1964	Nov. 20, 1963	5.79	513
1961	Dec. 1, 1960	5.26	306	1965	Dec. 23, 1964	9.85	3,190

2589. West Fork Chowchilla River near Mariposa, Calif.

Location.--Lat 37°25'15", long 119°52'25", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.6 S., R.19 E., on left bank 15 ft downstream from bridge on Indian Peak Road, 0.5 mile downstream from Humbug Creek, and 6.7 miles southeast of Mariposa.

Drainage area.--33.6 sq mi.

Gage.--Recording. Altitude of gage is 1,680 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,900 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 3, 1958	8.67	3,590	1962	Feb. 9, 1962	7.16	1,570
1959	Feb. 16, 1959	6.71	1,130	1963	Jan. 31, 1963	8.63	3,520
1960	Mar. 28, 1960	5.42	441	1964	Nov. 15, 1963	4.94	264
1961	Dec. 2, 1960	3.37	21	1965	Dec. 23, 1964	7.70	2,260

2589.2. Middle Fork Chowchilla River near Nipinnawassee, Calif.

Location.--Lat 37°23'00", long 119°50'12", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.25, T.6 S., R.19 E., on right bank 3.4 miles upstream from West Fork and 6 miles west of Nipinnawassee.

Drainage area.--12.3 sq mi.

Gage.--Recording. Altitude of gage is 1,520 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 550 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	4.82	421	1962	Feb. 9, 1962	8.15	925
1960	Mar. 28, 1960	4.94	461	1963	Feb. 1, 1963	10.10	1,280
				1964	Nov. 20, 1963	4.43	217
1961	Dec. 1, 1960	3.68	64	1965	Dec. 23, 1964	8.56	1,010

2590. Chowchilla River at Buchanan damsite, near Raymond, Calif.

(Published as Chowchilla River at Buchanan damsite prior to Oct. 1, 1962)

Location.--Lat 37°13'00", long 119°59'00", in SE $\frac{1}{4}$ sec.22, T.8 S., R.18 E., on right bank 1.9 miles upstream from Raynor Creek and 4.3 miles west of Raymond.

Drainage area.--235 sq mi.

Gage.--Recording. Datum of gage is 407.30 ft above mean sea level, adjustment of 1912 (levels by Merced Irrigation District).

Stage-discharge relation.--Defined by current-meter measurements below 6,000 cfs and extended above on basis of slope-area measurement at 22,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 770 cfs.

Peak stages and discharges of Chowchilla River at Buchanan damsite, near Raymond, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 3, 1931	3.19	156	1952	Mar. 19, 1952	8.40	3,260
1932	Dec. 28, 1931	11.65	9,610		Apr. 14, 1952	5.55	935
1933	Jan. 30, 1933	4.8	620	1953	Dec. 31, 1952	6.76	1,710
1934	Feb. 23, 1934	7.17	2,170		Jan. 14, 1953	6.49	1,510
1935	Apr. 8, 1935	9.74	5,510	1954	Jan. 25, 1954	6.32	1,390
1936	Feb. 11, 1936	12.15	11,000		Feb. 14, 1954	6.27	1,360
1937	Feb. 6, 1937	13.0	13,600		Apr. 28, 1954	5.53	925
1938	Mar. 2, 1938	14.4	18,900	1955	Jan. 1, 1955	5.80	1,070
1939	Mar. 10, 1939	5.23	765	1956	Dec. 23, 1955	16.50	30,000
1940	Jan. 26, 1940	11.58	8,750		Dec. 26, 1955	8.90	3,960
1941	Feb. 12, 1941	12.53	12,100		Dec. 31, 1955	5.34	831
1942	Dec. 29, 1941	9.98	5,800		Jan. 16, 1956	6.56	1,560
1943	Jan. 22, 1943	11.20	8,460		Jan. 23, 1956	7.84	2,620
1944	Feb. 22, 1944	-	1,060		Jan. 25, 1956	9.72	5,340
	Feb. 29, 1944	-	2,130		Feb. 23, 1956	5.73	1,030
	Mar. 4, 1944	9.54	5,020	1957	Feb. 25, 1957	5.56	940
1945	Feb. 2, 1945	11.65	9,610		May 19, 1957	6.07	1,230
	Mar. 15, 1945	-	3,230	1958	Jan. 26, 1958	6.90	1,820
	Mar. 17, 1945	-	1,280		Feb. 3, 1958	8.08	2,880
	Mar. 23, 1945	-	1,860		Feb. 25, 1958	8.15	2,960
	Mar. 26, 1945	-	2,200		Mar. 16, 1958	9.73	5,350
1946	Dec. 22, 1945	-	2,040		Mar. 21, 1958	9.05	4,200
	Dec. 23, 1945	-	1,170		Apr. 3, 1958	13.02	14,000
	Dec. 25, 1945	-	3,060	1959	Feb. 11, 1959	6.62	1,600
	Mar. 30, 1946	8.46	3,450		Feb. 16, 1959	7.27	2,120
1947	Nov. 20, 1946	-	1,130	1960	Feb. 2, 1960	5.71	1,010
	Nov. 23, 1946	7.93	2,870		Feb. 10, 1960	6.64	1,620
	Dec. 27, 1946	-	1,380		Mar. 28, 1960	6.15	1,280
	Feb. 13, 1947	-	1,110	1961	Dec. 2, 1960	3.56	200
1948	Mar. 24, 1948	-	1,260	1962	Feb. 9, 1962	10.28	6,400
	Apr. 6, 1948	-	785		Feb. 15, 1962	8.64	3,600
	Apr. 10, 1948	9.90	5,660		Mar. 7, 1962	6.50	1,520
1949	Mar. 4, 1949	8.38	3,360	1963	Feb. 1, 1963	11.68	9,740
1950	Jan. 17, 1950	-	1,320		Feb. 10, 1963	6.10	1,250
	Feb. 4, 1950	9.05	4,250		Mar. 28, 1963	7.96	2,750
1951	Nov. 18, 1950	15.06	22,500		Apr. 7, 1963	8.18	3,000
	Dec. 4, 1950	12.83	13,400		Apr. 14, 1963	8.02	2,810
	Jan. 11, 1951	5.59	955		Apr. 21, 1963	6.50	1,520
	Jan. 18, 1951	8.06	2,860		Apr. 26, 1963	5.92	1,140
	Feb. 5, 1951	5.27	795	1964	Nov. 20, 1963	5.39	855
1952	Dec. 5, 1951	7.39	2,210	1965	Dec. 23, 1964	11.15	8,380
	Dec. 29, 1951	8.41	3,270		Dec. 27, 1964	8.05	3,080
	Jan. 12, 1952	6.66	1,630		Jan. 7, 1965	8.87	4,180
	Jan. 16, 1952	10.10	6,040		Apr. 10, 1965	6.85	1,840
	Jan. 25, 1952	10.03	5,900				
	Mar. 10, 1952	6.85	1,780				
	Mar. 15, 1952	8.65	3,610				

2602. Bear Creek near Catheys Valley, Calif.
(Published as "near Cathay" prior to 1964)

Location.--Lat 37°28'40", long 120°06'45", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.21, T.5 S., R.17 E., on downstream side of bridge, 0.9 mile upstream from Raster Gulch and 3.7 miles north of Catheys Valley School.

Drainage area.--24.6 sq mi.

Gage.--Recording. Altitude of gage is 1,210 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges of Bear Creek near Catheys Valley, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 3, 1958	9.36	2,280	1962	Feb. 9, 1962	8.46	1,840
1959	Feb. 16, 1959	7.73	1,600	1963	Feb. 1, 1963	10.07	2,520
1960	Feb. 8, 1960	7.00	1,030	1964	Jan. 22, 1964	5.82	430
				1965	Jan. 7, 1965	9.97	2,490
1961	Dec. 1, 1960	6.94	999				

2604.8. Mariposa Creek near Catheys Valley, Calif.
(Published as "near Cathay" prior to 1964)

Location.--Lat 37°23'55", long 120°00'10", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.21, T.6 S., R.18 E., on downstream side of bridge on White Rock Road, 0.3 mile downstream from China Gulch and 5.6 miles east of Catheys Valley School.

Drainage area.--66.0 sq mi.

Gage.--Recording. Altitude of gage is 1,230 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 3, 1958	11.62	4,530	1962	Feb. 9, 1962	10.39	3,840
1959	Feb. 16, 1959	8.61	1,620	1963	Feb. 1, 1963	10.69	5,290
1960	Feb. 10, 1960	7.36	935	1964	Jan. 22, 1964	6.11	529
				1965	Dec. 23, 1964	10.81	5,200
1961	Dec. 1, 1960	7.38	968				

2628. Los Banos Creek near Los Banos, Calif.

Location.--Lat 37°01'00", long 120°54'05", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.32, T.10 S., R.10 E., at Delta-Mendota Canal siphon crossing, 4.3 miles southwest of Los Banos.

Drainage area.--159 sq mi.

Gage.--Recording. Prior to Sept. 9, 1959, at datum 1.00 ft higher. Altitude of gage is 175 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Dec. 23, 1955, reached a stage of 11.07 ft, from floodmark in well (discharge, 11,400 cfs on basis of slope-area measurement of peak flow).

Remarks.--Only annual peaks are shown prior to Oct. 1, 1960. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	11.07	11,400	1962	Feb. 18, 1962	4.27	2,060
					Mar. 6, 1962	1.76	130
1959	Feb. 20, 1959	1.71	527				
1960	Feb. 8, 1960	4.02	1,620	1963	Feb. 1, 1963	4.80	2,640
					Feb. 13, 1963	2.70	520
1961	-	-	0		Mar. 28, 1963	1.65	105
					Apr. 7, 1963	1.72	120
1962	Feb. 9, 1962	3.58	1,310		Apr. 21, 1963	1.76	130
	Feb. 15, 1962	4.43	2,230				

Peak stages and discharges of Los Banos Creek near Los Banos, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	-	-	0	1965	Jan. 7, 1965	2.83	651
1965	Dec. 23, 1964	2.92	716		Jan. 25, 1965	1.72	126
	Dec. 27, 1964	2.70	570		Apr. 11, 1965	1.70	120

2645. Merced River at Happy Isles Bridge, near Yosemite, Calif.

Location.--Lat' 37°43'54", long 119°33'28", on right bank 10 ft downstream from Happy Isles Bridge, 0.4 mile downstream from Illilouette Creek, and 2.0 miles southeast of Yosemite National Park Headquarters, Mariposa County.

Drainage area.--181 sq mi.

Gage.--Nonrecording at datum 0.55 ft lower prior to Nov. 2, 1916; recording thereafter. Datum of gage is 4,016.58 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs and extended above on basis of contracted-opening measurements at 8,400 and 9,260 cfs.

Bankfull stage.--14 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	June 7, 10, 17, 1916	6.2	2,500	1950	May 20, 1950	-	2,160
1917	June 10, 1917	6.68	3,320		June 1, 1950	6.62	2,520
1918	June 12, 1918	6.55	3,180	1951	Nov. 18, 1950	11.55	9,260
1919	May 28, 1919	7.1	3,800		Dec. 3, 1950	7.96	4,540
1920	May 19, 1920	6.10	2,720		Dec. 8, 1950	6.83	2,700
1921	June 12, 1921	6.10	2,720		May 28, 1951	7.03	2,980
1922	June 5, 1922	6.55	3,240		June 20, 1951	6.64	2,470
1923	June 11, 1923	6.00	2,620	1952	May 5, 1952	-	(a)
1924	May 2, 1924	4.40	1,240		May 13, 1952	-	(a)
1925	May 26, 1925	6.02	2,620		May 28, 1952	7.63	3,560
1926	May 5, 1926	5.58	2,240		June 6, 1952	7.80	3,580
1927	May 16, 1927	6.20	2,820		June 19, 1952	6.35	2,210
1928	May 13, 1928	5.42	2,050	1953	June 19, 1953	6.32	2,180
1929	June 16, 1929	5.88	2,520	1954	May 20, 1954	6.70	2,500
1930	June 7, 1930	5.15	1,870	1955	May 22, 1955	6.30	2,160
1931	May 7, 1931	4.56	1,350		May 30, 1955	6.26	2,120
1932	June 22, 1932	5.96	2,570		June 10, 1955	6.87	2,800
1933	June 15, 1933	5.91	2,520	1956	Dec. 23, 1955	12.73	9,860
1934	May 7, 1934	3.95	935		May 4, 1956	6.04	1,950
1935	June 5, 1935	6.15	2,820		May 24, 1956	7.36	3,520
1936	June 25, 1936	5.75	2,380		June 11, 1956	7.06	3,060
1937	May 14, 1937	6.42	3,020		June 19, 1956	6.67	2,560
1938	Dec. 11, 1937	10.4	8,400		June 29, 1956	6.86	2,790
1939	Apr. 21, 1939	5.17	1,210		July 21, 1956	6.64	2,530
1940	May 25, 1940	6.72	2,620		July 25, 1956	6.42	2,300
1941	May 23, 1941	7.17	3,220	1957	June 4, 1957	6.95	2,910
1942	June 11, 1942	6.87	2,800	1958	May 10, 1958	6.55	2,430
1943	June 1, 1943	7.34	3,480		May 18, 1958	7.44	3,640
1944	June 8, 1944	6.00	1,980		June 19, 1958	7.12	3,190
1945	May 4, 1945	7.00	3,040		June 23, 1958	6.90	2,920
1946	Oct. 30, 1945	7.22	3,690	1959	May 12, 1959	5.53	1,520
1947	May 3, 1947	6.33	2,450	1960	May 12, 1960	5.76	1,710
1948	May 16, 1948	-	2,670	1961	May 25, 1961	4.88	1,080
	May 27, 1948	6.78	3,080	1962	May 5, 1962	6.28	2,160
	June 4, 1948	-	2,160				
	June 9, 1948	-	2,550				
1949	May 14, 1949	-	2,370				
	May 27, 1949	6.40	2,480				

a Discharge unknown; exceeded base.

Peak stages and discharges of Merced River at Happy Isles Bridge, near Yosemite, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	June 3, 1962	6.28	2,160	1964	May 26, 1964	5.73	1,720
	June 10, 1962	6.35	2,230		Dec. 23, 1964	11.50	9,240
	June 20, 1962	6.23	2,120	1965	May 18, 1965	6.51	2,470
1963	Feb. 1, 1963	8.29	5,200		May 30, 1965	6.19	2,150
	May 22, 1963	6.36	2,240		June 6, 1965	6.65	2,620
	June 2, 1963	6.52	2,400		June 12, 1965	6.85	2,860
	June 18, 1963	7.06	3,110				

2650. Tenaya Creek near Yosemite, Calif.

Location--Lat 37°44'32", long 119°33'25", in Yosemite National Park, at bridge 0.7 mile upstream from mouth and 1.7 miles east of Yosemite National Park Headquarters, Mariposa County.

Drainage area--46.9 sq mi.

Gage--Nonrecording prior to Sept. 14, 1918; recording thereafter. Prior to Feb. 4, 1913, at several sites on bridge at various datums. Feb. 4, 1913, to Sept. 30, 1956, at present site at datum 2.0 ft higher. Altitude of gage is 4,000 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,000 cfs and extended above on basis of contracted-opening measurement at 5,150 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Peaks for the years 1912-18 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 490 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 1, 1912	-	835	1946	Oct. 30, 1945	4.50	1,030
1913	May 24-26, 1913	-	520	1947	May 2, 1947	4.34	945
1914	May 14, 1914	-	1,010	1948	May 6, 1948	-	798
1915	May 31, 1915	5.85	1,120		May 16, 1948	-	1,060
1916	May 5, 1916	5.0	775		May 26, 1948	4.73	1,220
1917	June 9, 1917	6.0	1,190		June 3, 1948	-	924
1918	June 8, 1918	5.0	775		June 8, 1948	-	946
1919	May 28, 1919	7.05	1,730	1949	Apr. 22, 1949	-	770
1920	May 20, 1920	6.10	1,320		May 1, 1949	-	601
1921	May 15, 1921	5.25	960		May 14, 1949	4.18	867
1922	June 4, 1922	6.60	1,500		May 26, 1949	-	757
1923	May 15, 1923	5.35	1,020	1950	Apr. 26, 1950	-	750
1924	May 2, 1924	4.00	485		May 20, 1950	-	965
1925	May 6, 1925	5.53	1,080		May 27, 1950	4.39	1,080
1926	Apr. 25, 1926	5.03	885	1951	Nov. 18, 1950	8.44	5,150
1927	May 16, 1927	6.25	1,370		Nov. 20, 1950	7.16	3,230
1929	June 16, 1929	6.59	1,360		Dec. 3, 1950	5.93	2,070
1930	May 27, 1930	4.73	633		Dec. 6, 1950	5.72	1,820
1931	May 13, 1931	4.14	437		Apr. 11, 1951	3.99	559
1932	May 17, 1932	5.65	1,000	1952	May 25, 1951	4.58	858
1933	May 30, 1933	5.77	1,080		Apr. 23, 1952	4.20	650
1934	June 13, 1934	3.61	372		May 5, 1952	4.46	764
1935	June 4, 1935	5.73	1,260		May 30, 1952	4.50	1,570
1936	May 14, 1936	5.33	1,110	1953	June 18, 1952	4.27	692
1937	May 14, 1937	5.80	1,570		Apr. 25, 1953	3.85	828
1938	Dec. 11, 1937	10.0	6,800		May 19, 1953	3.18	542
1939	Apr. 21, 1939	3.89	479		June 18, 1953	3.45	650
1940	May 12, 1940	4.89	985	1954	Mar. 9, 1954	3.23	562
1941	May 22, 1941	5.31	1,200		Apr. 22, 1954	3.53	684
1942	June 5, 1942	5.00	1,030		May 8, 1954	3.92	859
1943	June 1, 1943	5.90	1,900		May 19, 1954	3.63	728
1944	May 8, 1944	4.15	832	1955	May 12, 1955	3.28	627
1945	May 4, 1945	4.90	1,250				

a Occurred May 27, 1952.

SAN JOAQUIN RIVER BASIN

Peak stages and discharges of Tenaya Creek near Yosemite, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	May 21, 1955	3.77	832	1956	June 18, 1956	3.57	718
	May 29, 1955	3.38	687				
	June 7, 1955	3.22	603	1957	May 6, 1957	4.93	659
1956	Dec. 23, 1955	6.14	4,730		May 18, 1957	5.64	906
	Dec. 26, 1955	3.24	584		May 27, 1957	4.75	605
	Apr. 24, 1956	3.46	637		June 3, 1957	5.50	855
	May 4, 1956	4.49	1,150	1958	May 10, 1958	4.52	1,140
	May 23, 1956	5.10	1,540		May 18, 1958	5.16	1,650
	June 3, 1956	4.59	1,210		June 18, 1958	4.45	1,080
	June 10, 1956	4.41	1,110				

2655. Merced River at Yosemite, Calif.

Location--Lat 37°44'38", long 119°35'21", at Sentinel Bridge, in Yosemite National Park, 0.3 mile upstream from Yosemite Creek, 0.4 mile southwest of Yosemite National Park Headquarters, and 1.8 miles downstream from Tenaya Creek.

Drainage area--236 sq mi.

Gage--Nonrecording. Altitude of gage is 3,950 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 3,600 cfs.

Remarks--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 2, 1912	-	3,250	1916	June 8, 9, 1916	8.0	3,450
1913	May 26, 1913	-	2,080	1917	June 9, 1917	9.4	4,620
1914	May 30, 1914	8.7	3,680				
1915	June 1, 1915	9.1	4,010				

2660. Yosemite Creek at Yosemite, Calif.

Location--Lat 37°44'44", long 119°35'40", at highway bridge in Yosemite National Park, 0.25 mile upstream from mouth and 0.5 mile west of Yosemite National Park Headquarters, Mariposa County.

Drainage area--42.7 sq mi.

Gage--Nonrecording. Altitude of gage is 3,950 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,230 cfs.

Bankfull stage--Not subject to overflow.

Remarks--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 2, 1912	-	825	1916	June 8, 9, 1916	7.3	1,080
1913	May 1, 1913	-	555	1917	June 8, 1917	10.0	-
1914	May 7, 1914	7.4	900	1918	June 12, 1918	5.6	524
1915	June 8, 1915	8.5	1,500				

^a Caused by backwater.

2665. Merced River at Pohono Bridge, near Yosemite, Calif.

Location.--Lat 37°43'01", long 119°39'55", on left bank 150 ft upstream from Pohono Bridge, 0.4 mile upstream from Artist Creek, and 4.8 miles southwest of Yosemite National Park Headquarters, Mariposa County.

Drainage area.--321 sq mi.

Gage.--Recording. Prior to Sept. 5, 1918, at datum 1.8 ft higher and Sept. 5, 1918, to Sept. 30, 1955, at datum 1.0 ft higher. Datum of gage is 3,861.66 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 8,700 cfs and extended on basis of computation of flow over dam at 22,000 and 23,000 cfs.

Bankfull stage.--22 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 2,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	June 10, 1917	8.75	5,880	1952	May 14, 1952	6.17	4,700
1918	June 12, 1918	7.05	4,000		May 28, 1952	6.63	6,790
1919	May 29, 1919	9.80	6,150		June 19, 1952	7.16	3,540
1920	May 20, 1920	8.80	5,050				
1921	June 11, 1921	8.40	4,610	1953	Apr. 27, 1953	7.11	3,480
1922	June 5, 1922	10.0	6,370		June 19, 1953	6.85	3,200
1923	May 16, 1923	8.30	4,500	1954	Apr. 23, 1954	6.73	3,090
1924	May 2, 1924	5.95	2,120		May 8, 1954	7.48	3,890
1925	May 6, 1925	8.30	4,500		May 20, 1954	7.57	3,990
1926	May 5, 1926	7.77	3,950	1955	May 22, 1955	7.46	3,870
1927	May 17, 1927	9.48	5,700		May 30, 1955	7.08	3,450
1928	Mar. 25, 1928	8.58	4,680		June 8, 1955	7.39	3,790
1929	June 16, 1929	9.25	4,890				
1930	May 28, 1930	7.23	2,780	1956	Dec. 23, 1955	21.52	23,400
1931	May 7, 1931	6.10	1,840		May 4, 1956	8.25	4,890
1932	May 18, 1932	9.12	4,780		May 23, 1956	10.33	6,470
1933	May 31, 1933	8.60	4,230		June 11, 1956	9.16	4,770
1934	June 14, 1934	5.43	1,470		June 19, 1956	8.13	3,590
1935	June 5, 1935	9.44	5,110		June 29, 1956	8.02	3,480
1936	May 5, 1936	8.84	4,450	1957	May 18, 1957	8.24	4,880
1937	May 15, 1937	10.25	6,010		June 4, 1957	8.78	4,320
1938	Dec. 11, 1937	19.1	22,000	1958	May 11, 1958	9.09	4,710
1939	Apr. 22, 1939	5.95	2,200		May 19, 1958	10.43	6,630
1940	May 13, 1940	8.45	4,750		May 23, 1958	9.85	5,790
1941	May 24, 1941	9.55	6,410		June 19, 1958	9.00	4,740
1942	May 25, 1942	9.21	5,860	1959	May 13, 1959	6.80	2,340
1943	Apr. 28, 1943	9.53	6,370				
1944	May 9, 1944	7.36	3,470	1960	May 12, 1960	7.54	3,010
1945	May 5, 1945	9.18	5,810				
1946	May 7, 1946	8.15	4,680	1961	Apr. 5, 1961	5.84	1,550
1947	May 3, 1947	7.52	3,930	1962	Apr. 24, 1962	7.36	3,000
1948	May 6, 1948	-	3,240		May 6, 1962	8.59	4,300
	May 17, 1948	-	4,550		June 3, 1962	8.02	3,670
	May 27, 1948	8.50	5,100		June 10, 1962	7.83	3,470
	June 4, 1948	-	3,730		June 20, 1962	7.29	2,930
	June 9, 1948	-	4,160	1963	Feb. 1, 1963	14.25	13,200
1949	Apr. 24, 1949	-	3,300		May 8, 1963	7.57	3,250
	May 14, 1949	7.96	4,450		May 21, 1963	8.72	4,490
	May 27, 1949	-	3,950		June 3, 1963	8.38	4,110
					June 18, 1963	8.40	4,130
1950	Apr. 27, 1950	-	3,470	1964	May 26, 1964	6.91	2,710
	May 21, 1950	-	4,240				
	May 28, 1950	7.99	4,490	1965	Dec. 23, 1964	16.96	18,000
1951	Nov. 19, 1950	19.98	23,000		Apr. 30, 1965	7.78	3,540
	Dec. 3, 1950	13.29	15,000		May 18, 1965	8.77	4,730
	Dec. 8, 1950	11.16	9,850		May 31, 1965	8.03	3,890
	May 28, 1951	7.56	3,980		June 6, 1965	8.43	4,330
					June 12, 1965	8.40	4,300
1952	May 6, 1952	7.11	3,480				

2673. South Fork Merced River at Wawona, Calif.

Location--Lat 37°32'20", long 119°39'40", in SW $\frac{1}{4}$ sec.34, T.4 S., R.21 E., in Yosemite National Park, Mariposa County, 1,000 ft downstream from highway bridge at Wawona, and 1,200 ft upstream from Big Creek.

Drainage area--100 sq mi.

Gage--Recording. Altitude of gage is 4,030 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 6,000 cfs.

Bankfull stage--11 ft.

Remarks--Only annual peak is shown for 1956. Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	12	15,000	1963	Feb. 1, 1963	9.56	8,590
1959	Feb. 16, 1959	5.26	1,860		May 8, 1963	5.29	1,750
	May 11, 1959	4.54	1,200		May 21, 1963	5.78	2,260
					June 15, 1963	5.16	1,620
1960	May 11, 1960	4.86	1,470	1964	Nov. 15, 1963	4.79	1,300
1961	Apr. 4, 1961	4.00	800		May 26, 1964	4.74	1,260
1962	Feb. 9, 1962	4.65	1,290	1965	Dec. 23, 1964	9.83	9,030
	Apr. 18, 1962	4.56	1,220		Apr. 30, 1965	5.16	1,510
	Apr. 23, 1962	4.63	1,270		May 17, 1965	6.04	2,390
	May 5, 1962	5.50	2,110		May 30, 1965	5.70	2,020
	June 2, 1962	5.30	1,900		June 5, 1965	5.93	2,260
					June 11, 1965	5.86	2,180

2675. South Fork Merced River near Wawona, Calif.

Location--Lat 37°32'30", long 119°40'20", in SE $\frac{1}{4}$ sec.33, T.4 S., R.21 E., 0.5 mile downstream from Big Creek, 0.75 mile upstream from Rush Creek, and 1 mile west of Wawona.

Drainage area--131 sq mi.

Gage--Nonrecording. Altitude of gage is 4,000 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,700 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 3, 1912	6.6	3,110	1917	June 15, 1917	5.7	2,200
1913	Apr. 27, 1913	4.6	1,200	1919	May 28, 1919	5.95	2,500
1914	Jan. 26, 1914	7.2	3,770				
1915	June 8, 1915	6.0	2,500	1921	May 13, 1921	4.60	1,190
1916	June 11, 1916	6.3	2,800				

2680. South Fork Merced River near El Portal, Calif.

Location.--Lat 37°39'05", long 119°53'05", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.29, T.3 S., R.19 E., on right bank 1,400 ft upstream from mouth and 6.2 miles west of El Portal.

Drainage area.--241 sq mi.

Gage.--Recording. Altitude of gage is 1,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs and extended above on basis of slope-area measurement at 37,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Low peaks may be affected by diversion of up to 50 cfs to Big Creek ditch since about 1956. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 19, 1950	17.63	37,600	1958	Feb. 25, 1958	8.24	2,240
	Dec. 3, 1950	13.32	13,100		Mar. 16, 1958	8.72	2,930
	Dec. 8, 1950	11.20	7,000		Mar. 21, 1958	8.21	2,190
	Jan. 18, 1951	8.19	2,170		Apr. 3, 1958	10.17	5,540
					May 11, 1958	8.62	2,780
1952	Dec. 29, 1951	8.73	2,700		May 18, 1958	9.15	3,580
	Jan. 25, 1952	9.42	3,520		June 17, 1958	8.61	2,760
	Apr. 24, 1952	8.01	2,010		June 22, 1958	8.25	2,250
	May 6, 1952	8.37	2,340				
	May 27, 1952	9.86	4,190	1959	Feb. 16, 1959	9.74	4,680
1953	Apr. 27, 1953	8.75	2,720	1960	May 11, 1960	7.66	1,570
1954	Feb. 13, 1954	8.30	2,270	1961	Dec. 1, 1960	7.80	1,720
	Mar. 9, 1954	8.37	2,340				
	May 8, 1954	8.21	2,190	1962	Feb. 9, 1962	10.26	5,720
	May 19, 1954	8.06	2,050		Feb. 15, 1962	8.33	2,360
					May 6, 1962	8.32	2,350
1955	May 21, 1955	8.35	2,320				
1956	Dec. 23, 1955	18.70	46,500	1963	Feb. 1, 1963	15.22	21,600
	Dec. 28, 1955	11.48	6,260		Apr. 14, 1963	8.80	2,140
	Jan. 15, 1956	9.27	2,640		May 9, 1963	9.25	2,800
	Jan. 23, 1956	8.93	2,290		May 21, 1963	9.19	2,700
	Jan. 26, 1956	10.62	4,620				
	May 4, 1956	9.66	3,120	1964	Nov. 15, 1963	8.99	2,410
	May 22, 1956	10.24	3,980				
	June 3, 1956	9.20	2,560	1965	Dec. 23, 1964	13.62	14,200
	June 9, 1956	8.99	2,350		Dec. 27, 1964	8.92	2,180
	July 20, 1956	8.95	2,310		Jan. 6, 1965	10.17	4,460
					May 1, 1965	8.73	2,040
1957	Feb. 24, 1957	8.47	2,560		May 17, 1965	9.27	2,830
	May 19, 1957	10.29	5,780		May 30, 1965	8.94	2,340
	June 1, 1957	8.11	2,070		June 5, 1965	9.06	2,500
					June 11, 1965	8.96	2,360
1958	Feb. 3, 1958	8.57	2,700				

2685. Merced River at Bagby, Calif.
(Published as "at Horseshoe Bend" prior to September 1931 and as
"at Kittridge" October 1931 to September 1947)

Location.--Lat 37°36'40", long 120°07'50", in SE¹ sec.6, T.4 S., R.17 E., on left bank 800 ft upstream from highway bridge at Bagby and 0.3 mile upstream from Flyaway Gulch.

Drainage area.--911 sq mi.

Gage.--Recording prior to Nov. 20, 1950, and after Nov. 4, 1951; nonrecording Nov. 20, 1950, to Nov. 4, 1951. Prior to Nov. 24, 1928, at site 5.0 miles downstream at different datum. Nov. 24, 1928, to Nov. 3, 1947, at site 3.8 miles downstream at different datum. Nov. 20, 1950, to Nov. 4, 1951, at site 800 ft downstream at datum 51.62 ft lower. Datum of gage is 779.52 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 7,500 cfs prior to Nov. 24, 1928; below 10,000 cfs and extended above on basis of change in contents in Lake McClure for period Nov. 24, 1928, to Nov. 3, 1947. Defined by current-meter measurements below 12,000 cfs and extended above on basis of change in contents in Lake McClure for period Nov. 20, 1950, to Nov. 4, 1951. Defined by current-meter measurements below 25,000 cfs and extended above on basis of change in contents in Lake McClure Nov. 4, 1947, to Nov. 19, 1950, and subsequent to Nov. 5, 1951.

Bankfull stage.--Not subject to overflow.

Historical data.--Reported stages reached in 1862 are in general much greater than the stage of the flood of Dec. 11, 1937.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial partial-duration series, 6,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Apr. 6, 1923	13.50	11,000	1951	Dec. 3, 1950	67.83	51,000
1924	May 3, 1924	7.15	2,930		Dec. 8, 1950	61.8	22,500
1925	Feb. 6, 1925	15.48	14,000				
1926	Feb. 13, 1926	12.05	8,750	1952	Jan. 12, 1952	6.57	6,670
1927	Feb. 18, 1927	-	11,400		Jan. 15, 1952	8.99	12,700
1928	Mar. 25, 1928	19.20	20,900		Jan. 25, 1952	9.23	13,400
1929	June 16, 1929	11.65	9,380		Mar. 15, 1952	6.67	6,890
1930	May 28, 1930	8.35	4,480		May 28, 1952	8.33	11,000
1931	May 7, 1931	6.87	2,880	1953	Apr. 27, 1953	7.17	8,070
1932	Feb. 6, 1932	16.0	18,300				
1933	May 31, 1933	10.31	6,720	1954	Feb. 13, 1954	6.37	6,230
1934	Jan. 1, 1934	9.10	5,280		Mar. 9, 1954	6.39	6,280
1935	Apr. 8, 1935	21.5	31,700		Apr. 28, 1954	6.45	6,410
1936	Feb. 23, 1936	15.38	16,900		May 9, 1954	6.54	6,610
1937	Feb. 6, 1937	22.6	33,200		May 20, 1954	6.42	6,340
1938	Dec. 11, 1937	31.0	59,000	1955	May 22, 1955	6.50	6,520
1939	Apr. 11, 1939	7.63	3,800				
1940	Feb. 27, 1940	13.70	13,500	1956	Dec. 23, 1955	26.80	92,500
1941	Feb. 12, 1941	15.35	16,800		Dec. 26, 1955	9.80	14,900
1942	May 26, 1942	12.40	11,000		Jan. 16, 1956	-	(a)
1943	Jan. 21, 1943	19.70	27,000		Jan. 23, 1956	-	(a)
1944	Mar. 4, 1944	11.52	9,420		Jan. 26, 1956	-	(a)
1945	Feb. 2, 1945	24.5	39,800		May 4, 1956	7.00	9,000
1946	Dec. 22, 1945	14.48	15,000		May 23, 1956	7.53	10,400
1947	Nov. 23, 1946	11.15	9,040		May 31, 1956	6.59	7,930
1948	Apr. 10, 1948	-	6,220		June 11, 1956	6.30	7,220
	May 17, 1948	-	7,180	1957	Feb. 24, 1957	5.80	6,020
	May 27, 1948	7.13	7,970		May 19, 1957	8.68	13,600
	June 9, 1948	-	6,810		June 4, 1957	6.13	6,810
1949	Mar. 3, 1949	7.54	8,960	1958	Mar. 16, 1958	8.65	13,600
	May 14, 1949	-	7,090		Mar. 22, 1958	6.74	8,320
	May 27, 1949	-	6,440		Apr. 3, 1958	12.33	25,000
1950	Feb. 4, 1950	7.02	7,710		May 11, 1958	6.83	8,800
	May 21, 1950	-	6,800	1959	May 19, 1958	7.68	11,000
	May 28, 1950	-	6,940		June 18, 1958	6.56	8,100
1951	Nov. 19, 1950	26.96	83,000	1960	June 23, 1958	6.08	6,850
				1959	Feb. 16, 1959	7.52	10,600
				1960	Feb. 8, 1960	5.59	5,770
				1961	Apr. 5, 1961	4.07	2,750

a Discharge unknown; exceeded base.

Peak stages and discharges of Merced River at Bagby, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 9, 1962	8.83	14,700	1964	Nov. 15, 1963	5.41	4,920
	Feb. 15, 1962	7.74	11,400		Dec. 23, 1964	14.79	33,800
	May 6, 1962	6.25	7,390	1965	Jan. 7, 1965	9.97	17,700
	June 3, 1962	5.72	6,090		May 1, 1965	5.96	6,510
1963	Feb. 1, 1963	19.17	51,600		May 18, 1965	6.59	8,200
	May 9, 1963	6.52	7,240		May 31, 1965	5.96	6,680
	May 22, 1963	6.76	7,800		June 6, 1965	6.10	7,010
	June 3, 1963	6.14	6,410		June 12, 1965	5.94	6,630

2700. Merced River at Exchequer, Calif.
(Published as "near Merced Falls" prior to 1914)

Location.--Lat 37°34'55", long 120°16'45", in SE 1/4 sec. 14, T.4 S., R.15 E., on right bank at Exchequer, 0.65 mile downstream from Lake McClure and 5 miles northeast of Merced Falls.

Drainage area.--1,037 sq mi.

Gage.--Nonrecording prior to Apr. 29, 1922; recording thereafter. Prior to Nov. 30, 1913, at site 5 miles downstream at different datum. Nov. 22, 1915, to Oct. 24, 1922, at site 1 mile upstream at different datum. Altitude of gage is 400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 17,300 cfs prior to Nov. 30, 1913; below 8,800 cfs for period Nov. 22, 1915, to Oct. 24, 1922; below 12,200 cfs and extended above on basis of computed flow over dam at 46,200 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Exchequer powerplant and Lake McClure (capacity, 281,300 acre-ft) beginning in April 1926. Peaks for the years 1922-22 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1902	Apr. 7, 1902	14.1	9,120	1931	Apr. 3, 1931	3.71	1,500
1903	Jan. 27, 1903	17.0	19,000	1932	May 27, 1932	8.30	6,360
1904	May 7, 1904	14.3	10,700	1933	Aug. 3, 1933	4.08	1,770
1905	Feb. 2, 1905	14.4	11,000	1934	Apr. 15, 1934	4.08	1,770
				1935	May 24, 1935	9.31	7,840
1906	Jan. 19, 1906	18.8	26,600	1936	Feb. 23, 1936	12.96	14,000
1907	Mar. 19, 1907	18.2	25,200	1937	May 16, 1937	9.23	7,690
1908	Apr. 29, 1908	11.8	3,970	1938	Feb. 11, 1938	12.83	15,200
1909	Jan. 14, 1909	18.4	25,800	1939	Apr. 25, July 25, 1939	4.00	1,690
1910	Dec. 9, 1909, Jan. 1, 1910	16.7	18,700	1940	May 12, 1940	7.86	5,480
				1941	June 5, 1941	8.77	6,720
1911	Jan. 31, 1911	23.3	47,700	1942	May 26, 1942	8.54	6,400
1912	June 4, 1912	13.6	6,840	1943	June 2, 1943	9.32	7,520
1913	May 18, 1913	12.1	3,480	1944	May 29, 1944	7.48	5,000
1916	Jan. 17, 1916	20.0	22,000	1945	May 5, 1945	9.40	7,640
1917	Feb. 21, 1917	19.9	21,700	1946	May 8, 1946	8.48	6,310
1918	Mar. 7, 12, 19, 1918	18.5	17,700	1947	May 21, 1947	5.96	3,280
1919	May 29, 1919	14.8	9,580	1948	June 9, 1948	8.48	6,310
1920	Apr. 15, 1920	15.0	10,000	1949	May 28, 1949	7.41	4,910
1921	Jan. 18, 1921	18.7	19,400	1950	May 28, 1950	8.40	6,200
1922	Feb. 11, 1922	17.9	17,200	1951	Dec. 4, 1950	22.6	46,200
1923	Apr. 6, 1923	10.50	11,500	1952	June 4, 1952	12.0	12,000
1924	May 3, 1924	5.41	2,970	1953	July 15, 17-24, 1953	4.42	1,930
1925	Feb. 6, 1925	12.35	15,400	1954	May 11, 1954	7.89	5,520
1926	Feb. 14, 1926	10.34	11,100	1955	June 13-14, 1955	4.35	1,910
1928	May 8, 1928	7.08	5,120	1956	Dec. 27, 1955	11.00	10,400
1929	May 16, 1929	4.10	1,820	1957	June 2, 1957	8.02	5,890
1930	June 19, 1930	4.30	1,980	1958	Apr. 3, 1958	11.65	11,600

Peak stages and discharges of Merced River at Exchequer, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Aug. 21, 1959	4.31	1,930	1962	May 8, 1962	7.88	5,690
1960	July 26, 1960	4.42	2,020	1963	May 9, 1963	8.35	6,350
1961	July 5, 1961	4.50	2,060	1964	Aug. 20, 1964	4.53	2,100

2715. Merced River near Livingston, Calif.

Location.--Lat 37°23'29", long 120°47'10", in SE $\frac{1}{4}$ sec.20, T.6 S., R.11 E., 3.5 miles west of Livingston and 10 miles upstream from mouth.

Drainage area.--1,259 sq mi.

Gage.--Recording. Prior to Oct. 24, 1926, at datum 0.50 ft higher, and Oct. 24, 1926, to July 10, 1939, at datum 2.00 ft higher. Altitude of gage is 82 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 9,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Lake McClure (capacity, 281,300 acre-ft) beginning in April 1926. Practically entire flow is diverted above station during irrigation season. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	June 5, 1922	17.30	8,100	1934	Jan. 2, 1934	6.35	1,700
1923	Apr. 6-7, 1923	16.57	7,860	1935	June 6, 1935	13.46	5,620
1926	Feb. 14, 1926	15.9	7,000	1936	Feb. 24, 1936	19.24	9,560
1927	May 18, 1927	13.70	6,140	1937	May 18, 1937	14.10	5,480
1928	May 9, 1928	8.87	3,270	1938	Feb. 12, 1938	19.44	11,100
1929	Feb. 4, 1929	5.73	1,450	1939	Feb. 8, 1939	6.84	2,000
1930	Mar. 6, 1930	3.64	605	1940	Mar. 31, 1940	17.10	6,540
1931	Feb. 16, 1931	2.21	230	1942	Apr. 18, 1942	15.35	5,200
1932	May 29, 1932	11.09	4,560	1943	Mar. 10, 1943	18.28	7,630
1933	Feb. 13, 1933	5.51	1,220	1944	Feb. 23, 1944	7.43	1,330

2725. Merced River near Stevinson, Calif.

Location.--Lat 37°22'15", long 120°55'45", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.36, T.6 S., R.9 E., on right bank 5 miles upstream from mouth and 6 miles northwest of Stevinson.

Drainage area.--1,274 sq mi.

Gage.--Nonrecording prior to Jan. 5, 1945; recording thereafter. Prior to Aug. 16, 1955, at datum 55.74 ft higher, and Aug. 16, 1955, to Sept. 30, 1959, at datum 54.74 ft higher. Datum of gage is mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 10,500 cfs.

Bankfull stage.--72 ft.

Remarks.--Records for 1941-44 furnished by Bureau of Reclamation. Peaks regulated by Lake McClure (capacity, 281,300 acre-ft) beginning in April 1926. Practically entire flow is diverted above station during irrigation season. Peaks for the years 1941-44 are maximum observed. Only annual peaks are shown.

Peak stages and discharges of Merced River near Stevinson, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Mar. 5, 1941	-	5,430	1954	May 21, 1954	10.45	3,480
1942	Apr. 18, 1942	-	4,890	1955	Jan. 19, 1955	4.43	912
1943	Mar. 10, 1943	-	6,240				
1944	May 31, 1944	-	3,070	1956	Dec. 28, 1955	18.10	11,200
1945	May 10, 1945	13.15	4,960	1957	June 5, 1957	11.52	3,700
				1958	Apr. 5, 1958	17.91	11,500
1946	May 10, 1946	11.93	4,050	1959	Oct. 16, 1958	3.20	414
1947	May 25, 1947	6.39	1,200	1960	Feb. 11, 1960	59.55	882
1948	June 11, 1948	12.16	4,210				
1949	May 30, 1949	9.35	2,480	1961	Jan. 31, 1961	56.41	158
1950	June 3, 1950	11.26	3,450	1962	Feb. 16, 1962	67.41	3,840
				1963	May 11, 1963	67.37	4,610
1951	Dec. 5, 1950	18.05	13,600	1964	Jan. 24, 1964	57.60	260
1952	June 2, 1952	16.56	8,740	1965	Jan. 8, 1965	72.09	11,000
1953	Jan. 1, 1953	7.80	2,060				

2740. San Joaquin River near Newman, Calif.

Location.--Lat 37°21'02", long 120°58'34", in SW¹/₄ sec.3, T.7 S., R.9 E., on left bank 300 ft downstream from new bridge on Hills Ferry Road, 300 ft downstream from Merced River, and 3.5 miles northeast of Newman.

Drainage area.--9,990 sq mi.

Gage.--Nonrecording prior to Mar. 3, 1931; recording thereafter. Prior to Oct. 1, 1959, at datum 47.31 ft higher. Datum of gage is at mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 32,000 cfs.

Bankfull stage.--6 ft.

Historical data.--Flood of Jan. 2, 1868, reached a stage of 21.7 ft; flood of February 1886, 19.8 ft; and the flood of 1911, 19 ft. Peaks observed in a building 500 ft upstream and referred to datum in use prior to 1959.

Remarks.--Peaks regulated by many storage reservoirs, ground-water withdrawals, and diversions for irrigation since beginning of record. Records prior to 1936 and after 1943 do not include small flows that bypassed station through Merced River Slough when discharge was above about 9,000 cfs. Peaks for the years 1914-31 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1868	Jan. 2, 1868	21.7	-	1933	June 21, 1933	7.08	2,660
				1934	Jan. 3, 1934	6.62	2,300
1886	February 1886	19.8	-	1935	Apr. 18, 1935	14.02	8,820
1911	-	19	-				
				1936	Feb. 26, 1936	16.80	14,400
1914	Jan. 27, 1914	18.0	20,700	1937	Feb. 18-20, 1937	15.96	12,800
1915	June 12, 20, 21, 1915	15.6	15,200	1938	Mar. 7, 1938	18.50	33,000
				1939	Feb. 13, 1939	8.05	3,300
1916	Feb. 6, 1916	17.0	18,200	1940	Mar. 7, 1940	14.74	11,300
1917	Feb. 26, 1917, June 19, 20, 1917	15.3	14,600	1941	Mar. 8, 1941	17.43	22,300
1918	Mar. 14, 1918	14.7	13,400	1942	June 7, 1942	14.87	12,100
1919	May 30, 1919	12.3	9,210	1943	Mar. 20, 1943	16.49	16,700
1920	May 29-31, 1920	12.1	8,900	1944	Mar. 8, 1944	7.23	3,180
				1945	May 13, 1945	13.06	8,970
1921	Jan. 20, 1921	12.5	9,200	1946	May 10, 1946	9.95	5,480
1922	June 17, 1922	17.35	17,300	1947	Jan. 2, 1947	5.78	2,240
1923	May 26, 27, 1923	13.9	12,100	1948	June 11, 1948	8.12	3,580
1924	Apr. 13, 1924	5.15	1,770	1949	May 30, 1949	6.10	2,270
1925	May 27-29, 1925	11.10	7,440	1950	June 3, 1950	7.63	3,110
1926	Apr. 9, 1926	10.60	7,300	1951	Dec. 11, 1950	16.09	11,600
1927	May 18, 19, 1927	13.0	9,150	1952	June 2, 1952	16.30	13,300
1928	Mar. 31, 1928	8.95	4,500	1953	Jan. 18, 1953	7.69	3,090
1929	Feb. 5, 1929	5.60	1,660	1954	May 21, 1954	8.10	3,500
1930	Mar. 7, 1930	4.20	870	1955	Jan. 20, 1955	5.43	1,820
1931	Jan. 25, 1931	3.90	690	1956	Dec. 29, 1955	17.05	16,800
1932	Feb. 15, 1932	13.47	9,150	1957	June 5, 1957	8.44	4,120

Peak stages and discharges of San Joaquin River near Newman, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 6, 1958	18.25	21,600	1962	Feb. 19, 1962	60.03	7,940
1959	Feb. 19, 1959	4.27	1,340	1963	Feb. 14, 1963	57.17	4,870
1960	Feb. 13, 1960	52.74	1,850	1964	Oct. 14, 1963	52.70	1,710
1961	Jan. 22, 1961	51.02	1,030	1965	Jan. 10, 1965	62.69	11,300

2750. Falls Creek near Hetch Hetchy, Calif.
(Published as "near Sequoia" prior to Oct. 1, 1918)

Location--Lat 37°58'15", long 119°45'45", in SE $\frac{1}{4}$ sec.3, T.1 N., R.20 E., on right bank in Yosemite National Park, 0.2 mile upstream from Wampana Falls, 0.6 mile upstream from mouth, and 2 miles northeast of Hetch Hetchy.

Drainage area--46.0 sq mi.

Gage--Recording. Altitude of gage is 5,350 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,500 cfs and extended above on basis of velocity-area studies.

Remarks--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	June 9, 1916	5.2	996	1951	Dec. 3, 1950	7.47	2,980
1917	June 10, 1917	5.6	1,240		Dec. 8, 1950	6.96	2,300
1918	June 14, 1918	5.34	1,070		May 28, 1951	6.09	1,380
1919	May 29, 1919	5.55	1,210				
1920	May 20, 1920	5.16	992	1952	May 13, 1952	5.69	1,010
					May 20, 1952	5.77	1,080
1921	June 11, 1921	5.47	1,160		June 6, 1952	6.22	1,480
1922	June 5, 1922	5.58	1,240		June 19, 1952	5.70	1,020
1923	June 11, 1923	5.30	1,080				
1924	May 3, 1924	4.28	606	1953	Apr. 27, 1953	6.05	1,320
1925	Feb. 6, 1925	5.55	1,210		June 19, 1953	6.22	1,480
1926	Apr. 26, 1926	4.85	844	1954	Mar. 9, 1954	6.09	1,350
1927	Mar. 17, 1927	5.42	1,130		May 9, 1954	5.74	1,050
1928	Mar. 25, 1928	6.45	1,740		May 20, 1954	5.93	1,210
1929	June 16, 1929	6.15	1,590				
1930	June 7, 1930	4.89	867	1955	May 24, 1955	5.70	980
					May 30, 1955	5.75	1,020
1931	May 6, 1931	4.51	689		June 8, 1955	5.97	1,180
1932	June 22, 1932	5.49	1,180				
1933	June 15, 1933	5.42	1,130	1956	Dec. 23, 1955	9.00	6,660
1934	May 7, 1934	3.88	453		May 4, 1956	5.87	1,070
1935	June 5, 1935	5.40	1,130		May 24, 1956	5.97	1,150
					June 4, 1956	5.95	1,130
1936	June 12, 1936	5.28	1,080		June 11, 1956	6.00	1,170
1937	May 29, 1937	5.35	1,100		June 19, 1956	5.75	985
1938	Dec. 11, 1937	8.90	6,300		June 28, 1956	5.86	1,060
1939	Apr. 22, 1939	4.92	569				
1940	Mar. 26, 1940	6.22	1,440	1957	May 18, 1957	6.42	1,560
					June 4, 1957	6.16	1,300
1941	June 20, 1941	6.15	1,380		June 8, 1957	5.67	932
1942	Dec. 3, 1941	7.50	2,850				
1943	June 1, 1943	6.80	1,950	1958	May 11, 1958	5.64	914
1944	June 8, 1944	5.31	766		May 19, 1958	5.96	1,140
1945	Feb. 2, 1945	5.95	1,220		June 19, 1958	6.24	1,380
1946	Oct. 30, 1945	5.97	1,240	1959	May 13, 1959	5.33	732
1947	May 4, 1947	5.67	1,010				
				1960	May 12, 1960	5.55	932
1948	May 17, 1948	-	920				
	May 27, 1948	5.80	1,100	1961	May 26, 1961	4.82	488
	June 10, 1948	-	955				
1949	May 14, 1949	5.95	1,220	1962	June 3, 1962	5.75	985
	May 27, 1949	-	955		June 10, 1962	5.68	938
					June 20, 1962	5.62	902
1950	June 1, 1950	6.05	1,300	1963	Feb. 1, 1963	8.68	5,560
1951	Nov. 19, 1950	9.0	6,660		June 14, 1963	5.78	1,010

Peak stages and discharges of Falls Creek near Hetch Hetchy, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	Nov. 15, 1963	5.72	964	1965	May 18, 1965	5.70	950
					June 12, 1965	6.05	1,210
1965	Dec. 23, 1964	8.66	5,490		June 21, 1965	5.72	964

2765. Tuolumne River near Hetch Hetchy, Calif.

(Published as "below Hetch Hetchy damsite, near Sequoia" January 1915 to September 1918)

Location.--Lat 37°56'15", long 119°47'50", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.17, T.1 N., R.20 E., in Yosemite National Park, on left bank 1 mile downstream from O'Shaughnessy Dam at Hetch Hetchy and 2.5 miles downstream from Falls Creek.

Drainage area.--457 sq mi.

Gage.--Recording. Altitude of gage is 3,430 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 10,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Peaks regulated by Hetch Hetchy Reservoir (capacity, 360,400 acre-ft) beginning in April 1923. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	June 1, 1915	12.55	9,040	1941	June 20, 1941	12.27	8,270
1916	June 8, 9, 17, 1916	12.3	8,350	1942	June 11, 1942	12.30	8,350
1917	June 10, 1917	13.8	10,000	1943	June 1, 1943	13.90	12,900
1918	June 14, 1918	12.9	8,500	1944	June 30, 1944	9.78	3,270
1919	May 29, 1919	13.4	11,400	1945	June 14, 1945	12.28	8,300
1920	May 21, 1920	11.9	7,310	1946	May 21, 1946	11.63	6,660
1921	June 12, 1921	12.20	8,090	1947	July 13, 1947	8.83	2,290
1922	June 5, 6, 1922	12.7	9,450	1948	June 15, 1948	10.95	5,190
1923	June 10, 1923	12.30	8,350	1949	June 12, 1949	10.43	4,240
1924	July 12, 1924	9.81	3,290	1950	June 15, 1950	13.15	10,700
1925	May 27, 1925	12.60	9,170	1951	May 27, 1951	13.1	10,600
1926	June 8, 1926	11.10	5,490	1952	July 2, 1952	11.5	6,350
1927	June 7, 1927	12.70	9,450	1953	June 20, 1953	12.01	7,600
1928	May 23, 1928	11.34	5,910	1954	June 2, 1954	11.75	6,950
1929	June 16, 1929	13.58	12,000	1955	July 6, 1955	8.55	2,050
1930	June 10, 1930	11.25	5,690	1956	June 29, 1956	12.30	8,350
1931	Aug. 8, 1931	7.42	1,280	1957	June 7, 1957	12.56	9,060
1932	June 22, 1932	12.70	9,450	1958	June 24, 1958	11.84	6,730
1933	June 13, 1933	13.03	10,300	1959	Nov. 17, 1959	8.35	2,780
1934	Sept. 26, 1934	6.68	970	1960	June 8-13, 1960	8.29	1,840
1935	June 6, 1935	12.88	10,000	1961	July 13, 1961	7.40	1,280
1936	June 13, 1936	12.03	7,570	1962	June 23, 1962	11.21	5,710
1937	May 30, 1937	11.25	5,690	1963	June 27, 1963	10.71	4,730
1938	June 4, 1938	13.25	10,800	1964	Dec. 11, 1963	7.15	1,160
1939	May 2, 1939	10.50	4,350	1965	June 23-24, 1965	10.71	4,730
1940	May 25, 1940	11.43	6,200				

2770. Cherry Creek near Hetch Hetchy, Calif.
(Published as "near Sequoia" 1910-18)

Location--Lat 38°00', long 119°54', in SW $\frac{1}{4}$ sec.28, T.2 N., R.19 E., on left bank 2.5 miles northwest of Lake Eleanor Dam, 4 miles upstream from Eleanor Creek, and 7.5 miles northwest of Hetch Hetchy.

Drainage area--111 sq mi.

Gage--Recording. Altitude of gage is 4,500 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 7,700 cfs and extended above on basis of velocity-area studies.

Remarks--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Release from five small reservoirs (total capacity, 2,990 acre-ft) has caused increased summer flow since 1931 and may affect some peaks. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	June 8, 1915	8.55	3,990	1946	Oct. 30, 1945	16.05	9,640
1916	Jan. 17, 1916	9.9	4,800	1947	Nov. 23, 1946	8.02	3,170
1917	June 9, 1917	9.1	3,800	1948	May 16, 1948	-	2,870
1918	June 13, 1918	7.20	2,740		May 26, 1948	8.06	3,200
1919	May 28, 1919	8.14	3,550		June 8, 1948	-	2,650
1920	May 19, 1920	8.1	3,550	1949	Apr. 24, 1949	-	2,570
1921	June 10, 1921	8.37	3,840		May 14, 1949	8.22	3,310
1922	June 2, 1922	9.40	4,400		May 26, 1949	-	2,550
1923	June 16, 1923	8.06	3,370	1950	May 16, 1950	-	2,640
1924	May 1, 1924	5.50	1,500		May 21, 1950	-	2,870
1925	Oct. 28, 1924	11.21	5,800		May 27, 1950	-	3,230
1926	May 4, 1926	7.35	2,790		May 31, 1950	8.28	3,360
1927	May 16, 1927	8.52	3,640		June 5, 1950	-	2,610
1928	Mar. 25, 1928	12.57	7,000	1951	Oct. 26, 1950	11.67	6,000
1929	June 16, 1929	13.57	7,750		Nov. 18, 1950	20.17	13,400
1930	May 19, 1930	6.50	2,150		Dec. 3, 1950	14.65	8,380
1931	May 13, 1931	6.96	2,500		May 27, 1951	7.14	2,580
1932	June 11, 1932	7.65	2,940	1952	June 5, 1952	8.88	3,850
1933	May 30, 1933	7.72	3,020		June 18, 1952	7.08	2,590
1934	Dec. 13, 1933	6.03	1,850	1953	Apr. 27, 1953	10.55	5,100
1935	June 6, 1935	8.18	3,400		June 18, 1953	8.05	3,200
1936	June 7, 1936	10.70	5,400	1954	Mar. 9, 1954	11.24	5,650
1937	June 16, 1937	8.54	3,640		May 8, 1954	7.68	2,940
1938	Dec. 11, 1937	25.1	18,100		May 18, 1954	7.48	2,800
1939	Oct. 15, 1938	6.98	2,390	1955	May 21, 1955	7.25	2,790
1940	Mar. 26, 1940	10.40	5,200		May 29, 1955	7.03	2,640
1941	May 23, 1941	8.79	3,960		June 6, 1955	6.98	2,610
1942	Dec. 3, 1941	16.60	10,100				
1943	Nov. 18, 1942	11.9	6,380				
1944	May 14, 1944	7.88	3,280				
1945	Feb. 2, 1945	13.50	7,660				

2780. Eleanor Creek near Hetch Hetchy, Calif.
(Published as "near Sequoia" prior to 1918)

Location.--Lat 37°58'10", long 119°52'50", in SW $\frac{1}{4}$ sec.3, T.1 N., R.19 E., in Yosemite National Park, on right bank 0.5 mile downstream from Lake Eleanor Dam, 1.1 miles upstream from Miguel Creek, and 5.5 miles northwest of Hetch Hetchy.

Drainage area.--78.4 sq mi.

Gage.--Recording. Prior to November 1915, at site 1 mile upstream at different datum. Altitude of gage is 4,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,480 cfs prior to November 1915; below 2,000 cfs and extended above on basis of velocity-area studies thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Peaks regulated by Lake Eleanor (capacity, 26,100 acre-ft) beginning June 23, 1918. Low peaks may be affected by diversion from Lake Eleanor to Cherry Lake beginning in March 1960. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	May 13, 1915	7.85	1,540	1941	May 12, 1941	6.28	1,740
				1942	May 25, 1942	6.80	2,230
1916	Mar. 20, 1916	6.3	1,610	1943	Jan. 22, 1943	8.05	3,480
1917	June 10, 1917	6.25	1,580	1944	May 15, 1944	5.57	1,210
1918	May 5, 1918	5.23	952	1945	Feb. 2, 1945	9.78	5,350
1919	May 2, 1919	6.30	1,610				
1920	May 19, 1920	6.1	1,470	1946	Dec. 22, 1945	6.02	1,530
				1947	May 6, 1947	4.78	775
1921	Apr. 30, 1921	6.30	1,610	1948	May 17, 1948	5.67	1,270
1922	May 25, 1922	6.66	1,880	1949	May 14, 1949	5.91	1,440
1923	June 10, 1923	7.4	2,400	1950	May 17, 1950	5.36	1,090
1924	May 16, 1924	7.25	1,860				
1925	Feb. 6, 1925	9.10	4,300	1951	Nov. 19, 1950	14.95	11,700
				1952	May 28, 1952	6.31	1,750
1926	Apr. 6, 1926	5.63	1,180	1953	Apr. 27, 1953	7.23	2,860
1927	May 14, 1927	6.6	1,840	1954	Mar. 9, 1954	6.98	2,610
1928	Mar. 25, 1928	11.00	6,400	1955	June 7, 1955	5.21	926
1929	June 16, 1929	8.70	3,570				
1930	Apr. 24, 1930	5.24	885	1956	Dec. 23, 1955	14.80	11,500
				1957	June 4, 1957	4.81	866
1931	Apr. 16, 1931	4.96	748	1958	May 21, 1958	5.90	1,840
1932	May 15, 1932	5.97	1,250	1959	Mar. 18, 1959	4.40	670
1933	May 31, 1933	5.48	1,010	1960	Apr. 15, 1960	3.97	502
1934	June 14, 1934	4.70	635				
1935	May 24, 1935	6.04	1,550	1961	Sept. 6-9, 1961	2.86	149
				1962	June 10, 1962	4.44	756
1936	June 7, 1936	7.18	2,530	1963	Feb. 1, 1963	12.24	10,400
1937	May 15, 1937	6.35	1,790	1964	June 30, 1964	1.66	20
1938	Dec. 11, 1937	13.95	10,500	1965	Dec. 24, 1964	9.94	6,920
1939	Apr. 9, 1939	4.74	740				
1940	Mar. 27, 1940	7.87	3,300				

2783. Cherry Creek near Early Intake, Calif.

Location.--Lat 37°53'40", long 119°57'42", in SE $\frac{1}{4}$ sec.35, T.1 N., R.18 E., on right bank 1.2 miles upstream from mouth, 1.3 miles north of Early Intake, and 10.3 miles southwest of Hetch Hetchy.

Drainage area.--226 sq mi.

Gage.--Recording. Datum of gage is 2,272.00 ft above mean sea level (levels by city and county of San Francisco).

Stage-discharge relation.--Defined by current-meter measurements below 4,510 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Peaks regulated by Cherry Lake (capacity, 268,200 acre-ft) beginning in December 1955 and Lake Eleanor (capacity, 26,100 acre-ft) beginning June 23, 1918. Peaks may be affected by Cherry Creek Canal diversion about 1.0 mile upstream (capacity, about 200 cfs) beginning in April 1956. Peaks may also be affected by diversion from Cherry Lake to Cherry powerhouse beginning Aug. 1, 1960. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	July 17, 1957	8.22	2,050	1962	Feb. 9, 1962	6.34	768
1958	May 6, 1958	10.46	4,940	1963	Feb. 1, 1963	14.50	16,500
1959	May 14, 1959	8.31	2,130	1964	Apr. 2, 1964	3.96	95
1960	June 9, 1960	7.89	1,770	1965	Dec. 24, 1964	12.12	8,660
1961	Dec. 1, 1960	4.07	124				

2795. South Fork Tuolumne River at Italian Flat, near Sequoia, Calif.

Location.--Lat 37°49', long 119°55', in SW $\frac{1}{4}$ sec.29, T.1 S., R.19 E., at Italian Flat, $1\frac{1}{4}$ miles northeast of highway bridge on Big Oak Flat Road and 1.5 miles northwest of Sequoia.

Drainage area.--66.7 sq mi.

Gage.--Recording. Altitude of gage is 3,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 360 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 6, 1925	4.22	663	1929	June 16, 1929	3.80	577
1926	Apr. 6, 1926	3.72	559	1932	Dec. 28, 1931	3.74	559
1927	Feb. 18, 1927	4.26	675	1933	May 28, 1933	3.00	433
1928	Mar. 27, 1928	4.45	695				

2810. South Fork Tuolumne River near Oakland Recreation Camp, Calif.

Location.--Lat 37°49'16", long 120°00'48", in SE $\frac{1}{4}$ sec.29, T.1 S., R.18 E., on right bank 75 ft downstream from highway bridge on Big Oak Flat Road, 0.5 mile southwest of Oakland Recreation Camp, and 0.6 mile upstream from Middle Tuolumne River.

Drainage area.--87.0 sq mi.

Gage.--Recording. Altitude of gage is 2,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended above on basis of slope-area measurement at 11,900 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 370 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Apr. 6, 1923	7.03	3,140	1954	Feb. 13, 1954	5.58	1,330
1924	Apr. 11, 1924	2.65	138		Feb. 17, 1954	3.94	415
1925	Feb. 6, 1925	6.45	2,440		Mar. 9, 1954	4.85	890
					Apr. 16, 1954	3.88	392
1926	Apr. 6, 1926	5.05	1,040		Apr. 22, 1954	3.91	403
1927	Feb. 18, 1927	6.61	2,520		Apr. 28, 1954	4.64	767
1928	Mar. 25, 1928	6.50	2,390		May 8, 1954	4.06	464
1929	June 16, 1929	4.85	970				
1930	Feb. 22, 1930	4.45	715	1955	May 21, 1955	3.84	377
1931	Feb. 14, 1931	3.06	202	1956	Dec. 23, 1955	10.9	11,900
1932	Dec. 28, 1931	5.45	1,380		Dec. 26, 1955	6.83	2,790
1933	May 28, 1933	3.90	464		Jan. 15, 1956	5.07	1,030
1934	Jan. 1, 1934	4.30	596		Jan. 26, 1956	6.62	2,530
1935	Apr. 8, 1935	7.07	3,100		Apr. 26, 1956	3.97	443
					May 4, 1956	4.73	818
1936	Feb. 22, 1936	5.53	1,440		May 22, 1956	4.49	685
1937	Feb. 13, 1937	6.70	2,630				
1938	Dec. 11, 1937	10.00	9,000	1957	Feb. 24, 1957	4.98	968
1939	Mar. 26, 1939	3.50	315		May 18, 1957	6.14	1,990
1940	Mar. 30, 1940	5.65	1,460		June 1, 1957	3.93	427
1941	Dec. 23, 1940	5.73	1,860	1958	Dec. 16, 1957	4.17	526
1942	Dec. 3, 1941	5.65	1,560		Feb. 3, 1958	4.75	620
1943	Jan. 21, 1943	8.00	4,520		Feb. 24, 1958	6.23	1,500
1944	Mar. 4, 1944	4.45	608		Mar. 16, 1958	5.60	1,070
1945	Feb. 2, 1945	8.38	5,220		Mar. 21, 1958	5.75	1,160
					Apr. 3, 1958	7.10	2,380
1946	Dec. 21, 1945	7.03	3,110		May 11, 1958	5.02	750
					May 20, 1958	5.30	890
1947	Nov. 20, 1946	-	1,150	1959	Feb. 16, 1959	6.24	1,320
	Nov. 23, 1946	6.00	1,750				
	Feb. 12, 1947	-	480	1960	Feb. 1, 1960	4.25	565
1948	Apr. 9, 1948	4.39	570		Feb. 8, 1960	6.45	2,330
	May 16, 1948	-	428		Mar. 28, 1960	4.61	750
	May 26, 1948	-	460	1961	Dec. 1, 1960	4.35	615
1949	Apr. 24, 1949	-	379				
	May 14, 1949	4.08	432	1962	Feb. 9, 1962	7.48	3,670
1950	Feb. 4 or 6, 1950	4.66	713		Feb. 15, 1962	5.09	1,040
					Apr. 15, 1962	3.86	399
1951	Nov. 18, 1950	8.68	4,540		May 5, 1962	4.10	495
	Dec. 3, 1950	7.68	3,090	1963	Feb. 1, 1963	9.60	8,000
	Dec. 8, 1950	7.48	2,850		Mar. 28, 1963	4.41	645
	Dec. 14, 1950	4.63	696		Apr. 14, 1963	4.87	902
	Jan. 18, 1951	4.86	826		May 8, 1963	4.80	860
					May 22, 1963	4.14	513
1952	Dec. 4, 1951	3.93	376	1964	Nov. 15, 1963	4.58	734
	Dec. 29, 1951	4.76	823				
	Jan. 25, 1952	5.21	1,090	1965	Dec. 23, 1964	6.27	2,120
	Feb. 1, 1952	4.63	752		Dec. 27, 1964	4.38	630
	May 27, 1952	4.83	862		Jan. 6, 1965	5.95	1,800
1953	Jan. 13, 1953	4.31	576		Jan. 24, 1965	4.65	772
	Apr. 27, 1953	5.10	1,020		Apr. 30, 1965	4.16	522
1954	Jan. 24, 1954	3.99	434		May 18, 1965	4.23	555

2815. Middle Tuolumne River near Mather, Calif.
(Published as "Middle Fork of Tuolumne River" prior to 1933)

Location.--Lat 37°51', long 119°52', in NE¹/₄ sec.15, T.1 S., R.18 E., 600 ft downstream from highway bridge and 2 miles south of Mather.

Drainage area.--51.6 sq mi.

Gage.--Recording. Altitude of gage is 4,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	May 5, 1925	2.85	670	1928	Mar. 25, 1928	4.00	810
				1929	June 16, 1929	3.76	750
1926	May 4, 1926	2.38	482				
1927	May 16, 1927	2.40	-	1933	May 30, 1933	2.40	419

a Backwater from debris.

2820. Middle Tuolumne River at Oakland Recreation Camp, Calif.
(Published as Middle Fork of Tuolumne River near Buck Meadows for 1917-32 and "near Buck Meadows" 1933-40)

Location.--Lat 37°49'40", long 120°00'40", in NW¹/₄ sec.28, T.1 S., R.18 E., on left bank 1,000 ft downstream from Oakland Recreation Camp, 0.5 mile upstream from South Fork Tuolumne River, and 4 miles east of Buck Meadows Post Office.

Drainage area.--73.5 sq mi.

Gage.--Recording. Altitude of gage is 2,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs and extended above on basis of slope-area measurement at 4,920 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by city and county of San Francisco. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 370 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Feb. 21, 1917	6.7	912	1941	May 23, 1941	6.14	863
1918	Mar. 19, 1918	5.32	558	1942	May 26, 1942	6.66	1,010
1919	May 28, 1919	8.15	1,510	1943	Jan. 21, 1943	7.89	1,550
1920	May 20, 1920	5.55	630	1944	Mar. 4, 1944	4.88	529
				1945	Feb. 2, 1945	9.50	2,380
1921	Jan. 18, 1921	6.65	884				
1922	June 3, 1922	6.95	996	1946	Dec. 21, 1946	6.64	1,040
1923	Apr. 6, 1923	5.75	678	1947	Nov. 23, 1946	4.63	478
1924	May 9, 1924	3.45	194				
1925	Feb. 6, 1925	6.15	802	1948	May 18, 1948	-	466
					May 26, 1948	5.26	623
1926	May 5, 1926	5.25	545		June 9, 1948	-	589
1927	May 17, 1927	6.10	766				
1928	Mar. 27, 1928	6.80	960	1949	May 14, 1949	5.07	573
1929	June 16, 1929	6.27	820		May 27, 1949	-	490
1930	May 28, 1930	4.40	360				
				1950	May 27, 1950	5.09	578
1931	May 14, 1931	4.08	287				
1932	Dec. 28, 1931	6.30	820	1951	Nov. 19, 1950	10.45	3,450
1933	May 31, 1933	5.43	590		Dec. 3, 1950	9.69	2,730
1934	Dec. 13, 1933	4.49	372		Dec. 8, 1950	7.70	1,420
1935	Apr. 8, 1935	7.65	1,220		Dec. 18, 1950	4.90	520
					Jan. 18, 1951	4.75	482
1936	Feb. 1, 1936	6.56	922				
1937	Feb. 13, 1937	7.75	1,280	1952	Dec. 29, 1951	4.37	410
1938	Dec. 11, 1937	10.4	3,400		Jan. 12, 1952	4.70	465
1939	Apr. 21, 1939	3.95	260		Jan. 15, 1952	4.35	379
1940	Mar. 30, 1940	6.17	690		Jan. 25, 1952	4.54	417

Peak stages and discharges of Middle Tuolumne River at Oakland Recreation Camp, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	May 27, 1952	6.56	1,070	1959	Feb. 16, 1959	5.44	702
1953	Apr. 27, 1953	5.03	552	1960	May 12, 1960	4.13	389
1954	Feb. 13, 1954	5.06	571	1962	Dec. 1, 1960	3.57	241
	Mar. 10, 1954	4.39	404		Feb. 9, 1962	5.06	592
	Apr. 28, 1954	-	-		Feb. 15, 1962	6.10	980
	May 8, 1954	-	-		May 6, 1962	4.86	539
1955	May 22, 1955	4.50	422		June 3, 1962	4.54	459
	May 30, 1955	4.52	427	1963	Feb. 1, 1963	8.86	2,290
1956	Dec. 23, 1955	11.75	4,920		Mar. 28, 1963	4.68	494
	Jan. 15, 1956	5.46	708		May 9, 1963	4.85	545
	Jan. 23, 1956	5.33	669		May 23, 1963	5.20	650
	Jan. 26, 1956	6.68	1,070		May 27, 1963	5.50	750
	May 4, 1956	6.12	906		June 15, 1963	4.50	440
	May 22, 1956	6.13	909		Nov. 15, 1963	3.89	302
				1965	Dec. 24, 1964	7.06	1,430
1957	May 19, 1957	6.27	951		Jan. 6, 1965	5.85	890
	June 1, 1957	5.00	576		May 1, 1965	4.50	440
1958	Feb. 24, 1958	5.08	432		May 18, 1965	5.19	647
	Mar. 16, 1958	5.49	687		June 5, 1965	5.00	590
	Apr. 3, 1958	7.54	1,420				
	May 20, 1958	6.22	936				

2825. South Fork Tuolumne River near Buck Meadows, Calif.

Location--Lat 37°50'15", long 120°02'40", in SW $\frac{1}{4}$ sec.19, T.1 S., R.18 E., 600 ft upstream from South Fork trail bridge, a quarter of a mile upstream from mouth, and 2 miles northeast of Buck Meadows.

Drainage area--164 sq mi.

Gage--Recording. Altitude of gage is 1,450 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,500 cfs.

Bankfull stage--Not subject to overflow.

Historical data--Largest peak known in period 1910-22 occurred Jan. 25, 1914, stage 8 to 10 ft, site and datum then in use, discharge not determined.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Feb. 21, 1917	2.7	3,010	1920	May 20, 1920	6.41	1,270
1918	Mar. 7, 1918	6.95	1,920	1921	Jan. 18, 1921	7.75	3,160
1919	May 28, 1919	6.9	1,860				

2830. Tuolumne River near Buck Meadows, Calif.
(Published as "near Groveland" prior to 1916).

Location.--Lat 37°50'10", long 120°02'55", in SE $\frac{1}{4}$ sec.24, T.1 S., R.17 E., two-thirds of a mile downstream from South Fork Tuolumne River and 2 miles north of Buck Meadows.

Drainage area.--924 sq mi.

Gage.--Recording. Prior to Jan. 1, 1913, at different datum. Jan. 1, 1913, to Sept. 30, 1931, at site half a mile downstream at different datum. Altitude of gage is 1,420 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 17,000 cfs Jan. 1, 1913, to Sept. 30, 1931; below 11,400 cfs in 1911 and subsequent to Sept 30, 1931.

Bankfull stage.--Not subject to overflow at site used after Sept. 30, 1931.

Historical data.--Flood of Jan. 14, 1909, reached a maximum daily discharge of 35,000 cfs.

Remarks.--Peaks regulated by Lake Eleanor (capacity, 26,100 acre-ft) beginning June 23, 1918, and by Hetch Hetchy Reservoir (capacity, 360,400 acre-ft) beginning Apr. 6, 1923. Peaks may also be affected by diversions to Moccasin powerhouse since 1925, and for domestic and industrial use in city of San Francisco through Hetch Hetchy aqueduct since October 1934. Peak for the year 1911 is maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 30, 1911	15.4	45,200	1925	Feb. 6, 1925	10.5	13,800
1913	May 18, 1913	-	9,440	1926	May 20, 1926	8.20	6,570
1914	Jan. 25, 1914	12.73	25,400	1927	June 7, 1927	10.20	12,600
1916	June 9, 1916	10.3	12,400	1928	Mar. 25, 1928	12.05	21,200
1917	June 10, 1917	11.3	17,700	1929	June 16, 1929	11.0	16,200
1918	June 14, 1918	10.19	12,600	1930	June 12, 1930	8.40	7,010
1919	May 29, 1919	10.96	16,200	1931	May 14, 1931	5.77	2,480
1920	May 21, 1920	10.22	12,600	1932	June 22, 1932	11.0	11,800
1921	June 11, 1921	10.23	12,600	1933	June 13, 1933	11.25	12,300
1922	June 5, 1922	11.15	17,200	1934	Dec. 13, 1933	6.86	2,940
1923	June 10, 1923	9.93	11,400	1935	June 5, 1935	11.70	13,700
1924	May 12, 1924	7.25	4,590	1936	May 16, 1936	10.58	9,900

2850. North Fork Tuolumne River above Dyer Creek, near Tuolumne, Calif.

Location.--Lat 37°58'53", long 120°12'20", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.34, T.1 N., R.16 E., on left bank at Riverside Guard Station, 0.2 mile upstream from Dyer Creek, and 2.2 miles northeast of Tuolumne.

Drainage area.--69.2 sq mi.

Gage.--Recording. Altitude of gage is 2,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown in 1956. Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	10.7	-	1961	Dec. 1, 1960	2.62	350
1959	Feb. 16, 1959	4.03	1,460	1962	Feb. 9, 1962	4.79	2,420
1960	Feb. 8, 1960	3.90	1,320		Feb. 15, 1962	3.75	1,170

Peak stages and discharges of North Fork Tuolumne River above Dyer Creek, near Tuolumne, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Jan. 31, 1963	5.79	4,130	1965	Dec. 23, 1964	5.16	2,990
	Mar. 28, 1963	3.44	892		Dec. 23, 1964	4.13	1,570
	Apr. 7, 1963	3.20	700		Jan. 7, 1965	4.21	1,660
	Apr. 14, 1963	3.70	1,120		Jan. 23, 1965	3.44	892
	May 8, 1963	3.24	732				
1964	Nov. 15, 1963	3.53	967				

2860. Tuolumne River near Jacksonville, Calif.

Location.--Lat 37°50'50", long 120°21'40", in S $\frac{1}{2}$ sec.18, T.1 S., R.15 E., three-quarters of a mile upstream from Woods Creek, three-quarters of a mile east of Jacksonville, and $\frac{1}{2}$ miles downstream from Moccasin Creek.

Drainage area.--1,343 sq mi.

Gage.--Recording. Altitude of gage is 620 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 17,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Lake Eleanor (capacity, 26,100 acre-ft) beginning June 23, 1918, and by Hetch Hetchy Reservoir (capacity, 360,400 acre-ft) beginning Apr. 6, 1923. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	May 11, 1924	5.01	5,010	1930	June 10, 1930	6.40	8,460
1925	Feb. 6, 1925	11.2	26,500				
1926	May 19, 1926	6.34	8,160	1931	May 14, 1931	4.36	3,660
1927	Feb. 18, 1927	8.55	16,700	1932	Feb. 6, 1932	9.04	18,200
1928	Mar. 25, 1928	12.38	35,300	1933	May 31, 1933	5.70	6,540
1929	June 16, 1929	10.17	23,900	1934	Jan. 1, 1934	5.44	5,960

2865. Woods Creek near Jacksonville, Calif.

Location.--Lat 37°51'30"; long 120°23'45", in SE $\frac{1}{4}$ sec.11, T.1 S., R.14 E., on right bank 200 ft downstream from Blue Gulch, 1.5 miles upstream from mouth, and 1.5 miles northwest of Jacksonville.

Drainage area.--97.2 sq mi.

Gage.--Recording. Prior to Oct. 1, 1947, at datum 2.00 ft higher. Datum of gage is 653.65 ft above mean sea level, unadjusted.

Stage-discharge relation.--Defined by current-meter measurements below 4,300 cfs and extended above on basis of surface-float measurements at 6,980 and 7,410 cfs, and slope-area measurement at 14,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Low peaks may be affected by diversion of water from the Stanislaus River basin into Woods Creek basin by way of Tuolumne Canal (capacity, about 60 cfs) beginning in 1937. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 900 cfs.

SAN JOAQUIN RIVER BASIN

Peak stages and discharges of Woods Creek near Jacksonville, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 5, 1925	7.54	7,000	1952	Dec. 4, 1951	6.93	1,150
1926	Feb. 14, Apr. 8, 1926	4.85	2,340	1952	Dec. 30, 1951	8.60	1,970
1927	Feb. 18, 1927	6.5	4,600	1952	Jan. 12, 1952	10.65	3,150
1928	Mar. 25, 1928	7.00	5,600	1952	Jan. 14, 1952	11.15	3,450
1929	Feb. 4, 1929	3.68	1,270	1952	Jan. 25, 1952	11.00	3,360
1930	Mar. 5, 1930	5.25	2,820	1952	Feb. 1, 1952	7.85	1,580
1931	Feb. 14, 1931	2.77	498	1952	Mar. 15, 1952	8.11	1,820
1932	Feb. 6, 1932	8.50	9,580	1952	Mar. 19, 1952	8.80	2,190
1933	Jan. 29, 1933	2.81	695	1953	Dec. 30, 1952	7.56	1,300
1934	Jan. 1, 1934	4.39	1,700	1953	Jan. 14, 1953	7.27	1,180
1935	Apr. 8, 1935	6.88	5,100	1953	Jan. 20, 1953	8.60	1,970
1936	Feb. 14, 1936	8.15	8,060	1953	Apr. 27, 1953	9.24	2,320
1937	Feb. 6, 1937	9.12	10,600	1954	Jan. 24, 1954	7.42	1,370
1938	Feb. 9, 1938	10.5	13,500	1954	Feb. 13, 1954	6.82	1,100
1939	Jan. 30, 1939	4.30	550	1955	Jan. 1, 1955	9.85	2,670
1940	Mar. 31, 1940	8.80	5,500	1956	Dec. 23, 1955	14.66	14,400
1941	Apr. 4, 1941	7.50	3,800	1956	Dec. 26, 1955	11.2	6,140
1942	Jan. 25, 1942	5.85	2,120	1956	Jan. 5, 1956	7.30	1,490
1943	Jan. 21, 1943	10.35	8,200	1956	Jan. 15, 1956	10.38	4,750
1944	Feb. 9, 1944	-	972	1956	Jan. 22, 1956	8.51	2,470
1944	Feb. 22, 1944	-	1,430	1956	Jan. 26, 1956	9.00	2,960
1944	Feb. 29, 1944	-	2,040	1956	Feb. 23, 1956	6.36	920
1944	Mar. 4, 1944	7.95	3,570	1957	Mar. 5, 1957	6.92	1,240
1945	Nov. 10, 1944	-	1,670	1957	May 19, 1957	8.22	2,210
1945	Feb. 1, 1945	-	4,510	1958	Jan. 26, 1958	6.47	1,010
1945	Feb. 15, 1945	11.5	6,900	1958	Feb. 3, 1958	7.14	1,420
1945	Mar. 15, 1945	-	3,840	1958	Feb. 12, 1958	6.65	1,120
1945	Mar. 22, 1945	-	1,390	1958	Feb. 25, 1958	11.10	6,140
1945	Mar. 26, 1945	-	1,510	1958	Mar. 15, 1958	9.00	3,280
1946	Dec. 22, 1945	7.53	3,000	1958	Mar. 21, 1958	8.95	3,210
1946	Dec. 23, 1945	-	1,900	1958	Apr. 2, 1958	10.04	4,600
1946	Dec. 25, 1945	-	1,580	1959	Jan. 10, 1959	9.22	3,320
1946	Jan. 4, 1946	-	976	1959	Feb. 11, 1959	7.49	1,620
1946	Mar. 30, 1946	-	1,530	1959	Feb. 16, 1959	8.32	2,500
1947	Nov. 23, 1946	-	1,000	1959	Feb. 18, 1959	6.43	975
1947	Feb. 12, 1947	-	1,060	1960	Feb. 1, 1960	7.28	1,540
1947	Mar. 10, 1947	6.40	2,040	1960	Feb. 8, 1960	9.83	4,320
1948	Mar. 24, 1948	8.59	2,150	1960	Apr. 27, 1960	6.40	960
1948	Apr. 4, 1948	-	923	1961	Dec. 2, 1960	5.33	540
1948	Apr. 10, 1948	-	1,040	1962	Feb. 9, 1962	8.53	2,720
1949	Mar. 3, 1949	10.70	3,320	1962	Feb. 15, 1962	9.68	4,110
1949	Mar. 12, 1949	-	1,000	1962	Mar. 6, 1962	9.10	3,400
1950	Jan. 17, 1950	-	2,180	1963	Jan. 31, 1963	13.50	11,300
1950	Feb. 4, 1950	9.80	2,780	1963	Feb. 13, 1963	6.97	1,300
1950	Mar. 24, 1950	-	1,950	1963	Mar. 28, 1963	10.29	4,740
1950	Apr. 8, 1950	-	1,760	1963	Apr. 14, 1963	7.21	1,470
1951	Nov. 18, 1950	11.75	3,820	1964	Nov. 20, 1963	6.37	945
1951	Dec. 3, 1950	10.70	3,180	1964	Jan. 22, 1964	7.86	1,980
1951	Dec. 8, 1950	11.38	3,590	1965	Nov. 12, 1964	6.35	935
1951	Jan. 11, 1951	7.62	1,470	1965	Dec. 23, 1964	12.40	8,650
1951	Jan. 18, 1951	8.87	2,120	1965	Dec. 27, 1964	9.08	3,300
1951	Feb. 5, 1951	7.62	1,470	1965	Jan. 6, 1965	10.42	5,070
1952	Dec. 1, 1951	7.65	1,360	1965	Jan. 24, 1965	6.37	1,100
				1965	Apr. 10, 1965	7.34	1,720

2880. Tuolumne River above La Grange Dam, near La Grange, Calif.
(Published as "at La Grange" prior to 1912, and as "near La Grange" or
"at La Grange Dam, near La Grange" 1913-17)

Location.--Lat 37°42'35", long 120°24'45", in NE $\frac{1}{4}$ sec.3, T.3 S., R.14 E., on
left bank 0.5 mile downstream from Don Pedro Dam, 3.5 miles upstream from La
Grange Dam, and 5 miles upstream from La Grange.

Drainage area.--1,532 sq mi.

Gage.--Nonrecording prior to Feb. 29, 1916; recording thereafter. Prior to
Mar. 31, 1908, and Sept. 25 to Dec. 5, 1908, at site 5 miles downstream be-
low point of reentrance of Sierra and San Francisco Power Co.'s canal, at
different datum. Apr. 1 to Sept. 24, 1908, and Dec. 5, 1908, to Feb. 29,
1916, at site 3.5 miles downstream at La Grange Dam, diversion point of Tur-
lock and Modesto Canals, at different datum. Altitude of gage is 330 ft
(from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 19,000
cfs prior to Dec. 5, 1908; below 19,000 cfs for period Dec. 6, 1908, to
Feb. 29, 1916; and below 17,000 cfs and extended above on basis of computa-
tions of flow over dam at 29,200, 34,400, and 61,000 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--The flood of January 1862 reached a peak discharge of 130,000
cfs as determined by L. Wagoner, from high-water marks.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished
by city and county of San Francisco. Peaks regulated by Don Pedro power-
plant, Don Pedro Reservoir (capacity, 290,400 acre-ft) beginning Nov. 14,
1922, Hetch Hetchy Reservoir (usable capacity, 360,400 acre-ft) beginning
Apr. 6, 1923, Cherry Lake (capacity, 268,200 acre-ft) beginning in December
1955 and Lake Eleanor (usable capacity, 26,100 acre-ft) beginning June 23,
1918. Diversion through Hetch Hetchy aqueduct to San Francisco began Oct. 19,
1934. Peaks for the years 1897-1912, 1914, and 1915 are maximum observed.
Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	January 1862	-	130,000	1926	May 19, 1926	12.65	7,110
1897	Feb. 3, 1897	-	18,800	1927	Apr. 30, 1927	20.35	19,400
1898	Dec. 8, 1897,	8.0	7,600	1928	Mar. 25, 1928	29.6	38,100
	Apr. 25-27, 1898			1929	May 16, 17, 1929	9.50	3,330
1899	Mar. 25, 1899	13.0	29,800	1930	June 13, 1930	12.75	7,410
1900	Jan. 3, 1900	10.0	15,000	1931	Apr. 15, 1931	8.69	2,610
1901	Jan. 7, 1901	12.3	25,600	1932	June 22, 1932	15.9	11,600
1902	Apr. 7, 1902	9.7	13,800	1933	June 15, 1933	14.33	9,130
1903	Apr. 1, 1903	11.4	21,000	1934	Apr. 11, 1934	8.97	2,910
1904	Feb. 25, Mar. 20, 1904	10.6	17,400	1935	Apr. 8, 1935	22.2	22,800
1905	Oct. 11, 1904	10.9	18,800	1936	May 16, 1936	15.3	10,900
1906	Mar. 24, 1906	14.0	36,500	1937	May 15, 1937	16.3	12,700
1907	Mar. 19, 1907	16.0	52,000	1938	Feb. 11, 1938	27.3	34,400
1908	Apr. 30, May 1, 2, 1908	3.35	5,420	1939	May 1, 1939	12.08	6,210
1909	Jan. 14, 1909	10.10	29,000	1940	Mar. 31, 1940	27.2	29,200
1910	Dec. 9, 1909	-	20,500	1941	May 26, 1941	17.18	13,300
1911	Jan. 31, 1911	16.45	60,300	1942	May 26, 1942	18.8	15,500
1912	June 4, 1912	5.65	12,200	1943	June 2, 1943	21.46	19,700
1913	May 19, 1913	-	9,500	1944	May 23, 1944	11.74	4,990
1914	Jan. 25, 1914	16.0	57,900	1945	June 15, 1945	15.50	10,300
1915	May 13, 1915	7.1	17,200	1946	May 21, 1946	15.50	10,300
1916	Mar. 20, 1916	22.65	23,000	1948	June 26, 1948	13.47	7,260
1917	Feb. 21, 1917	27.58	36,500	1949	Apr. 14, 15, 1949	11.53	4,740
1918	Mar. 7, 1918	22.47	23,300	1950	June 2, 1950	15.06	9,610
1919	May 29, 1919	18.10	15,600	1951	Dec. 8, 1950	43.8	61,000
1920	Apr. 16, 1920	18.05	15,500	1952	May 15, 1952	15.87	11,400
1921	Jan. 18, 1921	-	25,000	1953	June 19, 1953	14.44	9,260
1922	June 5, 1922	20.7	19,900	1954	Mar. 11, 1954	13.40	7,700
1923	June 25, 1923	16.4	12,900	1955	Apr. 15, 1955	9.45	2,860
1924	Oct. 12, 1923	9.85	3,600	1956	Dec. 24, 1955	34.00	41,700
1925	May 5, 1925	19.85	18,300	1957	June 8, 1957	13.80	7,520
				1958	June 20, 1958	16.15	11,800

Peak stages and discharges of Tuolumne River above La Grange Dam, near La Grange, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Dec. 23, 1958	9.42	2,680	1962	Mar. 9, 1962	11.50	5,100
1960	Feb. 4, 1960	9.57	2,860	1963	June 19, 1963	13.83	8,340
				1964	Dec. 9, 1963	9.63	3,030
1961	Aug. 31, 1961	9.54	2,940	1965	Jan. 7, 1965	13.90	8,450

2900. Tuolumne River at Modesto, Calif.

Location.--Lat 37°37'38", long 120°59'20", in SW $\frac{1}{4}$ sec.33, T.3 S., R.9 E., on left bank at bridge on U.S. Highway 99 in Modesto, 0.2 mile downstream from Dry Creek.

Drainage area.--1,883 sq mi.

Gage.--Nonrecording prior to Dec. 31, 1896; recording thereafter. Prior to Dec. 31, 1896, at site 2,000 ft downstream at different datum. Mar. 27, 1940, to July 11, 1947, at site 1,700 ft downstream, and July 11, 1947, to Nov. 16, 1953, at site 1,000 ft downstream at same datum. Datum of gage is mean sea level, unadjusted (levels by Modesto Irrigation District).

Stage-discharge relation.--Defined by current-meter measurements below 9,500 cfs prior to Dec. 31, 1896; below 17,400 cfs for period Mar. 27, 1940, to July 11, 1947; below 50,900 cfs for period July 11, 1947, to Nov. 16, 1953; and below 37,500 cfs thereafter.

Bankfull stage.--64 ft at present site and datum.

Remarks.--Peaks regulated by Hetch Hetchy Reservoir (capacity, 330,400 acre-ft) beginning Apr. 6, 1923, Lake Eleanor (capacity, 26,100 acre-ft) beginning June 23, 1918, Cherry Lake (capacity, 268,200 acre-ft) beginning in December 1955, and Don Pedro Reservoir (capacity, 290,400 acre-ft) beginning Nov. 14, 1922, and by Don Pedro powerplant. Peaks may be affected by diversions from Stanislaus River basin into Tuolumne River basin through Tuolumne Canal (capacity, about 55 cfs), and diversions for irrigation through Turlock Canal (capacity, about 2,300 cfs) beginning prior to 1898, and Modesto Canal (capacity, about 1,900 cfs) beginning prior to 1903. Peak for the year 1895 is maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1895	Feb. 13, 1895	20.7	19,650	1953	June 22, 1953	49.27	6,510
				1954	Mar. 18, 1954	49.18	6,190
1940	Mar. 27, 1940	63.1	18,200	1955	Jan. 17, 1955	43.43	2,950
1943	Mar. 11, 1943	59.62	17,400	1956	Dec. 25, 1955	66.43	37,600
1944	Mar. 5, 1944	44.76	3,410	1957	June 10, 1957	46.31	4,610
1945	Feb. 5, 1945	51.32	8,070	1958	Apr. 4, 1958	56.00	12,200
				1959	Feb. 19, 1959	44.47	3,320
1946	May 22, 1946	50.54	7,640	1960	Feb. 11, 1960	43.08	2,200
1947	Nov. 23, 1946	42.13	2,220				
1948	June 18, 1948	46.58	4,570	1961	Dec. 20, 1960	42.09	849
1949	Mar. 5, 1949	43.54	3,120	1962	Mar. 10, 1962	47.76	5,390
1950	June 3, 1950	50.29	6,720	1963	Feb. 14, 1963	51.21	7,340
				1964	Dec. 2, 1963	44.02	2,960
1951	Dec. 9, 1950	69.19	57,000	1965	Jan. 7, 1965	55.35	11,100
1952	Jan. 26, 1952	53.46	10,500				

2920. Middle Fork Stanislaus River at Kennedy Meadows, near Dardanelle, Calif.

(Published as "at Kennedy Meadows" prior to 1963)

Location.--Lat 38°17'50", long 119°44'25", in NE $\frac{1}{4}$ sec.11, T.5 N., R.20 E., on right bank at upper end of Kennedy Meadows, 1.3 miles upstream from Deadman Creek, 1.6 miles downstream from Relief Reservoir, and 6.0 miles west of Sonora Pass.

Drainage area.--47.5 sq mi.

Gage.--Recording. Datum of gage is 6,320.1 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended above on basis of slope-area measurement at 1,700 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Relief Reservoir (usable capacity, 15,600 acre-ft) beginning in 1909. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	May 29, 1939	4.60	496	1953	June 18, 1953	5.93	1,160
1940	May 25, 1940	5.60	880	1954	May 21, 1954	5.69	965
				1955	June 10, 1955	5.89	1,070
1941	June 20, 1941	5.98	1,060	1956	Dec. 23, 1955	6.51	1,480
1942	July 4, 1942	5.86	1,000	1957	June 3-4, 1957	5.66	1,040
1943	June 1, 1943	6.17	1,160	1958	June 18, 1958	6.11	1,310
1944	May 23, 1944	5.1	668	1959	June 6, 1959	4.57	533
1945	May 7, 1945	5.78	961	1960	June 2, 1960	5.36	880
1947	June 7, 1947	5.04	644	1961	June 5, 1961	4.21	408
1948	May 27, 1948	5.41	796	1962	June 19, 1962	5.44	920
1949	May 26, 1949	5.34	767	1963	June 16, 1963	6.00	1,240
1950	May 31, 1950	5.84	1,090	1964	June 15, 1964	4.62	548
1951	Nov. 20, 1950	6.66	1,700	1965	Dec. 23, 1964	5.96	1,220
1952	June 6, 1952	6.01	1,220				

2925. Clark Fork Stanislaus River near Dardanelle, Calif.

Location.--Lat 38°21'50", long 119°52'30", in SE $\frac{1}{4}$ sec.15, T.6 N., R.19 E., on right bank 0.3 mile upstream from mouth and 3 miles northwest of Dardanelle.

Drainage area.--67.5 sq mi.

Gage.--Recording. Datum of gage is 5,507.3 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 4,350 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 20, 1950	11.88	4,350	1955	May 21, 1955	5.87	760
	Dec. 3, 1950	7.54	1,470		May 29, 1955	6.00	805
	Dec. 8, 1950	8.61	2,070		June 9, 1955	6.76	1,090
	May 27, 1951	7.13	1,260		July 14, 1955	5.42	616
	June 16, 1951	5.96	791	1956	Dec. 23, 1955	10.54	3,340
1952	June 7, 1952	8.03	1,720		May 4, 1956	5.60	695
	June 18, 1952	6.57	1,020		May 23, 1956	7.36	1,380
	July 3, 1952	6.25	892		June 3, 1956	7.14	1,280
1953	Apr. 25, 1953	5.29	603		June 10, 1956	7.16	1,280
	June 18, 1953	7.57	1,380		June 28, 1956	6.79	1,140
					July 24, 1956	5.34	607
1954	May 8, 1954	6.08	834	1957	May 18, 1957	5.52	667
	May 20, 1954	6.48	982		June 4, 1957	6.96	1,200

Peak stages and discharges of Clark Fork Stanislaus River near Dardanelle, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	June 25, 1957	5.42	632	1963	Feb. 1, 1963	9.32	2,300
1958	May 10, 1958	5.92	807		May 23, 1963	6.89	1,200
	May 18, 1958	7.04	1,240		June 1, 1963	6.28	952
	June 17, 1958	7.08	1,250		June 8, 1963	5.49	677
	June 5, 1958	5.80	765		June 16, 1963	7.54	1,490
					June 19, 1963	6.67	1,110
1959	May 12, 1959	5.15	550		June 26, 1963	5.50	680
1960	May 11, 1960	5.48	653	1964	May 19, 1964	5.34	632
	June 2, 1960	5.60	695	1965	Dec. 23, 1964	10.08	3,020
1961	May 25, 1961	5.18	559		Apr. 30, 1965	5.72	752
1962	June 2, 1962	6.03	846		May 17, 1965	6.13	896
	June 9, 1962	6.10	870		June 11, 1965	6.93	1,210
	June 19, 1962	6.06	856		June 21, 1965	5.86	801
					Aug. 14, 1965	5.57	701

a Occurred Jan. 31, 1963.

2927. Middle Fork Stanislaus River at Hells Half Acre Bridge, Calif.

Location--Lat 38°14'49", long 120°02'02", in NE $\frac{1}{4}$ sec. 31, T.5 N., R.18 E., on left bank 200 ft upstream from Donnell's powerhouse, 800 ft downstream from Hells Half Acre Bridge, 1.1 miles upstream from Cow Creek, and 3.7 miles northwest of Strawberry.

Drainage area--287 sq mi.

Gage--Recording. Prior to Aug. 9, 1961, at site 1,600 ft upstream at datum 50.4 ft higher. Datum of gage is 3,410.94 ft above mean sea level (Oakdale and South San Joaquin Irrigation Districts bench mark).

Stage-discharge-relation--Defined by current-meter measurements below 2,400 cfs and extended on basis of slope-area measurement at 26,600 cfs prior to Aug. 9, 1961; defined by current-meter measurements below 2,090 cfs thereafter.

Bankfull stage--Not subject to overflow.

Historical data--Flood of Dec. 23, 1955, 17.72 ft, site and datum in use prior to Aug. 9, 1961, is maximum stage known since at least 1905.

Remarks--Peaks regulated by Relief Reservoir (capacity, 15,600 acre-ft) beginning in 1909, and by Donnell's Reservoir (capacity, 62,590 acre-ft) beginning in 1957, and by diversion around station through Donnell's powerhouse. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	17.72	26,600	1961	Apr. 3, 1961	3.09	198
1957	June 6, 1957	6.77	2,950	1962	May 9, 1962	8.92	2,920
1958	May 18, 1958	9.05	5,820	1963	Jan. 31, 1963	12.20	7,600
1959	May 16, 1959	4.26	766	1964	June 15, 1964	6.34	890
1960	June 2, 1960	5.43	1,630	1965	Dec. 24, 1964	14.2	10,200

2930. Middle Fork Stanislaus River at Sand Bar Flat, near Avery, Calif.

Location.--Lat 38°11'12", long 120°08'28", in SE $\frac{1}{4}$ sec.19, T.4 N., R.17 E., on left bank 1 mile upstream from diversion dam of Pacific Gas and Electric Co. at Sand Bar Flat, 6.5 miles north of Long Barn, and 13 miles southeast of Avery.

Drainage area.--325 sq mi.

Gage.--Recording. Datum of gage is 2,755 ft above mean sea level (river-profile survey).

Stage-discharge-relation.--Defined by current-meter measurements below 6,000 cfs and extended above on basis of computation of flow over dam.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Relief Reservoir (capacity, 15,600 acre-ft) beginning in 1909, Donnell's Reservoir (capacity, 62,590 acre-ft) beginning in April 1957, and Beardsley Lake (capacity, 98,300 acre-ft) beginning in January 1957. Peaks may be affected by diversion through Philadelphia Canal (capacity, about 65 cfs) from South Fork Stanislaus River into Middle Fork beginning Nov. 26, 1916. Only annual peaks are shown prior to Oct. 1, 1946, and subsequent to Sept. 37, 1956. Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 25, 1928	14.80	8,430	1952	Apr. 7, 1952	8.32	2,260
1929	June 16, 1929	-	4,060		Apr. 25, 1952	10.45	4,420
1930	June 12, 1930	-	2,690		May 27, 1952	11.92	6,640
1932	May 17, 1932	-	4,400	1953	Apr. 27, 1953	11.85	6,520
1933	May 30, 1933	-	3,840		May 20, 1953	8.37	2,300
					June 7, 1953	8.49	2,390
1935	May 25, 1935	11.75	5,190		June 19, 1953	10.43	4,390
1936	May 13, 1936	11.30	4,580	1954	Mar. 9, 1954	11.68	6,230
1937	May 14, 1937	11.90	5,320		Apr. 16, 1954	9.27	3,120
1938	Dec. 11, 1937	21.0	24,000		Apr. 22, 1954	9.48	3,330
1939	Apr. 8, 1939	7.77	1,920		May 8, 1954	10.24	4,160
1940	Mar. 27, 1940	10.6	4,690		May 20, 1954	9.76	3,620
1941	May 11, 1941	11.25	5,620	1955	May 13, 1955	8.78	2,680
1942	May 25, 1942	11.77	6,380		May 21, 1955	9.35	3,200
1943	Jan. 21, 1943	12.70	8,080		May 30, 1955	9.26	3,110
1944	May 9, 1944	9.31	3,140		June 10, 1955	9.71	3,560
1945	Feb. 2, 1945	13.14	8,960	1956	Dec. 23, 1955	20.2	26,000
1946	Apr. 25, 1946	10.13	4,030		Jan. 15, 1956	10.81	5,020
1947	May 2, 1947	9.15	2,980		Jan. 23, 1956	9.50	3,350
1948	May 6, 1948	-	3,610		Apr. 25, 1956	9.15	3,020
	May 16, 1948	-	4,340		May 4, 1956	10.87	4,370
	May 26, 1948	11.01	5,180		May 23, 1956	11.58	6,000
	June 9, 1948	-	3,670		May 31, 1956	10.57	4,570
1949	Apr. 24, 1949	9.61	3,440		June 4, 1956	10.48	4,450
	May 14, 1949	-	3,170		June 11, 1956	10.03	3,910
	May 27, 1949	-	3,210		June 29, 1956	9.33	3,180
	June 11, 1949	-	2,310		July 26, 1956	7.88	1,930
1950	Apr. 27, 1950	-	3,310	1957	June 4, 1957	10.40	4,350
	May 27, 1950	10.67	4,700	1958	May 23, 1958	11.60	6,030
	June 21, 1950	-	2,450	1959	June 15, 1959	6.63	1,060
1951	Nov. 18, 1950	18.13	20,100	1960	June 6, 1960	7.50	1,700
	Dec. 3, 1950	17.12	17,300	1961	Aug. 11, 1961	5.61	734
	Dec. 8, 1950	16.52	15,800	1962	June 10, 1962	9.29	3,140
	Dec. 14, 1950	9.91	3,770	1963	May 8, 1963	11.07	5,250
	May 28, 1951	9.65	3,480	1964	June 15, 1964	7.29	1,570
				1965	June 6, 1965	9.66	3,510

2935. North Fork Stanislaus River below Silver Creek, Calif.

Location.--Lat 38°26'22", long 120°00'53", in SE $\frac{1}{4}$ sec.20, T.7 N., R.18 E., on right bank 100 ft downstream from Silver Creek and 5.6 miles northeast of Big Meadow.

Drainage area.--27.8 sq mi.

Gage.--Recording. Datum of gage is 6,677.3 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks may be affected by Lake Alpine and Union and Utica Reservoirs (combined capacity, 9,600 acre-ft) beginning about 1906. Only annual peaks are shown prior to Oct. 1, 1960. Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 21, 1950	7.44	445	1962	Apr. 23, 1962	6.70	450
1951	Nov. 20, 1950	11.17	2,790		May 5-6, 1962	7.16	578
					May 22, 1962	7.03	539
1953	Apr. 27, 1953	7.58	654		June 3, 1962	6.35	370
1954	Apr. 22, 1954	6.96	480	1963	Jan. 31, 1963	8.75	970
1955	May 21, 1955	6.97	482		May 9, 1963	7.22	470
					May 24, 1963	7.70	600
1956	Dec. 23, 1955	9.17	1,370	1964	Nov. 15, 1963	6.50	392
1957	May 18, 1957	9.07	1,320		May 14, 1964	6.14	311
1958	May 23, 1958	8.03	883				
1959	June 17, 1959	7.30	624	1965	Dec. 24, 1964	11.16	2,780
1960	May 11, 1960	6.57	405		Apr. 29, 1965	7.26	578
1961	Apr. 18, 1961	5.70	244		May 18, 1965	7.28	583
1962	Apr. 14, 1962	6.73	458		June 4, 1965	6.55	400

2940. Highland Creek below Spicer Meadows Reservoir, Calif.

Location.--Lat 38°23'50", long 119°59'30", in SW $\frac{1}{4}$ sec.3, T.6 N., R.18 E., on right bank just downstream from Spicer Meadows Reservoir dam, 5.5 miles upstream from mouth and 7 miles east of Big Meadow.

Drainage area.--42.4 sq mi.

Gage.--Recording. Datum of gage is 6,374.8 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Historical data.--Driftline at 13.6 ft was noted on June 16, 1949.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Spicer Meadows Reservoir (capacity, 4,060 acre-ft) beginning in 1929. Only annual peaks are shown prior to Oct. 1, 1960. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	May 21, 1950	6.62	731	1961	Apr. 3, 1961	5.20	520
1951	Nov. 20, 1950	11.50	8,800	1962	Apr. 14, 1962	6.15	980
					Apr. 23, 1962	5.85	815
1953	Apr. 27, 1953	7.72	2,060		May 5, 1962	6.50	1,190
1954	Mar. 9, 1954	8.00	2,350		June 2, 1962	6.14	974
1955	May 21, 1955	6.33	1,020		June 9, 1962	5.67	725
					June 19, 1962	5.17	510
1956	Dec. 23, 1955	11.50	8,800	1963	Jan. 31, 1963	11.88	9,860
1957	May 18, 1957	8.48	3,000		May 8, 1963	6.80	1,400
1958	May 18, 1958	7.45	1,920		May 23, 1963	6.67	1,310
1959	Apr. 30, 1959	5.32	576		June 16, 1963	5.54	663
1960	Mar. 7, 1960	7.05	1,530				

Peak stages and discharges of Highland Creek below Spicer Meadows Reservoir,
Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1964	May 13, 1964	5.54	695	1965	Apr. 29, 1965	6.42	1,160
					May 17, 1965	6.50	1,210
1965	Dec. 23, 1964	10.96	7,400		May 29, 1965	5.96	890
	Apr. 21, 1965	6.06	946		June 4, 1965	5.88	850

2945. North Fork Stanislaus River near Avery, Calif.

Location.--Lat 38°14'45", long 120°17'20", in NE¹ sec.35, T.5 N., R.15 E., on right bank 700 ft upstream from intake of Utica Canal, 3.3 miles upstream from Beaver Creek, and 5.1 miles northeast of Avery.

Drainage area.--163 sq mi.

Gage.--Nonrecording at datum 0.05 ft lower prior to September 1922; recording thereafter. Datum of gage is 3,388.3 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 4,500 cfs and extended above on basis of slope-area measurement at 29,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks for the years 1915-22, are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1915	May 11, 1915	8.7	6,210	1949	May 1, 1949	-	2,260
1916	May 6, 1916	6.6	2,760		May 14, 1949	7.12	3,470
1917	Apr. 30, 1917	6.3	2,450	1950	Apr. 27, 1950	-	2,800
1918	Apr. 30, May 1, 1918	5.8	1,960		May 15, 1950	7.35	3,800
1919	May 7, 1919	6.00	2,150	1951	Nov. 18, 1950	13.8	29,000
1920	May 23, 1920	5.7	1,880		Dec. 3, 1950	-	25,000
					Dec. 8, 1950	-	(a)
1921	May 13, 1921	5.9	2,060		Dec. 14, 1950	6.88	3,130
1922	June 1, 1922	7.5	3,780	1952	Apr. 25, 1952	7.22	3,610
					Apr. 28, 1952	7.05	3,370
1929	June 16, 1929	6.90	3,000		May 3, 1952	6.92	3,190
1930	Apr. 24, 1930	6.18	2,230		May 13, 1952	8.12	5,090
					May 27, 1952	8.60	6,010
1931	Apr. 26, 1931	4.68	1,010	1953	Apr. 22, 1953	7.00	3,300
1932	May 11, 1932	7.90	4,690		Apr. 27, 1953	10.08	9,980
1933	May 29, 1933	7.31	3,580		May 19, 1953	6.70	2,910
1934	Mar. 29, 1934	5.88	2,000		June 7, 1953	6.11	2,260
1935	May 23, 1935	7.58	3,970		June 18, 1953	5.94	2,090
1936	June 7, 1936	8.50	5,810	1954	Mar. 9, 1954	9.20	7,400
1937	May 13, 1937	8.35	5,010		Apr. 16, 1954	6.63	2,830
1938	Dec. 11, 1937	14.1	31,100		Apr. 22, 1954	6.78	2,990
1939	Apr. 8, 1939	5.65	1,790		Apr. 27, 1954	6.35	2,500
1940	Mar. 26, 1940	9.82	9,160		May 9, 1954	6.58	2,740
1941	May 11, 1941	8.60	5,760	1955	May 13, 1955	6.12	2,270
1942	May 21, 1942	8.00	4,870		May 22, 1955	6.33	2,480
1943	Jan. 21, 1943	10.65	11,200	1956	Dec. 23, 1955	14.23	32,000
1944	May 15, 1944	6.53	2,690		Dec. 26, 1955	7.50	4,030
1945	Feb. 2, 1945	10.7	11,300		Jan. 15, 1956	8.18	5,190
					Jan. 23, 1956	6.40	2,560
1946	Apr. 25, 1946	7.30	3,730		Apr. 10, 1956	5.95	2,100
					Apr. 24, 1956	6.52	2,690
1947	May 3, 1947	6.20	2,320		May 4, 1956	8.98	6,850
					May 22, 1956	8.18	5,190
1948	May 6, 1948	-	3,660	1957	May 7, 1957	6.12	2,270
	May 16, 1948	7.82	4,550				
	May 26, 1948	-	4,540				
	June 3, 1948	-	2,570				
1949	Apr. 24, 1949	-	3,190				

a Discharge unknown; exceeded base.

Peak stages and discharges of North Fork Stanislaus River near Avery, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1957	May 18, 1957	11.18	14,300	1962	Apr. 14, 1962	7.42	3,340	
	May 28, 1957	6.00	2,150		May 5, 1962	7.65	3,760	
	June 2, 1957	6.12	2,270		June 3, 1962	6.60	2,110	
1958	Feb. 24, 1958	6.90	3,170	1963	Jan. 31, 1963	15.00	36,000	
	Apr. 20, 1958	6.10	2,250		May 8, 1963	9.07	6,780	
	May 18, 1958	8.63	6,070		May 23, 1963	7.30	3,550	
1959	Feb. 16, 1959	6.17	2,230	1964	Nov. 15, 1963	6.84	3,120	
1960	Feb. 8, 1960	7.35	3,220	1965	Dec. 24, 1964	14.00	29,000	
	Mar. 7, 1960	6.45	2,020		Apr. 21, 1965	7.32	3,830	
	May 6, 1960	6.43	2,000		Apr. 29, 1965	7.92	4,860	
1961	Apr. 4, 1961	5.73	1,320		May 18, 1965	7.13	3,530	
					May 30, 1965	6.23	2,350	
1962	Feb. 9, 1962	6.45	2,020					

2965. South Fork Stanislaus River at Strawberry, Calif.
(Published as "near Confidence" 1911-13)

Location.--Lat 38°11'51", long 120°00'27", in SW¹ sec.16, T.4 N., R.18 E., on right bank 0.3 mile downstream from bridge on State Highway 108 at Strawberry, 0.6 mile downstream from Herring Creek, and 1.2 miles downstream from Pinecrest Lake.

Drainage area.--44.8 sq mi.

Gage.--Nonrecording prior to January 1917; recording thereafter. Prior to January 1917, at site 1 mile downstream at different datum. Datum of gage is 5,235.1 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of contracted-opening measurement at 3,900 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Low peaks may be regulated by Pinecrest Lake (capacity, 18,300 acre-ft) beginning in 1916. Peaks for the years 1912-16, are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 14, 1912	4.8	1,120	1950	May 27, 1950	5.34	1,150
1913	May 18, 1913	5.5	1,510				
1914	May 31, June 17, 1914	5.6	1,570	1951	Nov. 21, 1950	9.25	3,900
1915	June 8, 1915	5.4	1,450	1952	June 6, 1952	5.72	1,330
				1953	June 18, 1953	5.57	1,240
				1954	May 18, 1954	5.26	1,080
1916	May 5, 6, 1916	4.1	775	1955	June 7, 1955	5.12	1,010
1939	Apr. 29, 1939	3.89	415	1956	Dec. 23, 1955	7.00	2,130
1940	May 12, 1940	5.32	1,150	1957	May 18, 1957	6.13	1,580
				1958	May 23, 1958	5.73	1,340
1941	May 11, 1941	5.40	1,190	1959	May 12, 1959	4.45	647
1942	June 9, 1942	5.52	1,270	1960	May 12, 1960	4.87	800
1943	June 1, 1943	6.20	1,620				
1944	May 23, 1944	4.77	815	1961	May 21, 1961	4.02	484
1945	June 4, 1945	6.3	1,680	1962	June 2, 1962	4.92	910
				1963	Feb. 1, 1963	6.52	1,810
1946	May 5, 1946	5.10	1,000	1964	May 20, 1964	4.60	724
1947	May 5, 1947	4.85	858	1965	Dec. 24, 1964	6.52	1,810
1948	May 26, 1948	5.38	1,180				
1949	May 14, 1949	5.12	1,010				

2980. South Fork Stanislaus River near Long Barn, Calif.

Location.--Lat 38°05'33", long 120°10'02", in SW $\frac{1}{4}$ sec.24, T.3 N., R.16 E., on left bank 600 ft downstream from Lyons Dam, 2 miles west of Long Barn, and 15 miles northeast of Sonora.

Drainage area.--66.9 sq mi.

Gage.--Recording. Datum of gage is 4,073.4 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of computation of flow over dam at 4,900 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Lyons Reservoir (capacity, 5,400 acre-ft) beginning in 1930 and Pinecrest Lake (capacity, 18,300 acre-ft) beginning in 1916. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	June 2, 1938	7.14	2,300	1952	July 6, 1952	6.12	1,320
1939	Apr. 28, 1939	5.82	1,320	1953	June 19, 1953	5.69	1,210
1940	May 13, 1940	5.20	1,080	1954	May 19, 1954	5.36	1,060
				1955	June 7, 1955	5.05	920
1941	June 20, 1941	5.55	1,320	1956	Dec. 23, 1955	8.00	3,160
1942	May 23, 1942	5.50	1,280	1957	June 4, 1957	7.27	2,410
1943	June 1, 1943	6.18	1,560	1958	May 24, 1958	6.05	1,450
1944	May 23, 1944	4.37	667	1959	May 13, 1959	4.65	740
1945	June 4, 1945	6.05	1,490	1960	May 11, 1960	4.70	740
1946	May 7, 1946	5.05	966	1961	May 22, 1961	4.30	580
1947	May 5, 1947	5.90	1,400	1962	June 3, 1962	4.93	845
1948	May 26, 1948	5.09	985	1963	May 24, 1963	6.28	1,610
1949	May 14, 1949	4.79	844	1964	May 21, 1964	4.35	600
1950	June 21, 1950	5.21	1,090	1965	Dec. 24, 1964	7.20	2,350
1951	Nov. 21, 1950	9.3	4,900				

3000. Stanislaus River near Knights Ferry, Calif.
(Published as "at Knights Ferry" prior to 1916)

Location.--Lat 37°52'30", long 120°36'20", in SW $\frac{1}{4}$ sec.1, T.1 S., R.12 E., 300 ft upstream from Tulloch Dam, 2 miles upstream from Goodwin Dam, and 6 miles upstream from Knights Ferry.

Drainage area.--972 sq mi; at site used prior to 1916, 980 sq mi.

Gage.--Nonrecording prior to February 1916; recording thereafter. Prior to February 1916, at site 6 miles downstream, below diversions, at different datum. Altitude of gage is 370 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs prior to February 1916; below 17,000 cfs thereafter.

Remarks.--Peaks regulated by Melones powerhouse and reservoir (capacity for power development, 106,100 acre-ft, for irrigation 110,000 acre-ft) beginning Aug. 21, 1926. Peaks may be affected by several smaller reservoirs and diversions above station. Peaks for the years 1904-15, are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	Jan. 11, 1862	33	100,000	1908	Apr. 21, 1908	9.73	3,990
				1909	Jan. 21, 1909	25.3	57,000
1904	Feb. 24, 1904	19.0	31,800	1910	Mar. 20, 1910	11.9	8,750
1905	Mar. 19, 1905	11.6	7,000				
1906	Jan. 19, 1906	15.8	19,900	1911	Jan. 31, 1911	26.0	60,000
1907	Mar. 19, 1907	27.0	64,500	1912	May 30, 1912	10.55	6,160
				1913	May 19, 1913	9.82	4,880

Peak stages and discharges of Stanislaus River near Knights Ferry, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Jan. 25, 1914	19.0	32,300	1924	May 3, 1924	2.89	2,100
1915	May 13, 1915	12.8	11,100	1925	Feb. 6, 1925	12.63	25,200
1916	Mar. 20, 1916	7.9	14,200	1926	Apr. 5, 1926	4.45	5,330
1917	Feb. 21, 1917	9.11	17,400	1927	May 17, 1927	6.75	9,840
1918	Mar. 12, 1918	7.95	14,300	1928	Mar. 25, 1928	17.0	46,000
1919	May 1, 1919	5.95	9,700	1929	June 6, 1929	4.45	5,330
1920	May 20, 1920	5.70	8,860	1930	May 19, 1930	4.46	5,330
1921	Jan. 18, 1921	9.45	16,200	1931	May 14, 1931	2.39	1,250
1922	May 18, 1922	8.25	12,500	1932	May 18, 1932	6.49	10,600
1923	Apr. 6, 1923	7.38	11,500				

3035. San Joaquin River near Vernalis, Calif.

Location.--Lat 37°40'34", long 121°15'51", 30 ft upstream from Durham Ferry highway bridge, 3 miles downstream from Stanislaus River, and 3.4 miles northeast of Vernalis, San Joaquin County.

Drainage area.--14,010 sq mi, approximately.

Gage.--Recording. Prior to Apr. 1, 1931, at different datum. Apr. 1, 1931, to Oct. 1, 1959, at datum 5.06 ft above mean sea level and 8.4 ft above datum of Corps of Engineers. Datum of gage is at mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 41,000 cfs.

Bankfull stage.--29 ft.

Remarks.--Peaks affected by storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation beginning prior to 1924. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Oct. 15, 1923	10.01	4,550	1947	Dec. 14, 1946	10.53	4,430
1930	June 17, 1930	10.56	5,050	1948	June 13, 1948	16.39	11,700
1931	Dec. 25, 1930	7.29	2,210	1949	May 17, 1949	11.52	5,340
1932	May 31, 1932	21.58	18,200	1950	June 5, 1950	18.50	14,700
1933	June 17, 1933	14.74	8,570	1951	Dec. 9, 1950	27.75	79,000
1934	Jan. 3, 1934	10.20	4,260	1952	June 2, 1952	25.33	34,400
1935	May 30, 1935	24.50	23,800	1953	June 22, 1953	15.43	10,100
1936	Feb. 25, 1936	25.47	28,700	1954	May 21, 1954	15.28	9,990
1937	June 1, 1937	a24.65	26,000	1955	Jan. 20, 1955	11.62	5,450
1938	Mar. 16, 1938	b27.05	51,200	1956	Dec. 25, 1955	26.89	50,900
1939	Feb. 10, 1939	12.05	5,660	1957	June 10, 1957	14.97	9,370
1940	Apr. 2, 1940	25.35	37,300	1958	Apr. 5, 1958	26.60	41,400
1941	Mar. 5, 1941	24.61	34,400	1959	Feb. 22, 1959	11.92	5,670
1942	June 9, 1942	23.87	27,200	1960	Feb. 11, 1960	14.67	3,310
1943	Mar. 12, 1943	25.30	38,900	1961	Jan. 29, 1961	12.56	1,610
1944	Mar. 6, 1944	13.53	7,480	1962	Feb. 21, 1962	22.85	12,600
1945	May 11, 1945	21.30	20,300	1963	May 31, 1963	23.80	13,100
1946	May 11, 1946	19.28	16,500	1964	Dec. 27, 1963	15.58	4,020
				1965	Jan. 12, 1965	28.27	22,800

a Occurred May 18, 1937.

b Occurred Feb. 12, 1938.

c Occurred May 30, 1952.

3050. San Domingo Creek near San Andreas, Calif.

Location.--Lat 38°06'55", long 120°37'00", in NE $\frac{1}{4}$ sec.14, T.3 N., R.12 E., on right bank 2.5 miles upstream from mouth, 3.2 miles downstream from French Gulch, and 6.5 miles southeast of San Andreas.

Drainage area.--27.2 sq mi.

Gage.--Nonrecording prior to Dec. 6, 1950; recording thereafter. Altitude of gage is 1,060 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 130 cfs and extended above on basis of slope-area measurement at 2,830 cfs.

Remarks.--Peaks may be affected at times by water received from North Fork Stanislaus River by way of Utica Reservoir (capacity, 2,400 acre-ft) beginning in 1908. Only annual peak is shown in 1950. Base for partial-duration series, 220 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 4, 1950	4.45	928	1956	Dec. 23, 1955	8.24	2,830
1951	Nov. 20, 1950	4.15	735		Dec. 26, 1955	4.59	487
	Dec. 8, 1950	4.18	728		Jan. 5, 1956	3.57	229
	Jan. 11, 1951	3.33	320		Jan. 15, 1956	4.45	445
	Jan. 18, 1951	3.66	447	1957	Mar. 5, 1957	3.60	235
1952	Dec. 1, 1951	3.27	242		May 18, 1957	3.66	247
	Dec. 30, 1951	3.61	338	1958	Feb. 24, 1958	3.94	310
	Jan. 12, 1952	3.92	464		Mar. 16, 1958	4.39	427
	Jan. 15, 1952	4.68	849		Mar. 22, 1958	4.33	409
	Jan. 25, 1952	4.01	504		Apr. 2, 1958	7.28	1,970
	Mar. 15, 1952	3.61	338		Apr. 6, 1958	4.08	345
	Mar. 19, 1952	3.86	437	1959	Feb. 16, 1959	3.73	265
1953	Mar. 19, 1953	3.47	296	1960	Feb. 8, 1960	4.65	508
	Apr. 27, 1953	3.92	464	1961	Mar. 17, 1961	1.80	27
1954	Feb. 13, 1954	3.15	214	1962	Feb. 10, 1962	3.70	295
1955	Dec. 3, 1954	3.71	374		Feb. 15, 1962	4.03	386
	Jan. 18, 1955	3.27	242		Mar. 6, 1962	3.29	222
1956	Dec. 19, 1955	3.92	442				

3055. San Antonio Creek near San Andreas, Calif.

Location.--Lat 38°07'50", long 120°38'10", in NE $\frac{1}{4}$ sec.10, T.3 N., R.12 E., on right bank 800 ft downstream from highway bridge, 1.9 miles upstream from mouth, 5 miles downstream from Indian Creek, and 5 miles southeast of San Andreas.

Drainage area.--46.6 sq mi.

Gage.--Recording. Altitude of gage is 940 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 250 cfs and extended above on basis of slope-area measurement at 2,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for 1950. Base for partial-duration series, 280 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 4, 1950	-	1,220	1952	Dec. 30, 1951	3.29	575
1951	Nov. 18, 1950	4.50	1,220		Jan. 12, 1952	3.81	840
	Jan. 11, 1951	2.93	406		Jan. 15, 1952	3.92	1,060
	Jan. 18, 1951	3.36	610		Jan. 25, 1952	3.37	615
	Jan. 22, 1951	2.80	348		Feb. 1, 1952	3.05	461
1952	Dec. 1, 1951	2.82	357		Feb. 16, 1952	2.67	294
					Mar. 15, 1952	3.34	600
					Mar. 18, 1952	3.10	484

Peak stages and discharges of San Antonio Creek near San Andreas, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 13, 1953	2.80	348	1957	Feb. 24, 1957	2.84	320
	Mar. 19, 1953	3.05	461		Mar. 5, 1957	2.93	378
	Apr. 27, 1953	2.91	397		May 18, 1957	3.41	677
1954	Feb. 13, 1954	2.73	277	1958	Jan. 26, 1958	2.90	355
1955	Apr. 22, 1955	2.74	295		Feb. 3, 1958	2.95	387
					Feb. 12, 1958	3.05	450
1956	Dec. 19, 1955	2.88	369		Feb. 19, 1958	2.83	320
	Dec. 23, 1955	5.66	2,500		Feb. 25, 1958	3.13	498
	Dec. 26, 1955	4.13	1,220		Mar. 21, 1958	3.85	965
	Jan. 5, 1956	2.95	410		Mar. 30, 1958	3.27	557
	Jan. 15, 1956	3.86	1,010		Apr. 3, 1958	5.64	2,490
	Jan. 23, 1956	3.21	566	1959	Feb. 16, 1959	3.07	462
	Jan. 26, 1956	3.49	753		Feb. 19, 1959	3.09	475
	Feb. 23, 1956	3.10	500				

3060. South Fork Calaveras River near San Andreas, Calif.

Location.--Lat 38°08'40", long 120°39'50", in NW¹ sec.4, T.3 N., R.12 E., on right bank 0.1 mile downstream from San Antonio Creek, 1.6 miles south of the Calaveras Cement Plant, and 3.7 miles south of San Andreas.

Drainage area.--118 sq mi.

Gage.--Nonrecording prior to Feb. 13, 1952; recording thereafter. Altitude of gage is 860 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,400 cfs and extended above on basis of slope-area measurement at 17,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for 1951. Peak for the year 1951 is maximum observed. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	6.40	5,620	1958	Mar. 21, 1958	5.30	3,440
1953	Mar. 19, 1953	4.38	1,890		Mar. 24, 1958	4.18	1,700
	Apr. 27, 1953	4.06	1,540		Apr. 2, 1958	8.79	12,000
					Apr. 6, 1958	4.82	2,610
1954	Feb. 13, 1954	3.65	1,100	1959	Feb. 11, 1959	4.33	1,920
	Mar. 16, 1954	3.62	1,070		Feb. 16, 1959	4.54	2,280
1955	Dec. 3, 1954	3.86	1,320		Feb. 19, 1959	3.91	1,410
	Jan. 1, 1955	3.75	1,200	1960	Feb. 8, 1960	5.34	3,510
	Jan. 18, 1955	4.23	1,750				
	Feb. 27, 1955	3.95	1,420	1961	Mar. 17, 1961	2.02	121
				1962	Feb. 10, 1962	5.88	3,630
1956	Dec. 19, 1955	4.16	1,660		Feb. 15, 1962	6.95	5,920
	Dec. 23, 1955	10.29	17,600		Mar. 6, 1962	5.06	2,430
	Dec. 26, 1955	5.44	3,690	1963	Jan. 31, 1963	9.20	12,600
	Dec. 31, 1955	3.71	1,160		Feb. 13, 1963	3.85	1,030
	Jan. 5, 1956	4.50	2,110		Mar. 28, 1963	6.04	3,790
	Jan. 15, 1956	5.38	3,580		Apr. 14, 1963	6.25	4,170
	Jan. 23, 1956	3.65	1,100		Apr. 20, 1963	4.54	1,650
	Jan. 26, 1956	4.06	1,540	1964	Nov. 20, 1963	4.02	1,160
	Feb. 23, 1956	3.94	1,400		Jan. 21, 1964	5.60	3,060
1957	Mar. 5, 1957	4.09	1,580	1965	Dec. 22, 1964	7.81	7,430
1958	Jan. 26, 1958	4.79	2,570		Dec. 27, 1964	5.21	2,190
	Feb. 4, 1958	4.80	2,580		Jan. 6, 1965	7.99	7,940
	Feb. 12, 1958	4.20	1,730		Apr. 9, 1965	5.51	2,950
	Feb. 19, 1958	4.91	2,740				
	Feb. 24, 1958	4.68	2,410				
	Mar. 16, 1958	4.57	2,260				

3065. Calaveritas Creek near San Andreas, Calif.

Location.--Lat 38°09'50", long 120°39'30", in SW $\frac{1}{4}$ sec.28, T.4 N., R.12 E., on right bank 0.8 mile east of Calaveritas Cement Plant, 1.0 mile upstream from mouth, and 2.6 miles southeast of San Andreas.

Drainage area.--53.0 sq mi.

Gage.--Nonrecording prior to Feb. 12, 1952; recording thereafter. Altitude of gage is 865 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,850 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown in 1951. Peak for the year 1951 is maximum observed. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	6.2	3,420	1958	Mar. 16, 1958	4.70	1,330
1953	Dec. 7, 1952	-	-		Mar. 21, 1958	4.44	1,100
	Jan. 13, 1953	3.56	789		Mar. 30, 1958	3.71	611
	Mar. 19, 1953	3.63	836		Apr. 2, 1958	6.65	4,410
					Apr. 6, 1958	4.17	915
1954	Feb. 13, 1954	3.23	583	1959	Feb. 16, 1959	3.66	605
1955	Dec. 3, 1954	4.59	1,550		Feb. 19, 1959	4.12	867
	Dec. 10, 1954	3.08	500	1960	Feb. 8, 1960	4.35	1,040
	Jan. 1, 1955	3.87	979	1961	Mar. 17, 1961	1.97	82
	Jan. 18, 1955	3.11	516		Feb. 10, 1962	4.10	940
	Apr. 22, 1955	3.35	650		Feb. 15, 1962	5.15	1,980
1956	Dec. 19, 1955	3.91	1,010		Mar. 6, 1962	3.72	692
	Dec. 23, 1955	6.33	3,600	1963	Feb. 1, 1963	6.35	3,870
	Dec. 26, 1955	4.73	1,680		Mar. 28, 1963	5.07	1,780
	Jan. 5, 1956	3.64	826		Apr. 14, 1963	4.37	1,060
	Jan. 15, 1956	5.16	2,130	1964	Jan. 21, 1964	3.22	388
	Jan. 23, 1956	4.18	1,200		Dec. 23, 1964	6.52	4,180
	Jan. 26, 1956	3.86	972		Dec. 27, 1964	4.49	1,100
	Feb. 23, 1956	3.19	560		Jan. 6, 1965	5.65	2,570
1957	Mar. 5, 1957	3.86	716		Apr. 10, 1965	3.69	580
1958	Jan. 26, 1958	4.07	835				
	Feb. 3, 1958	4.04	818				
	Feb. 12, 1958	4.30	1,080				

3070. Esperanza Creek near Mokelumne Hill, Calif.

Location.--Lat 38°19'00", long 120°35'40", in NW $\frac{1}{4}$ sec.6, T.5 N., R.13 E., on right bank 600 ft upstream from mouth and 6 miles east of Mokelumne Hill.

Drainage area.--16.7 sq mi.

Gage.--Recording. Altitude of gage is 1,470 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,100 cfs and extended above on basis of slope-area measurement at 2,030 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	3.90	780	1952	Feb. 16, 1952	3.01	362
	Dec. 28, 1951	3.49	576		Mar. 18, 1952	3.59	625
	Jan. 12, 1952	4.08	879	1953	Dec. 7, 1952	3.24	463
	Jan. 15, 1952	4.56	1,160		Dec. 30, 1952	2.83	296
	Jan. 25, 1952	3.62	640		Jan. 13, 1953	3.18	436
	Feb. 1, 1952	3.23	458				

Peak stages and discharges of Esperanza Creek near Mokelumne Hill, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 20, 1953	2.68	250	1957	Feb. 23, 1957	3.04	381
	Mar. 19, 1953	3.61	615		Mar. 5, 1957	3.09	401
	Apr. 27, 1953	2.56	213		May 18, 1957	3.16	429
1954	Jan. 23, 1954	3.05	379	1958	Dec. 18, 1957	2.51	215
	Feb. 13, 1954	3.40	535		Jan. 26, 1958	3.36	526
	Feb. 17, 1954	3.54	600		Jan. 29, 1958	2.89	329
1955	Dec. 3, 1954	3.43	548		Feb. 3, 1958	3.30	491
	Jan. 1, 1955	3.38	526		Feb. 12, 1958	3.03	375
	Apr. 22, 1955	3.16	427		Feb. 24, 1958	3.35	513
1956	Dec. 19, 1955	3.11	404		Mar. 16, 1958	3.75	706
	Dec. 23, 1955	6.78	3,060		Mar. 21, 1958	3.22	457
	Dec. 26, 1955	3.65	655		Mar. 30, 1958	3.18	439
	Jan. 15, 1956	3.57	615		Apr. 2, 1958	5.18	1,590
	Jan. 22, 1956	2.89	327	1959	Feb. 11, 1959	2.62	262
	Jan. 26, 1956	4.53	1,140		Feb. 16, 1959	3.36	543
	May 4, 1956	2.58	235		Feb. 19, 1959	2.98	379

3075. Jesus Maria Creek near Mokelumne Hill, Calif.

Location.--Lat 38°17'00", long 120°39'00", in SE $\frac{1}{4}$ sec.16, T.5 N., R.12 E., on right bank 0.6 mile upstream from mouth, 1.0 mile downstream from Wet Gulch, and 3.2 miles southeast of Mokelumne Hill.

Drainage area.--34.7 sq mi.

Gage.--Recording. Altitude of gage is 980 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs and extended above on basis of slope-area measurement at 4,380 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown in 1950. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 4, 1950	3.94	730	1956	Dec. 26, 1955	4.66	1,100
1951	Nov. 18, 1950	7.1	4,380		Jan. 15, 1956	4.73	1,150
	Jan. 18, 1951	3.62	553		Jan. 22, 1956	3.83	565
	Jan. 22, 1951	3.64	561		Jan. 26, 1956	5.26	1,630
1952	Mar. 5, 1951	3.73	598	1957	Feb. 23, 1957	3.68	491
	Dec. 1, 1951	4.36	916		Mar. 5, 1957	3.82	560
	Dec. 30, 1951	3.99	716		May 18, 1957	3.51	414
	Jan. 12, 1952	4.60	1,080	1958	Jan. 26, 1958	4.07	715
	Jan. 15, 1952	5.08	1,470		Jan. 29, 1958	3.87	600
	Jan. 25, 1952	3.90	675		Feb. 3, 1958	4.14	755
	Feb. 1, 1952	3.68	577		Feb. 12, 1958	4.22	800
	Mar. 18, 1952	3.61	549		Feb. 24, 1958	4.07	715
1953	Jan. 13, 1953	3.33	449		Mar. 16, 1958	4.66	1,100
	Mar. 19, 1953	3.58	537		Mar. 21, 1958	4.01	680
1954	Feb. 13, 1954	3.15	368		Mar. 30, 1958	3.82	572
1955	Dec. 3, 1954	3.53	517		Apr. 2, 1958	6.40	3,150
1956	Dec. 23, 1955	7.63	5,490	1959	Feb. 11, 1959	3.67	538
					Feb. 16, 1959	4.03	715
					Feb. 19, 1959	3.84	619

3080. North Fork Calaveras River near San Andreas, Calif.

Location.--Lat 38°13'05", long 120°41'55", in NW¼ sec.7, T.4 N., R.12 E., on right bank 0.5 mile upstream from Chile Gulch and 1.8 miles northwest of San Andreas.

Drainage area.--85.6 sq mi.

Gage.--Nonrecording prior to Feb. 14, 1952; recording thereafter. Altitude of gage is 750 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 3,900 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1952. Base for partial-duration series, 1,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	8.5	3,420	1958	Apr. 2, 1958	11.72	5,620
1952	Jan. 15, 1952	-	-	1959	Feb. 16, 1959	6.98	1,520
1953	Mar. 19, 1953	5.24	1,380	1960	Feb. 8, 1960	9.49	3,310
1954	Feb. 13, 1954	4.75	1,090	1961	Dec. 2, 1960	2.68	122
1955	Dec. 4, 1954	5.10	1,300	1962	Feb. 10, 1962	6.69	1,310
1956	Dec. 23, 1955	12.52	6,200	1962	Feb. 15, 1962	8.60	2,470
	Dec. 26, 1955	6.42	2,090		Mar. 6, 1962	6.88	1,390
	Jan. 26, 1956	7.22	2,580	1963	Feb. 1, 1963	11.72	5,620
1957	Mar. 5, 1957	5.41	1,490		Mar. 28, 1963	7.62	2,210
1958	Jan. 26, 1958	6.06	1,410		Apr. 14, 1963	7.43	2,080
	Feb. 3, 1958	6.01	1,380	1964	Jan. 21, 1964	5.85	1,140
	Feb. 25, 1958	6.21	1,500	1965	Dec. 23, 1964	11.22	4,800
	Mar. 16, 1958	7.69	2,540		Jan. 6, 1965	9.52	3,160
	Mar. 21, 1958	6.06	1,410				
	Mar. 30, 1958	5.86	1,300				

3085. Murray Creek near San Andreas, Calif.

Location.--Lat 38°12'45", long 120°40'55", in SW¼ sec.8, T.4 N., R.12 E., on right bank 600 ft upstream from bridge on State Highway 49, 0.9 mile downstream from North Fork Murray Creek, 1.1 miles north of San Andreas, and 1.5 miles upstream from mouth.

Drainage area.--23.5 sq mi.

Gage.--Nonrecording prior to Feb. 13, 1952; recording thereafter. Prior to May 25, 1955, at site 600 ft downstream at datum 7.23 ft lower. Altitude of gage is 820 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 101 cfs prior to May 25, 1955; below 820 cfs and extended above on basis of slope-area measurement at 1,700 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1952. Base for partial-duration series, 90 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 18, 1950	4.8	960	1955	Jan. 1, 1955	2.00	109
1952	Jan. 15, 1952	3.8	570		Jan. 18, 1955	2.02	112
1953	Mar. 19, 1953	1.97	108	1956	Dec. 23, 1955	6.62	1,700
1954	Feb. 13, 1954	1.82	79		Dec. 26, 1955	3.60	292
1955	Dec. 3, 1954	1.92	95		Jan. 5, 1956	2.99	128
					Jan. 15, 1956	4.33	636
					Jan. 22, 1956	3.17	167

Peak stages and discharges of Murray Creek near San Andreas, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Jan. 26, 1956	3.82	379	1958	Mar. 16, 1958	3.93	516
1957	Mar. 5, 1957	2.94	119		Mar. 22, 1958	2.94	172
1958	Jan. 26, 1958	2.91	163		Mar. 30, 1958	2.90	160
	Feb. 3, 1958	3.21	264		Apr. 2, 1958	5.77	1,340
	Feb. 12, 1958	3.34	309	1959	Feb. 11, 1959	2.75	120
	Feb. 24, 1958	2.99	187		Feb. 16, 1959	2.77	126
					Feb. 19, 1959	3.07	214

3090. Cosgrove Creek near Valley Springs, Calif.

Location.--Lat 38°08'10", long 120°50'05", in SE $\frac{1}{4}$ sec.35, T.4 N., R.10 E., on right bank 0.4 mile upstream from mouth and 2.7 miles south of Valley Springs.

Drainage area.--21.1 sq mi.

Gage.--Recording. Datum of gage is 547.8 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs and extended above on basis of slope-area measurement at 3,240 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 19, 1931	3.58	173	1952	Jan. 14, 1952	4.84	543
1932	Feb. 6, 1932	5.55	1,060		Jan. 25, 1952	5.65	958
1933	Jan. 27, 1933	4.04	310		Mar. 7, 1952	5.05	640
1934	Dec. 30, 1933	5.45	995		Mar. 15, 1952	5.94	1,130
1935	Apr. 7, 1935	4.65	565		Mar. 18, 1952	5.55	902
1936	Feb. 22, 1936	7.80	2,600	1953	Jan. 20, 1953	4.53	417
1937	Mar. 21, 1937	7.15	2,030				
1938	Feb. 3, 1938	6.63	1,740	1954	Feb. 14, 1954	3.95	232
1939	Feb. 7, 1939	4.12	311				
1940	Mar. 31, 1940	6.04	1,330	1955	Dec. 9, 1954	5.97	1,150
1941	Apr. 4, 1941	6.52	1,640		Jan. 1, 1955	5.04	658
1942	Jan. 27, 1942	7.04	2,010		Jan. 15, 1955	5.27	765
1943	Nov. 18, 1942	6.95	1,920		Jan. 18, 1955	5.07	672
1944	Feb. 8, 1944	-	500	1956	Dec. 23, 1955	8.96	3,240
	Mar. 4, 1944	4.89	626		Dec. 26, 1955	5.06	667
1945	Feb. 2, 1945	6.13	1,330		Jan. 15, 1956	6.22	1,270
	Feb. 3, 1945	-	616		Jan. 26, 1956	6.35	1,350
	Mar. 15, 1945	-	585	1957	Mar. 5, 1957	5.40	830
1946	Dec. 21, 1945	8.38	3,180	1958	Jan. 26, 1958	4.95	578
1947	Feb. 12, 1947	4.76	567		Feb. 2, 1958	4.94	573
1948	Apr. 5, 1948	6.20	1,300		Feb. 12, 1958	4.95	578
1949	Mar. 3, 1949	5.17	700		Feb. 19, 1958	5.24	720
1950	Jan. 28, 1950	-	615		Feb. 24, 1958	6.25	1,290
	Feb. 4, 1950	5.31	770		Mar. 16, 1958	5.72	976
1951	Nov. 18, 1950	6.34	1,390		Mar. 21, 1958	6.23	1,280
	Dec. 7, 1950	5.74	1,010		Mar. 24, 1958	4.83	524
	Dec. 14, 1950	4.77	513		Mar. 30, 1958	5.73	982
	Jan. 11, 1951	4.83	538		Apr. 2, 1958	8.07	2,540
	Jan. 18, 1951	7.75	2,560		Apr. 6, 1958	5.65	938
	Feb. 11, 1951	4.89	566	1959	Feb. 18, 1959	5.47	838
1952	Dec. 1, 1951	5.00	615		Feb. 18, 1959	5.24	720
	Dec. 30, 1951	5.24	735	1960	Mar. 12, 1960	5.20	710
	Jan. 12, 1952	5.81	1,050	1961	Feb. 2, 1961	2.79	24
				1962	Feb. 15, 1962	5.07	635
					Mar. 5, 1962	5.65	938

Peak stages and discharges of Cosgrove Creek near Valley Springs, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Feb. 1, 1963	5.74	987	1965	Dec. 23, 1964	6.82	1,650
	Mar. 28, 1963	5.16	680		Jan. 6, 1965	4.90	555
	Apr. 7, 1963	6.14	1,220				
1964	Jan. 21, 1964	4.93	568				

3095. Calaveras River at Jenny Lind, Calif.

Location.--Lat 38°05'20", long 120°51'53", in NW $\frac{1}{4}$ sec.27, T.3 N., R.10 E., on right bank 70 ft downstream from bridge on Milton road, 0.2 mile south of Jenny Lind, and 6.5 miles downstream from Cosgrove Creek.

Drainage area.--393 sq mi.

Gage.--Nonrecording prior to Dec. 3, 1925; recording thereafter. Prior to October 1917, at datum 7.00 ft higher, and October 1917 to May 1928 at datum 2.00 ft higher. Altitude of gage is 220 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 12,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Hogan Reservoir (usable capacity, 75,000 acre-ft) beginning in 1930, by Bingham Reservoir (capacity, 775 acre-ft) beginning in 1882. Peaks for the years 1907-21 and 1923 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	Mar. 19, 1907	11.4	34,600	1937	Feb. 6, 1937	9.02	8,760
1908	Feb. 10, 1908	3.0	2,110	1938	Feb. 11, 1938	10.40	10,600
1909	Jan. 21, 1909	11.0	33,000	1939	Feb. 8, 1939	4.39	1,170
1910	Dec. 9, 1909	6.3	11,200	1940	Mar. 31, 1940	8.01	5,990
1911	Jan. 31, 1911	14.0	50,000	1941	Apr. 4, 1941	7.24	4,630
1912	Mar. 13, 1912	1.8	1,120	1942	Jan. 27, 1942	10.97	7,820
1913	Jan. 19, 1913	-	1,330	1943	Jan. 22, 1943	10.67	7,160
1914	Jan. 22, 1914	6.2	12,100	1944	Feb. 29, 1944	7.67	3,400
1915	Feb. 2, 1915	4.4	9,190	1945	Feb. 3, 1945	10.52	7,180
1916	Jan. 17, 1916	7.2	22,000	1946	Dec. 21, 1945	9.64	5,950
1917	Feb. 21, 1917	8.9	31,300	1947	Mar. 10, 1947	6.36	1,950
1918	Mar. 12, 1918	12.0	21,800	1948	Apr. 5, 1948	8.72	3,890
1919	Feb. 11, 1919	9.5	11,000	1949	Mar. 4, 1949	5.65	1,310
1920	Mar. 17, 1920	6.7	2,970	1950	Feb. 6, 1950	9.32	3,740
1921	Jan. 18, 1921	15	37,900	1951	Nov. 19, 1950	11.89	7,570
1922	Feb. 9, 1922	12.5	24,500	1952	Jan. 16, 1952	11.00	6,340
1923	Dec. 13, 1922	8.3	7,030	1953	Jan. 14, 1953	6.53	1,970
1925	Feb. 6, 1925	13.0	27,500	1954	Feb. 14, 1954	6.65	2,060
1926	Feb. 13, 1926	9.60	12,700	1955	Jan. 18, 1955	8.07	3,180
1927	Feb. 3, 1927	10.68	19,300	1956	Dec. 23, 1955	15.44	14,200
1928	Mar. 25, 1928	9.97	17,300	1957	Mar. 5, 1957	7.26	3,160
1929	Feb. 4, 1929	7.47	3,060	1958	Apr. 3, 1958	13.17	12,200
1930	Mar. 6, 1930	7.73	3,920	1959	Feb. 11, 1959	6.75	2,450
1931	Feb. 15, 1931	4.54	405	1960	Feb. 9, 1960	7.23	2,910
1932	Dec. 28, 1931	7.57	4,210	1961	June 1, 1961	3.76	604
1933	Jan. 29, 1933	4.91	1,250	1962	Feb. 16, 1962	9.43	5,820
1934	Jan. 2, 1934	6.23	2,640	1963	Feb. 1, 1963	11.11	6,910
1935	Mar. 7, 1935	6.73	3,300	1964	Nov. 20, 1963	4.94	1,220
1936	Feb. 23, 1936	10.36	10,100	1965	Dec. 23, 1964	6.84	2,570

3120. Bear Creek near Lockeford, Calif.

Location.--Lat 38°09'15", long 121°08'15", in NW¹SE¹ sec.31, T.4 N., R.8 E., on right bank 15 ft downstream from county road bridge and 0.8 mile southeast of Lockeford.

Drainage area.--47.6 sq mi.

Gage.--Recording. Datum of gage is 80.68 ft above mean sea level (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 2,700 cfs.

Bankfull stage.--13 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 220 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	-	-	0	1955	Dec. 9, 1954	7.67	534
1932	Feb. 9, 1932	12.04	952	Jan. 1, 1955	7.10	455	
1933	Jan. 27, 1933	6.30	213	Jan. 10, 1955	6.40	364	
1934	Dec. 30, 1933	10.93	802	Jan. 16, 1955	8.17	606	
1935	Apr. 8, 1935	11.28	838	Jan. 19, 1955	9.27	773	
				Feb. 27, 1955	5.22	223	
1936	Feb. 22, 1936	13.93	1,700	1956	Dec. 23, 1955	13.48	1,840
1937	Mar. 21, 1937	14.77	2,140	Dec. 26, 1955	9.76	852	
1938	Feb. 11, 1938	13.01	1,620	Jan. 5, 1956	8.08	581	
1939	Mar. 9, 1939	6.29	328	Jan. 8, 1956	6.54	389	
1940	Feb. 27, 1940	12.06	1,230	Jan. 15, 1956	10.96	1,090	
				Jan. 20, 1956	5.67	294	
1941	Apr. 4, 1941	12.19	1,250	Jan. 23, 1956	6.22	354	
1942	Jan. 27, 1942	11.76	1,200	Jan. 25, 1956	6.53	388	
1943	Jan. 21, 1943	12.76	1,470				
				1957	Mar. 1, 1957	6.77	388
1944	Feb. 9, 1944	-	224	Mar. 5, 1957	8.63	654	
	Feb. 22, 1944	-	438				
	Feb. 29, 1944	11.65	1,200	1958	Jan. 26, 1958	8.00	485
	Mar. 4, 1944	-	896	Feb. 5, 1958	6.12	254	
1945	Feb. 2, 1945	14.45	2,260	Feb. 12, 1958	10.07	786	
	Feb. 3, 1945	-	600	Feb. 19, 1958	9.84	751	
	Feb. 5, 1945	-	509	Feb. 25, 1958	10.06	785	
	Mar. 27, 1945	-	239	Mar. 16, 1958	10.92	935	
1946	Dec. 23, 1945	6.20	336	Mar. 22, 1958	13.75	1,850	
				Apr. 3, 1958	15.13	2,930	
1947	Feb. 12, 1947	4.40	144	Apr. 6, 1958	9.50	780	
1948	Apr. 6, 1948	4.25	129	1959	Feb. 11, 1959	6.64	343
1949	Mar. 3, 1949	11.04	1,150	Feb. 16, 1959	8.01	541	
	Mar. 11, 1949	-	292	Feb. 19, 1959	6.29	300	
				Feb. 21, 1959	6.68	348	
1950	Jan. 17, 1950	-	225	1960	Feb. 8, 1960	8.43	515
	Jan. 28, 1950	-	655	Mar. 13, 1960	12.50	1,330	
	Feb. 4, 1950	10.76	1,030	1961	Jan. 31, 1961	5.95	190
1951	Nov. 19, 1950	8.70	685	1962	Feb. 9, 1962	9.62	631
	Dec. 3, 1950	8.55	662	Feb. 15, 1962	10.71	822	
	Dec. 7, 1950	9.65	834	Mar. 6, 1962	7.34	331	
	Dec. 14, 1950	7.86	560				
	Jan. 11, 1951	8.30	625	1963	Feb. 1, 1963	12.55	1,480
	Jan. 18, 1951	12.47	1,410	Feb. 13, 1963	8.22	457	
1952	Dec. 29, 1951	9.03	745	Mar. 28, 1963	8.60	516	
	Jan. 7, 1952	5.66	304	Apr. 7, 1963	9.31	642	
	Jan. 12, 1952	11.11	1,150	1964	Jan. 21, 1964	8.19	453
	Jan. 14, 1952	8.33	646				
	Jan. 25, 1952	8.48	667	1965	Dec. 20, 1964	7.20	322
	Feb. 20, 1952	7.79	571	Dec. 23, 1964	14.00	2,130	
	Mar. 7, 1952	8.13	618	Dec. 26, 1964	8.56	508	
	Mar. 15, 1952	11.01	1,070	Dec. 28, 1964	9.36	652	
	Mar. 19, 1952	7.37	492	Dec. 31, 1964	9.07	597	
1953	Dec. 30, 1952	5.65	272	Jan. 3, 1965	7.86	401	
1954	Nar. 16, 1954	4.54	145	Jan. 6, 1965	14.47	2,410	

3145. North Fork Mokelumne River below Salt Springs Dam, Calif.

(Published as "above Moore Creek" prior to Oct. 1, 1930)

Location.--Lat 38°29'37", long 120°13'12", in NE $\frac{1}{4}$ sec.4, T.7 N., R.16 E., on left bank 0.3 mile downstream from Salt Springs Dam and 1.3 miles upstream from Cole Creek.

Drainage area.--170 sq mi.

Gage.--Recording. Prior to Sept. 23, 1940, at datum 2.0 ft higher. Altitude of gage is 3,590 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 4,000 cfs and extended above on basis of computations of flow over dam and discharge through powerhouse.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Salt Springs Reservoir (usable capacity, 139,000 acre-ft) beginning in March 1931. Peaks may be affected by diversion from Bear River and Cole Creek to Salt Springs powerhouse and diversion above station through Tiger Creek powerhouse. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	May 16, 1927	10.81	4,500	1947	June 7, 1947	5.46	900
1928	Mar. 25, 1928	13.62	8,740	1948	June 10, 1948	8.81	2,970
1929	June 16, 1929	11.32	5,690	1949	Apr. 14, 1949	8.73	2,930
1930	May 20, 1930	9.27	3,400	1950	June 1, 1950	10.35	4,200
1931	July 24, 1931	4.81	550	1951	Nov. 21, 1950	17.23	16,000
1932	June 25, 1932	9.96	4,100	1952	May 29, 1952	9.95	4,460
1933	June 12, 1933	10.85	5,060	1953	June 20, 1953	7.57	2,400
1935	June 6, 1935	8.55	4,080	1954	May 21, 1954	6.57	1,700
1936	June 6, 1936	10.70	5,970	1955	June 10, 1955	5.03	900
1937	June 16, 1937	7.20	3,100	1956	May 22, 1956	12.01	6,450
1938	June 9, 1938	7.60	3,240	1957	June 2, 1957	9.22	3,550
1939	Nov. 5, 1938	2.80	530	1958	May 24, 1958	11.23	5,550
1940	May 13, 1940	7.5	3,160	1959	Apr. 10, 1959	4.02	499
1941	June 11, 1941	9.96	3,530	1960	June 2, 1960	6.12	1,400
1942	May 26, 1942	10.05	3,600	1961	Apr. 18, 1961	2.70	172
1943	June 1, 1943	13.0	6,360	1962	June 3, 1962	7.92	2,490
1944	June 11, 1944	5.04	675	1963	May 20, 1963	10.00	4,300
1945	June 4, 1945	9.65	3,550	1964	June 16, 1964	3.70	400
1946	Dec. 31, 1945	9.25	3,300	1965	Dec. 24, 1964	10.49	4,790

3150. Cole Creek near Mokelumne Peak, Calif.

(Prior to October 1958, published as Cold Creek near Mokelumne Peak)

Location.--Lat 38°31'26", long 120°12'28", in SE $\frac{1}{4}$ sec.21, T.8 N., R.16 E., on right bank 3.4 miles upstream from mouth and 6.3 miles southwest of Mokelumne Peak.

Drainage area.--20.4 sq mi.

Gage.--Recording. Altitude of gage is 5,970 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs and extended above on basis of slope-area measurement at 5,500 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 25, 1928	7.79	3,000	1931	Apr. 21, 1931	3.64	340
1929	June 15, 1929	6.00	1,250	1932	May 16, 1932	5.05	755
1930	May 20, 1930	4.45	472	1933	May 29, 1933	5.23	855

Peak stages and discharges of Cole Creek near Mokelumne Peak, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Mar. 29, 1934	5.36	905	1955	Feb. 17, 1955	-	-
1935	May 25, 1935	5.15	822		May 12, 1955	4.23	572
1936	June 6, 1936	5.45	965		May 21, 1955	4.66	770
1937	May 13, 1937	5.45	965		May 29, 1955	4.43	658
1938	Dec. 11, 1937	8.98	4,650	1956	Dec. 6, 1955	4.05	502
1939	Apr. 7, 1939	3.83	362		Dec. 23, 1955	9.00	4,670
1940	Mar. 26, 1940	6.01	1,570		Jan. 15, 1956	5.81	1,440
					Jan. 22, 1956	4.10	520
1941	May 11, 1941	5.25	1,080		May 4, 1956	5.22	1,050
1942	Dec. 3, 1941	6.11	1,710		May 22, 1956	5.18	1,030
1944	May 7, 1944	4.62	750	1957	Feb. 11, 1957	5.10	990
1945	Feb. 2, 1945	5.93	1,560		May 6, 1957	4.27	588
1946	Oct. 30, 1945	5.12	1,010		May 18, 1957	5.98	1,560
1947	May 2, 1947	4.73	805		June 1, 1957	4.62	785
1948	Oct. 17, 1947	-	740	1958	May 5, 1958	4.22	603
	Jan. 7, 1948	-	604		May 22, 1958	4.84	895
	May 7, 1948	-	690		June 17, 1958	4.38	671
	May 16, 1948	-	830	1959	Jan. 9, 1959	4.10	557
	May 26, 1948	4.98	930		Feb. 16, 1959	4.71	832
	June 9, 1948	-	855	1960	Feb. 8, 1960	4.38	-
1949	Apr. 24, 1949	-	591		May 11, 1960	4.06	541
	May 13, 1949	4.63	755	1961	Apr. 3, 1961	3.67	406
	May 26, 1949	-	663	1962	Apr. 14, 1962	3.96	506
1950	May 31, 1950	5.00	940		May 5, 1962	4.10	555
1951	Nov. 18, 1950	9.69	5,500	1963	Oct. 14, 1962	4.31	640
	Dec. 3, 1950	8.21	3,730		Feb. 1, 1963	9.88	5,730
	Dec. 8, 1950	7.55	3,000		May 8, 1963	4.48	716
	Jan. 22, 1951	4.80	600		May 24, 1963	5.38	1,190
1952	Apr. 27, 1952	4.27	586	1964	Nov. 15, 1963	4.88	915
	June 1, 1952	5.19	1,040		May 11-13, 1964	4.30	635
	June 18, 1952	4.52	700	1965	Dec. 23, 1964	10.21	6,140
1953	Apr. 27, 1953	5.18	1,030		Apr. 29, 1965	4.57	760
	May 19, 1953	4.82	850		May 17, 1965	4.59	720
	June 17, 1953	4.83	855		June 5, 1965	4.32	632
1954	Mar. 9, 1954	6.08	1,640		Aug. 12, 1965	4.30	648
	Apr. 22, 1954	4.40	645				
	May 8, 1954	4.68	780				

a Annual maximum stage; backwater from ice.

3155. Bear River at Pardoe Camp, Calif.

Location--Lat 38°32', long 120°15', in sec.18, T.8 N., R.16 E., at Pardoe Camp, 2 miles downstream from Bear River Reservoir of Pacific Gas & Electric Co.

Drainage area--33.0 sq mi.

Gage--Recording. Altitude of gage is 5,650 ft (from topographic map).

Stage-discharge-relation--Defined by current-meter measurements below 1,500 cfs.

Remarks--Water-stage-recorder graph furnished by Pacific Gas and Electric Co. Peaks regulated by Bear River Reservoir (capacity, 6,422 acre-ft) beginning in 1900. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 25, 1928	9.75	4,090	1933	May 29, 1933	6.04	1,320
1929	June 15, 1929	7.65	2,600	1934	Mar. 29, 1934	5.88	1,280
1930	May 20, 1930	4.54	705	1935	May 25, 1935	5.84	1,230
1931	Apr. 21, 1931	3.90	475	1936	June 7, 1936	6.72	1,950
1932	May 11, 1932	5.86	1,260	1937	May 13, 1937	6.22	1,580

Peak stages and discharges of Bear River at Pardoe Camp, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Dec. 11, 1937	12.0	5,850	1946	May 5, 1946	5.49	1,200
1939	Apr. 7, 1939	4.33	613	1947	May 2, 1947	5.44	1,170
1940	Mar. 26, 1940	7.78	2,700	1948	May 26, 1948	5.80	1,390
				1949	May 12, 1949	5.79	1,380
1941	May 11, 1941	6.25	1,660	1950	May 31, 1950	5.83	1,410
1942	May 25, 1942	6.28	1,680				
1943	Apr. 28, 1943	7.78	2,700	1951	Nov. 20, 1950	12.62	7,100
1944	May 7, 1944	5.38	1,140				
1945	Feb. 2, 1945	7.86	2,750				

3160. Bear River near Salt Springs Dam, Calif.

Location.--Lat 38°29'37", long 120°17'18", in NW $\frac{1}{4}$ sec.2, T.7 N., R.15 E., on right bank 200 ft upstream from diversion to Tiger Creek powerhouse conduit and highway bridge, 1.5 miles upstream from mouth, and 4 miles west of Salt Springs Dam.

Drainage area.--48.0 sq mi.

Gage.--Recording. Altitude of gage is 3,710 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 560 cfs.

Historical data.--Flood of November 1950, reached a stage of 11.2 ft, discharge unknown (occurred prior to storage in Lower Bear River Reservoir).

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks regulated by Bear River Reservoir (capacity, 6,760 acre-ft) beginning in 1900 and Lower Bear River Reservoir (capacity, 49,100 acre-ft) beginning in December 1952. Peaks may be affected by water diverted for power from Lower Bear River Reservoir through tunnel to Salt Springs powerhouse on North Fork Mokelumne River beginning in December 1952. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	November 1950	11.2	-	1959	Jan. 10, 1959	1.74	111
1952	June 1, 1952	4.12	1,640	1960	May 16, 1960	2.51	392
1953	June 18, 1953	3.32	930				
1954	May 17, 1954	3.11	777	1961	Apr. 3, 1961	1.36	33
1955	June 6, 1955	3.14	798	1962	June 2, 1962	3.15	738
				1963	Feb. 1, 1963	4.00	1,400
1956	Dec. 23, 1955	4.00	1,400	1964	Nov. 5, 1963	1.67	103
1957	May 18, 1957	5.35	3,060	1965	Dec. 24, 1964	11.8	11,000
1958	May 24, 1958	4.08	1,480				

3165. North Fork Mokelumne River near West Point, Calif.

Location.--Lat 38°28', long 120°22', in NW $\frac{1}{4}$ sec.17, T.7 N., R.15 E., 1 mile upstream from Blue Creek, 4 miles downstream from Bear River, and 9.5 miles northeast of West Point.

Drainage area.--273 sq mi.

Gage.--Nonrecording prior to Oct. 18, 1917; recording thereafter. Altitude of gage is 3,050 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 3,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Blue Lakes (combined capacities, 12,350 acre-ft), Meadow Lake (capacity, 5,650 acre-ft), Twin Lakes (capacity, 1,425 acre-ft), and Bear River Reservoir (capacity, 6,422 acre-ft) since beginning of record and by Salt Springs Reservoir (capacity, 139,000 acre-ft) beginning Jan. 7, 1931. Peaks may be affected by diversion through Tiger Creek powerhouse conduit (capacity, about 600 cfs) beginning June 15, 1931. Only annual peaks are shown.

Peak stages and discharges of North Fork Mokelumne River near West Point, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	June 9, 1917	12.4	7,290	1927	May 16, 1927	12.20	6,970
1918	May 4, 1918	10.3	4,140	1928	Mar. 25, 1928	17.2	15,500
				1929	June 16, 1929	13.3	8,730
1924	May 2, 1924	9.23	2,860	1930	May 21, 1930	10.62	4,560
1925	Feb. 6, 1925	14.2	10,200				
				1931	Apr. 22, 1931	6.73	778
1926	Apr. 15, 1926	10.0	3,750	1932	June 21, 1932	10.84	4,840

3170. Middle Fork Mokelumne River at West Point, Calif.

Location.--Lat 38°23'23", long 120°31'32", in SE¹/₄ sec.10, T.6 N., R.13 E., on right bank 200 ft downstream from highway bridge, 0.6 mile south of West Point, and 4.5 miles upstream from South Fork.

Drainage area.--68.4 sq mi.

Gage.--Nonrecording prior to Aug. 18, 1928; recording thereafter. Prior to Oct. 6, 1926, at site 1,200 ft upstream at different datum. Altitude of gage is 2,450 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 481 cfs prior to Oct. 6, 1926; below 4,010 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Middle Fork Reservoir (capacity, 1,740 acre-ft) since January 1940. Peaks may be affected by diversion 4 miles above station to South Fork Mokelumne River via Middle Fork ditch (capacity, about 15 cfs) and Licking Fork Mokelumne River. Peaks for the years 1912-14, 1919-24, and 1926 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 6, 1912	4.55	168	1945	Feb. 2, 1945	5.90	1,620
1913	Apr. 8, 1913	4.20	111		Feb. 3, 1945	-	1,480
1914	Jan. 23, 1914	10.0	2,550				
1915	May 13, 1915	6.6	701	1946	Dec. 21, 1945	-	950
					Dec. 22, 1945	4.80	975
1916	Mar. 20, 1916	8.0	1,300		Dec. 25, 1945	-	684
1917	Feb. 21, 1917	7.8	1,240				
1918	Mar. 11, 12, 1918	7.56	1,150	1947	Nov. 23, 1946	3.17	370
1919	Feb. 10, 1919	5.7	454				
1920	Apr. 15, 1920	6.45	675	1948	Apr. 5, 1948	2.98	317
1921	Jan. 18, 1921	6.30	640	1949	Mar. 3, 1949	3.29	403
1922	May 20, 1922	5.80	484				
1923	Apr. 6, 1923	5.95	544	1950	Feb. 4, 1950	4.32	688
1924	Feb. 8, 1924	4.30	127		Mar. 24, 1950	-	425
1925	Feb. 6, 1925	9.0	1,930		Apr. 7, 1950	-	452
1926	Apr. 8, 1926	5.80	484	1951	Nov. 18, 1950	7.70	2,820
1927	Feb. 18, 1927	4.7	930		Dec. 3, 1950	7.05	2,360
1928	Mar. 25, 1928	6.82	2,200		Dec. 8, 1950	6.18	1,760
1929	Feb. 4, 1929	3.02	346		Dec. 14, 1950	4.36	704
1930	Mar. 4, 1930	3.40	460		Jan. 18, 1951	4.63	825
					Jan. 22, 1951	4.39	716
1931	Nov. 16, 1930	1.87	106		Feb. 5, 1951	3.45	412
1932	Feb. 6, 1932	4.65	910				
1933	Mar. 17, 1933	2.22	161	1952	Dec. 1, 1951	4.90	960
1934	Jan. 1, 1934	3.05	354		Dec. 28, 1951	4.18	633
1935	Apr. 8, 1935	5.17	960		Jan. 12, 1952	3.54	437
					Jan. 15, 1952	4.60	810
1936	Feb. 22, 1936	7.22	2,520		Jan. 25, 1952	4.00	575
1937	Feb. 14, 1937	5.41	1,080		Feb. 2, 1952	4.80	910
1938	Dec. 11, 1937	5.97	1,460		Feb. 16, 1952	3.81	518
1939	Mar. 27, 1939	2.22	145		Apr. 25, 1952	3.77	506
1940	Mar. 31, 1940	6.40	1,900				
1941	Mar. 1, 1941	3.94	568	1953	Jan. 13, 1953	3.67	440
1942	Jan. 27, 1942	5.94	1,560		Mar. 19, 1953	3.57	415
1943	Jan. 21, 1943	5.78	1,470		Apr. 27, 1953	3.70	470
1944	Mar. 4, 1944	3.78	520	1954	Mar. 10, 1954	3.63	464

Peak stages and discharges of Middle Fork Mokelumne River at West Point, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Apr. 22, 1955	3.08	305	1959	Feb. 16, 1959	4.32	739
1956	Dec. 19, 1955	3.71	488	1960	Feb. 8, 1960	5.40	1,260
	Dec. 23, 1955	8.98	4,320	1961	Dec. 1, 1960	2.19	111
	Dec. 26, 1955	6.14	1,730		Feb. 10, 1962	4.70	900
	Jan. 5, 1956	3.70	528	1962	Feb. 15, 1962	5.11	1,100
	Jan. 15, 1956	5.70	1,440		Oct. 14, 1962	3.46	460
	Jan. 22, 1956	4.71	900	1963	Jan. 31, 1963	8.22	3,400
	Jan. 26, 1956	5.37	1,240		Mar. 28, 1963	4.00	640
1957	May 4, 1956	3.51	471		Apr. 7, 1963	4.31	759
	Feb. 24, 1957	4.62	859		Apr. 14, 1963	4.60	880
	Mar. 5, 1957	4.40	768		May 8, 1963	4.13	687
	May 18, 1957	3.54	480	1964	Jan. 21, 1964	2.54	201
1958	Feb. 3, 1958	3.39	407		Dec. 23, 1964	7.91	3,160
	Feb. 12, 1958	3.72	519		Jan. 6, 1965	6.19	1,760
	Feb. 24, 1958	4.59	846		Jan. 24, 1965	3.97	608
	Mar. 16, 1958	4.09	652				
	Mar. 21, 1958	4.28	722				
	Apr. 2, 1958	6.13	1,720				

3175. South Fork Mokelumne River near Railroad Flat, Calif.

Location.--Lat 38°19'55", long 120°25'20", in sec.34, T.6 N., R.14 E., at Laidet Ranch, 5 miles upstream from Licking Fork and 5 miles east of Railroad Flat.

Drainage area.--38.7 sq mi.

Gage.--Nonrecording prior to Aug. 16, 1928; recording thereafter. Prior to Apr. 1, 1928, at site 700 ft upstream at different datum. Altitude of gage is 2,680 ft (from topographic map).

Stage-discharge-relation.--Defined by current-meter measurements below 851 cfs prior to Apr. 1, 1928; below 845 cfs thereafter.

Remarks.--Peaks for the years 1912-13, 1915-27 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 26, 1912	-	105	1923	Apr. 6, 1923	3.50	635
1913	Apr. 5, 1913	-	73	1924	Feb. 8, 1924	2.18	101
1914	Jan. 25, 1914	6.9	3,330	1925	Feb. 6, 1925	4.60	1,350
1915	May 14, 1915	3.51	660	1926	Apr. 5, 1926	3.40	580
1916	Mar. 20, 1916	4.15	1,040		Apr. 3, 1927	4.40	970
1917	Feb. 25, 1917	4.0	945	1928	Mar. 25, 1928	6.1	2,440
1918	Mar. 12, 1918	3.6	695	1929	Feb. 4, 1929	2.12	153
1919	Feb. 11, 1919	2.90	338	1930	Mar. 4, 1930	2.48	214
1920	Mar. 1, Apr. 17, 1920	3.20	475	1931	Nov. 16, 1930	1.60	83
1921	Jan. 18, 1921	3.98	945	1932	Feb. 6, 1932	3.87	542
	May 20, 1922	3.45	608	1933	May 28, 1933	1.78	108
1922				1934	Jan. 1, 1934	2.37	195

3180. Licking Fork Mokelumne River near Railroad Flat, Calif.

Location.--Lat 38°01', long 120°25', in E $\frac{1}{2}$ SE $\frac{1}{4}$ sec.26, T.6 N., R.14 E., 100 ft upstream from Big Canyon Creek, 6 miles upstream from mouth and 6.6 miles east of Railroad Flat.

Drainage area.--6.32 sq mi.

Gage.--Nonrecording. Prior to June 4, 1915, at site 160 ft upstream at different datum. Altitude of gage is 3,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 15 cfs prior to June 4, 1915; below 33 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 1, 3, 1912	-	14	1916	Mar. 16, 24, 1916	3.2	47
1913	Apr. 5, 1913	-	16	1917	Apr. 25, 1917	3.22	51
1914	Jan. 25, 1914	2.4	-				
1915	May 13, 1915	1.28	40				

3185. South Fork Mokelumne River near West Point, Calif.

Location.--Lat 38°22'06", long 120°32'40", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.16, T.6 N., R.13 E., on right bank 500 ft upstream from highway bridge, 2.4 miles southwest of West Point, and 2.5 miles upstream from mouth.

Drainage area.--75.1 sq mi.

Gage.--Recording. Prior to Sept. 19, 1957, at site 1,100 ft downstream at different datum. Altitude of gage is 1,950 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,510 cfs and extended above on basis of slope-area measurements at 3,300 and 6,920 cfs prior to Sept 19, 1957; defined by current-meter measurements below 1,370 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Dec. 13, 1933	4.87	595	1950	Feb. 4, 1950	7.03	1,080
1935	Apr. 8, 1935	6.23	1,690		Mar. 24, 1950	-	592
					Apr. 8, 1950	-	667
1936	Feb. 22, 1936	8.90	3,600				
1937	Feb. 6, 1937	a7.50	1,600	1951	Nov. 18, 1950	9.64	3,300
1938	Feb. 11, 1938	8.55	2,440		Dec. 3, 1950	9.12	2,780
1939	Mar. 27, 1939	4.92	151		Dec. 8, 1950	8.54	2,200
1940	Mar. 31, 1940	9.55	3,440		Dec. 14, 1950	6.92	774
					Jan. 18, 1951	7.13	924
1941	Mar. 1, 1941	6.82	1,220		Jan. 22, 1951	6.82	712
1942	Jan. 27, 1942	8.55	2,700				
1943	Jan. 21, 1943	9.06	3,230	1952	Dec. 1, 1951	7.22	996
					Dec. 29, 1951	7.18	964
1944	Feb. 29, 1944	-	588		Jan. 12, 1952	7.34	1,090
	Mar. 4, 1944	6.55	912		Jan. 15, 1952	7.85	1,540
1945	Feb. 2, 1945	9.55	3,760		Jan. 25, 1952	7.14	932
	Feb. 3, 1945	-	2,270		Feb. 1, 1952	7.27	1,040
					Mar. 18, 1952	6.78	677
1946	Dec. 22, 1945	7.19	1,320		Apr. 7, 1952	6.59	554
	Dec. 25, 1945	-	906		Apr. 25, 1952	6.61	566
1947	Nov. 23, 1946	6.18	500	1953	Jan. 13, 1953	6.59	500
					Mar. 19, 1953	6.53	500
1948	Apr. 5, 1948	6.27	538		Apr. 27, 1953	6.80	690
1949	Mar. 3, 1949	6.70	835	1954	Mar. 9, 1954	6.66	599

a Occurred Feb. 14, 1937.

Peak stages and discharges of South Fork Mokelumne River near West Point, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Jan. 1, 1955	6.36	432	1960	Feb. 8, 1960	7.37	1,910
1956	Dec. 23, 1955	14.8	6,920	1961	Dec. 1, 1960	3.87	214
	Jan. 15, 1956	7.15	1,620				
	Jan. 22, 1956	6.41	1,040	1962	Feb. 10, 1962	6.05	1,040
	Jan. 26, 1956	6.85	1,370		Feb. 15, 1962	6.66	1,410
	Feb. 22, 1956	5.48	515		Mar. 6, 1962	5.31	694
	May 4, 1956	5.65	600				
1957	Feb. 24, 1957	6.18	893	1963	Oct. 14, 1962	5.09	566
	Mar. 5, 1957	6.08	833		Jan. 31, 1963	10.78	5,690
	May 18, 1957	5.97	767		Mar. 28, 1963	6.26	1,180
1958	Jan. 26, 1958	5.09	556		Apr. 7, 1963	5.62	810
	Feb. 3, 1958	5.17	592		Apr. 14, 1963	6.16	1,120
	Feb. 12, 1958	5.33	665		May 8, 1963	5.32	664
	Feb. 24, 1958	6.16	1,110	1964	Nov. 6, 1963	4.51	350
	Mar. 16, 1958	5.88	949				
	Mar. 21, 1958	6.08	1,060	1965	Dec. 23, 1964	10.19	4,870
	Apr. 2, 1958	8.37	2,750		Jan. 6, 1965	8.11	2,520
1959	Feb. 16, 1959	6.23	1,150		Jan. 24, 1965	5.30	655
	Feb. 19, 1959	5.03	582		Apr. 21, 1965	5.00	526

3195. Mokelumne River near Mokelumne Hill, Calif.
(Published as "at Electra" 1901, 1903-4)

Location--Lat 38°18'46", long 120°43'09", SW¹/₄SW¹/₄ sec.1, T.5 N., R.11 E., on downstream side of bridge, 1.2 miles northwest of Mokelumne Hill and 8 miles downstream from confluence of North and South Forks.

Drainage area--544 sq. mi.

Gage--Nonrecording Jan. 1 to June 30, 1901, and May 11, 1903, to Dec. 31, 1904; recording subsequent to Nov. 10, 1927. Jan. 1 to June 30, 1901, and May 11, 1903, to Dec. 31, 1904 at site 3 miles upstream at different datum. Datum of gage is 589.88 ft above mean sea level (levels by California Division of Highways).

Stage-discharge relation--Defined by current-meter measurements below 19,000 cfs prior to 1905; below 25,800 cfs thereafter.

Bankfull stage--Not subject to overflow.

Historical data--In 1862 the Mokelumne River near Mokelumne Hill reached a maximum stage corresponding to about 23.4 ft at the present station, as determined from a mark pointed out by Mr. C. F. Kelton, whose grandfather observed the flood. The crest stage of 1907 was observed by Mr. Kelton at a point that corresponds to a gage height of 20.3 ft. The peak of 1867 reached a stage about the same as that of 1907.

Remarks--Peaks regulated by Salt Springs Reservoir (usable capacity, 139,000 acre-ft) beginning in March 1931, several smaller reservoirs, and four powerplants. Peaks for the years 1901 and 1904 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1901	Feb. 19, 1901	11.0	13,200	1936	Feb. 22, 1936	13.39	17,400
1904	Feb. 24, 1904	12.7	19,000	1937	Feb. 14, 1937	7.86	5,540
				1938	Dec. 11, 1937	15.25	23,000
1928	Mar. 25, 1928	16.10	25,700	1939	Apr. 8, 1939	4.21	1,290
1929	June 16, 1929	10.18	10,100	1940	Mar. 31, 1940	12.50	14,900
1930	May 21, 1930	6.15	3,690	1941	May 13, 1941	7.97	5,800
1931	Apr. 29, 1931	5.47	869	1942	Jan. 27, 1942	10.45	9,660
1932	June 25, 1932	7.48	5,650	1943	June 1, 1943	12.56	14,500
1933	June 12, 1933	8.82	7,760	1944	Mar. 4, 1944	5.54	2,530
1934	Mar. 29, 1934	5.35	2,360	1945	Feb. 2, 1945	14.7	21,300
1935	Apr. 8, 1935	8.14	6,020	1946	Dec. 21, 1945	8.66	6,740

Peak stages and discharges of Mokelumne River near Mokelumne Hill, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Nov. 23, 1946	5.06	1,960	1957	May 18, 1957	9.62	8,440
1948	June 10, 1948	8.08	5,810	1958	Apr. 2, 1958	10.10	9,400
1949	Apr. 15, 1949	7.30	4,640	1959	Feb. 16, 1959	6.16	3,140
1950	June 1, 1950	8.90	7,120	1960	Feb. 8, 1960	8.92	7,160
1951	Dec. 3, 1950	18.5	33,700	1961	Apr. 6, 1961	4.22	1,130
1952	May 31, 1952	9.50	7,970	1962	Feb. 10, 1962	7.65	5,140
1953	Apr. 27, 1953	6.62	3,710	1963	Feb. 1, 1963	16.15	25,900
1954	Mar. 9, 1954	6.63	3,720	1964	Nov. 15, 1963	5.79	2,550
1955	June 7, 1955	5.03	1,850	1965	Dec. 24, 1964	17.31	29,700
1956	Dec. 23, 1955	15.42	23,500				

3235. Mokelumne River below Camanche Dam, Calif.
(Published as "near Clements" prior to October 1961)

Location.--Lat 38°13'15", long 121°02'20", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.7, T.4 N., R.9 E., on left bank 0.7 mile downstream from Murphy Creek and 3.4 miles northeast of Clements.

Drainage area.--627 sq mi.

Gage.--Nonrecording prior to Apr. 19, 1926; recording thereafter. Prior to Apr. 19, 1926, at bridge 3.6 miles downstream at datum 13.82 ft lower Apr. 19, 1926, to Apr. 8, 1931, at site 75 ft downstream from bridge at datum 15.82 ft lower Apr. 9, 1931, to Sept. 30, 1961, at site 700 ft upstream from bridge at datum 15.75 ft lower. Datum of gage is 82.91 ft above mean sea level (levels by East Bay Municipal Utility District).

Stage-discharge relation.--Defined by current-meter measurements below 8,730 cfs prior to Apr. 18, 1926; below 15,400 cfs for period Apr. 19, 1926, to Apr. 8, 1931; below 27,400 cfs for period Apr. 9, 1931, to Sept. 30, 1961; and below 5,100 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Pardee Reservoir (usable capacity, 194,100 acre-ft) beginning Mar. 9, 1929, Salt Springs Reservoir (usable capacity, 139,000 acre-ft) beginning in March 1931, several smaller reservoirs, and four powerplants. Peaks for the years 1905-25 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	May 17, 1905	11.2	5,540	1931	Aug. 7, 1931	4.44	663
1906	June 12, 1906	15.0	9,960	1932	June 2, 1932	9.72	4,240
1907	Mar. 19, 1907	22.0	25,500	1933	Jan. 27, 1933	5.05	1,070
1908	Apr. 30, 1908	8.5	3,100	1934	Dec. 29, 1933	6.36	1,870
1909	Jan. 14, 1909	16.5	13,100	1935	June 7, 1935	11.34	5,270
1910	Dec. 3, 1909	14.9	10,800	1936	Feb. 22, 1936	12.06	6,020
1911	Jan. 31, 1911	18.6	18,900	1937	Mar. 21, 1937	11.75	5,790
1912	June 3, 1912	11.3	6,520	1938	Feb. 11, 1938	11.72	5,700
1913	May 18, 1913	10.4	5,580	1939	Mar. 9, 1939	4.67	1,000
1914	Jan. 26, 1914	15.5	13,300	1940	Mar. 31, 1940	12.82	6,760
1915	June 8, 1915	12.3	8,290	1941	May 15, 1941	10.90	5,140
1916	Mar. 20, 1916	13.8	10,700	1942	Jan. 27, 1942	13.54	7,440
1917	June 10, 1917	12.6	9,300	1943	Mar. 10, 1943	15.22	9,360
1918	Mar. 12, 1918	12.0	8,620	1944	Feb. 29, 1944	6.42	1,990
1919	Feb. 11, 1919	10.9	7,540	1945	Feb. 2, 1945	12.63	5,960
1920	May 20, 1920	10.3	6,820	1946	Dec. 24, 1945	10.10	4,220
1921	Jan. 18, 1921	14.4	11,100	1947	Feb. 12, 1947	4.44	851
1922	June 3, 1922	12.8	8,970	1948	June 12, 1948	10.47	4,240
1923	May 17, 1923	10.2	6,400	1950	June 1, 1950	11.57	4,500
1924	May 2, 1924	5.3	2,260	1951	Nov. 21, 1950	24.40	28,800
1925	Feb. 6, 1925	18.6	18,500	1952	June 8, 1952	11.95	4,770
1926	Apr. 30, 1926	9.34	3,740	1953	June 22, 1953	9.13	3,630
1927	May 17, 1927	14.28	7,870	1954	May 22, 1954	6.67	2,000
1928	Mar. 25, 1928	22.45	25,600	1955	Dec. 9, 1954	6.05	1,810
1929	June 16, 1929	11.69	6,220				
1930	May 21, 1930	9.35	4,060	1956	Dec. 24, 1955	23.85	27,300

Peak stages and discharges of Mokelumne River below Camanche Dam, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	June 3, 1957	11.75	5,120	1962	June 12-13, 1962	8.10	3,100
1958	Apr. 3, 1958	14.88	8,220	1963	Feb. 2, 1963	10.87	5,920
1959	Feb. 18, 1959	4.71	1,160	1964	Jan. 31, 1964	5.47	822
1960	June 6, 1960	5.56	1,550	1965	Dec. 31, 1964	7.85	2,900
1961	June 28, 1961	3.51	641				

a Occurred June 5, 1962.

3255. Mokelumne River at Woodridge, Calif.

Location.--Lat 38°09'30", long 121°18'10", in NE¹ sec.34, T.4 N., R.6 E., on left bank at Woodbridge, 0.3 mile downstream from county highway bridge and 0.4 mile downstream from dam and canal intake of Woodbridge Irrigation District.

Drainage area.--661 sq mi.

Gage.--Recording. Prior to July 1928, about 100 ft downstream from bridge at datum about 4 ft higher and July 1928 to March 1931, 400 ft downstream from bridge at about same datum. Datum of gage is 14.9 ft above mean sea level (levels by East Bay Municipal Utility District).

Stage-discharge relation.--Defined by current-meter measurements below 5,560 cfs prior to July 1928; below 2,900 cfs for period July 1928 to March 1931; and below 6,000 cfs and extended above on basis of contracted-opening measurement at 27,000 cfs thereafter.

Bankfull stage.--25 ft.

Remarks.--Peaks regulated by Pardee Reservoir (usable capacity, 191,100 acre-ft) beginning Mar. 9, 1929, Salt Springs Reservoir (usable capacity, 139,000 acre-ft) beginning in March 1931, several smaller reservoirs and four powerplants. Peaks may be affected by many diversions upstream for irrigation and by diversions to Woodbridge Canal (capacity, about 500 cfs) since beginning of record. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	May 1, 1926	15.32	3,200	1946	Jan. 5, 1946	19.93	3,920
1927	May 18, 1927	21.5	5,470	1947	Nov. 25, 1946	12.32	1,520
1928	Mar. 26, 1928	26.58	24,000	1948	June 12, 1948	19.57	4,030
1929	June 18, 1929	19.83	3,290	1949	Dec. 20, 1948	15.00	2,320
1930	May 22, 1930	17.63	2,710	1950	June 3, 1950	19.28	3,780
1931	Nov. 8, 1930	14.63	1,660	1951	Nov. 22, 1950	29.58	27,000
1932	June 4, 1932	19.10	3,720	1952	June 6, 1952	21.41	4,590
1933	Jan. 7, 1933	12.03	1,250	1953	June 23, 1953	15.44	2,440
1934	Dec. 30, 1933	12.40	1,280	1954	May 18, 1954	11.68	1,460
1935	June 8, 1935	21.54	4,640	1955	Nov. 16, 1954	12.63	1,940
1936	Feb. 24, 1936	21.87	4,670	1956	Dec. 24, 1955	29.00	23,000
1937	Mar. 22, 1937	16.66	2,720	1957	June 4, 1957	19.59	4,350
1938	Feb. 15, 1938	21.95	4,640	1958	Apr. 3, 1958	22.90	4,960
1939	Oct. 31, 1938	15.44	2,290	1959	Dec. 31, 1958	12.14	1,580
1940	Apr. 4, 1940	22.32	5,100	1960	Jan. 4, 1960	12.37	1,640
1941	May 22, 1941	20.92	4,470	1961	Nov. 10, 1960	12.47	1,670
1942	Jan. 28, 1942	22.46	4,950	1962	June 13, 1962	15.66	2,340
1943	Mar. 11, 1943	23.08	5,190	1963	Feb. 4, 1963	22.56	5,340
1944	Nov. 22, 1943	12.92	1,650	1964	Nov. 16, 1963	15.34	1,710
1945	Feb. 6, 1945	22.35	5,140	1965	June 25, 1965	18.20	3,500

3270. Sutter Creek near Sutter Creek, Calif.

Location.--Lat 38°23'45", long 120°46'50", in SE $\frac{1}{4}$ sec.5, T.6 N., R.11 E., on left bank 1.3 miles east of town of Sutter Creek.

Drainage area.--48.1 sq mi.

Gage.--Nonrecording prior to Dec. 8, 1938; recording thereafter. Prior to Dec. 8, 1938, at datum 4.00 ft lower. Altitude of gage is 1,220 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 22, 1936	12.0	3,900	1961	Nov. 26, 1960	1.27	61
1937	Feb. 6, 1937	8.5	1,420	1962	Feb. 10, 1962	3.04	656
1938	Feb. 11, 1938	9.7	2,020	1963	Jan. 31, 1963	6.27	5,770
1939	Mar. 9, 1939	1.83	163	1964	Jan. 21, 1964	1.79	211
1940	Mar. 31, 1940	5.74	2,050	1965	Dec. 23, 1964	4.77	2,400
1941	Feb. 11, 1941	4.30	810				

3275. Sutter Creek at Sutter Creek, Calif.

Location.--Lat 38°23'45", long 120°48'30", in NW $\frac{1}{4}$ sec.7, T.6 N., R.11 E., three-eighths of a mile west of town of Sutter Creek.

Drainage area.--50.8 sq mi (revised).

Gage.--Nonrecording. Altitude of gage is 1,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 612 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by small dam upstream and by release of mine water. All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Feb. 9, 1922	5.0	1,480	1929	Mar. 10, 1929	2.30	190
1923	Dec. 13, 1922	7.5	3,100	1930	Mar. 5, 1930	4.00	970
1924	Feb. 8, 1924	1.85	114				
1925	Feb. 6, 1925	7.5	3,100	1931	Jan. 2, Feb. 19, 1931	2.00	106
				1932	Feb. 6, 1932	5.6	1,770
1926	Feb. 4, 1926	2.80	400	1933	Mar. 16, 1933	2.4	210
1927	Apr. 3, 1927	5.41	1,720	1934	Jan. 1, 1934	3.60	660
1928	Mar. 25, 1928	6.27	2,260	1935	Apr. 8, 1935	4.9	1,100

3280. Dry Creek near Ione, Calif.

Location.--Lat 38°17'55", long 121°03'45", in Arroyo Seco Grant, at highway bridge near Sacramento-San Joaquin County line, 3 miles downstream from Jackson Creek and 8 miles southwest of Ione.

Drainage area.--270 sq mi.

Gage.--Nonrecording prior to Apr. 10, 1926; recording thereafter. Datum of gage is 140.03 ft above mean sea level, datum of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 6,400 cfs.

Remarks.--Low peaks may be affected by small importation from North Fork Mokelumne River through Amador Canal since beginning of record. Peaks for the years 1912 and 1926, are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 6, 1912	-	1,020	1929	Feb. 4, 1929	8.90	1,770
1926	Feb. 20, 1926	10.2	3,180	1930	Mar. 5, 1930	10.56	3,120
1927	Apr. 3, 1927	10.90	4,050	1931	Feb. 19, 1931	7.53	755
1928	Mar. 25, 1928	11.8	14,000	1932	Feb. 6, 1932	11.66	10,000

3290. Goose Creek near Elliott, Calif.

Location.--Lat 38°15', long 121°07', in SE $\frac{1}{4}$ sec. 29, T.5 N., R.8 E., $1\frac{1}{2}$ miles upstream from mouth and $4\frac{1}{2}$ miles northeast of Elliott.

Drainage area.--8.44 sq mi.

Gage.--Recording. Altitude of gage is 110 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 380 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 25, 1928	5.56	318	1931	Feb. 19, 1931	4.06	113
1929	Jan. 19, 1929	5.11	238	1932	Feb. 6, 1932	6.00	726
1930	Mar. 4, 1930	5.30	296	1933	Jan. 24, 1933	4.46	161

3295. Dry Creek near Galt, Calif.

Location.--Lat 38°14'48", long 121°13'03", in NE $\frac{1}{4}$ sec. 32, T.5 N., R.7 E., on right bank of main channel just downstream from county road bridge, 2 miles downstream from Coyote Creek and 4 miles east of Galt.

Drainage area.--329 sq mi.

Gage.--Recording. Prior to Sept. 30, 1933, at site 4 miles downstream at different datum. Oct. 1, 1944, to Sept. 30, 1945, at datum 3.00 ft higher. Datum of gage is 52.83 ft above mean sea level (levels by East Bay Municipal Utility District).

Stage-discharge relation.--Defined by current-meter measurements below 6,610 cfs prior to Sept. 30, 1933; below 22,900 cfs thereafter.

Bankfull stage.--12 ft.

Remarks.--Low peaks may be affected by many small reservoirs (combined capacity, about 1,000 acre-ft) and by many small diversions for irrigation of approximately 500 acres. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of Dry Creek near Galt, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Apr. 4, 1927	9.06	3,370	1956	Jan. 6, 1956	13.83	5,840
1928	Mar. 26, 1928	10.20	5,250	Jan. 8, 1956	13.25	2,800	
1929	Feb. 5, 1929	7.60	690	Jan. 16, 1956	14.32	12,000	
1930	Mar. 6, 1930	8.80	2,480	Jan. 23, 1956	13.54	2,530	
				Jan. 27, 1956	13.46	2,350	
1931	Feb. 20, 1931	6.18	195				
1932	Feb. 7, 1932	9.71	6,760	1957	Feb. 25, 1957	12.50	2,170
1933	Mar. 18, 1933	6.02	233	Mar. 5, 1957	13.26	3,600	
1945	Feb. 2, 1945	10.84	13,200	1958	Jan. 27, 1958	12.22	1,720
1946	Dec. 23, 1945	13.49	8,620	Feb. 3, 1958	12.32	1,800	
				Feb. 5, 1958	12.13	1,660	
1947	Mar. 11, 1947	11.91	1,040	Feb. 12, 1958	13.08	2,850	
				Feb. 19, 1958	12.98	2,620	
1948	Mar. 25, 1948	12.47	1,360	Feb. 25, 1958	13.05	2,780	
				Mar. 17, 1958	-	3,000	
1949	Mar. 4, 1949	13.51	7,620	Mar. 22, 1958	13.73	5,250	
				Mar. 31, 1958	13.53	4,320	
1950	Feb. 5, 1950	13.24	5,630	Apr. 3, 1958	15.28	24,000	
				Apr. 6, 1958	13.23	7,640	
1951	Nov. 19, 1950	13.72	9,260				
	Dec. 4, 1950	13.69	9,020	1959	Feb. 11, 1959	11.27	1,820
	Dec. 14, 1950	12.65	2,310	Feb. 16, 1959	12.16	3,010	
	Jan. 12, 1951	13.05	4,320	Feb. 19, 1959	12.19	3,060	
	Jan. 19, 1951	13.84	10,200				
	Jan. 22, 1951	13.11	4,720	1960	Feb. 9, 1960	12.86	5,300
	Feb. 12, 1951	12.48	1,770				
	Mar. 5, 1951	12.82	3,010	1961	Feb. 2, 1961	4.45	177
1952	Dec. 30, 1951	13.35	5,250	1962	Feb. 10, 1962	12.76	2,290
	Jan. 13, 1952	13.77	8,730	Feb. 15, 1962	13.30	3,900	
	Jan. 15, 1952	13.50	6,400	Mar. 5, 1962	12.35	1,840	
	Jan. 26, 1952	13.56	6,910				
	Mar. 7, 1952	12.92	2,760	1963	Oct. 14, 1962	12.03	2,020
	Mar. 16, 1952	13.59	7,160	Feb. 1, 1963	13.96	9,320	
	Mar. 20, 1952	13.37	5,390	Feb. 13, 1963	12.23	2,250	
				Mar. 28, 1963	13.52	6,800	
1953	Jan. 21, 1953	12.03	1,120	Apr. 7, 1963	13.14	5,060	
1954	Mar. 30, 1954	11.81	1,390	1964	Jan. 22, 1964	13.05	4,350
1955	Dec. 10, 1954	13.06	1,950	1965	Dec. 23, 1964	14.36	14,500
	Jan. 1, 1955	12.82	1,670	Dec. 28, 1964	13.00	4,000	
	Jan. 19, 1955	13.31	2,520	Dec. 31, 1964	12.75	2,640	
				Jan. 4, 1965	12.10	2,040	
1956	Dec. 24, 1955	14.55	17,000	Jan. 6, 1965	13.99	11,500	
	Dec. 27, 1955	13.80	5,600	Apr. 10, 1965	10.68	1,590	

3300. North Fork Cosumnes River at Cosumnes Mine, Calif.

Location.--Lat 38°40'11", long 120°31'57", in SW $\frac{1}{4}$ sec.34, T.10 N., R.13 E., on right bank 0.3 mile downstream from Cosumnes Mine, 2.4 miles north of Grizzly Flat, 4.3 miles upstream from Steeley Fork, and 15 miles southeast of Placerville.

Drainage area.--36.9 sq mi.

Gage.--Recording. Prior to Aug. 12, 1949, at site 0.2 mile upstream at different datum. Altitude of gage is 3,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 74 cfs prior to Aug. 12, 1949. Defined below 431 cfs and extended above on basis of slope-area measurement at 3,940 cfs thereafter.

Remarks.--Only annual peaks shown prior to Oct. 1, 1951. Base for partial-duration series, 250 cfs.

Peak stages and discharges

Peak Stages and Discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Apr. 22, 1949	2.95	350	1951	Dec. 3, 1950	8.42	2,880
					Dec. 8, 1950	7.35	1,950
1950	Apr. 21, 1950	4.56	438		Dec. 14, 1950	5.16	637
					Jan. 22, 1951	5.47	763
1951	Nov. 18, 1950	8.77	3,210	Feb. 5, 1951	4.34	368	
	Nov. 21, 1950	9.50	3,940	May 11, 1951	3.91	268	

Peak stages and discharges of North Fork Cosumnes River at Cosumnes Mine, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 28, 1951	3.99	288	1952	May 11, 1952	5.09	574
	Feb. 2, 1952	4.53	429				
	Apr. 7, 1952	4.62	456	1953	Apr. 27, 1953	5.83	945
	Apr. 25, 1952	5.17	601				

3315. Camp Creek near Camino, Calif.

Location.--Lat 38°41'35", long 120°32'35", in NE¼ sec.28, T.10 N., R.13 E., on right bank 3.6 miles upstream from Sly Park Creek and 7.5 miles southeast of Camino.

Drainage area.--33.0 sq mi.

Gage.--Recording. Altitude of gage is 3,120 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,350 cfs and extended above on basis of slope-area measurement at 2,560 cfs.

Remarks.--Peaks may be affected by diversion into Jackson Lake beginning in March 1955. Only annual peak is shown for the year 1949. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Apr. 24, 1949	2.79	335	1952	Feb. 2, 1952	3.02	507
1950	Jan. 18, 1950	4.28	-		Apr. 6, 1952	2.80	403
	Jan. 23, 1950	-	421		Apr. 25, 1952	2.93	464
	Feb. 6, 1950	2.94	451	1953	Apr. 27, 1953	3.12	556
1951	Nov. 20, 1950	5.65	2,560	1954	Mar. 10, 1954	2.80	385
	Dec. 3, 1950	5.41	2,320	1955	Apr. 7, 1955	1.42	56
	Dec. 8, 1950	4.45	1,450				
	Dec. 14, 1950	2.98	488				
	Jan. 22, 1951	3.23	618		Dec. 23, 1955	6.24	3,260

a Annual maximum stage; backwater from ice.

3325. Sly Park Creek near Pollock Pines, Calif.
(Published as Park Creek, 1953-55)

Location.--Lat 38°42'50", long 120°34'00", in SW¼ sec.17, T.10 N., R.13 E., on right bank 0.3 mile downstream from Sly Park Dam, 3.2 miles upstream from mouth, 3.4 miles south of Pollock Pines, and 12 miles east of Placerville.

Drainage area.--17.8 sq mi; at site used 1949-53, 18.2 sq mi.

Gage.--Recording. Prior to Aug. 25, 1949, at site 100 ft downstream at different datum. Aug. 26, 1949, to June 28, 1953, at site 0.2 mile downstream at different datum. Altitude of gage is 3,300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 71 cfs prior to Aug. 25, 1949; below 770 cfs for period Aug. 26, 1949, to June 28, 1953; and below 98 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 19, 1949	2.56	101	1951	Nov. 18, 1950	5.25	926
1950	Jan. 23, 1950	-	398		Nov. 20, 1950	5.14	889
	Feb. 6, 1950	4.62	433		Dec. 3, 1950	5.53	1,030
					Dec. 8, 1950	5.77	779

Peak stages and discharges of Sly Park Creek near Pollock Pines, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Jan. 18, 1951	4.29	387	1953	Jan. 13, 1953	3.54	222
	Jan. 22, 1951	5.08	577				
1952	Dec. 28, 1951	4.20	342	1954	Feb. 13, 1954	3.00	270
	Jan. 26, 1952	4.22	346				
	Feb. 1, 1952	6.01	868	1955	Oct. 11, 1954	2.21	87
	Feb. 16, 1952	4.27	357				

3330. Camp Creek near Somerset, Calif.

Location.--Lat 38°39'26", long 120°39'46", in SW $\frac{1}{4}$ sec. 4, T.9 N., R.12 E., on right bank 0.2 mile upstream from mouth, 1.3 miles northeast of Somerset, and 5.6 miles south of Camino.

Drainage area.--62.6 sq mi.

Gage.--Recording. Altitude of gage is 1,820 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,210 cfs and extended above on basis of slope-area measurement at 5,050 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Jenkinson Lake (usable capacity, 40,570 acre-ft) beginning in January 1955. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Jan. 1, 1955	3.34	123	1961	Feb. 11, 1961	2.43	39
1956	Dec. 23, 1955	12.48	6,020	1962	Feb. 10, 1962	3.50	150
1957	Feb. 25, 1957	5.74	682	1963	Feb. 1, 1963	12.25	5,740
1958	Apr. 3, 1958	7.53	1,510	1964	May 18, 1964	3.40	135
1959	Feb. 16, 1959	3.50	148	1965	Dec. 23, 1964	12.50	6,040
1960	Feb. 8, 1960	5.45	615				

3335. North Fork Cosumnes River near El Dorado, Calif.

Location.--Lat 38°35'20", long 120°50'38", in SW $\frac{1}{4}$ sec. 35, T.9 N., R.10 E., on downstream side of left abutment of county road bridge, 0.8 mile north of Nashville, 2.6 miles upstream from mouth, and 6 miles south of El Dorado.

Drainage area.--205 sq mi.

Gage.--Nonrecording prior to October 1933; recording thereafter. Prior to October 1933, at site 1.5 miles upstream at different datum. October 1933 to December 1941, at site 1,000 ft upstream at different datum. Altitude of gage is 840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,400 cfs prior to October 1933; below 3,830 cfs for period October 1933 to December 1941; below 3,690 cfs and extended above on basis of contracted-opening measurement at 10,900 cfs and slope-area measurement at 15,800 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Jenkinson Lake (usable capacity, 40,570 acre-ft) beginning in January 1955. Peaks may be affected by numerous small diversions above station for irrigation and domestic use. Peaks shown prior to 1934 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1939. Base for partial-duration series, 1,800 cfs.

Peak stages and discharges of North Fork Cosumnes River near El Dorado, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 6, 1912	-	810	1951	Dec. 3, 1950	10.32	7,430
1913	Apr. 5, 1913	-	568		Dec. 8, 1950	9.22	5,390
1914	Jan. 25, 1914	14.2	8,000		Jan. 18, 1951	8.25	3,800
1915	Feb. 2, 1915	9.0	2,550		Jan. 22, 1951	8.60	4,350
1916	Mar. 20, 1916	10.1	3,400	1952	Dec. 28, 1951	7.71	2,530
1917	Feb. 22, 1917	11.0	4,150		Jan. 12, 1952	7.83	2,680
1918	Mar. 12, 1918	10.5	3,720		Jan. 15, 1952	7.87	2,730
1919	Feb. 11, 1919	11.5	4,580		Jan. 26, 1952	7.70	2,520
1920	Mar. 21, 1920	7.6	1,550		Feb. 1, 1952	8.38	3,390
1921	Jan. 18, 1921	11.0	4,150	1953	Apr. 27, 1953	7.09	1,890
1922	Feb. 19, 1922	10.8	3,980				
1923	Dec. 13, 1922	11.7	4,460	1954	Mar. 10, 1954	6.92	1,750
1924	Feb. 8, 1924	5.8	560				
1925	Feb. 6, 1925	14.5	8,000	1955	Jan. 1, 1955	6.80	1,650
1926	Apr. 8, 1926	7.3	1,150	1956	Dec. 23, 1955	14.8	15,800
1927	Apr. 3, 1927	11.5	4,280		Jan. 15, 1956	9.55	4,980
1928	Mar. 25, 1928	15.2	8,700		Jan. 23, 1956	8.25	3,050
1929	Feb. 4, 1929	6.80	920		Jan. 26, 1956	8.35	3,190
1930	Mar. 5, 1930	8.00	1,550				
1931	Feb. 19, 1931	5.3	366	1957	Feb. 25, 1957	7.86	2,550
1932	Feb. 6, 1932	10.8	3,690		Mar. 5, 1957	7.91	2,610
1933	May 30, 1933	5.68	462	1958	Feb. 25, 1958	8.04	2,770
1934	Jan. 1, 1934	4.9	2,210		Mar. 16, 1958	8.13	2,880
1935	Apr. 8, 1935	8.73	6,060		Mar. 22, 1958	8.67	3,640
1936	Feb. 22, 1936	8.80	6,520		Mar. 30, 1958	8.98	4,070
1937	Feb. 6, 1937	5.75	2,890		Apr. 3, 1958	10.81	7,160
1938	Feb. 11, 1938	8.12	5,610		Apr. 6, 1958	8.18	2,950
1939	Mar. 9, 1939	2.68	460	1959	Feb. 16, 1959	6.66	1,330
1940	Jan. 9, 1940	-	2,040	1960	Feb. 8, 1960	9.15	3,820
	Jan. 11, 1940	-	3,500				
	Jan. 26, 1940	-	2,640	1961	Mar. 25, 1961	3.29	214
	Feb. 28, 1940	-	4,940				
	Mar. 27, 1940	-	5,170	1962	Feb. 10, 1962	7.38	1,820
	Mar. 31, 1940	10.12	8,350		Feb. 15, 1962	8.08	2,480
1941	Dec. 27, 1940	-	2,040	1963	Oct. 14, 1962	7.70	2,780
	Feb. 11, 1941	-	2,050		Feb. 1, 1963	13.45	12,800
	Apr. 4, 1941	5.07	2,210		Mar. 28, 1963	7.30	2,340
1949	Mar. 3, 1949	7.20	2,400		Apr. 7, 1963	7.87	3,100
1950	Feb. 6, 1950	7.38	2,670	1964	Jan. 22, 1964	4.77	642
	Apr. 7, 1950	-	1,840	1965	Dec. 23, 1964	13.85	13,700
1951	Nov. 18, 1950	12.06	10,900		Dec. 27, 1964	7.74	2,970
	Nov. 21, 1950	10.82	8,400		Jan. 6, 1965	9.77	6,770
					Jan. 24, 1965	6.50	1,820

3342. Middle Fork Cosumnes River near Somerset, Calif.

Location.--Lat 38°37'29", long 120°42'02", in NW¹/₄ sec. 19, T.9 N., R.12 E., on left bank 1,000 ft downstream from county road bridge, 0.2 mile downstream from Perry Creek, and 1.8 miles southwest of Somerset.

Drainage area.--107 sq mi.

Gage.--Recording. Datum of gage is 1,647.95 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 2,440 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Low peaks may be affected by diversion above station through Garabaldi ditch (maximum, 30 cfs) during Dec. 1 to May 15 each year. Only annual peak is shown for 1956. Base for partial-duration series, 700 cfs.

Peak stages and discharges of Middle Fork Cosumnes River near Somerset, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	18.1	-	1962	Feb. 10, 1962	8.53	1,460
1958	Feb. 12, 1958	7.55	924		Feb. 15, 1962	8.22	1,270
	Feb. 25, 1958	9.85	2,470		Apr. 15, 1962	7.00	700
	Mar. 16, 1958	7.36	843	1963	Oct. 14, 1962	8.50	1,440
	Mar. 21, 1958	8.65	1,580		Feb. 1, 1963	16.20	11,800
	Mar. 30, 1958	8.10	1,210		Mar. 28, 1963	8.0	1,150
	Apr. 3, 1958	10.85	3,400		Apr. 7, 1963	9.20	1,940
	Apr. 6, 1958	8.15	1,230		Apr. 14, 1963	8.26	1,300
	Apr. 22, 1958	7.78	1,040		May 8, 1963	8.48	1,430
	May 9, 1958	7.62	960				
				1964	Jan. 21, 1964	-	950
	Feb. 16, 1959	7.56	930				
1960	Feb. 8, 1960	10.06	2,650	1965	Dec. 23, 1964	17.8	11,000
	Mar. 12, 1960	7.01	704		Jan. 6, 1965	10.95	3,510
1961					Jan. 24, 1965	8.15	1,230
	Dec. 2, 1960	5.16	195		Feb. 6, 1965	-	700
					Apr. 22, 1965	7.73	1,020

3343. South Fork Cosumnes River near River Pines, Calif.

Location.--Lat 38°33'25", long 120°47'32", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.8 N., R.11 E., on left bank 2.4 miles upstream from mouth and 2.7 miles west of River Pines.

Drainage area.--64.3 sq mi.

Gage.--Recording. Altitude of gage is 1,220 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,900 cfs and extended above on basis of slope-area measurement at 4,740 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by importation from Middle Fork Cosumnes River through Garabaldi ditch (capacity, 30 cfs). Base for partial-duration series, 600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 3, 1958	3.90	863	1962	Feb. 10, 1962	4.52	1,260
	Feb. 12, 1958	3.84	823		Feb. 15, 1962	4.35	1,150
	Feb. 25, 1958	4.08	983		Mar. 6, 1962	4.11	1,010
	Mar. 16, 1958	4.76	1,440	1963	Oct. 14, 1962	5.79	2,040
	Mar. 22, 1958	5.22	1,720		Feb. 1, 1963	10.90	5,540
	Mar. 30, 1958	4.65	1,360		Mar. 28, 1963	5.31	1,800
	Apr. 3, 1958	9.90	4,740		Apr. 7, 1963	3.99	914
	Apr. 6, 1958	4.80	1,460				
1959	Feb. 16, 1959	4.64	1,360	1964	Jan. 21, 1964	3.38	565
	Feb. 18, 1959	3.79	790	1965	Dec. 23, 1964	8.67	3,870
1960	Feb. 8, 1960	5.02	1,540		Dec. 27, 1964	4.30	1,120
					Jan. 6, 1965	7.62	3,160
1961	Dec. 1, 1960	1.58	57		Apr. 16, 1965	3.46	615

3345. Cosumnes River near Plymouth, Calif.

Location.--Lat 38°32'20", long 120°51'45", in NW $\frac{1}{4}$ sec.22, T.8 N., R.10 E., on right bank 1.8 miles downstream from confluence of Middle and North Forks and 4 miles north of Plymouth.

Drainage area.--429 sq mi.

Gage.--Recording. Altitude of gage is 580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs.

Remarks.--Base for partial-duration series, 1,900 cfs.

Peak stages and discharges of Cosumnes River near Plymouth, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	10.27	4,370	1956	Jan. 7, 1956	8.97	2,720
	Dec. 28, 1951	11.56	5,940		Jan. 15, 1956	14.60	12,300
	Jan. 12, 1952	12.32	7,380		Jan. 23, 1956	11.86	6,780
	Jan. 15, 1952	11.92	6,780		Jan. 26, 1956	12.39	7,700
	Jan. 25, 1952	12.00	6,900		Feb. 23, 1956	9.95	5,920
	Feb. 1, 1952	12.27	7,300		May 4, 1956	8.63	2,370
	Feb. 11, 1952	8.57	2,310	1957	Feb. 25, 1957	12.00	7,000
	Feb. 16, 1952	9.93	3,890		Mar. 5, 1957	10.70	4,980
	Feb. 20, 1952	8.61	2,350		May 19, 1957	9.85	3,780
	Mar. 15, 1952	10.43	4,590	1958	Jan. 26, 1958	8.96	2,710
	Mar. 18, 1952	11.36	5,940		Feb. 3, 1958	8.31	3,100
	Apr. 7, 1952	9.49	3,320		Feb. 5, 1958	9.26	3,030
1953	Jan. 14, 1953	8.64	2,380		Feb. 12, 1958	10.32	4,440
	Jan. 18, 1953	8.31	2,070		Feb. 25, 1958	11.79	6,650
	Jan. 21, 1953	8.53	2,270		Mar. 16, 1958	12.16	7,280
	Apr. 27, 1953	10.26	4,350		Mar. 22, 1958	13.35	9,540
1954	Feb. 13, 1954	8.96	2,710		Mar. 24, 1958	11.04	5,490
	Feb. 17, 1954	8.60	2,340		Mar. 30, 1958	13.13	9,120
	Mar. 10, 1954	9.85	3,780		Apr. 3, 1958	16.47	23,400
	Mar. 30, 1954	8.72	2,460		Apr. 6, 1958	12.78	8,450
	Apr. 6, 1954	8.40	2,150		Apr. 22, 1958	8.79	2,540
1955	Dec. 9, 1954	8.34	2,100		May 6, 1958	8.35	2,100
	Jan. 1, 1955	9.14	2,900	1959	Feb. 16, 1959	10.00	4,010
1956	Dec. 20, 1955	-	-		Feb. 18, 1959	8.17	2,920
	Dec. 23, 1955	20.96	33,500	1960	Feb. 8, 1960	13.02	8,900
	Dec. 26, 1955	-	-		Mar. 13, 1960	9.39	3,200
	Jan. 5, 1956	11.02	5,460				

3350. Cosumnes River at Michigan Bar, Calif.

Location.--Lat 38°30'00", long 121°02'45", in SE $\frac{1}{4}$ sec.36, T.8 N., R.8 E., on downstream side of midstream pier of highway bridge at Michigan Bar, 5.5 miles southwest of Latrobe, and 12 miles downstream from confluence of North and Middle Forks.

Drainage area.--537 sq mi.

Gage.--Nonrecording prior to July 10, 1930; recording thereafter. Datum of gage is 168.09 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 23,000 cfs and extended above on basis of comparison with upstream and downstream peaks and velocity-area studies.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Jenkinson Lake (usable capacity, 40,570 acre-ft) beginning in January 1955. Peaks may be affected by diversion of water out of basin through Camino conduit for irrigation and domestic supply in North Fork Cosumnes and South Fork American River basins. Peaks for the years 1908-18, 1920-24, 1926, 1927, 1929, and 1930 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1907	March 1907	16.3	-	1919	Feb. 10, 1919	10.8	22,000
1908	Jan. 21, 24, 1908	-	2,200	1920	Mar. 1, 21, 1920	6.0	3,700
1909	Jan. 13, 1909	12.0	28,400	1921	Jan. 18, 1921	10.5	20,600
1910	Mar. 21, 1910	-	9,640	1922	Feb. 9, 1922	8.2	10,600
1911	Jan. 31, 1911	12.0	28,400	1923	Dec. 13, 1922	8.5	11,600
1912	Mar. 6, 1912	-	1,700	1924	Feb. 8, 1924	4.5	1,120
1913	Jan. 18, 1913	5.0	1,700	1925	Feb. 6, 1925	11.2	23,800
1914	Jan. 22, 1914	10.0	18,200	1926	Feb. 12, 1926	6.0	3,850
1915	Feb. 2, 1915	7.5	8,200	1927	Apr. 3, 1927	8.4	11,400
1916	Mar. 20, 1916	8.1	10,400	1928	Mar. 25, 1928	11.0	22,900
1917	Feb. 21, 1917	11.0	22,900	1929	Mar. 10, 1929	5.7	3,160
1918	Mar. 12, 1918	8.5	11,900	1930	Mar. 5, 1930	6.80	6,090

Peak stages and discharges of Cosumnes River at Michigan Bar, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Feb. 18, 1931	4.87	1,620	1952	Feb. 2, 1952	7.46	8,440
1932	Feb. 6, 1932	8.24	10,600		Mar. 15, 1952	7.48	8,520
1933	May 30, 1933	4.28	890		Mar. 18, 1952	6.97	6,620
1934	Jan. 1, 1934	7.15	7,170				
1935	Apr. 8, 1935	10.43	20,100	1953	Apr. 27, 1953	6.12	4,080
1936	Feb. 22, 1936	9.95	18,200	1954	Mar. 30, 1954	6.03	3,860
1937	Mar. 21, 1937	9.50	15,300	1955	Jan. 1, 1955	6.11	4,060
1938	Feb. 11, 1938	10.06	19,300	1956	Dec. 23, 1955	14.59	42,000
1939	Mar. 9, 1939	5.05	1,930		Dec. 26, 1955	8.63	11,100
1940	Mar. 31, 1940	11.66	26,200		Jan. 5, 1956	7.38	6,840
1941	Apr. 4, 1941	7.67	9,280		Jan. 15, 1956	9.58	13,900
1942	Jan. 27, 1942	11.28	24,500		Jan. 23, 1956	7.33	6,680
1943	Mar. 10, 1943	10.90	22,900		Jan. 26, 1956	7.54	7,350
1944	Feb. 29, 1944	-	5,900	1957	Feb. 25, 1957	7.23	6,370
	Mar. 4, 1944	7.45	8,490		Mar. 5, 1957	7.41	6,930
1945	Nov. 10, 1944	-	5,310	1958	Jan. 26, 1958	6.42	4,110
	Feb. 2, 1945	10.51	21,100		Feb. 12, 1958	7.05	5,830
	Feb. 3, 1945	-	14,200		Feb. 25, 1958	7.34	6,710
	Mar. 26, 1945	-	4,540		Mar. 16, 1958	7.91	8,550
1946	Dec. 23, 1945	8.50	12,600		Mar. 21, 1958	8.85	11,900
	Dec. 26, 1945	-	6,940		Mar. 24, 1958	7.20	6,280
	Mar. 30, 1946	-	5,190		Mar. 30, 1958	8.82	12,300
1947	Mar. 10, 1947	6.06	3,930		Apr. 3, 1958	12.18	29,300
1948	Mar. 24, 1948	6.86	6,240		Apr. 6, 1958	8.10	10,700
1949	Mar. 3, 1949	8.72	13,500	1959	Feb. 16, 1959	6.37	4,340
1950	Feb. 4, 1950	7.44	8,360	1960	Feb. 8, 1960	8.22	11,200
1951	Nov. 18, 1950	11.84	27,600	1961	Mar. 25, 1961	3.85	486
	Nov. 21, 1950	10.80	22,500	1962	Feb. 10, 1962	7.29	7,440
	Dec. 4, 1950	10.00	18,900		Feb. 15, 1962	7.29	7,440
	Dec. 8, 1950	9.25	15,800		Mar. 6, 1962	6.41	4,410
	Dec. 14, 1950	6.50	5,100	1963	Oct. 14, 1962	8.21	11,100
	Jan. 18, 1951	8.92	14,400		Feb. 1, 1963	14.11	39,400
	Jan. 22, 1951	8.46	12,400		Mar. 28, 1963	8.49	12,300
	Feb. 12, 1951	6.12	4,080		Apr. 7, 1963	7.70	8,940
	Mar. 5, 1951	6.10	4,030		Apr. 14, 1963	6.62	4,840
1952	Dec. 1, 1951	6.38	4,760	1964	Jan. 22, 1964	6.29	4,010
	Dec. 29, 1951	7.17	7,330	1965	Dec. 23, 1964	13.80	37,500
	Jan. 12, 1952	8.48	12,500		Jan. 6, 1965	10.47	19,800
	Jan. 15, 1952	7.63	9,120		Apr. 16, 1965	6.50	4,240
	Jan. 25, 1952	7.53	8,720				

3360. Cosumnes River at McConnell, Calif.

Location.--Lat 38°21'29", long 121°20'34", in sec.20, T.6 N., R.6 E., on downstream side of bridge on U.S. Highway 99, 0.2 mile south of McConnell, 1 mile downstream from Deer Creek, and 7 miles north of Galt.

Drainage area.--724 sq mi.

Gage.--Recording. Gage is set to datum of Corps of Engineers.

Stage-discharge relation.--Defined by current-meter measurements below 36,000 cfs.

Bankfull stage.--42 ft.

Remarks.--Peaks regulated by Jenkinson Lake (usable capacity, 40,570 acre-ft) beginning in January 1955. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 3,600 cfs.

Peak stages and discharges of Cosumnes River at McConnell, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 23, 1936	45.94	-	1955	Jan. 19, 1955	39.42	3,940
1944	Mar. 5, 1944	41.10	8,800	1956	Dec. 23, 1955	46.26	54,000
1945	Feb. 5, 1945	43.20	15,800		Dec. 27, 1955	43.16	18,000
					Jan. 6, 1956	41.61	9,540
1946	Dec. 24, 1945	42.73	13,900		Jan. 16, 1956	43.19	18,200
					Jan. 23, 1956	40.79	7,040
1947	Mar. 11, 1947	38.26	3,600		Jan. 27, 1956	41.42	8,810
					Feb. 23, 1956	38.85	4,440
1948	Mar. 25, 1948	38.30	3,560				
1949	Mar. 4, 1949	44.03	14,700	1957	Feb. 25, 1957	39.80	5,070
					Mar. 6, 1957	42.00	7,710
1950	Jan. 18, 1950	-	4,120	1958	Jan. 27, 1958	38.60	4,720
	Feb. 5, 1950	41.66	6,410		Feb. 3, 1958	38.78	5,000
					Feb. 13, 1958	39.94	6,190
1951	Nov. 21, 1950	44.89	21,900		Feb. 19, 1958	38.40	4,520
	Dec. 4, 1950	44.48	17,400		Feb. 25, 1958	40.73	7,350
	Dec. 9, 1950	43.95	14,600		Mar. 17, 1958	41.57	8,380
	Dec. 15, 1950	40.18	6,060		Mar. 22, 1958	43.98	5,300
	Jan. 12, 1951	38.63	4,210		Mar. 31, 1958	43.11	12,300
	Jan. 19, 1951	42.85	11,300		Apr. 3, 1958	46.10	52,600
	Jan. 23, 1951	43.05	11,800		Apr. 6, 1958	42.02	10,500
	Feb. 6, 1951	38.47	4,050				
	Feb. 12, 1951	38.56	4,140	1959	Feb. 17, 1959	37.93	4,100
	Mar. 7, 1951	39.28	4,920				
1952	Dec. 2, 1951	38.94	4,120	1960	Feb. 9, 1960	40.93	7,710
	Dec. 29, 1951	41.22	7,700				
	Jan. 13, 1952	43.97	14,700	1961	Feb. 3, 1961	32.51	728
	Jan. 16, 1952	43.17	12,200				
	Jan. 26, 1952	42.89	11,400	1962	Feb. 11, 1962	41.22	8,640
	Feb. 3, 1952	41.30	7,840		Feb. 15, 1962	41.95	9,100
	Feb. 17, 1952	38.05	3,630		Mar. 6, 1962	37.98	4,300
	Feb. 21, 1952	38.08	3,660				
	Mar. 8, 1952	39.86	5,630	1963	Oct. 4, 1962	41.28	8,760
	Mar. 16, 1952	41.42	8,060		Feb. 1, 1963	45.52	26,200
	Mar. 20, 1952	40.99	7,230		Mar. 29, 1963	41.74	9,440
1953	Jan. 14, 1953	38.53	3,790		Apr. 8, 1963	42.00	10,100
	Jan. 21, 1953	38.90	4,200		Apr. 15, 1963	40.14	6,400
	Apr. 28, 1953	38.78	4,070	1964	Jan. 22, 1964	39.28	5,470
1954	Feb. 14, 1954	39.64	4,480				
	Mar. 11, 1954	39.13	3,970	1965	Dec. 23, 1964	45.35	32,200
	Mar. 30, 1954	39.66	4,500		Dec. 27, 1964	41.03	8,670
					Jan. 4, 1965	40.03	6,710
1955	Dec. 10, 1954	40.58	4,960		Jan. 7, 1965	43.14	15,700
	Jan. 2, 1955	40.62	5,000		Jan. 24, 1965	37.91	4,060
					Apr. 11, 1965	38.03	3,980
					Apr. 17, 1965	38.31	4,240

3395. Drews Creek near Lakeview, Oreg.
(Published as Drew Creek near Lakeview 1919-50)

Location.--Lat 42°07'10", long 120°34'45", in NW¹/₄ sec.10, T.40 S., R.18 E., on left bank 10 ft upstream from bridge on road to Drews Creek Forest Camp, 2.0 miles downstream from Willow Creek, 2.7 miles downstream from Drews Dam, and 13 miles southwest of Lakeview.

Drainage area.--212 sq mi.

Gage.--Nonrecording prior to Dec. 13, 1911, and May 1, 1921, to June 21, 1942; recording Dec. 13, 1911, to Apr. 30, 1921, and subsequent to June 21, 1942. Prior to Oct. 26, 1941, at various sites within 1 mile below reservoir at different datums. Oct. 27, 1941, to July 3, 1953, at site a quarter of a mile upstream at datum 8.1 ft higher. Datum of gage is 4,827.0 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 1,050 cfs and extended above on basis of computation of flow over dam prior to Oct. 26, 1941. Defined by current-meter measurements below 1,200 cfs for period Oct. 26, 1941, to July 3, 1953, and below 970 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Records for 1922-25 furnished by the State Engineer of Oregon. Peaks regulated by Drews Reservoir (capacity 62,500 acre-ft) beginning in December 1912. Since Mar. 18, 1914, North Drews Canal diverts up to 80 cfs above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	Jan. 16, 1909	8.3	2,730	1939	June 10, 1939	1.30	69
1910	Mar. 1, 1910	-	3,000	1940	Mar. 31, 1940	-	707
1911	Mar. 23, 1911	7.0	1,600	1941	Mar. 12, 1941	2.66	227
1912	May 3, 1912	4.08	392	1942	Apr. 15, 1942	4.06	438
1913	Apr. 1, 1913	4.15	415	1943	Apr. 8, 1943	5.27	800
1914	Apr. 19, 1914	4.51	481	1944	July 9, 1944	2.02	83
1915	Mar. 31, 1915	4.31	441	1945	May 30, 1945	3.41	247
1916	Mar. 19, 1916	5.20	672	1946	Mar. 19, 1946	5.40	770
1917	Apr. 23, 1917	5.82	828	1947	Feb. 12, 1947	2.07	87
1918	May 29, 1918	.82	24	1948	Jan. 7, 1948	2.45	132
1919	Apr. 13, 1919	1.86	230	1949	Apr. 15, 1949	2.99	206
				1950	Apr. 27, 1950	2.98	204
1921	Mar. 17, 1921	2.32	550	1951	Apr. 5, 1951	4.64	522
1922	May 11, 1922	1.42	190	1952	Apr. 19, 1952	6.21	1,180
1925	June 26, 1925	.86	82	1953	Apr. 29, 1953	4.49	498
1926	June 16, 1926	1.21	39	1954	Apr. 18, 1954	4.22	538
1927	May 5, 1927	3.40	518	1955	Mar. 9, 1955	a2.84	-
1928	Mar. 27, 1928	3.16	428		July 30, 1955	2.67	86
1929	July 22, 1929	1.40	66	1956	Apr. 23, 1956	5.07	1,020
1930	June 18, 1930	1.44	57	1957	Mar. 12, 1957	4.03	562
1931	May 29, 1931	1.10	52	1958	Apr. 22, 1958	5.08	1,010
1932	May 27, 1932	1.46	90	1959	June 24, 1959	2.75	147
1933	June 20, 1933	1.18	63	1960	June 14, 1960	2.67	134
1934	May 25, 1934	.96	43	1961	May 22, 1961	2.58	116
1935	July 20, 1935	1.27	62	1962	June 11, 1962	2.48	
1936	Mar. 6, 1936	3.80	465	1963	May 11, 1963	3.82	386
1937	Apr. 15, 1937	3.68	396	1964	Mar. 18, 1964	b3.12	111
1938	Apr. 26, 1938	5.43	1,080	1965	Dec. 22, 1964	6.20	1,240

a Annual maximum stage; backwater from ice.

b Occurred at different time than peak discharge, caused by backwater from ice.

3405. Cottonwood Creek near Lakeview, Oreg.

Location.--Lat 42°14'05", long 120°30'05", in N $\frac{1}{2}$ sec.32, T.38 S., R.19 E., on right bank 0.7 mile downstream from Cottonwood Dam and 9 miles northwest of Lakeview.

Drainage area.--32.9 sq mi.

Gage.--Nonrecording prior to June 1, 1919, and May 1, 1924, to June 3, 1932; recording June 1 to Sept. 30, 1919, and subsequent to June 4, 1932. Prior to June 1, 1919, and May 1, 1924, to June 3, 1932, at several sites within 0.6 mile upstream at different datums. June 1 to Sept. 30, 1919, and June 4, 1932, to Sept. 14, 1961, at site 0.6 mile upstream at different datums. Datum of gage is 4,949.37 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs prior to June 1, 1919; below 110 cfs for period May 1, 1924, to June 3, 1932; below 240 cfs for period June 4, 1932, to Sept. 14, 1961; and below 80 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Records for 1924-25 furnished by State engineer of Oregon. Flow regulated by Cottonwood Reservoir (capacity, 4,160 acre-ft) beginning in 1923. Peaks are maximum observed in the years 1909, 1911-26, 1929-32. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1909	Jan. 21, 1909	3.25	312	1941	May 8, 1941	3.50	170
1911	Mar. 30, 1911	3.40	337	1942	Apr. 15, 1942	3.28	117
1912	Feb. 17, 1912	2.98	267	1943	June 3, 1943	3.67	147
1913	Apr. 8, 1913	2.4	180	1944	July 8, 1944	2.57	36
1914	Apr. 15, 1914	3.3	320	1945	May 17, 1945	3.81	193
1915	Mar. 23, 1915	2.2	172	1946	Mar. 18, 1946	4.38	307
1916	Mar. 19, 1916	2.8	241	1947	Apr. 3, 1947	2.92	67
1917	May 10, 1917	3.0	265	1948	May 17, 1948	3.86	192
1918	Mar. 25, 1918	1.9	139	1949	Apr. 12, 1949	3.29	101
1919	Apr. 7, 1919	2.8	220	1950	Apr. 22, 1950	2.56	127
1925	Apr. 19, 1925	3.05	210	1951	Apr. 18, 1951	2.86	178
1926	May 17, 1926	1.80	66	1952	Feb. 2, 1952	2.51	-
1927	Apr. 26, 1927	-	(a)	1953	Mar. 29, 1952	4.79	377
1928	Mar. 27, 1928	3.84	430	1954	Apr. 28, 1953	4.36	265
1929	May 25, 1929	1.82	48	1954	Mar. 10, 1954	4.07	170
1930	Dec. 16, 1929	3.10	204	1955	June 7, 1955	3.10	55
1931	May 30, 1931	-	40	1956	May 6, 1956	4.53	266
1932	Mar. 24, 1932	3.60	335	1957	Mar. 17, 1957	2.61	117
1933	June 8, 1933	2.43	44	1958	May 11, 1958	4.54	268
1934	May 26, 1934	2.44	40	1959	June 24, 1959	2.50	56
1935	Apr. 16, 1935	3.17	131	1960	May 14, 1960	4.05	98
1936	April 1936	3.07	114	1961	June 21, 1961	2.94	60
1937	April 1937	3.24	143	1962	Apr. 6, 1962	2.28	148
1938	Apr. 18, 1938	4.43	367	1963	Dec. 17, 1963	2.30	160
1939	May 6, 1939	2.56	44	1964	July 3, 4, 8, 1964	2.18	71
1940	Mar. 28, 1940	4.49	376	1965	Apr. 1, 1965	2.40	216

a Between 500 and 1,000 cfs; result of break in reservoir outlet conduit.

b Annual maximum stage; backwater from ice.

3410. Thomas Creek near Lakeview, Oreg.

Location.--Lat 42°16', long 120°28', in NW¼ sec.22, T.38 S., R.19 E., on right bank half a mile upstream from Barnes Spring, 3 miles upstream from Bauers Creek, and 8 miles northwest of Lakeview.

Drainage area.--30 sq mi, approximately.

Gage.--Nonrecording. Prior to October 1945, at sites below Barnes Spring half a mile downstream at different datums. October 1945 to Oct. 1, 1949, at described site at datum 1.00 ft higher; gage heights herein for 1946-49 adjusted to described datum. Altitude of last used gage is 4,800 ft (from Corps of Engineers preliminary topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 28 cfs prior to Feb. 28, 1913; below 110 cfs for period ending in 1931; and below 140 cfs thereafter.

Remarks.--Records for 1927-31, 1946-58 furnished by State engineer of Oregon. Peaks are maximum observed in the years 1912-16, 1927-31 and 1946-58. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 10, 1912	2.40	112	1946	Apr. 16, 1946	4.72	254
1913	Apr. 27, 1913	2.81	105	1947	Feb. 12, 1947	3.82	187
1914	Apr. 15, 1914	4.15	440	1948	Jan. 7, 1948	4.03	212
1915	Apr. 2, 1915	2.60	95	1949	Apr. 11, 1949	4.17	282
				1950	Apr. 6, 1950	2.90	127
1916	Mar. 20, 1916	3.10	179				
1917	Apr. 24, 1917	3.9	310	1951	May 7, 1951	3.06	151
				1952	Apr. 19, 1952	4.60	360
1919	Apr. 18, 1919	2.82	202	1953	Apr. 27, 1953	4.06	269
				1954	Mar. 10, 1954	4.52	349
1927	Apr. 26, 1927	3.12	143	1955	Apr. 30, 1955	2.75	84
1928	Mar. 26, 1928	3.50	178				
1929	Apr. 27, 1929	2.14	46	1956	Dec. 22, 1955	6.32	790
1930	Dec. 20, 1929	2.38	64	1957	Feb. 26, 1957	4.80	406
				1958	Apr. 17, 1958	4.61	368
1931	Mar. 31, 1931	1.92	31				

SACRAMENTO RIVER BASIN

3415. Sacramento River at Castella, Calif.

Location.--Lat 41°08'20", long 122°18'50", in sec.22, T.38 N., R.4 W., at private highway bridge at Castella, 0.5 mile downstream from Castle Creek.

Drainage area.--256 sq mi.

Gage.--Nonrecording. Altitude of gage is 1,950 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,800 cfs.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Mar. 6, 1911	7.0	7,020	1917	Feb. 24, 1917	8.0	6,660
1912	Jan. 25, 1912	7.0	5,200				
1913	Nov. 9, 1912	6.7	4,600	1920	Apr. 9, 1920	4.10	1,360
1914	Jan. 2, 1914	15.7	16,000				
1915	Mar. 28, 1915	8.7	7,780	1921	Nov. 18, 1920	8.10	6,810
				1922	May 18, 1922	5.0	2,400
1916	Mar. 20, 1916	12.0	13,500	1923	Apr. 17, 1923	4.5	1,780

3420. Sacramento River at Delta, Calif.

Location--Lat 40°56'20", long 122°24'55", in NW $\frac{1}{4}$ sec.35, T.36 N., R.5 W., on left bank 0.2 mile downstream from Dog Creek, 0.6 mile southeast of Delta, and 2.8 miles south of LaMoine.

Drainage area--425 sq mi.

Gage--Recording. Datum of gage is 1,075.00 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation--Defined by current-meter measurements below 19,000 cfs and extended above on basis of slope-area measurement at 37,000 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 8,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 2, 1945	11.75	12,000	1957	Sept. 27, 1957	12.42	15,100
1946	Dec. 27, 1945	12.45	14,200	1958	Dec. 21, 1957	10.83	10,300
1947	Nov. 22, 1946	10.34	8,300		Jan. 29, 1958	13.28	17,800
	Feb. 12, 1947	-	8,180		Feb. 4, 1958	11.98	13,700
1948	Jan. 7, 1948	15.16	24,200		Feb. 7, 1958	12.92	16,700
1949	Feb. 22, 1949	-	9,500		Feb. 12, 1958	11.13	11,200
	Mar. 18, 1949	12.16	15,300		Feb. 16, 1958	11.72	13,000
1950	Feb. 6, 1950	9.14	5,620		Feb. 18, 1958	13.90	19,700
1951	Oct. 29, 1950	16.61	26,900		Feb. 24, 1958	17.92	32,200
1952	Dec. 1, 1951	14.00	19,600		Mar. 21, 1958	11.32	11,800
	Dec. 27, 1951	11.43	11,100		Mar. 23, 1958	11.85	13,400
	Feb. 1, 1952	12.06	13,000		Apr. 2, 1958	11.34	11,800
1953	Jan. 9, 1953	14.92	23,300	1959	Jan. 9, 1959	13.32	17,900
	Jan. 13, 1953	11.94	12,600		Jan. 12, 1959	14.73	22,300
	Jan. 20, 1953	11.84	12,300		Feb. 18, 1959	10.21	8,560
1954	Nov. 14, 1953	10.34	8,300	1960	Feb. 1, 1960	10.28	8,550
	Jan. 17, 1954	12.13	13,200		Feb. 8, 1960	13.05	16,300
	Feb. 12, 1954	12.38	13,900		Mar. 7, 1960	10.65	9,450
	Feb. 17, 1954	10.53	8,780	1961	Nov. 25, 1960	10.15	8,240
	Mar. 9, 1954	11.10	10,200		Dec. 1, 1960	12.18	13,600
	Apr. 4, 1954	11.87	12,400		Jan. 31, 1961	11.41	11,400
1955	Dec. 6, 1954	11.54	11,400		Feb. 11, 1961	12.32	14,100
1956	Dec. 19, 1955	12.80	15,200	1962	Feb. 9, 1962	12.35	14,200
	Dec. 22, 1955	19.50	37,000		Feb. 13, 1962	12.18	13,600
	Dec. 25, 1955	10.18	8,480	1963	Oct. 12, 1962	16.10	26,300
	Jan. 7, 1956	11.80	13,200		Jan. 31, 1963	12.55	14,800
	Jan. 15, 1956	12.32	14,800		Feb. 3, 1963	11.61	12,000
	Feb. 21, 1956	13.58	18,700		Apr. 12, 1963	10.67	9,500
1957	Feb. 24, 1957	15.83	25,700		Apr. 14, 1963	14.68	21,600
	Feb. 26, 1957	13.11	17,200	1964	Nov. 14, 1963	10.79	9,820
	May 18, 1957	13.07	17,100		Jan. 20, 1964	12.00	13,100
				1965	Dec. 22, 1964	20.10	38,800
					Jan. 1, 1965	10.22	8,410
					Apr. 15, 1965	11.64	12,100
					Apr. 20, 1965	10.29	8,580

3425. Sacramento River at Antler, Calif.

Location.--Lat 40°52'50", long 122°22'40", in SE $\frac{1}{4}$ sec.13, T.35 N., R.5 W., 1,000 ft downstream from Gregory Creek, a quarter of a mile downstream from Antler, and 14 miles upstream from Pit River.

Drainage area.--461 sq mi.

Gage.--Nonrecording prior to Dec. 14, 1930, Mar. 17, 1940, to Mar. 31, 1941; recording Dec. 14, 1930, to Feb. 19, 1940. Prior to Dec. 14, 1930, at site a quarter of a mile upstream at different datum. Dec. 14, 1930, to Feb. 19, 1940, at described site and datum. Mar. 17, 1940, to Mar. 31, 1941, at site 1,400 ft upstream at different datum. Datum of gage is 934.4 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 11,500 cfs prior to Dec. 14, 1930, and Mar. 17, 1940, to Mar. 31, 1941; below 14,000 cfs and extended above on basis of slope-area measurement at 58,000 cfs and velocity-area studies for period Dec. 14, 1930, to Feb. 19, 1940.

Bankfull stage.--12 ft.

Remarks.--Peaks for the years 1911, 1920-27, 1929 and 1941 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Mar. 6, 1911	13.0	17,000	1931	Jan. 23, 1931	5.67	3,510
1920	Apr. 9, 1920	7.7	5,210	1932	May 1, 1932	6.72	5,500
1921	Nov. 19, 1920	14.0	18,100	1933	Mar. 27, 1933	12.20	19,200
1922	Feb. 19, 1922	8.3	7,230	1934	Jan. 1, 1934	9.00	10,100
1923	Apr. 6, 1923	6.8	4,770	1935	Apr. 7, 1935	8.20	8,360
1924	Feb. 7, 1924	7.9	6,550	1936	Feb. 21, 1936	13.06	21,300
1925	Feb. 4, 1925	11.6	13,400	1937	Apr. 14, 1937	8.73	9,500
1926	Apr. 8, 1926	15.0	22,000	1938	Dec. 10, 1937	14.55	24,900
1927	Nov. 30, 1926	17.0	28,200	1939	Mar. 13, 1939	8.27	8,540
1928	Mar. 26, 1928	19.4	34,000	1940	Feb. 28, 1940	21.0	58,000
1929	Feb. 4, 1929	8.4	6,920	1941	Mar. 1, 1941	18.9	32,600
1930	Dec. 14, 1929	14.0	19,800				

3435. North Fork Pit River near Alturas, Calif.

Location.--Lat 41°30', long 120°29', in NE $\frac{1}{4}$ sec.8, T.42 N., R.13 E., on right bank 1.5 miles downstream from Parker Creek, 3 miles northeast of Alturas, and 4 miles upstream from mouth.

Drainage area.--203 sq mi, excluding Goose Lake basin.

Gage.--Recording. Datum of gage is 4,391 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 1,870 cfs.

Bankfull stage.--10 ft.

Historical data.--December 1955 flood reached a stage of about 12 ft, from information by local resident. According to Mr. Bettendorff, on whose land the gage is located, the peak of Mar. 19, 1932, was the highest in the 25 to 30 years prior to 1932.

Remarks.--Peaks regulated by many small reservoirs (total capacity, about 2,480 acre-ft) since beginning of record. Peaks may be affected by diversion of up to 6,100 acre-ft to Dorris Reservoir (capacity, 11,100 acre-ft) beginning in 1925 and diversions for irrigation of about 7,100 acres. Only annual peaks are shown.

Peak stages and discharges of North Fork Pit River near Alturas, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 19, 1932	8.38	1,480	1961	Mar. 26, 1961	2.82	312
1956	December 1955	12	-	1962	Feb. 10, 1962	4.26	759
				1963	Oct. 14, 1962	11.07	2,530
1958	Feb. 24, 1958	9.85	2,140	1964	June 10, 1964	9.06	2,070
1959	Dec. 24, 1958	2.35	175	1965	Dec. 22, 1964	7.82	1,670
1960	Feb. 8, 1960	8.68	1,840				

3455. South Fork Pit River near Likely, Calif.

Location.--Lat 41°14', long 120°25', in NE $\frac{1}{4}$ sec.11, T.39 N., R.13 E., on left bank 1.3 miles downstream from West Valley Creek and 3.5 miles east of Likely.

Drainage area.--247 sq mi.

Gage.--Recording. Datum of gage is 4,508 ft above mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by West Valley Creek Reservoir (capacity, 17,700 acre-ft) beginning in May 1937. Low peaks may be affected by diversions for irrigation of about 3,800 acres. Only annual peaks are shown.

Peak stages and discharges

Peak stages and discharges							
Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Apr. 27, 1932	5.55	1,520	1951	Feb. 1, 1951	a4.23	-
1933	Apr. 29, 1933	3.20	179		May 13, 1951	4.15	466
1934	June 6, 1934	4.00	398	1952	Apr. 5, 1952	b4.87	852
1935	May 30, 1935	4.49	610	1953	June 7, 1953	4.38	567
				1954	Apr. 27, 1954	3.33	233
1936	Feb. 21, 1936	4.38	574	1955	Feb. 3, 1955	a4.10	-
1937	Mar. 11, 1937	3.39	253		May 24, 1955	3.21	208
1938	May 16, 1938	4.90	900				
1939	Mar. 18, 1939	3.52	290	1956	May 27, 1956	4.21	506
1940	May 12, 1940	3.31	233	1957	May 19, 1957	4.43	474
				1958	May 12, 1958	4.56	633
1941	May 8, 1941	3.77	322	1959	Jan. 5, 1959	a3.95	-
1942	May 25, 1942	4.01	435		Aug. 8, 1959	3.03	171
1943	Jan. 21, 1943	4.15	484	1960	Feb. 8, 1960	3.44	269
1944	June 9, 1944	3.87	398				
1945	June 6, 1945	4.33	549	1961	Dec. 12, 1960	a3.12	-
					July 24, 1961	3.07	189
1946	Apr. 29, 1946	4.03	422	1962	May 28, 1962	4.02	439
1947	June 9, 1947	2.98	156	1963	Oct. 13, 1962	4.70	684
1948	June 5, 1948	4.54	625	1964	June 10, 1964	4.75	768
1949	May 13, 1949	4.45	592	1965	May 1, 1965	4.43	542
1950	Feb. 5, 1950	3.92	405				

a Annual maximum stage; backwater from ice.

b Occurred Apr. 4, 1952.

3475. Pine Creek near Alturas, Calif.

Location.--Lat 41°26'00", long 120°26'25", in SW $\frac{1}{4}$ sec.35, T.42 N., R.13 E., at hydroelectric plant, 6.5 miles upstream from mouth and 6.5 miles southeast of Alturas.

Drainage area.--23.5 sq mi, approximately.

Gage.--Nonrecording prior to Apr. 22, 1929; recording thereafter. Altitude of gage is about 4,700 ft.

Stage-discharge relation.--Defined by current-meter measurements below 70 cfs.

Remarks.--Peaks regulated by powerplant just above station (usable forebay storage, 168 acre-ft) beginning prior to 1919. All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges of Pine Creek near Alturas, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1919	Mar. 29, 1919	3.20	205	1926	Feb. 7, 1926	2.16	54
1920	Apr. 18, 1920	2.65	108	1927	June 18, 1927	2.46	82
				1928	Mar. 25, 1928	2.60	97
1921	Feb. 10, 1921	3.50	275	1929	Apr. 22, 1929	2.17	83
1922	Apr. 2, 1922	2.80	130	1930	Feb. 5, 1930	2.22	88
1923	Jan. 6, 1923	2.20	61				
1924	Apr. 5, 1924	2.70	115	1931	May 12, 1931	1.66	34
1925	May 21, 1925	2.24	60				

3485. Pit River near Canby, Calif.

Location.--Lat 41°24', long 120°55', in SW¹/₄ sec.10, T.41 N., R.9 E., on right bank at lower end of Warm Spring Valley, 4 miles southwest of Canby.

Drainage area.--1,431 sq mi, excluding Goose Lake basin.

Gage.--Nonrecording prior to December 1905; recording thereafter. Prior to Sept. 30, 1931, at different datum. Datum of gage is 4,266 ft (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 6,450 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by many small reservoirs (total capacity, about 141,000 acre-ft) beginning prior to 1904. Peaks may be affected by diversions for irrigation of about 39,000 acres above station. Peaks for the years 1904 and 1905 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 8, 1904	15.0	13,000	1948	June 11, 1948	4.96	1,300
1905	Feb. 4, Apr. 5, 1905	-	1,410	1949	May 19, 1949	5.76	1,890
				1950	Mar. 23, 1950	4.36	956
1932	Mar. 20, 1932	6.62	2,170	1951	May 18, 1951	4.56	1,040
1933	Mar. 11, 1933	3.82	605	1952	Apr. 5, 1952	9.82	5,870
1934	Feb. 8, 9, 1934	2.62	90	1953	Jan. 11, 1953	6.72	2,680
1935	Apr. 9, 1935	5.66	1,820	1954	July 8, 1954	a7.38	1,020
1936	Feb. 22, 1936	7.05	2,800	1955	Mar. 13, 1955	bs.07	520
1937	Mar. 14, 1937	5.43	1,690	1956	Dec. 23, 1955	8.39	4,260
1938	Dec. 11, 1937	12.65	8,210	1957	Feb. 27, 1957	6.23	2,270
1939	Mar. 20, 1939	4.32	932	1958	Feb. 26, 1958	6.75	2,700
1940	Feb. 28, 1940	8.72	4,280	1959	Apr. 29, 1959	3.66	546
1941	Feb. 12, 1941	6.13	2,150	1960	Feb. 9, 1960	6.70	2,660
1942	Jan. 28, 1942	7.60	3,280	1961	June 3, 1961	3.70	570
1943	Jan. 22, 1943	7.61	3,290	1962	Feb. 11, 1962	4.88	1,330
1944	Mar. 13, 1944	4.04	764	1963	Oct. 14, 1962	10.72	6,460
1945	June 10, 1945	5.56	1,700	1964	June 13, 1964	6.86	2,670
1946	Dec. 30, 1945	4.76	1,170	1965	Dec. 24, 1964	8.32	4,020
1947	Feb. 14, 1947	4.26	896				

a Occurred Sept. 12, 1954, backwater from temporary dam.

b Occurred Oct. 2, 1954, backwater from temporary dam.

3490. Pit River near Lookout, Calif.

Location.--Lat 41°19'25", long 121°07'35", in NE $\frac{1}{4}$ sec.11, T.40 N., R.7 E., on right bank 0.5 mile downstream from unnamed tributary and 8 $\frac{1}{2}$ miles north of Lookout.

Drainage area.--1,585 sq mi, excluding Goose Lake basin.

Gage.--Recording. Altitude of gage is 4,160 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,800 cfs.

Bankfull stage.--15 ft.

Remarks.--Peaks regulated by many small reservoirs (total capacity, about 141,000 acre-ft) beginning prior to 1904. Peaks may be affected by diversions for irrigation of about 41,000 acres. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 18, 1959	8.65	777	1962	Feb. 12, 1962	12.30	1,880
1960	Feb. 8, 1960	14.58	3,200	1963	Oct. 14, 1962	19.39	8,170
				1964	June 14, 1964	14.14	2,640
1961	June 1, 1961	8.55	722	1965	Dec. 24, 1964	16.75	4,820

3505. Ash Creek at Adin, Calif.

Location.--41°12', long 120°57', in SW $\frac{1}{4}$ sec.21, T.39 N., R.9 E, on left bank 300 ft upstream from highway bridge at Adin and 0.4 mile upstream from Butte Creek.

Drainage area.--258 sq mi.

Gage.--Nonrecording prior to Dec. 31, 1905; recording thereafter. Prior to Sept. 12, 1957, at sites within 1 mile of present site, at different datums. Altitude of gage is 4,190 ft (estimated on basis of bench mark 300 ft downstream).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs in 1904; below 230 cfs in 1905; below 430 cfs in 1932; and below 600 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Peaks for the years 1904 and 1905 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 19, 1904	-	1,470	1960	Feb. 8, 1960	11.30	1,300
1905	Mar. 26, 1905	-	1,120				
1932	Mar. 19, 1932	10.70	958	1961	Dec. 1, 1960	7.57	466
				1962	Feb. 9, 1962	9.23	814
				1963	Oct. 13, 1962	14.40	2,880
1958	Feb. 24, 1958	12.67	1,690	1964	June 10, 1964	8.21	591
1959	Feb. 16, 1959	9.11	790	1965	Dec. 22, 1964	13.70	2,410

3520. Pit River near Bieber, Calif.

Location.--Lat 41°00'55", long 121°09'13", in NE¹/₄SW¹/₄ sec.27, T.37 N., R.7 E., on right bank 2.2 miles upstream from Spring Gulch and 7.4 miles south of Bieber.

Drainage area.--2,475 sq mi, excluding Goose Lake basin.

Gage.--Nonrecording prior to November 1928; recording thereafter. Datum of gage is 4,080.4 ft above mean sea level (levels by Topographic Division).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by many small reservoirs (total capacity, about 62,000 acre-ft in 1904; about 175,000 acre-ft in 1930; and about 201,000 acre-ft in 1962). Peaks may be affected by diversions for irrigation of about 72,000 acres. Peaks prior to 1926 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Mar. 9, 1904	-	18,300	1953	Jan. 11, 1953	8.32	5,310
1905	Jan. 24, 1905	-	2,960	1954	Mar. 14, 1954	6.87	2,920
				1955	Feb. 18, 1955	5.26	-
1906	Mar. 25, 1906	-	13,800		Apr. 23, 1955	5.12	1,080
1907	Mar. 19, 1907	-	33,800	1956	Dec. 24, 1955	10.78	11,700
1908	Jan. 14, 1908	-	2,010	1957	Feb. 28, 1957	8.40	5,460
				1958	Feb. 26, 1958	8.99	6,760
1914	Jan. 4, 1914	10.3	10,400	1959	Feb. 19, 1959	5.62	1,570
				1960	Feb. 9, 1960	7.48	3,850
1922	Apr. 5, 1922	8.0	5,180	1961	Feb. 16, 1961	5.28	1,250
1923	Feb. 23, 1923	5.20	1,330	1962	Feb. 11, 1962	6.58	2,620
1924	Feb. 11-14, 1924	5.0	1,160	1963	Oct. 15, 1962	11.02	12,500
1925	Feb. 6, 1925	6.80	3,180	1964	June 17, 1964	6.26	2,230
1926	Feb. 5-7, 1926	5.6	1,700	1965	Dec. 23, 1964	9.80	8,880
1952	Apr. 7, 1952	11.36	13,600				

a Annual maximum stage; backwater from ice.

3535. Bear Creek near Dana, Calif.

Location.--Lat 41°09', long 121°34', in sec.1, T.38 N., R.3 E., 3 miles north of Dana.

Drainage area.--More than 84 sq mi; hydrologic drainage boundary uncertain owing to ground-water exchange.

Gage.--Nonrecording. Altitude of gage is 3,420 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 255 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	May 7, 1922	5.06	365	1925	Feb. 6, 1925	6.0	562
1923	Apr. 9, May 7, 1923	3.62	140				
1924	Feb. 8, 1924	3.60	138	1926	Feb. 7, 1926	4.00	192

3537. Fall River near Dana, Calif.

Location.--Lat 41°06'20", long 121°33'00", in NE $\frac{1}{4}$ sec.30, T.38 N., R.4 E., on left bank 0.7 mile southeast of Dana and 1 mile downstream from large springs below Bear Creek.

Drainage area.--More than 123 sq mi; hydrologic drainage boundaries uncertain owing to ground-water exchange.

Gage.--Recording. Altitude of gage is 3,340 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs.

Remarks.--Records furnished by California Department of Water Resources. Practically entire flow of stream originates in large spring about 1 mile upstream. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 25, 1958	10.3	-	1962	Apr. 28, 1962	6.56	820
1959	Jan. 13, 1959	8.4	881	1963	Apr. 7, 1963	9.23	1,770
1960	Mar. 8, 1960	7.20	1,020	1964	Jan. 20, 1964	5.84	640
				1965	Dec. 23, 1964	12.62	3,910
1961	Feb. 11, 1961	6.75	669				

3550. Pit River at Fall River Mills, Calif.

Location.--Lat 41°00', long 121°26', in NE $\frac{1}{4}$ sec.6, T.36 N., R.5 E., 0.8 mile downstream from Fall River and town of Fall River Mills.

Drainage area.--3,651 sq mi, approximately (revised), excluding Goose Lake basin.

Gage.--Recording. Prior to December 1922 at site 0.7 mile upstream at different datum. Altitude of gage is 3,235 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs prior to December 1922; below 9,000 cfs and extended above on basis of velocity-area and Δd studies, thereafter.

Remarks.--Peaks regulated by many small reservoirs upstream (total usable capacity, about 185,000 acre-ft in 1950). Peaks may be affected, beginning Oct. 23, 1922, by diversion of Fall River through Pit No. 1 powerhouse and by many diversions for irrigation above station. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	Apr. 4, 1922	5.96	7,330	1937	Mar. 14, 1937	5.19	5,080
1923	Jan. 17, 1923	5.40	2,050	1938	Dec. 12, 1937	11.8	28,600
1924	Feb. 8, 1924	5.15	1,730	1939	Mar. 22, 1939	3.03	1,590
1925	Feb. 6, 1925	4.49	3,800	1940	Feb. 29, 1940	9.00	16,900
1926	Feb. 6, 1926	3.26	1,860	1941	Feb. 12, 1941	6.70	9,200
1927	Mar. 15, 1927	5.01	4,700	1942	Feb. 7, 1942	7.55	11,800
1928	Mar. 28, 1928	7.89	13,000	1943	Jan. 21, 1943	7.30	11,000
1929	Apr. 25, 1929	2.40	930	1944	Mar. 12, 1944	2.53	1,070
1930	Feb. 10, 1930	4.33	3,540	1945	Feb. 15, 1945	3.89	2,770
1931	Feb. 19, 1931	1.60	385	1946	Dec. 30, 31, 1945	4.29	3,310
1932	Mar. 21, 1932	5.86	6,480	1947	Feb. 14, 1947	4.23	3,210
1933	Mar. 13, 1933	3.80	2,630	1948	Apr. 12, 1948	4.54	3,830
1934	Feb. 25, 26, 1934	1.48	326	1949	Mar. 5, 1949	4.22	2,860
1935	Apr. 9, 1935	6.85	9,500	1950	Mar. 27, 1950	4.20	2,830
1936	Jan. 16, 1936	7.12	10,400	1951	Feb. 13, 1951	4.25	2,900

3555. Hat Creek near Hat Creek, Calif.

Location.--Lat 40°41'12", long 121°25'25", in SE¹ sec.28, T.33 N., R.5 E., on right bank 0.8 mile northeast of Old Station Post Office and 8 miles south-east of Hat Creek Post Office.

Drainage area.--122 sq mi, approximately; hydrologic drainage boundary uncertain owing to ground-water exchange.

Gage.--Recording. July 1926 to April 1928 at site 0.5 mile upstream at different datum. Altitude of gage is 4,300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs prior to April 1928; below 290 cfs and extended above on basis of slope-area measurement at 3,320 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 170 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Aug. 8, 1926	0.93	108	1954	May 20, 1954	3.18	310
1927	Nov. 24, 1926	1.50	335		June 15, 1954	2.90	232
1928	Mar. 26, 1928	4.00	419				
1929	June 15, 1929	3.40	248	1955	Nov. 15, 1954	2.72	181
1930	June 7, 1930	3.04	177		May 13, 1955	2.67	177
					May 22, 1955	2.78	201
1931	May 15, 1931	2.71	126		May 30, 1955	2.75	194
1932	May 14, 1932	3.07	171		June 9, 1955	2.86	222
1933	May 31, 1933	3.03	176				
1934	Mar. 29, 1934	3.47	269	1956	Nov. 20, 1955	2.86	209
1935	Nov. 15, 1934	3.34	237		Dec. 23, 1955	5.06	1,050
					Jan. 15, 1956	3.12	298
1936	May 14, 1936	3.20	203		May 4, 1956	2.92	243
1937	June 16, 1937	4.12	450		May 22, 1956	3.29	345
1938	Dec. 11, 1937	a 7.75	3,320		May 30, 1956	3.27	340
1939	Oct. 29, 1938	2.58	156				
1940	Jan. 2, 1940	3.38	387	1957	Feb. 24, 1957	2.91	241
					May 18, 1957	3.57	430
1941	May 24, 1941	3.21	318		June 1, 1957	2.95	252
1942	Dec. 3, 1941	4.54	776		Sept. 27, 1957	3.14	303
1943	June 1, 1943	3.23	332				
1944	May 8, 1944	2.82	215	1958	Oct. 13, 1957	2.91	241
1945	May 16, 1945	3.13	304		Nov. 14, 1957	3.18	314
					Feb. 24, 1958	2.98	260
1946	Oct. 30, 1945	3.15	310		May 24, 1958	3.38	372
1947	June 8, 1947	2.85	226		June 12, 1958	3.35	363
					July 22, 1958	3.02	267
1948	Oct. 16, 1947	-	386				
	Jan. 7, 1948	-	262	1959	Jan. 12, 1959	3.15	304
	Apr. 15, 1948	-	177		Sept. 18, 1959	2.76	198
	May 17, 1948	-	279				
	May 26, 1948	-	265	1960	Feb. 8, 1960	3.18	312
	June 5, 1948	3.45	592		Mar. 7, 1960	2.68	178
					May 11, 1960	2.77	200
1949	May 13, 1949	2.80	206		June 4, 1960	2.86	224
	May 25, 1949	-	177				
1950	May 17, 1950	-	187	1961	May 21, 1961	2.77	198
	June 1, 1950	2.87	224		June 15, 1961	2.83	214
	June 15, 1950	-	187	1962	June 1, 1962	2.75	193
1951	Oct. 26, 1950	2.84	219				
	Oct. 30, 1950	2.94	244	1963	Oct. 12, 1962	6.85	2,370
	Nov. 21, 1950	3.00	260		Dec. 3, 1962	2.67	215
	Dec. 11, 1950	2.84	219		Dec. 15, 1962	3.28	384
	Dec. 14, 1950	2.83	216		Jan. 31, 1963	5.47	1,310
	May 10, 1951	2.70	185		Feb. 3, 1963	3.58	474
	May 27, 1951	2.87	226		Apr. 6, 1963	2.77	242
					May 21, 1963	2.84	261
1952	June 9, 1952	3.32	352				
	June 28, 1952	3.11	291	1964	Oct. 11, 1963	2.78	245
					Nov. 6, 1963	2.53	174
1953	Jan. 9, 1953	3.25	331		Nov. 14, 1963	2.95	285
	Apr. 27, 1953	3.13	296		May 26, 1964	2.58	187
	May 19, 1953	3.00	260		June 7, 1964	2.60	192
	June 6, 1953	3.03	268	1965	Dec. 23, 1964	6.67	2,200
1954	Mar. 9, 1954	2.85	219		Jan. 23, 1965	1.75	196
	Mar. 12, 1954	2.81	209		Apr. 28, 1965	1.90	226
	Apr. 4, 1954	2.70	181		May 16, 1965	2.03	245
	Apr. 27, 1954	2.88	227		June 5, 1965	2.20	278
					Aug. 11, 1965	3.30	191

a Affected by drawdown.

3605. Burney Creek near Burney, Calif.
(Published as "at Burney" prior to August 1913)

Location.--Lat 40°52'15", long 121°40'50", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.35 N., R.3 E., on right bank 300 ft upstream from road bridge, three-quarters of a mile southwest of Burney, and 4.5 miles upstream from Goose Creek.

Drainage area.--88.8 sq mi.

Gage.--Nonrecording prior to Aug. 9, 1913; recording thereafter. Prior to September 1922, at different site and datum. Altitude of gage is 3,180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 220 cfs prior to September 1922; below 200 cfs thereafter.

Remarks.--Records furnished by California Department of Water Resources. Peaks for the years 1912-22 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 1, 1912	-	149	1960	Feb. 8, 1960	10.31	543
1913	May 9, 1913	3.6	240	1961	Feb. 8, 1961	9.27	427
1921	May 21, 1921	3.75	216	1962	Feb. 13, 1962	8.21	302
1922	May 19, 1922	4.22	265	1963	Jan. 31, 1963	11.62	1,350
1959	Jan. 12, 1959	9.75	592	1964	Jan. 20, 1964	8.80	526
				1965	Dec. 22, 1964	14.35	-

3655. Squaw Creek above Shasta Lake, Calif.
(Published as "above Shasta Reservoir" prior to 1950)

Location.--Lat 40°51'25", long 122°05'08", in SW $\frac{1}{4}$ sec.29, T.35 N., R.2 W., on left bank 1.3 miles upstream from Salt Creek, 2 miles upstream from Shasta Lake, and 10 miles west of town of Montgomery Creek.

Drainage area.--64.0 sq mi.

Gage.--Recording. Altitude of gage is 1,170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,200 cfs and extended above on basis of slope-area measurement at 11,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Feb. 1, 1945	14.55	4,510	1952	Dec. 1, 1951	15.10	5,110
1946	Dec. 27, 1945	16.0	6,150		Dec. 4, 1951	12.55	2,660
					Dec. 27, 1951	16.55	6,820
1947	Feb. 12, 1947	-	2,950		Feb. 1, 1952	16.76	7,090
	Mar. 3, 1947	13.48	3,470	1953	Dec. 30, 1952	12.86	2,910
	Mar. 10, 1947	-	2,920		Jan. 9, 1953	17.71	8,350
1948	Jan. 4, 1948	-	2,930		Jan. 13, 1953	16.65	6,940
	Jan. 7, 1948	13.66	3,630		Jan. 20, 1953	14.10	4,060
	Mar. 23, 1948	-	3,000		Mar. 19, 1953	12.70	2,780
1949	Mar. 18, 1949	11.62	1,930	1954	Jan. 17, 1954	17.40	8,580
1950	Jan. 23, 1950	13.72	3,690		Jan. 23, 1954	13.33	3,340
	Feb. 6, 1950	-	2,760		Feb. 12, 1954	13.15	3,180
1951	Oct. 30, 1950	16.50	6,750		Feb. 17, 1954	11.87	2,120
	Nov. 16, 1950	12.31	2,470		Mar. 9, 1954	18.90	11,200
	Dec. 8, 1950	11.74	2,020		Apr. 5, 1954	14.46	4,440
	Dec. 15, 1950	12.69	2,770	1955	Dec. 6, 1954	11.64	1,950
	Jan. 18, 1951	12.85	2,900	1956	Dec. 21, 1955	21.90	17,800
	Feb. 5, 1951	12.75	2,820		Jan. 5, 1956	12.62	2,780
	Feb. 11, 1951	16.32	6,630				

Peak stages and discharges of Squaw Creek above Shasta Lake, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Jan. 7, 1956	14.25	4,210	1960	Feb. 8, 1960	16.32	6,880
	Jan. 15, 1956	14.58	4,570		Mar. 6, 1960	12.91	2,970
	Feb. 21, 1956	18.67	10,800	1961	Jan. 30, 1961	13.45	3,440
1957	Feb. 24, 1957	16.45	7,080	1962	Dec. 1, 1961	12.13	2,340
	Mar. 12, 1957	12.74	2,830		Feb. 9, 1962	16.73	7,510
1958	Dec. 21, 1957	14.00	3,960		Feb. 13, 1962	15.20	5,420
	Jan. 29, 1958	16.67	7,410	1963	Jan. 31, 1963	15.60	5,890
	Feb. 7, 1958	13.65	3,620		Mar. 28, 1963	14.66	4,860
	Feb. 12, 1958	12.17	2,380		Apr. 6, 1963	13.86	4,070
	Feb. 16, 1958	14.38	4,350		Apr. 15, 1963	12.62	2,960
	Feb. 24, 1958	14.98	5,040	1964	Jan. 20, 1964	17.50	8,750
	Mar. 21, 1958	12.27	2,460	1965	Dec. 22, 1964	19.46	12,300
	Mar. 30, 1958	11.99	2,430		Dec. 26, 1964	13.48	3,730
	Apr. 2, 1958	13.58	3,560		Jan. 5, 1965	15.22	5,440
1959	Jan. 9, 1959	13.13	3,160		Jan. 23, 1965	12.25	2,660
	Jan. 12, 1959	16.10	6,550		Apr. 16, 1965	12.67	3,000
	Feb. 16, 1959	13.22	3,240		Apr. 19, 1965	11.80	2,300
	Feb. 18, 1959	13.72	3,690				
1960	Feb. 1, 1960	11.87	2,150				

3665. Pit River near Ydalpom, Calif.

Location--Lat 40°45'50", long 122°14'20", in NW $\frac{1}{4}$ sec.32, T.34 N., R.3 W., at Silverthorne Ferry, 0.5 mile downstream from Squaw Creek and 1.5 miles southwest of Ydalpom.

Drainage area--5,350 sq mi, approximately, excluding Goose Lake basin.

Gage--Nonrecording prior to May 4, 1924; recording thereafter. Prior to May 4, 1924, at site 400 ft downstream at datum 2.26 ft higher. Altitude of gage is 735 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 27,200 cfs prior to May 4, 1924; below 22,000 cfs and extended above on basis of velocity-area and aV^d studies at 65,000 cfs thereafter.

Remarks--Peaks regulated by powerplants and many small reservoirs (total usable capacity, about 70,000 acre-ft in 1910 and about 210,000 acre-ft in 1943). Peaks may be affected by many diversions for irrigation above station. Peaks for the years 1911-23 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Mar. 7, 1911	-	20,600	1928	Mar. 26, 1928	18.5	37,800
1912	Jan. 25, 1912	-	16,500	1929	Feb. 4, 1929	8.54	8,100
1913	Jan. 18, 1913	-	19,600	1930	Dec. 15, 1929	15.20	26,500
1914	Dec. 31, 1913	18.2	47,000	1931	Feb. 19, 1931	7.70	6,840
1915	Feb. 2, 1915	14.6	33,900	1932	Mar. 19, 1932	11.52	15,400
1916	Feb. 10, 1916	16.4	40,300	1933	Mar. 16, 1933	10.92	13,700
1917	Feb. 25, 1917	16.5	40,700	1934	Jan. 2, 1934	10.45	12,500
1918	Mar. 25, 1918	8.8	15,000	1935	Apr. 8, 1935	16.00	29,400
1919	Feb. 9, 1919	13.9	31,400	1936	Jan. 15, 1936	18.50	37,900
1920	Apr. 15, 1920	8.3	13,700	1937	Apr. 13, 1937	11.08	14,300
1921	Nov. 18, 1920	12.3	25,900	1938	Dec. 10, 1937	24.20	65,000
1922	Mar. 31, 1922	8.4	13,900	1939	Mar. 13, 1939	12.68	18,800
1923	Apr. 6, 1923	6.6	9,610	1940	Feb. 28, 1940	22.25	56,000
1925	Feb. 11, 1925	15.0	26,700	1941	Jan. 26, 1941	16.65	32,100
1926	Feb. 4, 1926	14.75	26,000	1942	Feb. 6, 1942	19.75	44,900
1927	Feb. 21, 1927	20.78	45,700	1943	Jan. 23, 1943	16.22	30,500

3675. McCloud River near McCloud, Calif.

Location.--Lat 41°11'20", long 122°03'50", in NE $\frac{1}{4}$ sec.34, T.39 N., R.2 W., on right bank 0.4 mile downstream from Angel Creek and 6 miles southeast of McCloud.

Drainage area.--358 sq mi.

Gage.--Recording. Datum of gage is 2,711.2 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 4,500 cfs and extended above on basis of slope-area measurement at 11,800 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	May 1, 1932	1.44	934	1956	Dec. 26, 1955	3.90	3,000
1933	May 31, 1933	1.42	920		Jan. 16, 1956	3.21	2,240
1934	Mar. 29, 1934	1.67	1,080		Feb. 22, 1956	3.88	2,980
1935	Apr. 30, 1935	1.99	1,330		May 5, 1956	2.99	2,020
1936	Feb. 22, 1936	3.62	2,570	1957	Feb. 26, 1957	5.21	4,570
1937	Apr. 15, 1937	2.05	1,370		Mar. 12, 1957	2.69	1,720
1938	Dec. 10, 1937	5.4	4,600		May 18, 1957	2.80	1,830
1939	Mar. 27, 1939	1.63	1,010	1958	Dec. 21, 1957	2.81	1,840
1940	Feb. 28, 1940	8.9	10,800		Jan. 29, 1958	3.30	2,340
1941	Mar. 1, 1941	4.28	3,370		Feb. 8, 1958	3.43	2,490
1942	Dec. 16, 1941	4.45	3,560		Feb. 12, 1958	3.04	2,050
1943	Mar. 29, 1943	2.86	1,960		Feb. 16, 1958	3.74	2,840
1944	May 9, 1944	1.79	1,100		Feb. 18, 1958	3.72	2,820
1945	May 14, 1945	2.90	1,910		Feb. 24, 1958	7.29	8,010
1946	Dec. 29, 1945	3.63	2,560		Mar. 21, 1958	2.74	1,800
1947	June 8, 1947	2.21	1,370		Apr. 22, 1958	2.90	1,940
1948	Jan. 7, 1948	3.68	2,600	1959	May 12, 1958	3.13	2,180
	May 17, 1948	-	1,570		Jan. 12, 1959	4.93	4,410
1949	Mar. 19, 1949	1.92	1,160		Apr. 26, 1959	2.43	1,560
1950	Apr. 22, 1950	1.74	1,050	1960	Feb. 8, 1960	2.91	1,990
1951	Oct. 30, 1950	3.54	2,480		Mar. 7, 1960	2.85	1,940
	Dec. 9, 1950	2.40	1,510		Mar. 30, 1960	2.68	1,780
	Dec. 15, 1950	3.89	2,610	1961	Jan. 31, 1961	2.85	1,930
	Feb. 11, 1951	2.86	1,880		Feb. 11, 1961	2.73	1,790
1952	Dec. 1, 1951	3.60	2,530	1962	Feb. 10, 1962	2.63	1,730
	Dec. 27, 1951	2.50	1,590		Apr. 28, 1962	2.47	1,550
	May 1, 1952	3.09	2,070	1963	Oct. 12, 1962	5.52	5,250
	May 8, 1952	3.15	2,120		Feb. 3, 1963	3.09	2,140
1953	Jan. 9, 1953	2.66	1,740		Mar. 31, 1963	2.57	1,640
	Jan. 13, 1953	3.50	2,550		Apr. 7, 1963	3.65	2,770
	Jan. 20, 1953	3.19	2,240		Apr. 14, 1963	4.14	3,360
	Apr. 27, 1953	3.45	2,500	1964	May 8, 1963	3.08	2,160
	May 20, 1953	2.58	1,670	1965	Nov. 15, 1963	2.66	1,750
1954	Feb. 13, 1954	2.72	1,800		Dec. 22, 1964	6.40	6,590
	Mar. 10, 1954	4.90	4,050		Jan. 6, 1965	2.76	1,840
	Apr. 6, 1954	4.53	3,640		Jan. 24, 1965	2.98	2,060
	Apr. 28, 1954	2.73	1,810		Apr. 16, 1965	2.74	1,830
1955	Dec. 6, 1954	2.09	1,300		Apr. 20, 1965	3.25	2,330
1956	Dec. 21, 1955	9.42	11,800				

3680. McCloud River above Shasta Lake, Calif.
(Published as "above Shasta Reservoir" prior to 1950)

Location.--Lat 40°57'30", long 122°13'05", in NW $\frac{1}{4}$ sec.28, T.36 N., R.3 W., on right bank just upstream from Shasta Lake, 0.2 mile downstream from Big Bollibokka Creek and 11.3 miles east of La Moine.

Drainage area.--604 sq mi.

Gage.--Recording. Datum of gage is 1,100.00 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 6,340 cfs and extended above on basis of slope-area measurement at 45,200 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Drift deposit at 27.8 ft, probably occurred in December 1937, from levels made by the Bureau of Reclamation in 1945.

Remarks.--Base for partial-duration series, 4,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Dec. 23, 1945	-	7,480	1956	Feb. 22, 1956	21.29	17,700
	Dec. 27, 1945	19.84	13,200		Feb. 24, 1957	21.48	18,300
	Dec. 28, 1945	-	12,700		Mar. 12, 1957	14.81	4,640
1947	Nov. 22, 1946	-	5,520	1957	May 18, 1957	15.73	5,880
	Feb. 12, 1947	16.94	7,700		Dec. 18, 1957	15.09	5,010
	Mar. 5, 1947	-	4,850		Dec. 21, 1957	17.90	9,500
	Mar. 10, 1947	-	4,500	1958	Jan. 29, 1958	19.95	14,100
	June 8, 1947	-	4,620		Feb. 7, 1958	19.48	13,000
1948	Jan. 7, 1948	20.25	14,100		Feb. 16, 1958	18.63	11,000
	Apr. 15, 1948	-	5,610		Feb. 24, 1958	22.98	22,900
1949	Feb. 22, 1949	-	5,040		Mar. 21, 1958	17.44	8,610
	Mar. 19, 1949	16.87	7,590		Apr. 2, 1958	17.30	8,360
1950	Feb. 6, 1950	14.66	4,410	1959	Jan. 12, 1959	21.25	17,600
1951	Oct. 29, 1950	20.85	15,400		Feb. 18, 1959	16.21	6,580
	Nov. 16, 1950	15.16	5,060	1960	Feb. 1, 1960	15.83	6,020
	Dec. 9, 1950	15.27	5,210		Feb. 8, 1960	19.36	12,700
	Dec. 15, 1950	19.34	12,100		Mar. 7, 1960	16.20	6,570
	Feb. 5, 1951	14.99	4,840	1961	Dec. 1, 1960	17.39	8,520
	Feb. 11, 1951	17.20	8,120		Jan. 31, 1961	16.79	7,490
					Feb. 11, 1961	15.87	6,080
1952	Dec. 1, 1951	20.19	13,900	1962	Dec. 1, 1961	14.97	4,850
	Dec. 4, 1951	15.03	4,930		Feb. 9, 1962	19.98	14,200
	Dec. 27, 1951	19.05	11,500		Feb. 13, 1962	18.22	10,100
	Feb. 1, 1952	17.85	9,230	1963	Oct. 12, 1962	20.24	14,900
1953	Jan. 9, 1953	22.55	21,400		Dec. 16, 1962	14.86	4,710
	Jan. 13, 1953	20.66	15,000		Jan. 31, 1963	18.00	9,700
	Jan. 20, 1953	18.51	10,400		Mar. 30, 1963	16.56	7,120
1954	Jan. 17, 1954	19.46	12,400		Apr. 7, 1963	17.19	8,160
	Jan. 23, 1954	14.71	4,510		Apr. 14, 1963	19.39	12,800
	Feb. 13, 1954	19.48	12,400	1964	Nov. 14, 1963	15.16	5,140
	Feb. 17, 1954	16.92	7,680		Jan. 20, 1964	19.53	13,100
	Mar. 9, 1954	19.66	12,800	1965	Dec. 22, 1964	24.37	28,000
	Apr. 5, 1954	19.67	12,800		Jan. 6, 1965	18.94	11,700
1955	Dec. 6, 1954	17.38	8,430		Jan. 24, 1965	16.13	6,500
1956	Dec. 22, 1955	28.20	45,200		Apr. 16, 1965	17.60	8,900
	Jan. 7, 1956	17.10	8,000		Apr. 20, 1965	16.80	7,560
	Jan. 15, 1956	18.47	10,700				

3690. McCloud River at Baird, Calif.

Location.--Lat 40°46'50", long 122°18'00", in SE $\frac{1}{4}$ sec.22, T.34 N., R.4 W., at Baird, 1.5 miles upstream from mouth.

Drainage area.--690 sq mi, approximately.

Gage.--Nonrecording at site 1 mile upstream at different datum prior to Dec. 13, 1930; recording thereafter. Altitude of gage is 700 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 18,000 cfs prior to Dec. 13, 1930; below 26,000 cfs thereafter.

Historical data.--Maximum discharge known since 1902, 55,000 cfs Feb. 16, 1904, at site 11 miles upstream near Gregory. A rise of 26 ft above low water on Feb. 2, 1881, which would correspond to about 90,000 cfs, was reported by Mr. Diller.

Remarks.--Peaks for the years 1911-13, 1915, 1916, 1918-20, 1922-27 and 1929 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Feb. 16, 1904	-	55,000	1927	Apr. 2, 1927	11.4	18,000
1911	Mar. 7, 1911	9.4	12,600	1928	Mar. 26, 1928	12.8	21,700
1912	Jan. 26, 1912	8.5	10,400	1929	Feb. 4, 1929	4.85	4,380
1913	Jan. 18, 1913	8.3	10,500	1930	Dec. 15, 1929	12.5	21,000
1914	Jan. 2, 1914	14.0	26,700	1931	Mar. 12, 1931	6.65	4,620
1915	Feb. 2, 1915	14.2	27,300	1932	Dec. 27, 1931	8.80	7,880
1916	Feb. 10, 1916	10.8	17,200	1933	Mar. 28, 1933	10.80	10,400
1917	Feb. 25, 1917	15.0	29,900	1934	Jan. 1, 1934	12.00	12,200
1918	Mar. 19, 1918	8.35	11,000	1935	Apr. 7, 1935	9.41	8,440
1919	Feb. 9, 1919	9.3	13,200	1936	Feb. 21, 1936	18.66	25,900
1920	Apr. 15, 1920	5.62	5,410	1937	Apr. 15, 1937	9.46	8,600
1921	Nov. 19, 1920	13.0	23,600	1938	Dec. 10, 1937	23.35	32,200
1922	Feb. 19, 1922	6.0	6,110	1939	Mar. 13, 1939	11.35	11,400
1923	Apr. 6, 1923	5.4	5,250	1940	Feb. 28, 1940	29.2	50,000
1924	Feb. 7, 1924	6.40	6,790	1941	Dec. 24, 1940	16.70	21,000
1925	Feb. 11, 1925	8.50	11,300	1942	Dec. 16, 1941	15.95	19,600
1926	Feb. 4, 1926	11.3	18,600	1943	Jan. 22, 1943	9.48	8,820

3695. Sacramento River at Kennett, Calif.

Location.--Lat 40°44', long 122°24', in SW $\frac{1}{4}$ sec.2, T.33 N., R.5 W., at highway bridge at Kennett.

Drainage area.--6,580 sq mi, approximately, excluding Goose Lake basin.

Gage.--Recording. Datum of gage is 618.44 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 70,000 cfs and extended above on basis of velocity-area studies.

Historical data.--A peak stage of 23 ft on Feb. 15, 1904, was reported in a newspaper dispatch.

Remarks.--Peaks regulated by storage and many diversions in Pit River basin beginning prior to 1904. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Feb. 15, 1904	a23.	-	1911	Mar. 7, 1911	a19.0	-
1907	Mar. 20, 1907	a35.2	-	1914	Dec. 31, 1913	a23.6	-
1909	Jan. 16, 1909, Feb. 3, 1909	a34.5	-	1915	Feb. 2, 1915	a31.5	-

a Maximum recorded; may not be the peak.

Peak stages and discharges of Sacramento River at Kennett, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1916	Feb. 10, 1916	a23.0	-	1934	Jan. 1, 1934	13.80	38,900
				1935	Apr. 7, 1935	15.65	47,000
1926	Feb. 4, 1926	19.50	66,000	1936	Feb. 21, 1936	23.3	85,500
1927	Feb. 21, 1927	24.66	92,800	1937	Apr. 14, 1937	12.33	32,600
1928	Mar. 26, 1928	25.1	94,900	1938	Dec. 11, 1937	30.6	132,000
1929	Feb. 4, 1929	10.46	25,800	1939	Mar. 13, 1939	14.40	41,500
1930	Dec. 15, 1929	19.07	64,000	1940	Feb. 28, 1940	38.2	182,000
1931	Mar. 12, 1931	6.70	14,300				
1932	Dec. 27, 1931	12.51	33,400	1941	Apr. 4, 1941	21.7	78,500
1933	Mar. 28, 1933	15.05	44,200	1942	Feb. 6, 1942	22.90	85,300

a Maximum recorded; may not be the peak.

3705. Sacramento River at Keswick, Calif.

Location.--Lat 40°36'05", long 122°26'35", in SW¼NW¼ sec.28, T.32 N., R.5 W., on right bank 0.4 mile upstream from Middle Creek, 0.8 mile downstream from Keswick Dam, 1.6 miles downstream from Keswick, and 10 miles downstream from Shasta Dam.

Drainage area.--6,486 sq mi, excluding Goose Lake basin.

Gage.--Recording. Prior to Oct. 1, 1939, at site 1.5 miles upstream at datum 20.2 ft higher and Oct. 1, 1939, to Apr. 30, 1942, at site 1.5 miles upstream at datum 15.2 ft higher. Datum of gage is 479.81 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 93,000 cfs and extended above on basis of peak discharge at Kennett, plus 4,000 cfs estimated inflow prior to Apr. 30, 1942. Defined by current-meter measurements below 78,300 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of December 1937 reached a peak stage of 537.0 ft above mean sea level.

Remarks.--Peaks regulated by Shasta Lake (usable capacity, 4,377,000 acre-ft) beginning Dec. 30, 1943, and by Keswick Reservoir (capacity between normal operating elevations, 4,170 acre-ft) beginning in 1950. Peaks regulated by powerplants and many small reservoirs (total usable capacity, about 70,000 acre-ft in 1910 and about 210,000 acre-ft in 1962) in the Pit River basin. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Mar. 13, 1939	17.12	44,700	1952	Feb. 6, 1952	23.62	35,300
1940	Feb. 28, 1940	47.2	186,000	1953	Jan. 16, 1953	30.71	75,100
				1954	Feb. 17, 1954	26.88	51,100
1941	Apr. 4, 1941	31.65	82,300	1955	July 5, 1955	14.51	11,600
1942	Feb. 6, 1942	32.20	85,000				
1943	Jan. 23, 1943	26.38	49,400	1956	Feb. 24, 1956	27.37	53,800
1944	Feb. 3, 1944	11.53	7,650	1957	Mar. 4, 1957	27.15	52,600
1945	Aug. 1, 1945	13.16	9,290	1958	Feb. 21, 1958	31.55	78,800
				1959	Feb. 20, 1959	22.14	32,600
1946	Jan. 4, 1946	21.70	29,400	1960	July 10, 1960	14.15	11,800
1947	May 31, 1947	11.90	7,650				
1948	Apr. 30, 1948	19.17	21,900	1961	Feb. 15, 1961	15.66	14,500
1949	Aug. 17, 1949	15.19	12,900	1962	Feb. 13, 1962	14.19	11,500
1950	Aug. 2, 1950	15.20	12,100	1963	Apr. 10, 1963	25.98	45,300
				1964	Aug. 4, 1964	15.39	13,200
1951	Dec. 17, 1950	25.60	42,100	1965	Dec. 27, 1964	27.59	54,000

3710. Clear Creek at French Gulch, Calif.

Location.--Lat 40°41'40", long 122°38'10", in NE $\frac{1}{4}$ sec.27, T.33 N., R.7 W., on right bank 1,200 ft downstream from Right Fork, 0.3 mile south of French Gulch, and 15 miles northwest of Redding.

Drainage area.--115 sq mi.

Gage.--Recording. Prior to Dec. 28, 1959, at datum 3.00 ft higher. Datum of gage is 1,320.60 ft above mean sea level, datum of 1929, supplementary adjustment of 1956.

Stage-discharge relation.--Defined by current-meter measurements below 4,600 cfs and extended above on basis of slope-area measurement at 7,050 cfs.

Bankfull stage.--21 ft.

Remarks.--Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Oct. 29, 1950	7.87	3,540	1958	Feb. 19, 1958	9.13	5,870
	Feb. 4, 1951	7.00	2,430		Feb. 24, 1958	8.23	4,550
1952	Dec. 1, 1951	7.50	3,040		Mar. 21, 1958	5.02	2,140
	Dec. 27, 1951	7.37	2,870		Mar. 24, 1958	6.57	3,360
	Feb. 1, 1952	8.27	4,140		Mar. 29, 1958	4.51	1,790
1953	Jan. 9, 1953	7.08	2,530	1959	Apr. 2, 1958	6.35	3,170
	Jan. 13, 1953	6.40	1,830		Apr. 6, 1958	4.66	1,690
	Jan. 20, 1953	7.19	2,660		Jan. 9, 1959	5.99	2,440
1954	Jan. 17, 1954	7.59	3,160		Jan. 12, 1959	5.83	2,330
	Feb. 12, 1954	6.79	2,220		Feb. 16, 1959	6.54	2,880
	Feb. 17, 1954	6.43	1,890	1960	Feb. 8, 1960	9.32	2,910
	Mar. 9, 1954	6.07	1,610	1961	Dec. 1, 1960	7.90	1,690
1955	Dec. 6, 1954	5.89	1,480		Jan. 31, 1961	7.93	1,900
					Mar. 15, 1961	7.57	1,650
1956	Dec. 19, 1955	8.08	3,840	1962	Feb. 9, 1962	7.80	1,630
	Dec. 22, 1955	10.49	7,050		Feb. 13, 1962	9.45	3,010
	Dec. 25, 1955	5.58	2,080		Mar. 6, 1962	8.85	2,710
	Jan. 7, 1956	7.08	3,310	1963	Oct. 12, 1962	8.53	2,320
	Jan. 15, 1956	8.35	4,560		Jan. 31, 1963	8.64	2,400
	Feb. 21, 1956	8.72	4,960		Mar. 27, 1963	7.46	1,570
					Apr. 14, 1963	10.53	3,910
1957	Feb. 24, 1957	8.53	4,750	1964	Jan. 20, 1964	9.82	3,310
	May 18, 1957	5.16	1,850	1965	Dec. 22, 1964	13.70	7,600
1958	Jan. 29, 1958	7.11	3,360		Jan. 5, 1965	7.62	1,940
	Feb. 4, 1958	7.99	4,290		Apr. 15, 1965	8.32	2,470
	Feb. 7, 1958	7.70	4,040		Apr. 19, 1965	7.36	1,760
	Feb. 12, 1958	5.89	2,520				
	Feb. 16, 1958	6.45	2,980				

3720. Clear Creek near Igo, Calif.

Location.--Lat 40°30'50", long 122°31'20", in NE $\frac{1}{4}$ sec.27, T.31 N., R.6 W., on left bank at highway bridge on Redding-Igo road, 1.0 mile northeast of Igo, 8 miles southwest of Redding, and 11.1 miles upstream from mouth.

Drainage area.--228 sq mi.

Gage.--Recording. Altitude of gage is 675 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 18,000 cfs and extended above on basis of slope-area measurement at 24,500 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Maximum stage known prior to 1955, about 13 ft, in February 1940, from information by local residents.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 3,600 cfs.

Peak stages and discharges of Clear Creek near Igo, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	February 1940	13	-	1956	Dec. 21, 1955	13.75	24,500
1941	Mar. 1, 1941	12.2	19,200	Dec. 25, 1955	7.37	4,670	
1942	Feb. 4, 1942	10.22	12,700	Jan. 7, 1956	7.95	6,580	
1943	Jan. 29, 1943	6.65	3,600	Jan. 15, 1956	8.53	8,080	
1944	Feb. 3, 1944	6.76	3,790	Feb. 21, 1956	12.36	19,600	
1945	Feb. 2, 1945	7.47	5,170	1957	Feb. 24, 1957	17.28	13,000
1946	Dec. 27, 1945	9.53	10,600	May 18, 1957	7.50	5,500	
1947	Feb. 12, 1947	6.71	3,700	1958	Dec. 21, 1957	7.32	5,060
1948	Jan. 7, 1948	7.18	4,580	Jan. 12, 1958	6.72	3,850	
1949	Mar. 3, 1949	-	3,950	Jan. 29, 1958	8.84	8,990	
Mar. 10, 1949	-	4,320		Feb. 4, 1958	8.60	8,360	
Mar. 18, 1949	8.37	7,360		Feb. 7, 1958	10.18	12,700	
1950	Feb. 6, 1950	5.39	1,810	Feb. 12, 1958	7.89	6,460	
1951	Oct. 29, 1950	8.13	6,740	Feb. 16, 1958	7.58	5,640	
Nov. 16, 1950	6.86	3,990		Feb. 18, 1958	11.32	16,200	
Feb. 4, 1951	7.06	4,350		Feb. 24, 1958	11.94	18,200	
1952	Dec. 1, 1951	7.77	5,870	Mar. 20, 1958	7.57	5,480	
Dec. 4, 1951	7.51	4,840		Mar. 24, 1958	8.25	7,420	
Dec. 27, 1951	7.64	5,560		Mar. 29, 1958	7.82	6,280	
Feb. 2, 1952	7.61	5,480		Apr. 2, 1958	9.35	10,800	
1953	Dec. 6, 1952	7.66	5,600	1959	Jan. 9, 1959	7.97	6,620
Dec. 27, 1952	6.98	4,200		Jan. 12, 1959	7.86	6,360	
Dec. 30, 1952	7.20	4,620		Feb. 16, 1959	9.56	10,900	
Jan. 8, 1953	8.24	7,020		1960	Feb. 1, 1960	6.86	4,120
Jan. 13, 1953	6.90	4,060		Feb. 8, 1960	8.58	8,210	
Jan. 18, 1953	7.13	4,480		Mar. 5, 1960	7.02	4,440	
Mar. 19, 1953	7.14	4,500		1961	Jan. 31, 1961	7.56	5,640
1954	Jan. 17, 1954	9.14	10,000	Mar. 16, 1961	6.63	3,660	
Jan. 27, 1954	7.35	5,230		1962	Feb. 9, 1962	6.84	3,730
Feb. 12, 1954	8.41	7,850		Feb. 13, 1962	9.36	10,100	
Feb. 17, 1954	7.05	4,600		Mar. 5, 1962	7.74	5,620	
Mar. 9, 1954	7.93	6,580		1963	Oct. 13, 1962	7.77	6,150
Apr. 4, 1954	7.73	6,090		Jan. 31, 1963	7.72	6,030	
1955	Dec. 5, 1954	7.05	4,600	Mar. 27, 1963	7.99	6,680	
Apr. 21, 1955	6.59	3,720		Apr. 14, 1963	8.59	8,230	
1956	Dec. 19, 1955	9.66	11,100	1964	Jan. 20, 1964	6.28	3,030
				1965	Dec. 22, 1964	9.23	9,940

3722. South Cow Creek near Millville, Calif.

Location.--Lat 40°32'55", long 122°05'30", in NW¼NE¼ sec.16, T.31 N., R.2 W., on left bank 2.5 miles upstream from Old Cow Creek and 4.4 miles east of Millville.

Drainage area.--77.3 sq mi.

Gage.--Recording. Prior to Aug. 9, 1957, at site 1.0 mile downstream at different datum. Altitude of gage is 610 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs and extended above by comparison with rating curve at present site prior to Aug. 9, 1957; defined by current-meter measurements below 1,800 cfs thereafter.

Bankfull stage.--9 ft.

Historical data.--Flood of December 1955, reached a stage of about 12.5 ft.

Remarks.--Base for partial-duration series, 1,800 cfs.

Peak stages and discharges of South Cow Creek near Millville, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	12.5	-	1961	Mar. 14, 1961	5.66	1,890
1957	May 18, 1957	9.23	5,720	1962	Dec. 1, 1961	8.45	4,440
1958	Nov. 13, 1957	7.18	3,100		Dec. 20, 1961	7.76	3,710
	Jan. 24, 1958	6.27	2,270		Jan. 19, 1962	5.54	1,880
	Jan. 29, 1958	8.50	4,490		Feb. 14, 1962	6.24	2,380
	Feb. 12, 1958	6.35	2,340		Mar. 5, 1962	6.06	2,240
	Feb. 24, 1958	7.21	3,130	1963	Oct. 11, 1962	8.52	4,820
	Mar. 21, 1958	6.34	2,330		Oct. 13, 1962	5.58	2,140
	Mar. 29, 1958	6.87	2,800		Dec. 17, 1962	6.35	2,720
	Apr. 1, 1958	6.50	2,470		Feb. 1, 1963	7.35	3,630
1959	Feb. 16, 1959	8.25	4,230		Apr. 6, 1963	8.94	5,330
1960	Feb. 1, 1960	5.88	1,940		Apr. 14, 1963	6.20	2,480
	Feb. 7, 1960	6.42	2,400		Apr. 21, 1963	5.50	1,900
1961	Dec. 1, 1960	8.81	4,870	1964	Jan. 20, 1964	8.13	4,410
	Feb. 11, 1961	8.28	4,260	1965	Dec. 22, 1964	7.71	3,990
	Feb. 15, 1961	6.06	2,210		Jan. 5, 1965	8.57	4,880

3732. Oak Run Creek near Oak Run, Calif.

Location.--Lat 40°41'25", long 122°02'35", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.25, T.33 N., R.2 W., on left bank 800 ft downstream from road bridge, 1.1 miles northwest of town of Oak Run, 3.2 miles upstream from Tracy Creek, and 12.2 miles north-east of Millville.

Drainage area.--11.0 sq mi.

Gage.--Recording. Altitude of gage is 1,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs and extended above on basis of slope-area measurement at 928 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown in 1958. Base for partial-duration series, 300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	6.13	1,000	1962	Dec. 1, 1961	5.66	736
1959	Dec. 26, 1958	5.19	450		Jan. 19, 1962	4.95	392
	Jan. 27, 1959	4.79	314		Mar. 5, 1962	5.00	380
	Feb. 16, 1959	6.47	1,250	1963	Oct. 11, 1962	6.53	1,440
1960	Feb. 1, 1960	4.75	302		Oct. 13, 1962	5.30	515
	Feb. 8, 1960	5.55	650		Dec. 2, 1962	6.00	960
	Mar. 7, 1960	5.48	609		Dec. 17, 1962	5.02	388
1961	Nov. 25, 1960	4.75	325		Jan. 31, 1963	5.00	380
	Dec. 1, 1960	5.96	928		Apr. 6, 1963	7.05	2,160
	Dec. 17, 1960	4.78	334	1964	Jan. 20, 1964	5.15	442
	Jan. 31, 1961	4.81	344	1965	Dec. 22, 1964	5.62	692
	Feb. 11, 1961	6.10	1,040		Dec. 26, 1964	5.14	456
					Jan. 5, 1965	6.02	976

3733. Little Cow Creek near Ingot, Calif.

Location.--Lat 40°44'45", long 122°03'40", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.2, T.38 N., R.2 W., on right bank 1.8 miles northeast of Ingot and 7 miles southwest of Round Mountain.

Drainage area.--60.6 sq mi.

Gage.--Recording. Altitude of gage is 1,140 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,300 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by the California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	16.64	8,200	1962	Feb. 13, 1962	13.84	3,800
1959	Feb. 16, 1959	15.63	6,630	1963	Apr. 7, 1963	17.00	9,090
1960	Feb. 8, 1960	13.73	3,500	1965	Dec. 22, 1964	17.10	9,270
1961	Dec. 1, 1960	14.81	5,140				

3740. Cow Creek near Millville, Calif.

Location.--Lat 40°30'20", long 122°13'55", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.31 N., R.3 W., on right bank 4.2 miles southwest of Millville and 4.3 miles downstream from Little Cow Creek.

Drainage area.--425 sq mi.

Gage.--Recording. Altitude of gage is 400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 27,100 cfs.

Bankfull stage.--11 ft.

Historical data.--Flood of 1937 or 1940 reached a stage of about 23 ft.

Remarks.--Base for partial-duration series, 10,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Jan. 17, 1950	-	16,600	1955	Nov. 15, 1954	13.38	14,100
	Feb. 6, 1950	16.48	22,500		Dec. 6, 1954	11.77	10,400
1951	Nov. 18, 1950	13.06	12,600	1956	Nov. 20, 1955	14.40	16,700
	Dec. 3, 1950	13.54	13,800		Dec. 6, 1955	14.73	17,600
	Dec. 14, 1950	14.28	15,600		Dec. 23, 1955	15.28	19,200
	Feb. 5, 1951	13.58	13,900		Jan. 7, 1956	13.77	15,000
					Jan. 15, 1956	19.06	33,000
1952	Dec. 1, 1951	12.16	10,700		Jan. 22, 1956	12.77	12,600
	Dec. 27, 1951	21.55	45,200		Feb. 22, 1956	-	(a)
	Jan. 11, 1952	13.09	13,400	1957	Mar. 4, 1957	11.75	10,400
	Jan. 14, 1952	13.05	13,300		May 18, 1957	11.88	10,600
	Jan. 24, 1952	13.13	13,500	1958	Nov. 13, 1957	16.55	23,600
	Feb. 1, 1952	14.32	16,500		Jan. 12, 1958	11.94	11,700
	Feb. 16, 1952	12.01	10,900		Jan. 24, 1958	12.52	12,900
1953	Dec. 10, 1952	13.74	15,000		Jan. 29, 1958	13.75	15,900
	Dec. 26, 1952	12.55	12,100		Feb. 12, 1958	15.27	19,900
	Jan. 7, 1953	12.78	12,600		Feb. 14, 1958	11.63	11,000
	Jan. 9, 1953	13.82	15,200		Feb. 19, 1958	12.35	12,600
	Jan. 17, 1953	12.18	11,300		Feb. 24, 1958	14.70	18,300
	Apr. 27, 1953	12.61	12,200		Mar. 29, 1958	12.92	13,900
					Apr. 1, 1958	11.86	11,500
1954	Jan. 17, 1954	13.57	14,500	1959	Feb. 16, 1959	18.74	31,500
	Jan. 23, 1954	13.21	13,600				
	Mar. 9, 1954	15.16	18,800				

a Discharge unknown; exceeded base.

Peak stages and discharge of Cow Creek near Millville, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Feb. 1, 1960	12.85	13,700	1963	Dec. 2, 1962	13.07	15,000
	Feb. 7, 1960	15.22	19,700		Dec. 17, 1962	12.99	14,800
1961	Dec. 1, 1960	19.67	35,800		Jan. 31, 1963	13.91	17,000
	Jan. 31, 1961	12.46	12,800		Apr. 7, 1963	15.02	19,700
	Feb. 9, 1961	14.66	18,200	1964	Apr. 14, 1963	11.92	12,400
1962	Dec. 1, 1961	16.68	23,900		Jan. 20, 1964	14.25	17,900
	Feb. 14, 1962	13.02	14,100	1965	Dec. 22, 1964	18.46	30,300
	Mar. 5, 1962	13.60	15,500		Jan. 5, 1965	19.00	32,700
					Apr. 9, 1965	11.64	11,900
1963	Oct. 12, 1962	16.98	24,800				

3765. Battle Creek near Cottonwood, Calif.

Location.--Lat 40°23'50", long 123°08'05", in NW $\frac{1}{4}$ sec.6, T.29 N., R.2 W., on left bank 6.3 miles upstream from mouth and 7.6 miles east of Cottonwood.

Drainage area.--358 sq mi.

Gage.--Recording. Datum of gage is 421.47 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 9,700 cfs.

Bankfull stage.--9 ft.

Historical data.--Peak of Dec. 11, 1937, reached a stage of 15.8 ft, from flood-marks (discharge, 35,000 cfs), by slope-area measurement of the peak flow.

Remarks.--Peaks slightly regulated by four small powerplants and several small reservoirs above station. About 50 to 90 cfs bypasses station through Coleman fish hatchery since about 1958. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Dec. 11, 1937	15.8	35,000	1951	Nov. 14, 1950	5.98	2,720
1940	-	9.5	-		Nov. 16, 1950	6.25	3,150
					Nov. 21, 1950	6.03	2,800
1941	Feb. 10, 1941	10.88	11,100		Dec. 3, 1951	7.22	4,720
1942	Feb. 6, 1942	11.85	12,800		Dec. 14, 1951	7.94	5,950
1943	Jan. 21, 1943	9.7	9,090	1952	Jan. 22, 1951	7.93	5,930
1944	Feb. 2, 1944	5.62	1,940		Feb. 4, 1951	6.62	3,740
					Dec. 1, 1951	6.97	4,300
1945	Feb. 1, 1945	5.77	2,140		Dec. 27, 1951	9.69	8,920
1946	Nov. 28, 1945	-	2,620		Jan. 14, 1952	7.65	5,460
	Dec. 4, 1945	-	3,570	1953	Jan. 24, 1952	6.53	3,600
	Dec. 21, 1945	7.60	4,470		Feb. 1, 1952	6.72	3,900
	Dec. 22, 1945	-	4,330		Dec. 1, 1952	6.43	2,660
	Dec. 27, 1945	-	2,550		Dec. 6, 1952	6.84	3,130
1947	Jan. 2, 1946	-	3,280		Dec. 10, 1952	7.18	3,540
				1954	Jan. 7, 1953	6.29	2,510
1948	Apr. 1, 1947	8.44	5,760		Apr. 27, 1953	6.54	2,780
	Apr. 2, 1947	-	2,700		May 19, 1953	10.81	10,200
1949	Jan. 4, 1948	-	5,360		Jan. 17, 1954	7.59	4,110
	Mar. 23, 1948	10.48	9,040	1955	Feb. 13, 1954	7.63	4,160
	Apr. 10, 1948	-	2,980		Feb. 17, 1954	7.09	3,410
	Apr. 14, 1948	-	3,360		Mar. 9, 1954	8.00	4,680
	Apr. 28, 1948	-	5,200	1956	Dec. 2, 1954	5.54	1,690
	June 5, 1948	-	3,210		Nov. 21, 1955	6.97	3,240
1950	Mar. 10, 1949	7.40	4,120		Dec. 6, 1955	8.05	4,750
					Dec. 19, 1955	9.83	7,650
1950	Jan. 17, 1950	-	3,200		Dec. 22, 1955	8.50	5,440
	Feb. 6, 1950	9.52	7,460		Dec. 26, 1955	8.83	5,970
	Mar. 24, 1950	-	2,680		Jan. 7, 1956	7.15	3,500

Peak stages and discharges of Battle Creek near Cottonwood, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Jan. 14, 1956	10.32	8,540	1958	Mar. 21, 1958	7.30	3,720
	Jan. 20, 1956	6.53	2,800		Mar. 29, 1958	7.29	3,710
	Jan. 22, 1956	6.50	2,770		Apr. 1, 1958	7.73	4,300
	Jan. 25, 1956	6.61	2,880		June 12, 1958	7.24	3,640
	Feb. 22, 1956	8.17	4,920	1959	Jan. 12, 1959	7.15	3,520
1957	Feb. 24, 1957	7.49	3,970		Feb. 16, 1959	10.92	9,720
	Mar. 4, 1957	7.04	3,370	1960	Feb. 1, 1960	6.36	2,630
	May 19, 1957	10.10	8,140		Feb. 7, 1960	8.48	5,410
1958	Oct. 13, 1957	6.98	3,290		Mar. 7, 1960	7.06	3,390
	Dec. 18, 1957	6.59	2,860	1961	Nov. 25, 1960	7.25	3,630
	Jan. 24, 1958	7.04	3,370		Dec. 1, 1960	11.88	11,700
	Jan. 29, 1958	7.99	4,660		Jan. 31, 1961	6.35	2,740
	Feb. 14, 1958	6.44	2,710		Feb. 11, 1961	7.52	4,060
	Feb. 19, 1958	7.02	3,340				
	Feb. 24, 1958	10.27	8,430				

3775. Paynes Creek near Red Bluff, Calif.

Location.--Lat 40°15'50", long 122°11'10", in SE $\frac{1}{4}$ sec.22, T.28 N., R.3 W., on right bank 0.4 mile upstream from mouth and 6.5 miles northeast of Red Bluff.

Drainage area.--92.7 sq mi.

Gage.--Recording. Altitude of gage is 360 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1954. Base for partial-duration series, 1,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1950	Feb. 4, 1950	7.93	3,820	1959	Feb. 16, 1959	9.75	6,810
1951	Jan. 22, 1951	7.40	3,120		Feb. 21, 1959	5.76	1,410
1952	Dec. 27, 1951	8.10	4,060	1960	Feb. 1, 1960	7.60	3,380
1953	Dec. 7, 1952	6.56	2,140		Feb. 7, 1960	8.19	4,200
1954	Feb. 13, 1954	7.83	3,680		Mar. 7, 1960	5.76	1,410
1955	Nov. 15, 1954	5.37	1,110	1961	Nov. 25, 1960	6.41	1,990
1956	Dec. 6, 1955	6.35	1,930		Dec. 1, 1960	10.56	8,780
	Dec. 19, 1955	8.77	5,130		Jan. 31, 1961	6.52	2,100
	Dec. 23, 1955	5.91	1,530		Feb. 11, 1961	7.06	2,700
	Dec. 26, 1955	7.61	3,390	1962	Dec. 1, 1961	11.33	10,600
	Jan. 7, 1956	7.63	3,420		Dec. 20, 1961	8.10	4,070
	Jan. 10, 1956	5.61	1,290		Jan. 20, 1962	6.10	1,600
	Jan. 14, 1956	7.64	3,430		Feb. 9, 1962	5.78	1,330
	Jan. 26, 1956	5.73	1,380		Feb. 13, 1962	7.09	2,600
	Feb. 22, 1956	7.76	3,590		Feb. 15, 1962	8.20	4,110
					Mar. 6, 1962	6.17	1,660
				1963	Oct. 12, 1962	7.53	3,130
1957	Feb. 24, 1957	5.86	1,490		Dec. 17, 1962	7.57	3,190
	Mar. 4, 1957	5.58	1,260		Jan. 30, 1963	7.65	3,300
1958	Jan. 26, 1958	7.66	3,460		Mar. 28, 1963	5.79	1,340
	Jan. 29, 1958	5.88	1,510		Apr. 10, 1963	6.16	1,660
	Feb. 3, 1958	6.32	1,910		Apr. 14, 1963	7.47	3,090
	Feb. 15, 1958	5.65	1,320	1964	Jan. 20, 1964	8.40	4,480
	Feb. 19, 1958	7.01	2,640				
	Feb. 24, 1958	9.13	5,700	1965	Nov. 10, 1964	6.91	2,380
	Mar. 21, 1958	7.01	2,630		Dec. 22, 1964	8.67	4,900
	Mar. 29, 1958	6.88	2,500		Dec. 26, 1964	6.28	1,760
	Apr. 1, 1958	7.29	2,960		Jan. 6, 1965	9.97	7,500
	Apr. 6, 1958	6.11	1,700		Apr. 16, 1965	6.30	1,780
	June 12, 1958	5.62	1,300				
1959	Jan. 12, 1959	6.31	1,910				

3780. Sacramento River near Red Bluff, Calif.
(Published as "at Red Bluff" 1894-96, and as "at Jellys Ferry" 1895-1902)

Location.--Lat 40°13'55", long 122°10'50", in SE $\frac{1}{4}$ sec.34, T.28 N., R.3 W., on left bank at lower end of Iron Canyon, 0.5 mile downstream from Sevenmile Creek and 4.6 miles northeast of Red Bluff.

Drainage area.--9,300 sq mi, approximately, excluding Goose Lake basin.

Gage.--Nonrecording prior to December 1919; recording thereafter. Prior to January 1902, at site 16.2 miles upstream at different datum. January 1902 to December 1919, at several sites within 1 mile of present site at same datum. Datum of gage is 253.18 ft above mean sea level, datum of 1929 (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 125,000 cfs prior to January 1902; below 110,000 cfs for period January 1902 to December 1919; and below 170,000 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of 1852 was described in a Red Bluff newspaper as the highest known to the oldest residents prior to December 1861. As reported in this account, the crest stage of 1852 was only slightly exceeded on Dec. 8, 1861, when a height of about 28 ft was reached. A flood on Jan. 10, 1862, was described as 1.5 ft lower than that of Dec. 8, 1861. On Jan. 23, 1862, a stage of 29 ft was reached and was the highest stage at Red Bluff until Feb. 4, 1881, according to Bulletin 43 of the U.S. Weather Bureau.

Remarks.--Peaks regulated by Shasta Lake (usable capacity, 4,377,000 acre-ft) beginning Dec. 30, 1943. Peaks may also be affected by regulation by many small reservoirs with a total capacity of about 62,000 acre-ft in 1904, 175,000 acre-ft in 1930, and about 215,000 acre-ft in 1962. Peaks for the years 1879-1904, 1906-9, 1911, 1912, 1917, and 1919 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1879	Mar. 6, 1879	22.2	140,000	1917	Feb. 25, 1917	28.0	188,000
1880	Dec. 20, 1879	17.4	87,000	1918	Mar. 19, 1918	12.8	59,900
				1919	Feb. 11, 1919	23.4	137,000
1881	Feb. 4, 1881	22.5	249,000	1920	Apr. 15, 1920	9.30	35,600
1882	Mar. 2, 1882	12.0	50,000				
1883	Mar. 29, 1883	13.0	56,000	1921	Jan. 30, 1921	22.36	127,000
1884	Apr. 15, 1884	17.0	82,000	1922	Feb. 20, 1922	12.80	54,400
1885	Dec. 26, 1884	16.2	76,000	1923	Dec. 28, 1922	11.6	47,500
				1924	Feb. 8, 1924	14.83	66,900
1886	Dec. 26, 1885	21.1	120,000	1925	Feb. 11, 1925	25.18	156,000
1887	Feb. 12, 1887	18.3	92,000				
1888	Jan. 31, 1888	17.6	85,000	1926	Feb. 5, 1926	20.52	110,000
				1927	Feb. 21, 1927	26.00	152,000
1892	Apr. 15, 1892	11.5	45,500	1928	Mar. 27, 1928	26.1	153,000
1893	Dec. 24, 26, 1892	24.3	156,000	1929	Feb. 4, 1929	16.08	75,800
1894	Jan. 15, 1894	25.0	150,000	1930	Dec. 16, 1929	18.48	93,600
1895	Jan. 22, 1895	22.4	117,000				
1896	Jan. 13, 1896	29.9	129,000	1931	Jan. 23, 1931	10.23	40,000
1897	Feb. 5, 1897	25.9	103,000	1932	Dec. 27, 1931	18.06	90,500
1898	Feb. 28, 1898	16.2	42,600	1933	Mar. 28, 1933	12.73	53,800
1899	Mar. 25, 1899	25.5	99,900	1934	Jan. 1, 1934	14.50	64,900
1900	Mar. 8, 1900	-	150,000	1935	Apr. 8, 1935	21.27	117,000
1901	Jan. 4, 1901	27.5	113,000	1936	Feb. 22, 1936	24.52	133,000
1902	Feb. 25, 1902	-	166,000	1937	Mar. 15, 1937	17.72	82,000
1903	Jan. 25, 1903	23	153,000	1938	Dec. 11, 1937	36.50	262,000
1904	Feb. 16, 1904	51.0	207,000	1939	Mar. 15, 1939	12.47	48,300
1905	Jan. 23, 1905	-	157,000	1940	Feb. 29, 1940	38.9	291,000
1906	Mar. 31, 1906	23.35	150,000	1941	Apr. 4, 1941	26.9	157,000
1907	Mar. 20, 1907	29.4	191,000	1942	Feb. 6, 1942	31.40	203,000
1908	Feb. 9, 1908	17.15	97,600	1943	Jan. 21, 1943	27.40	182,000
1909	Feb. 3, 1909	35.2	252,000	1944	Feb. 3, 1944	10.05	36,000
1910	Dec. 9, 1909	18.15	110,000	1945	Feb. 1, 1945	14.46	59,600
1911	Mar. 7, 1911	22.68	145,000	1946	Dec. 27, 1945	17.53	79,200
1912	Jan. 26, 1912	12.9	65,000	1947	Feb. 12, 1947	11.13	41,400
1913	Jan. 14, 1913	-	75,600	1948	Mar. 23, 1948	15.50	65,900
1914	Jan. 1, 1914	27.6	205,000	1949	Mar. 11, 1949	14.30	58,600
1915	Feb. 2, 1915	34.0	239,000	1950	Feb. 6, 1950	13.08	51,600
1916	Feb. 11, 1916	19.4	124,000	1951	Dec. 14, 1950	16.16	70,100
				1952	Dec. 27, 1951	24.79	137,000

a Present datum.

Peak stages and discharges of Sacramento River near Red Bluff, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 17, 1953	19.68	94,500	1960	Feb. 8, 1960	17.29	77,600
1954	Jan. 28, 1954	17.65	80,000	1961	Dec. 1, 1960	18.53	86,200
1955	Nov. 15, 1954	9.88	35,200	1962	Feb. 15, 1962	15.42	65,400
1956	Jan. 15, 1956	22.30	115,000	1963	Feb. 1, 1963	17.16	76,700
1957	Mar. 5, 1957	15.58	66,400	1964	Jan. 21, 1964	14.80	61,600
1958	Feb. 19, 1958	24.98	139,000	1965	Dec. 22, 1964	28.15	170,000
1959	Feb. 16, 1959	19.41	92,300				

3790. Antelope Creek near Red Bluff, Calif.

Location.--Lat 40°12'10", long 122°07'05", in Rio De Los Berrendos Grant, on right bank 1.8 miles upstream from diversion dam of Los Molinos Mutual Water Co., 6.5 miles east of Red Bluff, Tehama County, and 9.7 miles upstream from mouth.

Drainage area.--123 sq mi.

Gage.--Recording. Prior to Sept. 18, 1954, at site 0.6 mile downstream at different datum. Altitude of gage is 360 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 9,100 cfs prior to Sept. 18, 1954; below 2,800 cfs and extended above on basis of slope-area measurement at 8,510 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 2,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	22	-	1956	Dec. 19, 1955	11.78	8,510
1941	Feb. 10, 1941	12.9	9,180	Dec. 23, 1955	9.66	3,360	
1942	Feb. 6, 1942	13.9	10,400	Dec. 26, 1955	11.12	6,200	
1943	Jan. 21, 1943	9.5	5,250	Jan. 7, 1956	10.38	4,420	
1944	Mar 4, 1944	6.35	2,020	Jan. 14, 1956	10.16	4,060	
				Feb. 22, 1956	12.43	11,500	
1946	Dec. 4, 1945	-	4,150	1957	Feb. 24, 1957	9.81	3,550
	Dec. 22, 1945	9.70	5,470	1958	Jan. 26, 1958	9.72	3,440
	Dec. 27, 1945	-	2,850	Feb. 19, 1958	8.89	2,510	
	Dec. 29, 1945	-	2,700	Feb. 24, 1958	12.35	11,100	
1947	Feb. 12, 1947	6.56	2,190	Mar. 21, 1958	10.18	4,350	
				Apr. 1, 1958	9.83	3,800	
1948	Nov. 1, 1947	-	2,600	1959	Jan. 12, 1959	9.53	3,400
	Mar. 23, 1948	11.66	7,690	Feb. 16, 1959	11.32	7,120	
	Apr. 28, 1948	-	2,500	1960	Feb. 1, 1960	9.71	3,630
1949	Mar. 11, 1949	8.12	2,900	Feb. 7, 1960	9.90	3,900	
1950	Jan. 17, 1950	-	2,750	1961	Nov. 25, 1960	8.87	2,670
	Feb. 4, 1950	10.30	5,260	Dec. 1, 1960	12.06	9,830	
1951	Nov. 16, 1950	8.95	3,740	Jan. 31, 1961	9.34	3,170	
	Dec. 14, 1950	7.74	2,550	Feb. 11, 1961	8.61	2,430	
	Jan. 21, 1951	9.35	4,180	1962	Dec. 1, 1961	10.06	4,160
1952	Dec. 1, 1951	9.37	4,210	Dec. 20, 1961	9.31	3,130	
	Dec. 27, 1951	11.33	6,530	Feb. 15, 1962	10.32	4,600	
	Jan. 14, 1952	8.58	3,220	1963	Oct. 12, 1962	13.96	11,100
	Jan. 24, 1952	7.67	2,300	Dec. 17, 1962	9.86	3,970	
	Feb. 1, 1952	9.50	4,260	Jan. 31, 1963	9.67	3,740	
1953	Dec. 6, 1952	8.38	3,000	Mar. 28, 1963	8.86	2,900	
	Dec. 27, 1952	7.93	2,560	Apr. 10, 1963	8.13	2,250	
	Jan. 9, 1953	8.80	3,460	Apr. 14, 1963	11.44	6,180	
1954	Jan. 17, 1954	11.58	6,850	1964	Jan. 20, 1964	12.09	7,280
	Feb. 13, 1954	8.75	3,400	1965	Nov. 10, 1964	9.10	3,140
	Feb. 17, 1954	8.78	3,440	Dec. 22, 1964	13.05	8,990	
1955	Nov. 15, 1954	7.74	1,500	Jan. 5, 1965	12.29	7,400	

3815. Mill Creek near Los Molinos, Calif.

Location.--Lat 40°03'17", long 122°01'23", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.6, T.25 N., R.1 W., on right bank $4\frac{1}{2}$ miles northeast of Los Molinos and 5.5 miles upstream from mouth.

Drainage area.--131 sq mi.

Gage.--Recording. Altitude of gage is 380 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,000 cfs and extended on basis of slope-area studies to 23,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 3, 1929	6.15	1,770	1952	Dec. 1, 1951	8.34	4,930
1930	Dec. 15, 1929	10.05	6,000		Dec. 26, 1951	8.61	5,280
					Jan. 24, 1952	-	(a)
1931	Jan. 23, 1931	5.53	1,500		Feb. 1, 1952	8.12	4,650
1932	Dec. 24, 1931	9.62	5,440		Feb. 16, 1952	5.18	1,710
1933	Mar. 16, 1933	4.58	1,080		Mar. 15, 1952	5.50	1,920
1934	Dec. 29, 1933	7.16	2,630		May 8, 1952	5.22	1,730
1935	Jan. 4, 1935	8.5	4,010				
1936	Feb. 21, 1936	8.83	4,380	1953	Dec. 1, 1952	4.91	1,550
1937	Feb. 14, 1937	7.94	3,310		Dec. 7, 1952	6.06	2,350
1938	Dec. 11, 1937	23.4	23,000		Dec. 27, 1952	5.12	1,670
1939	Mar. 8, 1939	4.88	1,260		Dec. 30, 1952	5.18	1,710
1940	Feb. 28, 1940	12.35	11,400		Jan. 9, 1953	10.40	7,710
					Jan. 12, 1953	6.57	2,850
1941	Feb. 10, 1941	12.90	12,200		Jan. 20, 1953	5.52	1,930
1942	Feb. 6, 1942	12.70	11,000		Apr. 27, 1953	6.78	3,070
1943	Mar. 8, 1943	9.87	6,970	1954	Jan. 17, 1954	8.32	4,910
					Feb. 13, 1954	6.99	3,300
1944	Feb. 2, 1944	-	1,800		Feb. 17, 1954	6.74	3,020
	Mar. 4, 1944	6.92	3,220		Mar. 9, 1954	6.34	2,620
					Apr. 4, 1954	7.79	4,240
1945	Nov. 9, 1944	-	1,550	1955	Nov. 11, 1954	6.20	2,480
	Dec. 22, 1944	-	2,720		Nov. 15, 1954	5.46	1,890
	Feb. 1, 1945	-	2,320		Dec. 9, 1954	5.00	1,600
	Feb. 2, 1945	-	2,060				
	Feb. 5, 1945	6.93	3,230	1956	Dec. 19, 1955	10.70	7,010
1946	Nov. 28, 1945	-	2,580		Dec. 22, 1955	12.25	9,180
	Dec. 4, 1945	-	3,660		Dec. 26, 1955	9.16	5,110
	Dec. 21, 1945	9.30	6,180		Jan. 7, 1956	9.08	5,020
	Dec. 27, 1945	-	3,910		Jan. 15, 1956	8.87	4,790
	Dec. 29, 1945	-	2,750		Jan. 22, 1956	4.94	1,520
1947	Nov. 23, 1946	-	2,020		Jan. 28, 1956	6.37	2,480
	Dec. 4, 1946	-	1,770		Feb. 22, 1956	10.29	6,480
	Dec. 5, 1946	-	1,830	1957	Feb. 24, 1957	10.03	6,140
	Feb. 12, 1947	7.65	4,070		May 18, 1957	5.89	2,100
					Sept. 27, 1957	8.49	4,390
1948	Oct. 16, 1947	-	1,990	1958	Oct. 5, 1957	6.05	2,220
	Nov. 1, 1947	-	1,800		Nov. 14, 1957	6.31	2,430
	Jan. 7, 1948	-	2,670		Dec. 18, 1957	5.84	2,070
	Mar. 23, 1948	10.12	7,320		Jan. 26, 1958	7.37	3,330
	Apr. 15, 1948	-	2,170		Jan. 29, 1958	6.72	2,760
	Apr. 28, 1948	-	3,380		Feb. 2, 1958	6.08	2,240
	June 5, 1948	-	2,760		Feb. 5, 1958	5.14	1,600
1949	Mar. 3, 1949	-	1,750		Feb. 9, 1958	5.45	1,800
	Mar. 11, 1949	7.48	3,870		Feb. 12, 1958	7.60	3,540
					Feb. 16, 1958	4.97	1,500
1950	Jan. 17, 1950	-	1,930		Feb. 18, 1958	6.01	2,190
	Jan. 21, 1950	-	2,570		Feb. 24, 1958	10.60	6,880
	Feb. 4, 1950	7.95	4,430		Mar. 21, 1958	7.73	3,660
					Mar. 23, 1958	5.55	1,860
1951	Nov. 16, 1950	7.48	3,870		Mar. 29, 1958	7.09	3,080
	Nov. 21, 1950	7.37	3,730		Apr. 1, 1958	7.65	3,580
	Dec. 3, 1950	6.28	2,560		Apr. 6, 1958	5.10	1,580
	Dec. 9, 1950	5.70	2,060		June 12, 1958	5.94	2,140
	Dec. 14, 1950	5.90	2,220				
	Jan. 22, 1951	7.18	3,510	1959	Jan. 9, 1959	5.65	1,940
	Feb. 5, 1951	5.47	1,900		Jan. 12, 1959	6.44	4,340
	Feb. 11, 1951	7.31	3,660		Feb. 16, 1959	6.65	4,560

a Discharge unknown; exceeded base.

Peak stages and discharges of Mill Creek near Los Molinos, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Feb. 1, 1960	6.09	2,230	1963	Oct. 12, 1962	15.45	14,100
	Feb. 8, 1960	9.06	5,000		Dec. 17, 1962	7.86	4,280
	Mar. 7, 1960	6.26	2,370		Jan. 31, 1963	11.19	8,600
1961	Nov. 25, 1960	6.88	2,870		Mar. 27, 1963	8.19	4,700
	Dec. 1, 1960	8.26	4,160		Apr. 7, 1963	6.84	3,060
	Jan. 31, 1961	8.55	4,450		Apr. 14, 1963	8.45	5,040
	Feb. 11, 1961	6.26	2,370	1964	Jan. 20, 1964	9.82	6,500
1962	Dec. 1, 1961	7.54	3,470	1965	Nov. 9, 1964	7.24	3,450
	Jan. 20, 1962	5.50	1,770		Dec. 22, 1964	15.26	16,000
	Feb. 9, 1962	5.81	2,010		Jan. 5, 1965	10.37	8,190
	Feb. 12, 1962	6.80	2,800		Jan. 24, 1965	5.08	1,550
	Feb. 15, 1962	8.60	4,500		Apr. 9, 1965	5.04	1,520
	Mar. 6, 1962	5.99	2,150		Apr. 16, 1965	6.98	3,140

3835. Deer Creek near Vina, Calif.

Location.--Lat 40°00'50", long 121°56'50", in NW¹/₄ sec.23, T.25 N., R.1 W., on left bank 0.5 mile upstream from concrete diversion dam and 7.9 miles northeast of Vina.

Drainage area.--208 sq mi.

Gage.--Nonrecording prior to Oct. 9, 1928; recording thereafter. Prior to Oct. 9, 1928, at site 0.8 mile downstream at different datum. Oct. 9, 1928, to Jan. 19, 1939, at present site at datum 2.64 ft higher. Datum of gage is 479.5 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 3,020 cfs prior to Oct. 9, 1928; below 9,200 cfs and extended above on basis of velocity-area studies thereafter.

Bankfull stage.--7 ft.

Remarks.--Peak prior to 1927 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 26, 1912	4.7	1,040	1943	Jan. 21, 1943	8.90	6,240
1913	Jan. 18, 1913	6.7	2,480	1944	Mar. 4, 1944	6.85	3,220
1914	Dec. 31, 1913	11.0	6,920		Feb. 1, 1945	-	2,700
1915	Feb. 2, 1915	9.5	5,480		Feb. 2, 1945	-	3,070
1921	Jan. 17, 1921	8.0	3,820	1945	Feb. 5, 1945	7.72	4,460
	Feb. 26, 1922	5.4	1,620		Dec. 4, 1945	-	3,220
1923	Dec. 27, 1922	6.30	2,300		Dec. 21, 1945	9.55	7,280
1924	Feb. 8, 1924	5.80	1,900	1946	Dec. 27, 1945	-	4,060
1925	Feb. 4, 1925	7.1	2,990		Feb. 12, 1947	7.88	4,700
1926	Apr. 8, 1926	7.90	3,700		Mar. 23, 1948	9.29	6,860
1927	Feb. 3, 1927	7.60	3,400	1948	Apr. 15, 1948	-	2,940
1928	Mar. 26, 1928	15.0	12,200		Mar. 11, 1949	7.58	4,250
1929	Feb. 3, 1929	5.00	2,460	1950	Feb. 4, 1950	8.54	5,690
1930	Dec. 15, 1929	8.60	6,380		Nov. 16, 1950	7.75	4,500
1931	Jan. 23, 1931	3.25	1,170		Nov. 21, 1950	7.34	3,910
	Dec. 27, 1931	6.89	4,400	1951	Dec. 3, 1950	6.45	2,680
1933	Mar. 12, 1933	3.41	1,200		Jan. 22, 1951	7.14	3,630
1934	Dec. 30, 1933	6.24	3,640		Feb. 11, 1951	7.09	3,560
1935	Jan. 4, 1935	6.35	3,740	1952	Dec. 1, 1951	8.65	5,860
1936	Feb. 21, 1936	8.00	5,550		Dec. 26, 1951	8.57	5,740
1937	Feb. 14, 1937	6.58	3,610		Jan. 24, 1952	6.56	2,830
1938	Dec. 10, 1937	16.6	23,800		Feb. 1, 1952	9.24	6,780
1939	Mar. 8, 1939	4.24	939				
1940	Feb. 28, 1940	13.8	21,600				
1941	Feb. 10, 1941	11.42	12,700				
1942	Feb. 6, 1942	11.72	13,700				

Peak stages and discharges of Deer Creek near Vina, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Dec. 1, 1952	6.30	2,500	1959	Jan. 9, 1959	6.78	2,740
	Dec. 6, 1952	7.02	3,460		Jan. 12, 1959	8.37	4,730
	Jan. 8, 1953	11.60	10,800		Feb. 16, 1959	9.97	7,330
	Jan. 13, 1953	-	(a)				
	Jan. 20, 1953	6.41	2,630	1960	Feb. 1, 1960	7.00	2,970
	Mar. 19, 1953	6.71	3,020		Feb. 8, 1960	9.31	6,180
	Apr. 27, 1953	6.32	2,520		Mar. 7, 1960	6.79	2,740
1954	Jan. 17, 1954	10.21	8,370	1961	Dec. 1, 1960	8.35	4,690
	Feb. 12, 1954	8.56	5,720		Jan. 31, 1961	7.98	4,170
	Feb. 17, 1954	7.14	3,630				
	Mar. 10, 1954	6.59	2,870	1962	Dec. 1, 1961	8.02	4,230
	Apr. 4, 1954	8.03	4,920		Feb. 9, 1962	6.85	2,800
1955	Nov. 15, 1954	5.62	1,750		Feb. 15, 1962	9.43	6,370
					Mar. 5, 1962	6.94	2,900
1956	Dec. 19, 1955	11.29	9,840				
	Dec. 22, 1955	12.78	12,600	1963	Oct. 12, 1962	11.38	10,300
	Dec. 26, 1955	9.34	6,720		Dec. 17, 1962	7.29	3,310
	Jan. 7, 1956	9.49	6,940		Jan. 31, 1963	11.03	9,470
	Jan. 15, 1956	9.23	6,560		Mar. 27, 1963	8.97	5,370
	Jan. 26, 1956	6.31	2,510		Apr. 7, 1963	7.98	3,690
	Feb. 22, 1956	12.31	11,700		Apr. 14, 1963	9.35	6,030
1957	Feb. 24, 1957	10.04	7,470	1964	Jan. 20, 1964	10.30	7,880
1958	Dec. 16, 1957	6.69	2,630				
	Jan. 26, 1958	6.73	2,680	1965	Nov. 10, 1964	6.84	2,790
	Jan. 29, 1958	6.74	2,690		Dec. 22, 1964	14.67	18,600
	Feb. 12, 1958	6.86	2,810		Jan. 5, 1965	12.62	13,400
	Feb. 24, 1958	10.67	8,730		Apr. 15, 1965	7.54	3,910
	Mar. 21, 1958	8.43	4,820				

a Discharge unknown; exceeded base.

3840. Big Chico Creek near Chico, Calif.

(Published as Chico Creek near Chico prior to October 1952)

Location--Lat 39°46'35", long 121°45'10", in Arroyo Chico Grant, on right bank 1.8 miles upstream from golf clubhouse in Bidwell Park, 2.6 miles upstream from Lindo Channel, and 7 miles northeast of Chico, Butte County.

Drainage area--72.5 sq mi.

Gage--Recording. Prior to Oct. 1, 1955, at site 0.6 mile downstream at different datums (datum lowered 2.11 ft May 27, 1946). Altitude of gage is 300 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 5,000 cfs and extended above on basis of rating at cable gage and velocity-area studies prior to Oct. 1, 1955. Defined by current-meter measurements below 5,900 cfs thereafter.

Bankfull stage--Not subject to overflow.

Remarks--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Mar. 11, 1931	5.07	724	1944	Mar. 4, 1944	8.33	2,720
1932	Dec. 24, 1931	9.99	3,110				
1933	Mar. 12, 1933	5.41	900	1945	Feb. 1, 1945	-	2,750
1934	Dec. 30, 1933	8.33	2,210		Feb. 5, 1945	8.75	3,160
1935	Jan. 4, 1935	9.20	2,670				
1936	Feb. 21, 1936	12.70	4,940	1946	Dec. 21, 1945	10.17	4,070
1937	Feb. 14, 1937	7.94	1,960		Dec. 27, 1945	-	3,670
1938	Dec. 10, 1937	16.6	8,260	1947	Feb. 12, 1947	10.63	3,010
1939	Dec. 3, 1938	3.89	459				
1940	Feb. 27, 1940	14.52	7,040	1948	Mar. 23, 1948	13.10	4,370
1941	Apr. 4, 1941	11.28	4,700	1949	Mar. 11, 1949	9.31	2,090
1942	Feb. 6, 1942	13.85	6,560				
1943	Jan. 21, 1943	11.0	4,610	1950	Feb. 4, 1950	11.63	3,360

Peak stages and discharges of Big Chico Creek near Chico, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 16, 1950	9.71	2,270	1958	Feb. 12, 1958	8.57	2,730
	Dec. 3, 1950	8.19	1,630		Feb. 19, 1958	6.92	1,760
	Jan. 22, 1951	8.84	1,890		Feb. 24, 1958	11.13	4,370
1952	Dec. 1, 1951	11.71	3,570		Mar. 21, 1958	9.16	3,090
	Dec. 26, 1951	12.41	3,990		Mar. 29, 1958	7.21	1,920
	Feb. 1, 1952	14.52	5,460		Apr. 2, 1958	8.63	2,770
	Mar. 15, 1952	8.27	1,660	1959	Jan. 9, 1959	7.16	1,890
1953	Jan. 9, 1953	15.00	5,800		Jan. 12, 1959	7.38	2,020
	Mar. 19, 1953	8.83	1,940		Feb. 16, 1959	10.61	4,010
1954	Jan. 17, 1954	12.95	4,360	1960	Feb. 8, 1960	9.18	3,100
	Feb. 12, 1954	10.49	2,830		Mar. 7, 1960	8.55	2,720
	Feb. 17, 1954	9.12	2,290	1961	Jan. 31, 1961	7.22	1,920
	Apr. 4, 1954	10.37	2,920	1962	Dec. 1, 1961	6.77	1,800
1955	Apr. 21, 1955	6.51	1,180		Feb. 9, 1962	6.63	1,730
1956	Dec. 19, 1955	13.40	5,970		Feb. 13, 1962	10.03	3,720
	Dec. 22, 1955	14.94	7,150	1963	Oct. 13, 1962	11.77	4,850
	Dec. 26, 1955	9.57	3,320		Jan. 31, 1963	12.21	5,140
	Jan. 7, 1956	11.08	4,340		Mar. 28, 1963	8.55	2,810
	Jan. 15, 1956	10.16	3,700		Apr. 7, 1963	7.22	2,050
	Feb. 22, 1956	15.06	7,250		Apr. 14, 1963	7.57	2,240
1957	Feb. 24, 1957	10.74	4,100	1964	Jan. 20, 1964	10.12	3,780
	May 18, 1957	7.38	1,830	1965	Dec. 21, 1964	14.61	8,720
1958	Dec. 16, 1957	7.96	2,200		Jan. 5, 1965	15.36	9,580
	Jan. 26, 1958	6.93	1,610		Apr. 16, 1965	7.54	2,330
	Jan. 29, 1958	8.93	2,950				

3890. Sacramento River at Butte City, Calif.

Location.--Lat 39°27'35", long 121°59'35", in NE $\frac{1}{4}$ sec.32, T.19 N., R.1 W., on left bank 0.5 mile south of Butte City.

Gage.--Recording. Datum of gage is set to datum of Corps of Engineers (2.92 ft below mean sea level).

Stage-discharge relation.--Defined by current-meter measurements below 100,000 cfs.

Bankfull stage.--89 ft.

Historical data.--Flood of Feb. 28, 1940, produced a mean discharge for the day of 162,000 cfs.

Remarks.--Peaks are affected by storage reservoirs, power developments, and unmeasured overbank flow during extreme floods. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 12, 1941	95.17	151,000 ^a	1954	Feb. 19, 1954	90.54	80,700
1942	Feb. 7, 1942	96.87	170,000	1955	Dec. 10, 1954	80.49	33,500
1943	Jan. 24, 1943	94.44	143,000	1956	Jan. 16, 1956	94.66	149,000
1944	Feb. 4, 1944	82.95	42,400	1957	Mar. 6, 1957	88.00	59,500
1945	Feb. 2, 1945	86.43	62,700	1958	Feb. 20, 1958	96.70	160,000
1946	Dec. 29, 1945	91.69	114,000	1959	Feb. 17, 1959	91.37	94,100
1947	Feb. 13, 1947	83.56	49,300	1960	Feb. 9, 1960	90.93	89,300
1948	Mar. 24, 1948	86.44	58,000	1961	Dec. 2, 1960	88.34	65,300
1949	Mar. 12, 1949	90.53	82,200	1962	Feb. 16, 1962	90.90	87,800
1950	Feb. 7, 1950	86.76	59,400	1963	Apr. 15, 1963	92.20	105,000
1951	Jan. 23, 1951	89.25	74,300	1964	Jan. 21, 1964	84.80	50,800
1952	Dec. 29, 1951	92.49	111,000	1965	Dec. 24, 1964	94.89	126,000
1953	Jan. 14, 1953	89.21	106,000				

^a Occurred Jan. 22, 1953.

3895. Sacramento River at Colusa, Calif.

Location.--Lat 39°12'50", long 121°59'55", at north end of Jimeno Grant, on right bank just downstream from highway bridge at Colusa, Colusa County, at mile 89.4 upstream from Sacramento.

Gage.--Recording. Gage is set to datum of Corps of Engineers (2.95 ft below mean sea level).

Stage-discharge relation.--Defined by current-meter measurements below 44,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks are affected by storage reservoirs, power developments, and bypassing for flood control. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 12, 1941	67.57	44,900	1954	Jan. 30, 1954	64.70	40,000
1942	Feb. 8, 1942	69.20	49,000	1955	Nov. 17, 1954	59.38	30,900
1943	Jan. 24, 1943	66.56	42,300				
1944	Feb. 4, 1944	61.64	31,200	1956	Jan. 17, 1956	66.90	43,200
1945	Feb. 3, 1945	63.10	34,000	1957	Mar. 7, 1957	63.90	36,600
				1958	Feb. 26, 1958	67.97	45,800
1946	Dec. 29, 1945	65.33	38,100	1959	Feb. 18, 1959	65.27	39,400
1947	Feb. 14, 1947	62.22	32,300	1960	Feb. 10, 1960	64.78	38,400
1948	Mar. 25, 1948	63.42	35,800				
1949	Mar. 13, 1949	64.67	35,300	1961	Dec. 3, 1960	63.25	35,200
1950	Feb. 7, 1950	63.23	34,200	1962	Feb. 16, 1962	64.80	38,500
				1963	Apr. 16, 1963	65.22	39,300
1951	Jan. 23, 1951	63.88	37,700	1964	Jan. 22, 1964	61.88	33,300
1952	Dec. 29, 1951	65.02	39,700	1965	Jan. 7, 1965	67.07	43,900
1953	Jan. 23, 1953	66.53	40,000				

- a Occurred May 1, 1948.
b Occurred Jan. 22, 1953.
c Occurred Feb. 19, 1954.

3900. Butte Creek near Chico, Calif.

Location.--Lat 39°43'34", long 121°42'28", in NW¹/₄ NW¹/₄ sec.36, T.22 N., R.2 E., on right bank 0.7 mile downstream from Little Butte Creek and 7.5 miles east of Chico.

Drainage area.--147 sq mi.

Gage.--Recording. Prior to Aug. 13, 1944, at site 0.4 mile upstream at different datum. Altitude of gage is 320 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,200 cfs prior to Aug. 13, 1944; below 6,900 cfs and extended above on basis of slope-area measurement at 18,700 cfs thereafter.

Bankfull stage.--5 ft.

Remarks.--Peaks slightly regulated by Magalia Reservoir (capacity, 3,540 acre-ft) beginning in 1918. Peaks may be affected by imported water from the West Branch Feather River by way of De Sable and Centerville powerplants. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 2,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 23, 1931	4.98	1,430	1940	Feb. 28, 1940	13.8	12,400
1932	Dec. 24, 1931	7.75	4,070				
1933	Mar. 28, 1933	4.44	1,100	1941	Feb. 10, 1941	12.55	10,100
1934	Dec. 30, 1933	6.90	3,120	1942	Feb. 6, 1942	12.70	9,970
1935	Apr. 7, 1935	8.87	5,360	1943	Jan. 21, 1943	9.20	6,600
1936	Feb. 21, 1936	13.13	8,660	1944	Mar. 4, 1944	6.00	3,500
1937	Feb. 4, 1937	6.90	2,640				
1938	Dec. 11, 1937	18.9	17,000	1945	Feb. 1, 1945	-	3,900
1939	Dec. 3, 1938	3.74	854		Feb. 5, 1945	7.07	4,890

Peak stages and discharges of Butte Creek near Chico, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1946	Dec. 21, 1945	-	5,070	1956	Feb. 22, 1956	11.22	13,100
	Dec. 27, 1945	7.63	5,620				
1947	Feb. 12, 1947	7.00	4,800	1957	Feb. 24, 1957	7.65	5,690
					May 18, 1957	6.42	3,900
1948	Mar. 23, 1948	7.50	5,450	1958	Jan. 29, 1958	5.93	3,740
1949	Mar. 11, 1949	5.29	2,800		Feb. 19, 1958	5.91	3,720
1950	Feb. 6, 1950	7.86	5,920		Feb. 24, 1958	9.52	9,140
1951	Nov. 20, 1950	6.20	3,850		Mar. 21, 1958	6.03	3,930
	Dec. 3, 1950	5.65	3,250		Mar. 23, 1958	5.11	3,010
	Jan. 22, 1951	5.80	3,410		Mar. 29, 1958	5.43	3,330
	Feb. 11, 1951	5.61	3,210	1959	Apr. 2, 1958	6.10	4,000
1952	Dec. 1, 1951	6.5	4,180		Jan. 12, 1959	5.41	3,310
	Dec. 27, 1951	7.50	5,450		Feb. 16, 1959	6.77	5,110
	Feb. 1, 1952	9.18	7,700	1960	Feb. 8, 1960	7.75	6,490
1953	Jan. 9, 1953	10.10	10,300		Mar. 7, 1960	6.21	4,400
	Jan. 13, 1953	5.65	2,810	1961	Jan. 31, 1961	5.12	3,110
	Jan. 20, 1953	5.71	2,870	1962	Feb. 9, 1962	5.14	3,130
	Apr. 27, 1953	6.47	3,720		Feb. 15, 1962	6.63	4,930
1954	Jan. 17, 1954	6.88	4,650	1963	Oct. 13, 1962	10.34	10,900
	Feb. 12, 1954	6.66	4,380		Jan. 31, 1963	11.67	14,200
	Feb. 17, 1954	5.96	3,540		Mar. 27, 1963	6.68	4,220
	Mar. 10, 1954	5.31	2,760		Apr. 7, 1963	6.41	3,870
	Apr. 4, 1954	7.41	5,330		Apr. 14, 1963	7.17	4,900
1955	Apr. 21, 1955	4.20	1,560	1964	Jan. 20, 1964	7.20	4,940
1956	Dec. 19, 1955	10.10	10,300	1965	Dec. 22, 1964	14.12	21,200
	Dec. 22, 1955	13.35	18,700		Dec. 26, 1964	6.43	4,410
	Dec. 26, 1955	8.94	7,880		Jan. 5, 1965	13.04	17,600
	Jan. 7, 1956	7.54	5,710		Jan. 23, 1965	5.29	3,160
	Jan. 15, 1956	8.70	7,400		Apr. 16, 1965	5.96	3,780

3905. Sacramento River below Wilkins Slough, Calif.

Location.--Lat 39°00'35", long 121°49'25", in Jimeno Grant, on right bank 1,500 ft downstream from Wilkins Slough, Colusa County, 6 miles southeast of Grimes, and at mile 62.9 upstream from Sacramento.

Gage.--Recording. Gage is set to datum of Corps of Engineers (3.00 ft below mean sea level).

Stage-discharge relation.--Defined by current-meter measurements below 28,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks affected by storage reservoirs, power developments and bypassing for flood control. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1939	Mar. 15, 1939	46.32	23,700	1952	Dec. 30, 1951	48.21	23,100
1940	Mar. 1, 1940	52.75	27,000	1953	Jan. 23, 1953	49.23	24,700
1941	Feb. 13, 1941	49.84	23,800	1954	Feb. 20, 1954	48.38	25,200
1942	Feb. 8, 1942	52.29	26,600	1955	Dec. 11, 1954	46.23	23,400
1943	Jan. 25, 1943	49.41	23,300	1956	Jan. 17, 1956	50.77	-
1944	Feb. 5, 1944	46.69	20,800	1957	Mar. 7, 1957	48.56	23,900
1945	Feb. 4, 1945	47.75	21,700	1958	Feb. 27, 1958	51.41	28,900
1946	Dec. 30, 1945	48.44	22,400	1959	Feb. 18, 1959	48.30	25,100
1947	Feb. 14, 1947	47.05	22,400	1960	Feb. 10, 1960	48.19	26,700
1948	Mar. 25, 1948	47.82	23,800	1961	Feb. 4, 1961	47.43	26,200
1949	Mar. 5, 1949	47.89	23,200	1962	Dec. 3, 1961	48.27	25,700
1950	Feb. 7, 1950	47.89	22,700	1963	Dec. 19, 1962	48.79	26,000
				1954	Jan. 22, 1964	47.10	26,000
1951	Dec. 16, 1950	48.26	22,500	1965	Dec. 25, 1964	49.91	27,500

a Occurred May 1, 1948.
d Occurred Feb. 3, 1963.

b Occurred Mar. 13, 1949.

c Occurred Feb. 17, 1962.

3915. Big Grizzly Creek near Portola, Calif.
(Published as Grizzly Creek near Portola prior to October 1952)

Location.--Lat 39°52'00", long 120°27'20", in NW¹/₄ sec. 7, T.23 N., R.14 E., on left bank 500 ft upstream from small tributary, 4.3 miles upstream from mouth, and 4.5 miles north of Portola.

Drainage area.--45.5 sq mi.

Gage.--Recording. Prior to Sept. 30, 1932, at datum 2.04 ft higher. Altitude of gage is 5,320 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs and extended above on basis of slope-area measurement at 1,780 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1950. Base for partial-duration series, 410 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Apr. 6, 1926	3.85	468	1956	Jan. 15, 1956	4.42	448
1927	Feb. 21, 1927	3.90	480		Apr. 9, 1956	4.55	488
1928	Mar. 26, 1928	7.50	2,680		Apr. 22, 1956	5.12	672
1929	Mar. 28, 1929	2.72	250		May 4, 1956	4.80	560
1930	Dec. 12, 1929	4.30	730				
1931	Mar. 18, 1931	3.58	448		Feb. 24, 1957	5.63	892
1932	Apr. 13, 1932	3.50	406		Feb. 27, 1957	4.91	634
					Mar. 5, 1957	4.53	519
1951	Nov. 18, 1950	5.70	840		May 18, 1957	4.63	558
	Nov. 20, 1950	6.93	1,460				
	Dec. 3, 1950	7.48	1,780	1958	Feb. 24, 1958	6.10	1,170
	Dec. 8, 1950	5.07	604		Apr. 21, 1958	4.93	711
	Dec. 11, 1950	4.58	460		May 2, 1958	5.10	755
	Dec. 14, 1950	5.46	744				
	Feb. 7, 1951	4.56	455	1959	Jan. 12, 1959	4.33	473
	March or April 1951	4.56	455				
				1960	Feb. 8, 1960	5.43	816
1952	Apr. 26, 1952	6.00	1,060				
	May 2, 1952	6.17	1,140	1961	Jan. 31, 1961	5.36	185
1953	Apr. 5, 1953	4.73	589				
	Apr. 20, 1953	4.71	583	1962	Apr. 14, 1962	5.23	732
	Apr. 27, 1953	5.94	1,040				
1955	May 8, 1955	4.42	496	1963	Oct. 13, 1962	7.48	3,090
					Feb. 1, 1963	8.03	4,080
1956	Dec. 22, 1955	8.10	2,140		Apr. 6, 1963	5.42	952
	Dec. 24, 1955	4.62	506	1964	Apr. 11, 15, 1964	4.55	564
	Dec. 26, 1955	4.53	479	1965	Dec. 22, 1964	7.11	2,530
					Apr. 20, 1965	5.83	1,150

a Occurred at different time than peak discharge; backwater from ice.

3925. Middle Fork Feather River near Clito, Calif.

Location.--Lat 39°45'10", long 120°35'40", in SE¹/₄ sec. 23, T.22 N., R.12 E., on left bank 0.6 mile upstream from Frazier Creek, 1.0 mile northwest of Clito, and 2.2 miles southeast of Blairsden.

Drainage area.--686 sq mi.

Gage.--Recording. Prior to July 29, 1953, at site 0.5 mile downstream at different datum. Altitude of gage is 4,380 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,100 cfs prior to July 29, 1953. Defined by current-meter measurements below 6,300 cfs subsequent to July 29, 1953.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 850 cfs.

Peak stages and discharges of Middle Fork Feather River near Clio, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Feb. 4, 1926	5.20	1,430	1953	May 1, 1953	7.23	1,290
1927	Feb. 21, 1927	11.80	10,600				
1928	Mar. 26, 1928	12.0	11,000	1954	Feb. 17, 1954	6.78	950
1929	Mar. 12, 1929	3.68	590		Mar. 10, 1954	8.74	2,040
1930	Dec. 13, 1929	6.82	2,260		Apr. 6, 1954	7.47	1,300
1931	Mar. 18, 1931	4.47	925	1955	Mar. 14, 1955	7.32	1,100
1932	Mar. 20, 1932	7.83	3,290				
1933	Mar. 12, 1933	4.78	970	1956	Dec. 19, 1955	8.97	2,100
1934	Jan. 4, 1934	4.56	845		Dec. 23, 1955	15.77	14,400
1935	Apr. 9, 1935	9.93	5,650		Jan. 7, 1956	8.14	1,700
					Jan. 15, 1956	11.04	4,640
1936	Feb. 23, 1936	9.55	5,200		Mar. 5, 1956	7.66	1,400
1937	Mar. 13, 1937	7.0	2,110		Mar. 11, 1956	8.37	1,860
1938	Apr. 20, 1938	11.6	7,300		Mar. 20, 1956	8.71	2,130
1939	Mar. 31, 1939	5.09	582		Apr. 16, 1956	8.42	1,900
1940	Feb. 28, 1940	12.03	8,070		May 4, 1956	8.01	1,610
1941	Feb. 10, 1941	7.95	2,280	1957	Feb. 25, 1957	11.51	5,130
1942	Jan. 27, 1942	10.65	5,600		Mar. 6, 1957	7.25	1,070
1943	Jan. 23, 1943	13.03	9,870		May 19, 1957	7.40	1,140
1944	Mar. 25, 1944	6.42	1,350				
1945	Feb. 3, 1945	8.45	2,880	1958	Feb. 12, 1958	8.46	1,700
					Feb. 14, 1958	8.63	1,820
1946	Dec. 29, 1945	8.58	3,030		Feb. 24, 1958	11.81	5,500
1947	Feb. 12, 1947	8.26	2,680		Mar. 22, 1958	8.94	2,250
					Apr. 2, 1958	8.83	2,160
1948	Jan. 7, 1948	-	1,530		Apr. 22, 1958	9.50	2,730
	Apr. 9, 1948	-	884	1959	Jan. 12, 1959	7.37	1,220
	Apr. 17, 1948	7.24	1,840		Feb. 21, 1959	7.29	1,180
1949	Mar. 21, 1949	6.60	1,430				
	Apr. 15, 1949	-	1,040	1960	Feb. 8, 1960	10.90	3,920
					Mar. 7, 1960	8.33	1,670
1950	Jan. 23, 1950	-	2,510		Mar. 30, 1960	6.99	966
	Feb. 6, 1950	8.26	2,680				
	Mar. 20, 1950	-	982	1961	Jan. 31, 1961	5.93	552
	Mar. 22, 1950	-	1,200				
	Apr. 12, 1950	-	1,220	1962	Feb. 9, 1962	7.74	1,320
					Feb. 13, 1962	8.62	1,860
1951	Nov. 20, 1950	12.58	7,170		Feb. 17, 1962	7.62	1,260
	Dec. 3, 1950	11.31	4,940		Apr. 4, 1962	8.25	1,620
	Dec. 8, 1950	10.19	3,480				
	Dec. 14, 1950	9.16	2,430	1963	Oct. 13, 1962	12.65	6,520
	Jan. 24, 1951	10.99	4,490		Feb. 1, 1963	16.19	14,500
	Feb. 8, 1951	8.32	1,750		Mar. 27, 1963	7.42	1,160
	Feb. 13, 1951	8.24	1,700		Apr. 8, 1963	10.51	3,490
					Apr. 14, 1963	8.05	1,500
1952	Dec. 1, 1951	7.98	1,620				
	Dec. 4, 1951	6.84	897	1964	Nov. 25, 1963	6.88	916
	Feb. 2, 1952	7.24	1,120				
	Apr. 6, 1952	13.79	10,900	1965	Dec. 24, 1964	14.82	11,100
	Apr. 27, 1952	11.54	6,270		Jan. 8, 1965	9.02	2,150
					Jan. 25, 1965	10.10	3,080
1953	Jan. 9, 1953	9.15	3,050		Feb. 28, 1965	7.85	1,380
	Jan. 20, 1953	- (a)	-		Apr. 22, 1965	8.97	2,110
	Apr. 27, 1953	8.03	1,930				

a Discharge unknown; exceeded base.

3930. Middle Fork Feather River at Sloat, Calif.
(Published as "near Cromberg" 1914-15)

Location.--Lat 39°51'25", long 120°43'05", in SW $\frac{1}{4}$ sec.14, T.28 N., R.11 E.,
0.5 mile southeast of Sloat, 0.8 mile upstream from Poplar Creek, and
1.5 miles downstream from Cromberg.

Drainage area.--775 sq mi.

Gage.--Recording. Altitude of gage is 4,110 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below
5,600 cfs.

Remarks.--Only annual peaks are shown.

Peak stages and discharges of Middle Fork Feather River at Sloat, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Jan. 2, 1914	9.36	10,500	1921	Mar. 5, 1921	6.30	3,130
1915	May 12, 1915	7.48	5,570	1922	Apr. 23, 1922	8.23	6,900
				1923	Apr. 7, 1923	6.55	3,450
1916	Mar. 20, 1916	8.99	9,460	1924	Feb. 8, 1924	5.20	1,440
1917	Mar. 29, 1917	6.75	4,040	1925	Feb. 6, 1925	8.37	7,230
1918	Mar. 26, 1918	6.55	3,680				
1919	Feb. 10, 1919	6.8	4,070	1926	Apr. 7, 1926	6.63	3,630
1920	Apr. 15, 1920	5.90	2,470	1927	Feb. 22, 1927	10.1	11,700

3935. Middle Fork Feather River below Sloat, Calif.

Location.--Lat 39°52'00", long 120°46'15", in SW $\frac{1}{4}$ sec.8, T.23 N., R.11 E., on right bank 0.6 mile downstream from Bell Bar Creek, 1.1 miles west of Bell Bar, and 2.2 miles west of Sloat.

Drainage area.--819 sq mi.

Gage.--Recording. Prior to Sept. 9, 1953, at site 0.6 mile upstream at different datum. Altitude of gage is 4,010 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,700 cfs prior to Sept. 9, 1953; below 8,200 cfs and extended above on basis of slope-area measurement at 31,200 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 10, 1941	8.5	5,770	1953	Jan. 20, 1953	3.82	2,740
1942	Jan. 27, 1942	10.45	8,720		Apr. 27, 1953	5.08	3,900
1943	Jan. 21, 1943	12.65	12,400				
1944	May 1, 1944	4.66	1,520	1954	Mar. 9, 1954	8.90	6,550
1945	Feb. 2, 1945	7.98	5,070	1955	May 8, 1955	5.46	1,850
	Feb. 3, 1945	-	3,440	1956	Dec. 19, 1955	8.63	6,060
1946	Dec. 22, 1945	-	2,980		Dec. 23, 1955	19.25	31,200
	Dec. 29, 1945	7.25	4,500		Dec. 26, 1955	12.21	13,500
1947	Feb. 12, 1947	7.25	4,550		Jan. 15, 1956	9.51	7,770
1948	Jan. 7, 1948	-	2,840		Mar. 26, 1956	6.55	2,930
	Apr. 17, 1948	6.38	3,540		May 4, 1956	6.84	3,280
1949	Mar. 21, 1949	4.14	1,590	1957	Feb. 24, 1957	10.24	9,230
1950	Jan. 23, 1950	-	3,760		May 18, 1957	7.70	4,490
	Feb. 6, 1950	87.18	4,020	1958	Feb. 12, 1958	6.58	2,970
1951	Nov. 21, 1950	12.25	13,300		Feb. 19, 1958	6.53	2,910
	Dec. 3, 1950	9.33	9,190		Feb. 24, 1958	12.39	13,800
	Dec. 7, 1950	7.78	6,820		Mar. 22, 1958	6.52	3,090
	Dec. 14, 1950	5.91	4,360		Apr. 2, 1958	6.24	2,760
	Jan. 24, 1951	6.00	4,470		Apr. 22, 1958	7.35	4,190
1952	Feb. 2, 1952	4.75	3,100		May 11, 1958	6.68	3,290
	Apr. 6, 1952	10.54	11,100	1959	Jan. 12, 1959	6.51	3,070
	Apr. 19, 1952	8.01	6,880	1960	Feb. 8, 1960	11.23	11,300
	Apr. 27, 1952	8.52	7,930		Mar. 7, 1960	6.98	3,450
1953	Jan. 9, 1953	6.94	5,870	1961	Jan. 31, 1961	4.36	834
	Jan. 12, 1953	4.94	3,760	1962	Feb. 9, 1962	6.47	2,830
					Feb. 13, 1962	6.43	2,790
					Apr. 15, 1962	6.25	2,710

a Occurred Jan. 18, 1950.

3940. Middle Fork Feather River near Nelson Point, Calif.

Location.--Lat 39°51'12", long 120°52'20", in SW $\frac{1}{4}$ sec.16, T.23 N., R.10 E., 0.6 mile downstream from Nelson Creek and 1.2 miles southwest of Nelson Point.

Drainage area.--883 sq mi.

Gage.--Recording. Altitude of gage is 3,800 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Feb. 8, 1924	3.88	1,810	1929	June 16, 1929	3.19	1,140
1925	Feb. 6, 1925	9.20	9,340	1930	Dec. 13, 1929	8.20	7,580
1926	Apr. 7, 1926	6.56	5,170	1931	Mar. 18, 1931	4.15	1,900
1927	Feb. 22, 1927	10.98	12,300	1932	Mar. 19, 1932	6.22	4,410
1928	Mar. 27, 1928	16.0	22,000				

3945. Middle Fork Feather River near Merrimac, Calif.

Location.--Lat 39°42'30", long 121°16'15", in NE $\frac{1}{4}$ sec.2, T.21 N., R.6 E., on right bank 400 ft downstream from bridge on Milsap Bar Road, 500 ft downstream from Little North Fork, 4.5 miles southeast of Merrimac, and 20 miles northeast of Oroville.

Drainage area.--1,062 sq mi.

Gage.--Recording. Altitude of gage is 1,560 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 13,000 cfs and extended above on basis of comparison of upstream and downstream peak discharges and study of runoff per square mile for intervening areas.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Dec. 10, 1937, reached a stage of about 19.4 ft.

Flood of Nov. 21, 1950, reached a stage of 17.1 ft, from floodmarks (discharge 34,300 cfs, on basis of slope-area measurement at 34,300 cfs).

Remarks.--Only annual peaks are shown prior to Oct. 1, 1951. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Dec. 10, 1937	19.4	-	1956	Jan. 15, 1956	12.80	17,300
1951	Nov. 21, 1950	17.1	34,300		Jan. 23, 1956	9.12	7,090
1952	Dec. 1, 1951	10.61	11,200		Feb. 22, 1956	9.78	8,520
	Dec. 28, 1951	9.00	7,050		May 4, 1956	9.72	8,380
	Feb. 1, 1952	11.32	13,200	1957	Feb. 24, 1957	13.93	21,500
	Apr. 7, 1952	12.25	16,100		May 18, 1957	10.70	10,800
	Apr. 28, 1952	11.51	13,800	1958	Feb. 12, 1958	9.96	8,690
	May 8, 1952	10.48	10,900		Feb. 16, 1958	9.90	8,560
1953	Jan. 9, 1953	15.06	25,900		Feb. 19, 1958	10.48	10,200
	Jan. 13, 1953	10.77	11,000		Feb. 24, 1958	15.51	28,000
	Jan. 20, 1953	10.15	9,380		Apr. 22, 1958	9.23	7,090
	Apr. 27, 1953	11.39	12,700	1959	Jan. 12, 1959	9.49	7,670
1954	Mar. 9, 1954	12.63	16,700		Feb. 16, 1959	9.23	7,100
	Apr. 5, 1954	9.68	8,300	1960	Feb. 8, 1960	16.52	33,000
1955	May 9, 1955	7.56	4,160		Mar. 7, 1960	10.48	10,100
1956	Dec. 23, 1955	21.2	62,000	1961	Jan. 31, 1961	7.88	4,620

Peak stages and discharges of Middle Fork Feather River near Merrimac, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Feb. 9, 1962	10.65	10,500	1964	Nov. 14, 1963	8.83	6,300
1963	Oct. 13, 1962	17.00	35,500	1965	Dec. 22, 1964	26.5	86,200
	Feb. 1, 1963	21.65	65,400		Apr. 21, 1965	12.03	8,780
	Apr. 7, 1963	11.90	14,300				
	Apr. 14, 1963	9.63	7,960				

3950. South Fork Feather River near La Porte, Calif.

Location--Lat 39°43'30", long 121°00'50", in sec.31, T.22 N., R.9 E., at lower end of Little Grass Valley, and 3 miles northwest of La Porte.

Drainage area--25.4 sq mi.

Gage--Recording. Altitude of gage is 4,880 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 400 cfs.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 26, 1928	7.00	2,600	1931	Mar. 18, 1931	4.49	501
1929	Feb. 4, 1929	4.49	486	1932	May 12, 1932	4.70	552
1930	Dec. 13, 1929	5.73	1,280	1933	May 28, 1933	4.55	495

3970. South Fork Feather River at Enterprise, Calif.

Location--Lat 39°32'15", long 121°20'45", in NW $\frac{1}{4}$ sec.6, T.19 N., R.6 E., on left bank 0.5 mile upstream from McCabe Creek, 1 mile upstream from highway bridge at Enterprise, and 11 miles east of Oroville.

Drainage area--132 sq mi.

Gage--Nonrecording at site half a mile downstream at different datum prior to Oct. 18, 1930; recording thereafter. Altitude of gage is 640 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 3,000 cfs and extended above on basis of computation of flow over dam at 15,200 cfs prior to Oct. 18, 1930. Defined by current-meter measurements below 4,600 cfs and extended above on basis of computation of flow over dam at 19,200 cfs thereafter.

Bankfull stage--Not subject to overflow.

Remarks--Peaks affected by Little Grass Valley Reservoir (capacity, 94,600 acre-ft) beginning in October 1961, Sly Creek Reservoir (capacity, 65,200 acre-ft) beginning in November 1961, and smaller reservoirs. Peaks may also be affected by imported water from the North Yuba River basin by way of Slate Creek tunnel (capacity, about 800 cfs) beginning in February 1962; by diversions to Palermo Canal (capacity, about 41 cfs) since beginning of record; and by Oroville-Wyandotte Canal (capacity, about 43 cfs) for irrigation of about 4,500 acres in Oroville-Wyandotte Irrigation District since before 1928. Peaks for the years 1912-30 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1947, and subsequent to Sept. 30, 1961. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges of South Fork Feather River at Enterprise, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Mar. 6, 1912	4.5	1,210	1951	Dec. 14, 1950	9.46	2,750
1913	Nov. 6, 1912	4.75	1,380		Jan. 18, 1951	10.32	3,470
1914	Dec. 31, 1913	12.0	10,400		Jan. 22, 1951	10.19	3,350
1915	May 11, 1915	11.7	9,900		Feb. 5, 1951	9.05	2,440
1916	Jan. 3, 1916	8.4	4,510	1952	Dec. 1, 1951	9.66	2,910
1917	Feb. 25, 1917	12.05	10,600		Dec. 29, 1951	9.65	2,900
1918	Feb. 6, 1918	6.4	1,840		Feb. 1, 1952	12.26	5,350
1919	Feb. 10, 1919	9.4	5,940		Apr. 26, 1952	9.05	2,420
1920	Apr. 15, 1920	8.0	3,800		May 8, 1952	9.05	2,420
1921	Nov. 19, 1920	8.6	4,680	1953	Jan. 9, 1953	15.08	8,580
1922	Feb. 19, 1922	8.9	4,450		Jan. 12, 1953	10.63	3,750
1923	Dec. 13, 1922	8.1	3,120		Jan. 20, 1953	11.15	4,230
1924	Feb. 7, 8, 1924	8.5	3,800		Apr. 27, 1953	11.68	4,760
1925	Feb. 4, 1925	11.5	9,300	1954	Feb. 13, 1954	9.43	2,610
1926	Feb. 4, 1926	9.7	3,500		Feb. 17, 1954	9.55	2,710
1927	Feb. 21, 1927	12.5	8,250		Mar. 9, 1954	12.25	5,340
1928	Mar. 26, 1928	16.0	15,200		Apr. 5, 1954	10.50	3,580
1929	Mar. 10, 1929	5.8	1,290	1955	May 8, 1955	7.24	1,150
1930	Dec. 13, 1929	9.2	5,070	1956	Dec. 19, 1955	15.22	8,540
1931	Mar. 18, 1931	7.50	1,340		Dec. 22, 1955	21.60	19,200
1932	Dec. 24, 1931	9.25	2,540		Dec. 26, 1955	14.00	7,010
1933	May 30, 1933	6.67	890		Jan. 15, 1956	14.83	8,030
1934	Jan. 1, 1934	8.90	2,140		Jan. 23, 1956	9.28	2,420
1935	Apr. 8, 1935	12.80	6,000		Jan. 26, 1956	9.96	2,970
1936	Feb. 21, 1936	15.3	9,210		Feb. 22, 1956	13.00	5,900
1937	Feb. 14, 1937	8.30	1,830	1957	Feb. 24, 1957	15.6	9,060
1938	Dec. 10, 1937	20.4	17,300		May 18, 1957	11.2	3,860
1939	Mar. 27, 1939	6.97	690	1958	Feb. 12, 1958	10.95	3,640
1940	Feb. 27, 1940	18.3	13,800		Feb. 19, 1958	11.30	3,950
1941	Feb. 10, 1941	14.6	8,230		Feb. 24, 1958	14.80	7,940
1942	Feb. 6, 1942	15.05	8,360		Apr. 2, 1958	10.08	3,060
1943	Jan. 21, 1943	16.30	10,100	1959	Jan. 12, 1959	9.55	2,660
1944	Mar. 4, 1944	9.58	2,570		Feb. 16, 1959	11.04	3,900
1945	Feb. 2, 1945	14.4	8,220	1960	Feb. 8, 1960	20.00	16,200
1946	Dec. 29, 1945	12.05	5,260		Mar. 7, 1960	10.90	3,720
1947	Feb. 12, 1947	11.10	4,210	1961	Jan. 31, 1961	8.65	2,050
1948	Jan. 7, 1948	-	2,960	1962	Feb. 9, 1962	12.62	5,320
	Apr. 17, 1948	10.30	3,450	1963	Jan. 31, 1963	16.60	10,500
1949	Mar. 11, 1949	7.50	1,450	1964	Jan. 20, 1964	7.55	1,420
1950	Feb. 6, 1950	11.8	4,980	1965	Dec. 22, 1964	17.43	11,800
1951	Nov. 20, 1950	15.9	9,580				
	Dec. 3, 1950	12.71	5,840				
	Dec. 8, 1950	11.15	4,230				

3975. Feather River at Bidwell Bar, Calif.
(Published as Middle Fork of Feather River near Oroville prior to September 1925, and as Middle Fork Feather River at Bidwell Bar, for October 1925 to September 1950)

Location.--Lat 39°33'15", long 121°26'15", in NE1/4 sec.32, T.20 N., R.5 E., on left bank just upstream from suspension bridge at Bidwell Bar, 2 miles upstream from North Fork and 7 miles northeast of Oroville.

Drainage area.--1,341 sq mi.

Gage.--Nonrecording prior to Sept. 17, 1930; recording thereafter. Altitude of gage is 290 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 26,000 cfs and extended above on basis of studies of upstream and downstream peaks.

Bankfull stage.--Not subject to overflow.

Historical data.--Maximum stage known, 31.2 ft Jan. 10, 1862, from information by bridge tollkeeper. Maximum stage of February 1881 was reported to have been 8 ft below the record stage of 1862.

Remarks.--Peaks partly regulated by reservoirs above station. Peaks for the years 1912-27, 1929 and 1930 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 9,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	January 1862	31.2	-	1948	Jan. 7, 1948	-	14,700
					Apr. 17, 1948	12.70	16,600
1881	February 1881	23	-	1949	Apr. 23, 1949	8.68	6,140
1909	-	28.0	-	1950	Jan. 23, 1950	-	10,800
					Feb. 6, 1950	13.02	17,900
1912	Mar. 6, 1912	7.0	3,920	1951	Nov. 18, 1950	14.38	24,000
1913	May 9, 1913	8.6	6,820		Nov. 21, 1950	18.25	50,200
1914	Dec. 31, 1913	18.0	47,100		Dec. 3, 1950	14.89	28,600
1915	May 11, 1915	15.5	31,300		Dec. 8, 1950	13.82	21,300
1916	Mar. 20, 1916	12.7	16,400		Dec. 15, 1950	11.85	13,500
1917	Feb. 25, 1917	14.0	23,100		Jan. 18, 1951	11.07	11,100
1918	Mar. 26, 1918	10.72	11,400		Jan. 22, 1951	12.15	14,600
1919	Feb. 10, 1919	12.00	14,600		Feb. 5, 1951	11.25	11,600
1920	Apr. 15, 1920	10.0	9,760		Feb. 11, 1951	10.54	9,700
1921	Nov. 19, 1920	11.09	12,200	1952	Dec. 1, 1951	12.32	15,200
1922	May 20, 1922	11.3	13,000		Dec. 29, 1951	11.51	12,400
1923	Apr. 6, 1923	9.60	8,880		Feb. 2, 1952	13.75	21,000
1924	Feb. 8, 1924	10.04	9,760		Apr. 7, 1952	12.88	17,300
1925	Feb. 6, 1925	15.0	28,300		Apr. 28, 1952	12.65	16,400
1926	Apr. 7, 1926	12.3	15,300		May 8, 1952	12.06	14,200
1927	Feb. 21, 1927	17.0	40,300	1953	Jan. 9, 1953	17.00	40,000
1928	Mar. 26, 1928	22.8	90,000		Jan. 13, 1953	12.69	16,600
1929	Feb. 4, 1929	7.4	4,720		Jan. 20, 1953	12.53	16,000
1930	Dec. 13, 1929	14.2	25,500		Apr. 27, 1953	13.33	19,200
1931	Mar. 18, 1931	7.90	5,570	1954	Mar. 9, 1954	14.16	22,900
1932	Mar. 19, 1932	10.10	9,980		Apr. 5, 1954	11.82	13,400
1933	May 30, 1933	7.56	5,050		Apr. 27, 1954	10.67	10,000
1934	Mar. 29, 1934	10.55	11,100	1955	May 9, 1955	8.51	5,870
1935	Apr. 8, 1935	14.20	25,500	1956	Dec. 19, 1955	16.18	33,700
1936	Feb. 21, 1936	16.2	38,200		Dec. 23, 1955	25.5	104,000
1937	Apr. 15, 1937	9.45	7,920		Jan. 7, 1956	10.73	9,480
1938	Dec. 11, 1937	24.0	93,000		Jan. 15, 1956	15.85	31,800
1939	Mar. 27, 1939	6.97	3,230		Jan. 23, 1956	11.48	11,800
1940	Feb. 27, 1940	20.15	60,200		Jan. 26, 1956	11.31	11,200
1941	Feb. 10, 1941	15.6	30,300		Feb. 22, 1956	13.35	19,200
1942	Feb. 6, 1942	16.45	35,100		May 4, 1956	11.65	12,400
1943	Jan. 21, 1943	18.70	54,300	1957	Feb. 24, 1957	16.01	32,700
1944	Mar. 4, 1944	9.98	8,460		Mar. 5, 1957	10.98	10,200
1945	Feb. 2, 1945	15.25	28,600		May 18, 1957	12.73	16,600
1946	Dec. 29, 1945	13.96	22,000	1958	Jan. 29, 1958	10.89	9,930
1947	Feb. 12, 1947	13.00	17,800				

Peak stages and discharges of Feather River at Bidwell Bar, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 12, 1958	12.30	14,900	1961	Jan. 31, 1961	9.86	7,890
	Feb. 19, 1958	12.85	17,800		Feb. 9, 1962	13.20	18,600
	Feb. 24, 1958	16.88	39,300	1962	Feb. 15, 1962	11.29	11,500
	Mar. 21, 1958	10.68	10,000		Oct. 13, 1962	19.31	53,900
	Apr. 2, 1958	11.36	12,300	1963	Dec. 3, 1962	11.09	10,900
	Apr. 22, 1958	10.55	9,580		Jan. 31, 1963	24.50	93,600
1959	May 10, 1958	10.44	9,110		Mar. 28, 1963	10.73	9,580
	Jan. 12, 1959	11.38	11,800		Apr. 7, 1963	13.76	21,100
1960	Feb. 16, 1959	11.92	13,700		Apr. 14, 1963	12.00	13,800
	Feb. 8, 1960	20.50	62,800	1964	Jan. 20, 1964	10.15	8,530
	Mar. 7, 1960	12.73	16,600				

4000. Butt Creek above Almanor-Butt Creek tunnel, near Prattville, Calif.
(Published as "above tunnel No. 1" 1936-40)

Location--Lat 40°11'23", long 121°11'23", in NW¹ sec. 22, T. 27 N., R. 7 E., on left bank 0.2 mile upstream from outlet of old tunnel from Lake Almanor to Butt Creek and 2.2 miles southwest of Prattville.

Drainage area--68.6 sq mi.

Gage--Recording. Prior to Nov. 12, 1948, at site 1.5 miles upstream at different datum. Altitude of gage is 4,400 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 480 cfs prior to Nov. 12, 1948; below 520 cfs thereafter.

Remarks--Water-stage-recorder graph and several measurements furnished by Pacific Gas & Electric Co. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 310 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1937	May 4, 1937	4.40	216	1954	Mar. 9, 1954	3.27	694
1938	Dec. 11, 1937	6.48	2,320		Apr. 5, 1954	2.72	417
1939	Mar. 26, 1939	3.57	162		Apr. 27, 1954	2.72	417
1940	Feb. 28, 1940	5.75	1,500	1955	Mar. 29, 1955	2.09	201
1941	Feb. 11, 1941	5.20	980		Dec. 22, 1955	5.16	2,200
	Jan. 27, 1942	4.62	587	1956	Dec. 26, 1955	3.23	622
	Jan. 21, 1943	5.14	932		Jan. 15, 1956	3.45	750
1944	May 7, 1944	3.65	228		Jan. 23, 1956	2.66	349
1945	Feb. 2, 1945	3.74	240		Apr. 22, 1956	2.80	405
	Dec. 22, 1945	-	324		May 4, 1956	3.22	616
1946	Dec. 29, 1945	4.65	545		May 22, 1956	2.69	361
	Nov. 23, 1946	-	314	1957	Feb. 24, 1957	3.54	806
1947	Feb. 12, 1947	4.34	429		May 18, 1957	2.32	355
	Jan. 7, 1948	4.55	468	1958	Nov. 14, 1957	2.79	623
1948	Apr. 15, 1948	-	365		Feb. 19, 1958	2.32	406
	May 6, 1948	-	339		Feb. 24, 1958	3.92	1,370
	June 5, 1948	-	436		Apr. 22, 1958	2.82	639
1949	Apr. 16, 1949	2.36	252		May 11, 1958	3.12	795
	Mar. 19, 1950	2.62	334		June 12, 1958	2.46	469
1950	Apr. 6, 1950	-	315		July 28, 1958	2.54	505
	Apr. 21, 1950	-	315	1959	Jan. 12, 1959	2.60	537
	Nov. 20, 1950	3.45	785	1960	Feb. 8, 1960	3.29	894
1951	Dec. 3, 1950	2.98	490		Mar. 7, 1960	2.21	384
	Dec. 8, 1950	2.85	428	1961	Feb. 9, 1961	1.97	311
	Dec. 14, 1950	2.87	438	1962	Apr. 14, 1962	2.14	401
	Dec. 1, 1951	2.74	382		Apr. 27, 1962	2.13	397
1952	Feb. 2, 1952	2.82	454	1963	Oct. 13, 1962	4.21	1,800
	Apr. 27, 1952	3.34	748		Dec. 2, 1962	1.82	478
	May 7, 1952	3.34	748		Dec. 17, 1962	1.43	322
	Jan. 9, 1953	3.49	824		Jan. 31, 1963	3.47	1,320
1953	Jan. 20, 1953	2.57	356		Apr. 7, 1963	2.37	715
	Apr. 27, 1953	3.65	920		Apr. 14, 1963	2.60	850
				1964	Nov. 14, 1963	2.78	201

4011.5. Red Clover Creek near Genesee, Calif.

Location.--Lat 40°03'00", long 120°39'50", NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.5, T.25 N., R.12 E., 0.3 mile downstream from Rock Creek, 4.5 miles east of Genesee, and 9.5 miles east of Taylorsville.

Drainage area.--122 sq mi.

Gage.--Recording. Altitude of gage is 3,830 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,130 cfs.

Remarks.--Records furnished by the California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	7.56	4,000	1962	Apr. 8, 1962	5.56	1,160
1959	Mar. 13, 1959	3.74	329	1963	Feb. 1, 1963	9.49	7,870
1960	Feb. 8, 1960	6.58	2,150	1964	Apr. 9, 1964	4.66	829
				1965	Dec. 22, 1964	7.99	5,720
1961	Dec. 1, 1960	2.74	84				

4012. Indian Creek near Taylorsville, Calif.

Location.--Lat 40°02'55", long 120°48'55", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.12, T.25 N., R.10 E., on right bank 0.3 mile downstream from Montgomery Creek and 2.3 miles south-east of Taylorsville.

Drainage area.--526 sq mi; at site prior to Oct. 22, 1963, 533 sq mi.

Gage.--Recording. Prior to Oct. 22, 1963, at site 1.0 mile downstream at different datum. Altitude of gage is 3,560 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,000 cfs.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	11.5	-	1961	Apr. 4, 1961	3.02	464
				1962	Apr. 9, 1962	5.69	3,090
1958	Feb. 25, 1958	9.75	14,000	1963	Feb. 1, 1963	10.65	30,200
1959	Jan. 12, 1959	3.94	1,020	1964	Apr. 10, 1964	8.49	1,630
1960	Feb. 8, 1960	6.90	6,180	1965	Dec. 22, 1964	15.24	14,100

4013. Lights Creek near Taylorsville, Calif.

Location.--Lat 40°10'00", long 120°47'35", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.30, T.27 N., R.11 E., on left bank 0.4 mile downstream from Moonlight Creek and 6.7 miles north of Taylorsville.

Drainage area.--57.6 sq mi.

Gage.--Recording. Altitude of gage is 3,640 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	6.24	2,120	1961	Apr. 3, 1961	2.17	180
1959	Jan. 12, 1959	2.49	261	1962	Apr. 14, 1962	3.24	463
1960	Feb. 8, 1960	5.01	1,300				

4015. Indian Creek near Crescent Mills, Calif.

Location.--Lat 40°05', long 120°56', in SW¹ sec.25, T.26 N., R.9 E., on left bank 0.8 mile upstream from Dixie Creek and 1.5 miles south of town of Crescent Mills.

Drainage area.--739 sq mi.

Gage.--Nonrecording prior to March 1918; recording subsequent to Oct. 21, 1930. Prior to March 1918, at site 800 ft upstream at different datum. Altitude of gage is 3,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,200 cfs prior to March 1918; below 11,000 cfs and extended above on basis of slope-area measurement at 31,500 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Round Valley Reservoir since 1865 and Taylor Lake since 1929 (combined usable capacity, 5,380 acre-ft). Peaks for the years 1906-9, 1912-17 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1906	Jan. 19, 1906	10.08	6,010	1950	Apr. 23, 1950	-	2,080
1907	Mar. 19, 1907	20.2	25,000		May 2, 1950	-	1,190
1908	Mar. 19, 1908	6.2	1,940		May 17, 1950	-	1,170
1909	Jan. 16, 1909	-	(a)				
1912	May 2, 7-10, 1912	4.4	805	1951	Nov. 21, 1950	11.74	6,600
1913	Apr. 13, 1913	5.7	1,720		Dec. 4, 1950	10.16	4,770
1914	Jan. 1, 1914	10.8	6,900		Dec. 9, 1950	8.69	3,340
1915	May 12, 1915	10.9	7,040		Dec. 15, 1950	8.83	3,470
					Jan. 23, 1951	7.96	2,680
1916	Mar. 20, 1916	10.4	6,420		Feb. 8, 1951	7.84	2,580
1917	Apr. 24, 1917	9.4	5,320		Apr. 18, 1951	5.91	1,170
				1952	Dec. 2, 1951	6.41	1,580
1931	Mar. 19, 1931	5.08	892		Dec. 29, 1951	8.00	3,040
1932	Mar. 20, 1932	7.98	2,700		Feb. 2, 1952	10.07	5,550
1933	Apr. 4, 1933	5.00	834		Apr. 7, 1952	11.15	7,080
1934	Jan. 2, 1934	5.30	1,010		Apr. 19, 1952	11.15	7,080
1935	Apr. 8, 1935	10.93	5,580		Apr. 27, 1952	11.60	7,760
1936	Feb. 23, 1936	10.80	5,460	1953	Jan. 10, 1953	11.32	7,340
1937	Apr. 15, 1937	8.55	3,220		Jan. 13, 1953	9.99	5,440
1938	Dec. 12, 1937	15.00	11,500		Jan. 21, 1953	8.24	3,300
1939	Mar. 27, 1939	5.66	1,200		Feb. 8, 1953	5.72	1,110
1940	Feb. 28, 1940	16.07	14,000		Apr. 6, 1953	6.49	1,640
					Apr. 28, 1953	8.47	3,560
1941	Feb. 11, 1941	11.94	7,100		May 21, 1953	6.35	1,540
1942	Jan. 28, 1942	11.68	6,790	1954	Jan. 17, 1954	5.96	1,260
1943	Jan. 22, 1943	14.45	10,900		Feb. 13, 1954	6.58	1,710
1944	Apr. 5, 1944	6.83	1,910		Feb. 18, 1954	6.01	1,300
1945	Feb. 3, 1945	9.40	4,230		Mar. 10, 1954	11.60	7,760
1946	Dec. 30, 1945	11.07	6,050		Apr. 6, 1954	7.84	2,880
					Apr. 19, 1954	6.74	1,840
1947	Nov. 24, 1946	-	1,170	1955	May 9, 1955	5.83	1,220
	Feb. 13, 1947	9.67	4,510				
	Mar. 12, 1947	-	1,230	1956	Dec. 24, 1955	17.80	23,000
1948	Apr. 11, 1948	-	1,350		Dec. 27, 1955	11.68	9,000
	Apr. 18, 1948	9.73	4,330		Jan. 8, 1956	6.68	2,060
	May 8, 1948	-	1,290		Jan. 16, 1956	10.74	7,110
1949	Apr. 13, 1949	6.45	1,500		Feb. 23, 1956	9.27	4,720
	Apr. 19, 1949	-	1,450		Mar. 5, 1956	5.53	1,240
1950	Jan. 23, 1950	-	1,440		Mar. 26, 1956	9.37	4,860
	Feb. 6, 1950	8.22	2,920		Apr. 10, 1956	8.09	3,350
	Mar. 24, 1950	-	1,820		Apr. 24, 1956	8.80	4,140
	Apr. 8, 1950	-	1,970		May 5, 1956	8.54	3,830
	Apr. 14, 1950	-	1,720	1957	May 23, 1956	7.44	2,710
					Feb. 25, 1957	12.69	10,400

a More than 17,500 cfs; gage overtopped at 17 ft; no floodmark available.

Peak stages and discharges of Indian Creek near Crescent Mills, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Mar. 6, 1957	7.42	2,440	1961	Feb. 11, 1961	5.28	931
	Apr. 14, 1957	5.65	1,210				
	Apr. 22, 1957	5.60	1,180	1962	Feb. 10, 1962	8.12	2,970
	May 19, 1957	7.29	2,330		Feb. 15, 1962	8.12	2,970
1958					Apr. 9, 1962	8.72	3,540
	Dec. 18, 1957	6.39	1,670	1963	Oct. 14, 1962	16.54	18,800
	Jan. 30, 1958	6.35	1,640		Dec. 17, 1962	6.82	1,920
	Feb. 5, 1958	6.48	1,740		Feb. 1, 1963	18.35	24,900
	Feb. 8, 1958	6.63	1,840		Mar. 28, 1963	6.51	1,870
	Feb. 13, 1958	7.88	2,810		Apr. 7, 1963	11.93	8,890
	Feb. 20, 1958	8.60	3,490		Apr. 15, 1963	8.48	3,740
	Feb. 25, 1958	14.10	12,800	1964	Apr. 1, 1964	5.80	1,370
	Mar. 22, 1958	7.83	3,000		Apr. 10, 1964	6.33	1,730
	Mar. 30, 1958	7.60	2,770	1965	Dec. 23, 1964	16.70	21,400
	Apr. 22, 1958	9.50	4,860		Jan. 6, 1965	9.93	6,090
	May 12, 1958	8.40	3,590		Jan. 24, 1965	8.64	4,330
	June 13, 1958	6.59	1,900		Feb. 6, 1965	6.25	1,820
1959	Jan. 12, 1959	6.73	2,010		Feb. 28, 1965	5.77	1,460
	Feb. 17, 1959	7.60	2,780		Mar. 24, 1965	6.71	2,210
1960	Feb. 2, 1960	5.53	1,130		Apr. 1, 1965	6.64	2,140
	Feb. 9, 1960	10.58	5,960		Apr. 22, 1965	9.05	4,850
	Mar. 8, 1960	8.64	3,670				
	Mar. 28, 1960	8.64	3,670				
	Mar. 31, 1960	6.16	1,490				

4019. Spanish Creek near Quincy, Calif.

Location.--Lat 39°56'45", long 121°00'20", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.17, T.24 N., R.9 E., on right bank 0.9 mile downstream from Slate Creek and 3.2 miles west of Quincy.

Drainage area.--69.1 sq mi.

Gage.--Recording. Altitude of gage is 3,470 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Peaks lightly regulated by four small lakes. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 12, 1959	6.51	2,860	1962	Feb. 9, 1962	6.85	2,520
1960	Feb. 8, 1960	9.23	6,450	1963	Jan. 31, 1963	10.90	11,200
1961	Jan. 31, 1961	5.93	1,600				

4020. Spanish Creek above Blackhawk Creek, at Keddle, Calif.
(Published at "at Keddle" prior to October 1953)

Location.--Lat 40°00'05", long 120°57'20", in NE $\frac{1}{4}$ sec.27, T.25 N., R.9 E., on right bank 200 ft upstream from Blackhawk Creek and 0.9 mile southeast of Keddle.

Drainage area.--184 sq mi.

Gage.--Recording. Altitude of gage is 3,250 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,400 cfs and extended above on basis of slope-area measurement at 13,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,700 cfs.

SACRAMENTO RIVER BASIN

Peak stages and discharges of Spanish Creek above Blackhawk Creek, at Keddle, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Jan. 1, 1934	5.14	1,820	1954	Feb. 13, 1954	8.88	3,480
1935	Apr. 8, 1935	7.75	4,900	1954	Feb. 17, 1954	5.88	2,320
1936	Feb. 21, 1936	8.80	5,940	1954	Mar. 9, 1954	8.00	5,180
1937	Apr. 15, 1937	4.88	1,380	1954	Apr. 5, 1954	5.70	2,380
1938	Dec. 11, 1937	12.43	12,400	1955	May 8, 1955	3.95	772
1938	Jan. 5, 1938	3.85	855	1955	Dec. 19, 1955	9.45	7,500
1940	Feb. 27, 1940	11.80	10,800	1955	Dec. 23, 1955	12.47	13,100
1941	Feb. 10, 1941	9.20	8,990	1955	Dec. 28, 1955	8.72	8,290
1942	Feb. 8, 1942	10.50	9,150	1955	Jan. 7, 1956	5.76	2,380
1943	Jan. 21, 1943	12.10	11,900	1955	Jan. 15, 1956	7.27	4,170
1944	Mar. 4, 1944	3.98	882	1955	Jan. 28, 1956	5.48	2,070
1945	Feb. 2, 1945	7.75	4,830	1955	Feb. 22, 1956	8.98	6,880
1945	Feb. 5, 1945	-	2,500	1955	May 4, 1956	5.58	2,180
1946	Dec. 22, 1945	7.45	4,440	1957	Feb. 24, 1957	9.21	7,100
1946	Dec. 29, 1945	-	3,110	1957	Feb. 28, 1957	8.58	3,280
1947	Nov. 23, 1946	-	1,870	1957	May 18, 1957	8.28	1,780
1947	Feb. 12, 1947	8.94	3,790	1958	Dec. 18, 1957	5.58	2,100
1948	Jan. 7, 1948	-	2,480	1958	Jan. 29, 1958	8.00	2,580
1948	Apr. 17, 1948	7.00	3,880	1958	Feb. 8, 1958	8.60	2,120
1948	Apr. 18, 1949	4.11	938	1958	Feb. 12, 1958	6.54	3,210
1950	Jan. 23, 1950	-	1,790	1958	Feb. 19, 1958	8.49	3,180
1950	Feb. 8, 1950	8.90	3,740	1958	Feb. 24, 1958	11.00	10,300
1950	Mar. 19, 1950	-	1,840	1958	Mar. 21, 1958	8.20	2,800
1951	Nov. 20, 1950	8.11	5,330	1958	Mar. 30, 1958	8.04	2,810
1951	Dec. 3, 1950	7.10	3,980	1958	Apr. 1, 1958	5.33	1,830
1951	Dec. 8, 1950	5.55	2,200	1959	Jan. 12, 1959	6.38	3,030
1951	Dec. 14, 1950	5.63	2,280	1959	Feb. 18, 1959	8.94	3,480
1951	Jan. 18, 1951	5.42	2,070	1960	Feb. 1, 1960	5.64	2,170
1951	Jan. 22, 1951	5.81	2,590	1960	Feb. 8, 1960	10.00	6,480
1951	Feb. 5, 1951	5.07	1,720	1960	Mar. 7, 1960	8.53	3,210
1951	Feb. 11, 1951	5.34	1,990	1961	Jan. 31, 1961	5.70	2,240
1952	Dec. 1, 1951	-	(a)	1962	Feb. 8, 1962	7.82	4,930
1952	Dec. 27, 1951	-	(a)	1962	Feb. 13, 1962	8.44	3,100
1952	Feb. 2, 1952	8.68	8,040	1963	Oct. 13, 1962	12.50	13,200
1952	Apr. 8, 1952	5.70	2,360	1963	Feb. 1, 1963	13.37	18,000
1952	Apr. 28, 1952	5.57	2,220	1963	Mar. 27, 1963	8.35	2,700
1952	May 8, 1952	5.42	2,070	1963	Apr. 8, 1963	8.21	5,120
1953	Jan. 9, 1953	11.05	10,100	1963	Apr. 14, 1963	6.72	3,110
1953	Jan. 13, 1953	8.98	3,810	1964	Jan. 21, 1964	5.83	2,190
1953	Jan. 20, 1953	8.71	2,370	1965	Dec. 22, 1964	13.53	15,400
1953	Apr. 27, 1953	6.41	3,150	1965	Jan. 5, 1965	9.48	7,580
1954	Jan. 17, 1954	5.29	1,940	1965	Jan. 23, 1965	7.18	4,080
1954	Jan. 23, 1954	5.27	1,920	1965	Apr. 18, 1965	8.89	5,430
				1965	Apr. 21, 1965	5.18	1,750

a Discharge unknown; exceeded base.

4025. Spanish Creek at Keddle, Calif.

Location.--Lat 40°00'50", long 120°57'50", in SW $\frac{1}{4}$ sec.22, T.25 N., R.9 E., 250 ft downstream from highway bridge at Keddle and 4.7 miles upstream from confluence with Indian Creek.

Drainage area.--194 sq mi.

Gage.--Nonrecording. Prior to Oct. 1, 1917, at highway bridge 250 ft upstream at different datum. Altitude of gage is 3,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,240 cfs prior to Oct. 1, 1917; below 1,600 cfs thereafter. Subject to changes in 1917-33 owing to alterations to rock dam on the control.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversion for municipal supply by the city of Quincy, for irrigation and by several small reservoirs. All peaks are maximum observed except for the year 1928. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 28, Mar. 8, 1912	4.0	715	1922	Feb. 19, 1922	8.8	2,180
1913	Apr. 5, 1913	4.25	805	1923	Apr. 6, 1923	7.7	1,200
1914	Dec. 31, 1913, Jan. 2, 1914	10.0	9,450	1924	Feb. 8, 1924	8.40	1,730
1915	May 11, 1915	9.2	8,470	1925	Feb. 4, 1925	8.87	2,130
1916	Jan. 3, 1916	7.5	5,860	1926	Feb. 4, 1926	10.84	4,240
1917	Feb. 25, 1917	7.0	4,600	1927	Feb. 21, 1927	11.28	4,690
1918	Mar. 28, 1918	7.8	1,990	1928	Mar. 26, 1928	15.5	11,000
1919	Feb. 10, 1919	9.5	3,520	1929	Feb. 4, 1929	6.40	890
1920	Apr. 16, 1920	7.0	1,520	1930	Dec. 15, 1929	10.2	3,920
1921	Jan. 18, 1921	8.05	2,400	1932	Dec. 24, 1931	6.0	1,960
				1933	Mar. 28, 1933	6.75	995

4030. East Branch of North Fork Feather River near Rich Bar, Calif.

Location.--Lat 40°00'40", long 121°13'00", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.20, T.25 N., R.7 E., on left bank 0.5 mile upstream from mouth and 1.3 miles west of Rich Bar.

Drainage area.--1,025 sq mi.

Gage.--Recording. Altitude of gage is 2,300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above on basis of upstream and downstream peak discharges.

Remarks.--Base for partial-duration series, 5,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 21, 1950	11.00	14,600	1956	Dec. 26, 1955	11.95	15,400
	Dec. 4, 1950	9.84	8,830		Jan. 8, 1956	9.41	5,120
	Dec. 9, 1950	9.29	6,720		Jan. 16, 1956	10.84	9,980
	Dec. 15, 1950	9.35	6,920		Jan. 26, 1956	9.40	5,100
	Jan. 22, 1951	8.86	5,400		Feb. 22, 1956	11.88	15,000
	Feb. 12, 1951	8.91	5,530		Mar. 26, 1956	9.72	5,960
1952	Dec. 1, 1951	9.55	7,650	1957	Apr. 24, 1956	9.51	5,380
	Dec. 29, 1951	9.74	8,810		May 4, 1956	9.64	5,720
	Feb. 2, 1952	10.60	12,600		Feb. 25, 1957	12.00	15,700
	Apr. 7, 1952	10.37	11,500		Feb. 12, 1958	9.75	6,400
	Apr. 27, 1952	10.54	12,300		Feb. 19, 1958	10.03	7,260
1953	Jan. 9, 1953	11.68	18,500	1958	Feb. 25, 1958	12.60	19,200
	Jan. 13, 1953	10.24	10,900		Mar. 21, 1958	9.41	6,010
	Jan. 20, 1953	9.07	6,570		Mar. 30, 1958	9.32	5,770
	Apr. 27, 1953	9.28	7,220		Apr. 22, 1958	9.61	6,530
1954	Feb. 13, 1954	9.25	7,120	1959	Jan. 12, 1959	9.19	5,260
	Mar. 10, 1954	11.03	14,800		Feb. 16, 1959	9.62	6,280
	Apr. 6, 1954	8.83	5,880	1960	Feb. 8, 1960	11.67	15,100
1955	May 9, 1955	6.74	2,220		Mar. 7, 1960	9.63	6,940
	Dec. 19, 1955	11.13	15,300	1961	Jan. 31, 1961	8.07	3,240
1956	Dec. 23, 1955	16.52	48,000				

4045. North Fork Feather River at Pulga, Calif.
(Published as "at Big Bar" prior to Oct. 1, 1962)

Location.--Lat 39°47'40", long 121°27'00", in NE $\frac{1}{4}$ sec.6, T.22 N., R.5 E., on left bank between railroad and highway bridges, 0.5 mile downstream from Flea Valley Creek and Pulga, 1 mile downstream from Big Bar, and 1.5 miles downstream from Poe Dam.

Drainage area.--1,953 sq mi.

Gage.--Recording. Prior to Oct. 1, 1937, at site 1.5 miles upstream at different datum. Oct. 1, 1937, to Sept. 30, 1958, at present site at datum 5.00 ft higher. Datum of gage is 1,304.88 ft above mean sea level (levels by Pacific Gas & Electric Co.).

Stage-discharge relation.--Information not available prior to 1937. Subsequent to Oct. 1, 1937, defined by current-meter measurements below 34,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas & Electric Co. in 1930-37, 1939, and subsequent to 1939. Peaks regulated by Lake Almanor (usable capacity, 641,600 acre-ft) beginning in July 1913; Bucks Lake (capacity, 101,400 acre-ft) beginning in May 1927; Butt Valley Reservoir (capacity, 49,768 acre-ft) beginning in 1924; and Cresta, Rock Creek, and Poe powerplants. Diversion through Poe powerplant began May 29, 1958. Only annual peaks are shown.

Peak stages and discharges North Fork Feather River at Pulga, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1936	Feb. 21, 1936	18.8	38,400	1951	Nov. 20, 1950	17.89	25,700
1937	Apr. 15, 1937	10.93	9,220	1952	Feb. 2, 1952	17.30	23,300
1938	Dec. 11, 1937	30.2	66,900	1953	Jan. 9, 1953	23.30	43,100
				1954	Mar. 10, 1954	16.96	22,300
1940	Feb. 28, 1940	26.85	56,000	1955	Nov. 15, 1954	9.50	7,300
1941	Feb. 11, 1941	20.0	32,000	1956	Dec. 23, 1955	30.60	72,400
1942	Feb. 6, 1942	20.5	33,600	1957	Feb. 25, 1957	19.50	32,500
1943	Jan. 21, 1943	19.25	29,800	1958	Feb. 24, 1958	20.00	34,000
1944	May 8, 1944	8.85	6,800	1959	Jan. 12, 1959	15.23	8,120
1945	Feb. 2, 1945	14.68	17,500	1960	Feb. 8, 1960	25.10	34,300
1946	Dec. 29, 1945	15.47	19,300	1961	Jan. 31, 1961	11.50	4,550
1947	Feb. 12, 1947	14.70	17,500	1962	Feb. 9, 10, 1962	16.90	12,300
1948	Apr. 17, 1948	13.55	15,100	1963	Jan. 31, 1963	31.72	54,900
1949	Apr. 22, 1949	8.77	6,560	1964	Nov. 14, 1963	12.77	5,800
1950	Feb. 6, 1950	14.34	16,700	1965	Dec. 22, 1964	35.80	73,000

4053. West Branch Feather River near Paradise, Calif.

Location.--Lat 39°47'15", long 121°33'40", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.6, T.22 N., R.4 E., on left bank 0.6 mile upstream from Griffin Gulch and 4.0 miles northeast of Paradise.

Drainage area.--113 sq mi.

Gage.--Recording. Altitude of gage is 1,370 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 13,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversions to Dewey, Miners, and Hendricks Canals to Butte Creek basin for power development at DeSabra and Centerville plants of Pacific Gas & Electric Co. (combined capacity, greater than 120 cfs); also by diversion to Upper Miocene Canal (capacity about 50 cfs) for power development. Diversions in operation prior to beginning of record. Flow partly regulated by Round Valley Reservoir (capacity, 1,284 acre-ft) beginning in 1892, and Philbrook Reservoir (capacity, 5,010 acre-ft) beginning in 1926. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	-	4,000	1962	Dec. 1, 1961	8.65	2,120
	Dec. 16, 1957	11.38	4,400		Feb. 9, 1962	11.54	4,560
	Jan. 29, 1958	11.80	4,820		Feb. 15, 1962	10.96	4,000
	Feb. 3, 1958	-	2,600				
	Feb. 12, 1958	-	4,700	1963	Oct. 13, 1962	18.05	13,000
	Feb. 16, 1958	10.65	3,740		Dec. 2, 1962	10.78	3,690
	Feb. 19, 1958	12.03	5,050		Dec. 17, 1962	9.48	2,600
	Feb. 24, 1958	17.25	11,800		Jan. 31, 1963	23.35	21,200
	Mar. 21, 1958	10.43	3,290		Mar. 27, 1963	9.76	3,150
	Mar. 29, 1958	9.73	2,700		Apr. 7, 1963	12.68	5,880
					Apr. 14, 1963	12.83	6,030
1959	Jan. 9, 1959	8.84	2,060				
	Jan. 12, 1959	12.85	5,730	1964	Nov. 13, 1963	9.94	3,310
	Feb. 16, 1959	12.49	5,350		Jan. 20, 1964	11.65	4,850
1960	Feb. 8, 1960	18.55	14,000	1965	Dec. 22, 1964	26.2	26,300
	Mar. 7, 1960	11.50	4,520		Jan. 5, 1965	15.88	9,910
1961	Dec. 1, 1960	8.94	2,140		Jan. 23, 1965	10.94	4,210
	Jan. 31, 1961	10.48	3,580		Apr. 16, 1965	10.80	4,080
	Feb. 9, 1961	9.41	2,690		Apr. 21, 1965	8.68	2,280

4065. West Branch Feather River near Yankee Hill, Calif.

Location.--Lat 39°41'55", long 121°33'38", in SE¹/₄SE¹/₄ sec.6, T.21 N., R.4 E., on right bank 800 ft upstream from highway bridge, 1.7 miles downstream from Concow Creek, 2.1 miles west of Yankee Hill, and 4.9 miles southeast of Paradise.

Drainage area.--149 sq mi.

Gage.--Recording. Altitude of gage is 650 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversions to Dewey, Miners, and Hendricks Canals to Butte Creek basin for power development at DeSable and Centerville plants of Pacific Gas & Electric Co.; also by diversions to Upper Miocene Canal and Spring Valley ditch for development at Lime Saddle and Coal Canyon plants of Pacific Gas & Electric Co. and for irrigation below powerplants. Some diversions in operation prior to start of record. Peaks regulated by Round Valley Reservoir (capacity, 1,285 acre-ft) beginning in 1892; Philbrook Reservoir (capacity, 5,010 acre-ft) beginning in 1926; and Lake Wilenor (capacity, 8,210 acre-ft) beginning in 1925. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Jan. 23, 1931	8.41	1,710	1952	Jan. 24, 1952	11.24	3,170
1932	Dec. 24, 1931	12.10	3,910	Feb. 1, 1952	19.00	9,800	
1933	Mar. 28, 1933	7.72	1,380	May 7, 1952	11.75	3,540	
1934	Jan. 1, 1934	11.15	3,270	1953	Jan. 9, 1953	24.08	14,900
1935	Apr. 7, 1935	16.10	7,300	Jan. 12, 1953	12.70	4,300	
1936	Feb. 21, 1936	23.80	14,400	Jan. 20, 1953	13.25	4,740	
1937	Feb. 4, 1937	10.8	2,960	Mar. 19, 1953	11.40	3,280	
1938	Dec. 11, 1937	30.3	21,400	Apr. 27, 1953	17.57	8,510	
1939	Dec. 3, 1938	8.99	872	1954	Jan. 17, 1954	13.91	5,270
1940	Feb. 27, 1940	28.70	17,800	Jan. 23, 1954	11.15	3,100	
1941	Feb. 10, 1941	23.05	13,800	Feb. 12, 1954	13.28	4,740	
1942	Feb. 8, 1942	24.22	15,000	Feb. 17, 1954	13.53	4,960	
1943	Jan. 21, 1943	20.5	11,300	Mar. 9, 1954	13.75	5,140	
1944	Mar. 4, 1944	13.22	4,720	Apr. 4, 1954	14.87	6,080	
1945	Feb. 1, 1945	-	4,780	Apr. 27, 1954	11.51	3,380	
	Feb. 2, 1945	15.04	as, 240	1955	Nov. 15, 1954	9.87	2,190
	Feb. 2, 1945	-	as, 290	1956	Dec. 19, 1955	21.85	12,400
	Feb. 5, 1945	-	5,950	Dec. 22, 1955	30.2	21,300	
1946	Dec. 22, 1945	-	8,490	Dec. 28, 1955	-	(b)	
	Jan. 27, 1946	18.03	7,130	Jan. 7, 1956	14.48	5,750	
1947	Nov. 23, 1946	-	4,820	Jan. 15, 1956	19.36	10,200	
	Feb. 12, 1947	18.66	7,870	Feb. 22, 1956	21.35	12,200	
1948	Oct. 18, 1947	-	3,120	1957	Feb. 24, 1957	19.32	10,100
	Jan. 7, 1948	15.30	8,470	May 18, 1957	17.79	6,710	
	Mar. 23, 1948	-	5,750	1958	Nov. 14, 1957	12.81	4,290
	Apr. 9, 1948	-	3,580	Dec. 16, 1957	13.30	4,680	
1949	Mar. 10, 1949	11.62	3,440	Jan. 29, 1958	15.05	6,240	
1950	Feb. 6, 1950	17.05	8,040	Feb. 12, 1958	14.78	5,980	
1951	Nov. 18, 1950	13.08	4,590	Feb. 18, 1958	12.90	4,360	
	Nov. 20, 1950	17.93	8,840	Feb. 19, 1958	14.87	6,080	
	Dec. 3, 1950	14.97	6,170	Feb. 24, 1958	21.70	12,500	
	Dec. 8, 1950	13.58	5,000	Mar. 21, 1958	15.20	4,800	
	Dec. 14, 1950	12.79	4,370	Mar. 29, 1958	12.47	4,020	
	Jan. 18, 1951	12.80	4,140	Apr. 2, 1958	12.15	3,780	
	Jan. 22, 1951	13.24	4,730	1959	Jan. 12, 1959	15.37	8,550
	Feb. 5, 1951	12.53	4,180	Feb. 18, 1959	14.98	8,180	
	Feb. 11, 1951	12.34	4,010	1960	Feb. 8, 1960	22.75	13,800
			(b)	Mar. 7, 1960	15.95	7,080	
1952	Dec. 1, 1961	-	(b)	1961	Jan. 31, 1961	13.18	4,570
	Dec. 28, 1951	15.42	8,580	Feb. 9, 1961	11.35	3,200	

a Occurred at different times.

b Discharge unknown; exceeded base.

Peak stages and discharges of West Branch Feather River near
Yankee Hill, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1982	Feb. 12, 1982	13.53	4,620	1983	Dec. 16, 1982	11.4	3,130
	Feb. 15, 1982	14.42	5,680		Jan. 31, 1983	30.15	21,300
1983	Oct. 13, 1982	23.40	14,200		Mar. 27, 1983	12.92	4,380
		12.75	4,240		Apr. 7, 1983	15.81	8,930
	Dec. 3, 1982				Apr. 14, 1983	18.11	7,200

4070, Feather River at Oroville, Calif.

(Published as "near Oroville" October 1984 to September 1981)

Location.--Lat 39°31'06", long 121°32'57", in SW 1/4 sec. 8, T.19 N., R.4 E., on right bank 200 ft downstream from bridge on Oroville-Chico highway and 0.4 miles northeast of Oroville business district.

Drainage area.--3,626 sq mi.

Gage.--Nonrecording prior to Dec. 15, 1912; recording thereafter. Prior to 1902, at present site at datum 139.53 ft above mean sea level, datum of 1929. 1902 to December 1905, at present site and December 1905 to Dec. 31, 1910, at site 1,200 ft upstream at datum 137.5 ft above mean sea level, datum of 1929. Dec. 16, 1912, to Sept. 30, 1934, at present site at datum 139.53 ft above mean sea level, datum of 1929. Oct. 1, 1934, to June 30, 1982, at site 5.2 miles upstream at datum 182.02 ft above mean sea level, datum of 1929. Datum of gage is at mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 68,000 cfs 1902 to December 1905 and Dec. 16, 1912, to Sept. 30, 1934; below 49,000 cfs and extended above on basis of comparison with rating at previous location for period December 1905 to Dec. 31, 1910. Defined by current-meter measurements below 90,000 cfs and extended above on basis of float measurement at 198,000 cfs and a slope-area measurement at 201,000 cfs for period Oct. 1, 1934, to June 30, 1982. Defined by current-meter measurements below 84,000 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--The peak stage for February 1881 exceeded the previous record stage of 1882 by about half a foot. The peak stage of 1881 was believed to have been affected by the deposition of mining debris in the channel.

Remarks.--Peaks partly regulated by Lake Almanor (usable capacity, 641,600 acre-ft) beginning in July 1913, Bucks Lake (capacity, 101,400 acre-ft) beginning in May 1927, Butt Valley Reservoir (capacity, 49,768 acre-ft) beginning in 1984 and by several smaller reservoirs and powerplants. Peaks are maximum observed prior to 1910. Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 30,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1879	Feb. 12, 1879	11.7	-	1914	Dec. 31, 1913	20.8	122,000
1881	February 1881	25	-	1915	May 11, 1915	18.3	81,400
				1916	Mar. 20, 1916	11.8	42,400
1884	Mar. 9, 1884	13.0	-	1917	Feb. 25, 1917	15.15	50,400
1885	Dec. 23, 1884	13.8	-	1918	Mar. 28, 1918	9.83	28,200
1886	Dec. 25, 1885	15.7	-	1919	Feb. 11, 1919	14.58	85,900
				1920	Apr. 18, 1920	9.05	23,400
1902	Apr. 7, 1902	14.5	41,000	1921	Nov. 19, 1920	14.25	82,300
1903	Mar. 30, 1903	-	102,000	1922	May 20, 1922	11.0	38,400
1904	Feb. 24, 1904	-	118,000	1923	Apr. 5, 1923	8.61	22,400
1905	Dec. 30, 1904	-	81,000	1924	Feb. 5, 1924	11.50	42,400
1908	Jan. 18, 1908	27.0	128,000	1925	Feb. 4, 1925	15.25	84,300
				1926	Feb. 4, 1926	14.22	55,700
1907	Mar. 19, 1907	39.3	230,000	1927	Feb. 21, 1927	18.34	94,000
1908	Jan. 21, Feb. 3, 1908	11.00	18,500	1928	Mar. 28, 1928	28.08	185,000
1909	Jan. 18, 1909	-	140,000	1929	Feb. 4, 1929	7.50	14,000
1910	Dec. 9, 1909	14.0	31,000	1930	Dec. 15, 1929	15.62	80,100
1913	May 9, 1913	7.88	18,800	1931	Jan. 23, 1931	8.90	11,800

SACRAMENTO RIVER BASIN

Peak stages and discharges of Feather River at Oroville, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Dec. 24, 1931	9.28	22,600	1953	Jan. 13, 1953	40.75	42,600
1933	May 30, 1933	5.90	8,860		Jan. 20, 1953	38.75	37,900
1934	Jan. 1, 1934	9.37	20,300		Apr. 27, 1953	43.33	49,700
1935	Apr. 8, 1935	47.0	58,600	1954	Mar. 9, 1954	45.04	54,800
1936	Feb. 21, 1936	55.40	85,400		Apr. 5, 1954	36.62	33,600
1937	Apr. 15, 1937	27.90	19,200	1955	Nov. 15, 1954	21.82	13,000
1938	Dec. 11, 1937	73.6	185,000	1956	Dec. 19, 1955	55.56	95,000
1939	Mar. 27, 1939	17.1	8,080		Dec. 23, 1955	76.77	203,000
1940	Feb. 27, 1940	68.1	152,000		Dec. 26, 1955	54.26	89,200
1941	Feb. 11, 1941	54.3	84,200		Jan. 15, 1956	51.66	77,500
1942	Feb. 6, 1942	58.55	110,000		Feb. 22, 1956	50.28	71,700
1943	Jan. 21, 1943	58.2	108,000	1957	Feb. 24, 1957	52.91	83,100
1944	Mar. 4, 1944	31.40	24,900		May 18, 1957	39.79	38,800
1945	Feb. 2, 1945	46.70	60,100	1958	Feb. 12, 1958	38.84	37,000
	Feb. 5, 1945	-	32,200		Feb. 16, 1958	36.02	31,400
1946	Dec. 22, 1945	-	46,500		Feb. 19, 1958	41.10	41,600
	Dec. 27, 1945	-	44,300		Feb. 24, 1958	57.15	102,000
	Dec. 29, 1945	44.9	54,400		Mar. 21, 1958	35.35	30,200
1947	Feb. 12, 1947	41.9	45,600		Apr. 2, 1958	35.75	31,000
1948	Jan. 7, 1948	38.2	36,700	1959	Jan. 12, 1959	37.60	34,500
	Apr. 17, 1948	-	32,900		Feb. 16, 1959	36.60	32,500
1949	Mar. 11, 1949	25.25	16,800	1960	Feb. 8, 1960	63.80	135,000
1950	Feb. 6, 1950	42.17	46,400		Mar. 7, 1960	40.90	42,800
1951	Nov. 19, 1950	42.10	46,200	1961	Jan. 31, 1961	29.28	22,300
	Nov. 21, 1950	54.80	92,000	1962	Feb. 9, 1962	41.20	43,400
	Dec. 4, 1950	44.14	52,100		Feb. 15, 1962	35.58	32,000
	Dec. 8, 1950	42.08	46,100	1963	Oct. 13, 1962	160.13	136,000
	Dec. 14, 1950	36.75	33,800		Jan. 31, 1963	165.37	191,000
	Jan. 22, 1951	37.75	35,800		Apr. 7, 1963	149.64	57,500
1952	Dec. 1, 1951	40.90	43,000		Apr. 14, 1963	146.36	40,500
	Dec. 29, 1951	37.10	34,500	1964	Jan. 20, 1964	144.22	31,200
	Feb. 1, 1952	46.50	59,500	1965	Dec. 23, 1964	25.24	158,000
	Apr. 7, 1952	37.82	35,900		Dec. 26, 1964	17.73	78,300
	Apr. 28, 1952	39.16	38,800		Jan. 6, 1965	17.52	76,400
	May 8, 1952	37.52	35,300		Jan. 24, 1965	10.79	33,600
1953	Jan. 9, 1953	59.20	113,000				

4075. South Honcut Creek near Bangor, Calif.

Location--Lat 39°22'05", long 121°22'15", in SE $\frac{1}{4}$ sec.35, T.18 N., R.5 E., on right bank 2.3 miles southeast of Bangor and 3.3 miles upstream from Tennessee Creek.

Drainage area--30.6 sq mi.

Gage--Recording. Altitude of gage is 620 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurement at 6,340 cfs.

Bankfull stage--Not subject to overflow.

Remarks--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 20, 1950	8.68	3,170	1952	Jan. 24, 1952	7.87	2,160
	Dec. 3, 1950	8.11	2,450		Feb. 1, 1952	8.03	2,360
	Jan. 18, 1951	8.10	2,440	1953	Jan. 8, 1953	8.00	2,320
	Jan. 21, 1951	7.99	2,310		Jan. 12, 1953	7.71	1,970
1952	Dec. 1, 1951	7.64	1,890		Apr. 27, 1953	7.70	1,960
	Jan. 12, 1952	8.28	2,660				

Peak stages and discharges of South Honcut Creek near Bangor, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 17, 1954	7.40	1,640	1960	Feb. 8, 1960	8.63	2,980
	Feb. 13, 1954	7.33	1,570		Mar. 5, 1960	7.22	1,470
1955	Dec. 9, 1954	5.43	460	1961	Mar. 17, 1961	6.39	915
1956	Dec. 6, 1955	7.95	2,200	1962	Feb. 9, 1962	9.70	4,320
	Dec. 19, 1955	9.00	3,420		Feb. 14, 1962	7.55	1,780
	Dec. 23, 1955	11.15	6,340		Mar. 5, 1962	7.24	1,490
	Dec. 26, 1955	8.97	3,380				
	Jan. 7, 1956	7.48	1,710	1963	Oct. 13, 1962	12.40	8,280
	Jan. 15, 1956	8.65	3,000		Jan. 30, 1963	7.85	2,100
	Feb. 20, 1956	7.40	1,630		Mar. 27, 1963	7.75	1,980
	Feb. 22, 1956	8.85	3,240		Apr. 6, 1963	8.09	2,360
1957	Feb. 24, 1957	7.61	1,840		Apr. 14, 1963	8.09	2,560
	May 18, 1957	7.22	1,470	1964	Jan. 20, 1964	8.62	2,960
1958	Dec. 17, 1957	7.78	2,070	1965	Dec. 22, 1964	9.72	4,350
	Jan. 26, 1958	7.18	1,410		Dec. 26, 1964	19.25	17,600
	Feb. 12, 1958	7.28	1,520		Jan. 5, 1965	8.46	2,770
	Apr. 2, 1958	8.09	2,410				
1959	Feb. 16, 1959	8.29	2,630				

4085. Middle Yuba River at Milton, Calif.
(Published as Middle Fork Yuba River prior to October 1949)

Location.--Lat 39°31'22", long 120°34'53", in SW¹/₄SW¹/₄ sec.12, T.19 N., R.12 E., on right bank at diversion dam of Nevada Irrigation District, at old town-site of Milton, 4 miles southeast of Sierra City, and 8 miles upstream from South Fork of Middle Yuba River.

Drainage area.--39.8 sq mi.

Gage.--Recording. Prior to June 8, 1928, at site 0.2 mile downstream at different datum. Altitude of gage is 5,700 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of computation of flow over dam at 4,070 cfs prior to June 8, 1928. Defined by current-meter measurements below 1,500 cfs and extended above on basis of computation of flow over dam at 6,800 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks affected by diversion to Milton-Bowman tunnel (capacity, about 500 cfs) beginning May 21, 1928, and by Milton Reservoir (capacity 900 acre-ft) beginning in 1928. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	May 4, 1926	5.36	603	1947	Feb. 12, 1947	0.66	323
1927	May 16, 1927	6.53	1,620	1948	May 26, 1948	1.15	810
1928	Mar. 25, 1928	9.45	4,070	1949	May 14, 1949	1.47	1,230
1929	June 15, 1929	.56	322	1950	May 21, 1950	1.20	870
1930	Dec. 13, 1929	.83	550				
1931	-	-	0	1951	Nov. 20, 1950	4.00	6,300
1932	May 12, 1932	1.06	716	1952	May 27, June 8, 1952	1.64	1,480
1933	May 29, 1933	1.09	749	1953	Apr. 27, 1953	1.67	1,520
1934	-	-	0				
1936	June 7, 1936	1.44	1,210	1955	May 21, 1955	.88	516
1937	May 13, 1937	1.10	735	1956	Dec. 23, 1955	4.15	6,680
1938	Dec. 11, 1937	4.18	6,800	1957	May 18, 1957	2.49	2,910
1939	-	-	0	1958	May 23, 1958	1.52	1,300
1940	Mar. 26, 1940	2.04	2,110	1959	Feb. 17, 1959	.84	478
				1960	Feb. 8, 1960	1.41	1,140
1941	May 11, 1941	1.33	1,040	1961	Feb. 11, 1961	.13	16
1942	May 25, 1942	1.72	1,600	1962	May 8, 1962	.69	346
1943	Jan. 21, 1943	2.29	2,540	1963	Jan. 31, 1963	5.25	10,200
1944	May 6, 1944	.81	450	1964	June 7, 1964	.63	336
1945	Feb. 2, 1945	1.59	1,400	1965	June 5, 1965	.95	556
1946	May 6, 1946	1.04	542				

4087. Middle Yuba River near Alleghany, Calif.

Location.--Lat 39°28'19", long 120°48'40", in NW¼SW¼ sec.12, T.18 N., R.10 E., 0.5 mile downstream from Wolf Creek and 2.8 miles southeast of Alleghany.

Drainage area.--98.3 sq mi.

Gage.--Recording. Altitude of gage is 2,960 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs and extended above on basis of slope-area measurement at 6,300 cfs.

Bankfull stage.--20 ft.

Remarks.--Peaks affected by diversion to Milton-Bowman tunnel (capacity, about 500 cfs) beginning May 21, 1928, and by Milton Reservoir (capacity, 900 acre-ft) beginning in 1928. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	9.25	4,510	1962	Feb. 9, 1962	7.50	2,180
	May 5, 1958	7.14	1,630				
	May 9, 1958	7.45	2,110		Oct. 13, 1962	12.68	9,870
	May 16, 1958	8.04	2,780		Jan. 31, 1963	16.96	23,700
	May 23, 1958	8.07	2,760		Apr. 6, 1963	7.93	2,470
	June 2, 1958	7.14	1,630		May 21, 1963	7.32	1,840
1959				1963	May 28, 1963	8.38	3,000
	Feb. 16, 1959	5.92	932				
1960	Feb. 6, 1960	10.58	6,500	1964	Nov. 14, 1963	7.97	2,520
	Mar. 7, 1960	7.07	1,760				
1961	Feb. 9, 1961	4.75	473	1965	Dec. 22, 1964	14.70	13,900

4090. Middle Yuba River above Oregon Creek, Calif.
(Published as Middle Fork Yuba River prior to October 1949)

Location.--Lat 39°23'35", long 121°04'50", in SE¼ sec.28, T.18 N., R.8 E., on left bank 1,000 ft upstream from Oregon Creek and 2 miles northeast of North San Juan.

Drainage area.--162 sq mi.

Gage.--Recording. Altitude of gage is 1,440 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,200 cfs and extended above on basis of slope-area measurement at 19,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks affected by diversion to Milton-Bowman tunnel (capacity, about 500 cfs) beginning May 21, 1928, and by Milton Reservoir (capacity, 900 acre-ft) beginning in 1928. Only annual peaks are shown prior to Oct. 1, 1945. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 10, 1941	9.2	5,540	1951	Nov. 18, 1950	12.55	12,600
1942	Jan. 27, 1942	10.25	7,460		Nov. 21, 1950	15.25	19,500
1943	Jan. 21, 1943	12.63	14,200		Dec. 3, 1950	12.70	12,400
1944	Mar. 4, 1944	6.22	1,780		Dec. 6, 1950	10.73	7,880
1945	Feb. 2, 1945	10.32	7,640		Dec. 14, 1950	8.09	3,610
1946					Jan. 16, 1951	7.76	3,210
	Dec. 22, 1945	-	4,250	1952	Jan. 22, 1951	6.80	4,130
	Dec. 26, 1945	6.76	4,650		Feb. 5, 1951	7.41	2,810
1947	Feb. 12, 1947	6.24	4,020		Dec. 1, 1951	7.51	2,920
1948	Apr. 17, 1948	7.64	3,480		Feb. 2, 1952	9.51	5,560
1949	May 14, 1949	6.59	2,070	1953	May 28, 1952	7.69	2,970
1950					Jan. 9, 1953	7.20	5,080
	Jan. 23, 1950	-	2,930		Jan. 13, 1953	7.29	2,500
	Feb. 6, 1950	8.07	3,780		Jan. 20, 1953	7.71	2,980
					Apr. 27, 1953	9.13	5,080

Peak stages and discharges of Middle Yuba River above Oregon Creek, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Mar. 9, 1954	8.95	4,700	1960	Feb. 8, 1960	13.02	15,300
1955	May 9, 1955	5.89	1,190		Mar. 7, 1960	7.98	3,330
1956	Dec. 19, 1955	9.73	5,940	1961	Feb. 10, 1961	5.36	956
	Dec. 22, 1955	17.25	28,400	1962	Feb. 9, 1962	9.17	5,030
	Dec. 28, 1955	9.78	6,030		Feb. 15, 1962	7.52	2,810
	Jan. 15, 1956	10.98	8,400	1963	Oct. 13, 1962	13.53	14,600
	Feb. 22, 1956	7.29	2,500		Jan. 31, 1963	18.55	31,800
	May 23, 1956	7.27	2,480		Apr. 6, 1963	9.02	5,340
1957	Feb. 24, 1957	9.14	4,980		May 29, 1963	7.38	3,040
	Mar. 5, 1957	7.28	2,580	1964	Nov. 15, 1963	7.32	2,960
	May 18, 1957	11.17	6,810	1965	Dec. 22, 1964	16.26	22,900
1958	Feb. 12, 1958	7.34	2,640		Dec. 28, 1964	10.28	7,530
	Feb. 19, 1958	7.17	2,470		Jan. 6, 1965	9.16	5,570
	Feb. 24, 1958	9.80	6,070		Apr. 18, 1965	7.25	2,880
	May 23, 1958	7.52	2,760				
1959	Feb. 16, 1959	7.16	2,380				

4095. Oregon Creek near North San Juan, Calif.

Location.--Lat 39°24'10", long 121°04'35", in NW¼NW¼ sec.27, T.18 N., R.8 E., on right bank 0.7 mile upstream from mouth and 2.7 miles northeast of North San Juan.

Drainage area.--34.4 sq mi.

Gage.--Nonrecording at site 0.6 mile downstream at different datum prior to October 1933; recording thereafter. Altitude of gage is 1,580 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs prior to October 1933; below 2,800 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for the years 1911-31 and 1933 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Apr. 3, 1911	7.5	2,680	1937	Feb. 14, 1937	7.13	1,300
1912	Mar. 6, 1912	5.8	830	1938	Dec. 11, 1937	9.25	2,750
1913	Nov. 6, 1912	6.0	745	1939	Mar. 27, 1939	5.15	410
1914	Dec. 31, 1913	-	-	1940	Mar. 30, 1940	6.80	2,430
1915	May 12, 1915	6.65	1,620	1941	Feb. 10, 1941	8.35	2,100
1916	Feb. 10, 1916	6.8	1,560	1942	Feb. 6, 1942	8.38	2,120
1917	Feb. 25, 1917	6.8	1,780	1943	Jan. 21, 1943	9.4	2,910
1918	Mar. 27, 1918	5.7	585	1944	Mar. 4, 1944	6.17	802
1919	Feb. 11, 1919	6.4	1,310	1945	Feb. 2, 1945	7.90	1,780
1920	Apr. 15, 1920	6.5	1,500		Feb. 3, 1945	-	1,590
1921	Nov. 27, 1920	6.2	1,160	1946	Dec. 22, 1945	-	1,320
1922	Feb. 19, 26, 1922	6.2	1,160		Dec. 26, 1945	-	1,880
1923	Dec. 13, 1922	6.6	1,620		Dec. 28, 1945	6.10	1,920
1924	Feb. 8, 1924	5.8	580	1947	Feb. 12, 1947	7.09	1,270
1925	Feb. 4, 1925	7.0	1,890		Mar. 10, 1947	-	1,260
1926	Feb. 4, 1926	6.4	1,130	1948	Apr. 17, 1948	6.68	1,050
1927	Feb. 20, 1927	-	-	1949	Mar. 2, 1949	4.97	385
1928	Mar. 25, 1928	-	-	1950	Jan. 18, 1950	7.80	1,710
1929	Feb. 4, 1929	5.42	295		Jan. 23, 1950	-	1,380
1930	Mar. 5, 1930	6.31	820		Feb. 8, 1950	-	1,310
1931	Jan. 23, 1931	5.60	332	1951	Nov. 18, 1950	7.70	1,640
1932	Dec. 24, 1931	7.3	1,640		Nov. 21, 1950	9.80	3,240
1933	Mar. 28, 1933	5.70	520				
1934	Jan. 1, 1934	5.7	588				
1935	Apr. 7, 1935	6.80	2,250				
1936	Jan. 15, 1936	6.40	2,110				

Peak stages and discharges of Oregon Creek near North San Juan, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Dec. 3, 1950	8.90	2,510	1957	May 18, 1957	7.50	1,520
	Dec. 8, 1950	8.20	1,990	1958	Jan. 29, 1958	6.75	1,090
	Dec. 15, 1950	6.96	1,200		Feb. 12, 1958	7.88	1,770
	Jan. 18, 1951	7.85	1,740		Feb. 24, 1958	7.28	1,390
	Jan. 22, 1951	8.27	2,040	1959	Feb. 16, 1959	6.08	742
1952	Feb. 5, 1951	7.40	1,460				
	Dec. 29, 1951	7.34	1,420	1960	Feb. 8, 1960	10.40	3,800
	Feb. 1, 1952	8.71	2,360		Mar. 7, 1960	7.48	1,390
1953	Feb. 16, 1952	7.41	1,470	1961	Feb. 9, 1961	5.84	646
	Jan. 9, 1953	7.81	1,720				
	Jan. 13, 1953	6.66	1,030	1962	Feb. 10, 1962	8.73	2,300
1954	Jan. 20, 1953	7.69	1,630		Feb. 13, 1962	7.77	1,590
	Jan. 23, 1954	7.96	1,820	1963	Oct. 13, 1962	9.59	3,050
	Mar. 9, 1954	6.80	1,100		Dec. 2, 1962	6.88	1,080
1955	Jan. 1, 1955	5.07	415		Jan. 31, 1963	10.44	3,990
					Apr. 6, 1963	8.60	2,580
	Dec. 19, 1955	7.80	1,710	1964	Nov. 14, 1963	6.18	905
1956	Dec. 22, 1955	11.90	5,390				
	Dec. 26, 1955	7.65	1,610	1965	Dec. 22, 1964	12.88	10,300
	Jan. 15, 1956	9.50	2,990		Jan. 6, 1965	8.4	2,500
1957	Feb. 24, 1957	7.21	1,350		Jan. 23, 1965	6.54	1,100
	Mar. 5, 1957	7.00	1,220				

4100. Middle Yuba River near North San Juan, Calif.
(Published as Middle Fork of Yuba River, 1911-41)

Location--Lat 39°23'15", long 121°05'35", in NW $\frac{1}{4}$ sec.33, T.18 N., R.8 E.,
0.2 mile upstream from Moonshine Creek, 1 mile downstream from Oregon Creek,
and 1 mile north of North San Juan.

Drainage area--198 sq mi.

Gage--Nonrecording at site 0.4 mile upstream at different datum prior to
October 1930; recording thereafter. Datum of gage is 1,400.62 ft above mean
sea level, datum of 1929.

Stage-discharge relation--Prior to October 1930, defined by current-meter
measurements below 14,000 cfs; below 22,300 cfs thereafter.

Remarks--Peaks affected by diversion to Milton-Bowman tunnel (capacity, about
500 cfs) beginning May 21, 1928. Peaks for the years 1912-22, 1929 and 1930
are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Apr. 29, 1912	6.6	1,390	1927	Feb. 21, 1927	14.0	21,900
1913	May 9, 1913	7.15	2,230	1928	Mar. 25, 1928	15.3	26,000
1914	Dec. 31, 1913	11.5	13,700	1929	Feb. 4, 1929	6.18	1,290
1915	May 12, 1915	11.7	14,300	1930	Dec. 12, 1929	7.70	3,080
1916	Jan. 3, 1916	8.8	5,850	1931	Nov. 16, 1930	5.25	1,340
1917	Feb. 25, 1917	9.1	6,610	1932	Dec. 24, 1931	7.15	4,050
1918	Mar. 27, 1918	7.2	2,270	1933	May 30, 1933	5.53	1,700
1919	Feb. 10, 11, 1919	9.8	8,520	1934	Mar. 29, 1934	6.52	2,970
1920	Apr. 15, 1920	8.5	5,110	1935	Apr. 7, 1935	9.2	8,580
1921	Nov. 19, 1920	8.2	4,410	1936	Feb. 21, 1936	9.18	9,220
1922	Feb. 19, 1922	7.8	3,520	1937	Feb. 14, 1937	7.56	4,730
1923	Dec. 13, 1922	8.6	5,060	1938	Dec. 11, 1937	13.3	24,000
1924	Feb. 8, 1924	7.45	2,570	1939	Mar. 27, 1939	5.14	1,250
1925	Feb. 6, 1925	11.35	13,400	1940	Mar. 30, 1940	10.5	13,500
1926	Feb. 4, 1926	8.35	4,550	1941	Feb. 10, 1941	9.40	9,820

4105. North Yuba River near Sierra City, Calif.
(Published as North Fork Yuba River, prior to 1945)

Location.--Lat 39°33'45", long 120°39'30", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.20 N., R.12 E., on right bank 300 ft downstream from Big Avalanche Ravine and 1.4 miles west of Sierra City.

Drainage area.--94.4 sq mi (revised).

Gage.--Recording. Altitude of gage is 3,880 ft (revised, from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,500 cfs.

Historical data.--Flood of Dec. 23, 1955, reached a stage of 9.63 ft and a discharge of 11,400 cfs (determined by slope-area measurement of peak flow).

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1924	Apr. 13, 1924	2.95	442	1936	May 13, 1936	4.67	1,620
1925	Feb. 6, 1925	6.87	3,450	1937	May 13, 1937	4.76	1,750
				1938	Dec. 11, 1937	10.0	9,800
1926	Apr. 7, 1926	4.32	1,040	1939	Apr. 20, 1939	2.65	628
1927	May 16, 1927	5.67	2,150	1940	Mar. 26, 1940	5.28	3,170
1928	Mar. 25, 1928	8.50	5,920				
1929	June 15, 1929	4.50	1,120	1941	May 13, 1941	4.47	2,080
				1942	Dec. 3, 1941	4.65	2,300
1931	Mar. 26, 1931	3.85	742	1943	Jan. 21, 1943	5.50	3,560
1932	May 12, 1932	5.3	1,850	1944	May 8, 1944	3.48	1,240
1933	May 29, 1933	4.58	1,060				
1934	Mar. 29, 1934	5.20	1,470	1956	Dec. 23, 1955	9.63	11,400
1935	May 26, 1935	5.15	2,040				

4110. Downie River at Downieville, Calif.

(Published as North Fork of North Fork of Yuba River prior to 1927)

Location.--Lat 39°33'45", long 120°49'25", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.35, T.20 N., R.10 E., at upper highway bridge in Downieville, 500 ft upstream from dam, 0.3 mile upstream from mouth, and 0.5 mile downstream from Pauley Creek.

Drainage area.--72.7 sq mi.

Gage.--Nonrecording. Altitude of gage is 2,920 ft (revised, from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversion above station for municipal use beginning prior to 1911. All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 30, 1911	5.5	2,430	1919	Apr. 30, 1919	5.2	2,270
1912	May 7, 12, 15, 28, June 1, 3, 1912	4.2	860	1920	May 19, 1920	4.20	1,080
1913	May 9, 1913	-	1,260	1921	Nov. 19, 1920	5.50	2,700
1914	Dec. 31, 1913	7.5	5,840	1922	May 15, 1922	6.00	3,470
1915	May 11, 1915	8.0	6,760	1923	Apr. 5, May 7, 14, 1923	4.2	860
1916	Mar. 19, 1916	5.3	2,410	1924	Feb. 8, 1924	4.30	700
1917	Feb. 24, 1917	6.5	4,330	1925	Feb. 4, 1925	7.60	3,460
1918	Feb. 6, Apr. 9, 1918	4.5	1,140	1926	Apr. 7, 1926	5.4	1,680

4115. North Yuba River at Goodyears Bar, Calif.
(Published as North Fork of Yuba River at Goodyear Bar prior to 1932)

Location.--Lat 39°32'28", long 120°53'06", in SW¹ sec.5, T.19 N., R.10 E., at highway bridge at Goodyears Bar, one-eighth of a mile upstream from Rock Creek and a quarter of a mile upstream from Goodyears Creek.

Drainage area.--221 sq mi.

Gage.--Nonrecording. Altitude of gage is 2,650 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,000 cfs.

Remarks.--All peaks are maximum observed, except that for 1928 which is a momentary maximum. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	June 10, 1911	7.8	4,570	1922	May 31, June 2, 1922	8.3	5,700
1912	June 2, 1912	6.1	2,290	1923	May 9, 1923	6.4	2,660
1913	June 6, 1913	5.3	2,530	1924	Feb. 7, 1924	5.70	1,670
1914	Dec. 31, 1913	11.0	11,500	1925	Feb. 6, 1925	11.50	12,800
1915	May 11, 1915	11.5	12,600	1926	Apr. 7, 1926	7.0	3,400
1916	Mar. 19, 1916	7.6	4,430	1927	Feb. 21, 1927	10.5	10,400
1917	Feb. 26, June 6, 1917	7.3	3,940	1928	Mar. 28, 1928	15.6	26,000
1918	Apr. 9, 1918	6.5	2,790	1929	May 16, 1929	6.10	1,300
1919	Feb. 10, 1919	7.5	4,260	1930	Dec. 12, 1929	8.5	6,100
1920	May 19, 20, 1920	6.2	2,410	1931	Mar. 18, 1931	5.80	1,910
1921	Nov. 19, 1920	7.7	4,600				

4120. Rock Creek at Goodyears Bar, Calif.

Location.--Lat 39°32'15", long 120°53'05", in SW¹ sec.5, T.19 N., R.10 E., at footbridge at Goodyears Bar, 350 ft downstream from Woodruff Creek and 600 ft upstream from mouth.

Drainage area.--8.96 sq mi.

Gage.--Nonrecording. Altitude of gage is 2,700 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 390 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversions to three ditches (total capacity, about 10 cfs) since beginning of record. All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1911	Jan. 29, 30, 1911	6.0	545	1923	Dec. 13, 1922	4.0	210
1912	Apr. 29, 1912	5.7	95	1924	Feb. 7, 1924	3.30	134
1913	Nov. 8, 1913, Apr. 26, 1915	5.9	122	1925	Feb. 6, 1925	5.9	468
1914	Dec. 31, 1913	7.0	620	1926	Feb. 4, 1926	4.6	325
1915	May 11, 1915	5.0	575	1927	Feb. 21, 1927	6.1	503
1916	Feb. 10, 1916	4.2	365	1928	Mar. 25, 1928	10.0	1,600
1917	Feb. 25, 1917	4.9	549	1929	Feb. 4, Mar. 10, 1929	5.20	75
1918	Apr. 9, 1918	3.4	215	1930	Dec. 12, 1929	6.5	455
1919	Feb. 10, 1919	5.3	444	1931	Nov. 16, 1930, Jan. 23, 1931	5.60	160
1920	Apr. 15, 1920	4.5	324	1932	Dec. 24, 1931	6.0	275
1921	Jan. 17, 1921	4.0	251	1933	Mar. 26, 1933	5.50	135
1922	May 15, 1922	3.5	153				

4125. Goodyears Creek at Goodyears Bar, Calif.

Location.--Lat 39°32'30", long 120°53'12", in NW¼ sec.5, T.19 N., R.10 E., 300 ft upstream from mouth and 0.5 mile north of Goodyears Bar.

Drainage area.--12.9 sq mi.

Gage.--Nonrecording. Altitude of gage is 2,640 ft (revised, from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 540 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Dec. 31, 1913	7.0	1,460	1925	Feb. 6, 1925	8.4	1,100
1915	May 11, 1915	5.2	895	1926	Feb. 4, 1926	4.7	488
1916	Mar. 21, 1916	4.1	384	1927	Feb. 21, 1927	7.4	1,580
1917	Feb. 24, 1917	4.7	543	1928	Mar. 28, 1928	af. 5	1,800
1918	Apr. 9, 1918	3.7	278	1929	June 15, 1929	8.50	126
1919	Feb. 10, 1919	5.2	895	1930	Dec. 12, 1929	8.70	780
1920	Apr. 15, 1920	4.2	390	1931	Mar. 16, 1931	8.60	195
1921	Jan. 17, 1921	4.1	384	1932	Dec. 24, 1931	8.90	230
1922	May 15, 17, 1922	4.3	295	1933	Mar. 19, 1932		
1923	Dec. 13, 1922	4.0	270		May 28, 30, 1933	8.7	165
1924	Feb. 7, 1924	3.80	245				

a Probably affected by backwater from North Yuba River.

4130. North Yuba River below Goodyears Bar, Calif.
(Published as North Fork Yuba River prior to October 1949)

Location.--Lat 39°31'30", long 120°56'13", in SW¼ sec.11, T.19 N., R.9 E., on right bank 200 ft downstream from St. Catherine Creek, 3.1 miles southwest of Goodyears Bar, and 6.4 miles southwest of Downieville.

Drainage area.--250 sq mi.

Gage.--Recording. Datum of gage is 2,453 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above on basis of float measurement at 17,900 cfs and slope-area measurement at 26,400 cfs.

Bankfull stage.--27 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 3,800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Mar. 18, 1931	8.64	2,280	1947	Nov. 23, 1946	-	4,400
1932	May 12, 1932	8.80	4,120		Feb. 12, 1947	10.48	5,580
1933	May 29, 1933	7.98	3,440				
1934	Mar. 29, 1934	9.75	5,820	1948	Jan. 7, 1946	-	4,890
1935	Apr. 7, 1935	10.95	7,250		Apr. 17, 1948	9.88	5,720
					May 26, 1948	-	5,720
1936	Feb. 21, 1936	12.2	9,080				
1937	May 13, 1937	8.89	4,450	1949	May 14, 1949	7.80	3,180
1938	Dec. 11, 1937	19.0	28,000				
1939	Apr. 6, 1939	8.00	1,890	1950	Jan. 23, 1950	-	4,040
1940	Mar. 26-30, 1940	14.0	13,100		Feb. 8, 1950	9.04	4,800
					May 27, 1950	-	3,320
1941	Feb. 10, 1941	12.2	9,380				
1942	Jan. 27, 1942	12.75	10,400	1951	Nov. 18, 1950	14.80	14,400
1943	Jan. 21, 1943	18.25	18,000		Nov. 20, 1950	19.15	28,400
1944	May 8, 1944	7.89	3,120		Dec. 3, 1950	14.38	15,900
1945	Feb. 2, 1945	12.95	10,800		Dec. 6, 1950	12.95	10,800
					Dec. 14, 1950	10.35	8,380
1946	Dec. 29, 1945	10.95	7,250		Jan. 18, 1951	8.12	3,800

SACRAMENTO RIVER BASIN

Peak stages and discharges of North Yuba River below Goodyears Bar, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Jan. 22, 1951	9.04	4,600	1958	Feb. 12, 1958	8.61	4,110
	May 11, 1951	8.06	3,440		Feb. 16, 1958	8.10	3,530
1952	Dec. 1, 1951	9.00	4,550		Feb. 19, 1958	8.52	4,000
	Dec. 28, 1951	8.20	3,590		Feb. 24, 1958	13.96	13,000
	Feb. 1, 1952	10.82	7,090		May 18, 1958	9.54	5,280
	Apr. 28, 1952	8.72	4,200	1959	Jan. 10, 1959	7.85	3,250
	May 27, 1952	9.88	5,720		Jan. 12, 1959	8.90	4,460
	June 8, 1952	9.75	5,540		Feb. 16, 1959	8.34	3,790
1953	Jan. 9, 1953	13.16	11,200	1960	Feb. 8, 1960	15.25	16,000
	Jan. 12, 1953	8.55	4,000		Mar. 7, 1960	9.51	5,240
	Jan. 20, 1953	9.60	5,330	1961	May 18, 1961	5.88	1,540
	Apr. 27, 1953	11.68	8,450	1962	Feb. 9, 1962	9.79	5,610
	May 19, 1953	8.35	3,760		Feb. 13, 1962	7.81	3,210
	June 18, 1953	8.15	3,540	1963	Oct. 13, 1962	15.87	17,600
1954	Jan. 23, 1954	8.11	3,490		Dec. 3, 1962	9.30	4,970
	Mar. 9, 1954	12.27	9,490		Feb. 1, 1963	23.8	40,000
	Apr. 27, 1954	7.85	3,220		Apr. 6, 1963	10.60	6,760
1955	May 8, 1955	7.22	2,620		May 5, 1963	8.14	3,580
1956	Dec. 19, 1955	12.35	9,630		May 21, 1963	8.61	4,110
	Dec. 23, 1955	19.30	26,800		May 28, 1963	8.42	3,890
	Dec. 26, 1955	11.61	8,310	1964	Nov. 14, 1963	10.20	6,180
	Jan. 15, 1956	12.27	9,490	1965	Dec. 23, 1964	3.75	3,100
	May 4, 1956	8.36	3,650		Apr. 29, 1965	1.25	305
	May 22, 1956	9.25	4,700		May 20, 1965	1.40	370
1957	Feb. 24, 1957	12.05	9,090		June 4, 1965	1.56	450
	Mar. 5, 1957	8.17	3,610		June 21, 1965	1.24	301
	May 18, 1957	13.13	11,200				

4135. North Yuba River below Bullards Bar Dam, Calif.

(Published as North Fork Yuba River at Colgate diversion dam, 1940-49)

Location.--Lat 39°24'15", long 121°08'30", in NE 1/4 sec. 24, T.18 N., R.7 E., on right bank 2,000 ft downstream from Bullards Bar Dam, 3 miles upstream from confluence with Middle Yuba River, and 3 miles northwest of North San Juan.

Drainage area.--487 sq mi.

Gage.--Recording. Prior to Oct. 1, 1950, at site 1 mile downstream at different datum. Altitude of gage is 1,390 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 23,000 cfs and extended to 72,500 cfs on basis of computations of flow over dam prior to Oct. 1, 1950; defined by current-meter measurements below 32,000 cfs and extended above on basis of computation of flow over dam at 42,300 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Peak flow for Dec. 11, 1937, was estimated at 70,000 cfs.

Remarks.--Peaks slightly regulated by Bullards Bar Reservoir (capacity, 36,620 acre-ft) beginning in 1924. Peaks may be affected by diversion out of basin through Slate Creek tunnel (capacity, about 800 cfs) beginning in February 1962. Only annual peaks are shown in 1941-50, 1955-65. Base for partial-duration series, 5,200 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Dec. 11, 1937	-	70,000	1948	Apr. 17, 1948	8.05	15,200
1941	Feb. 10, 1941	-	30,600	1949	Apr. 23, 1949	4.36	5,060
1942	Feb. 6, 1942	-	28,100	1950	Feb. 6, 1950	8.55	13,300
1943	Jan. 21, 1943	-	44,200	1951	Nov. 18, 1950	26.9	35,600
1944	May 9, 1944	-	5,110		Nov. 21, 1950	31.3	47,100
1945	Feb. 2, 1945	-	26,400		Dec. 3, 1950	20.9	21,500
1946	Dec. 21, 1945	-	20,000		Dec. 8, 1950	-	(a)
1947	Feb. 12, 1947	9.10	18,600		Dec. 14, 1950	15.87	11,800
					Jan. 18, 1951	14.56	9,760

a Discharge unknown; exceeded base.

Peak stages and discharges of North Yuba River below Bullards Bar Dam, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Jan. 22, 1951	15.59	11,400	1954	Feb. 13, 1954	11.48	5,940
	Feb. 5, 1951	13.27	7,900		Feb. 17, 1954	12.07	6,640
	Feb. 11, 1951	11.64	5,870		Mar. 9, 1954	25.27	31,800
1952					Apr. 5, 1954	13.87	9,030
	Dec. 1, 1951	16.50	12,900	1955	Apr. 27, 1954	11.68	6,180
	Dec. 28, 1951	14.50	9,670		May 9, 1955	10.78	5,160
	Feb. 2, 1952	21.65	23,200	1956	Dec. 23, 1955	39.0	70,000
	Feb. 16, 1952	12.50	6,900		Feb. 24, 1957	24.4	30,200
	Apr. 7, 1952	11.76	6,010	1958	Feb. 24, 1958	26.40	34,600
	Apr. 28, 1952	13.30	7,940		Feb. 16, 1959	14.08	10,100
	May 8, 1952	13.44	8,140	1960	Feb. 8, 1960	30.00	43,600
	May 18, 1952	13.25	7,880				
	May 27, 1952	13.70	8,500				
1953	Jan. 9, 1953	26.25	34,000	1961	Feb. 10, 1961	10.00	3,540
	Jan. 13, 1953	14.50	9,920	1962	Feb. 9, 1962	20.20	21,000
	Jan. 20, 1953	16.85	13,600	1963	Feb. 1, 1963	42.0	83,000
	Apr. 27, 1953	20.2	20,000	1964	Nov. 15, 1963	14.02	10,400
	May 20, 1953	11.36	5,800	1965	Dec. 22, 1964	40.45	91,600
1954	Jan. 23, 1954	16.30	12,700				

4139. Upper Castle Creek at Soda Springs, Calif.

Location.--Lat 39°19'30", long 120°22'05", in SW¼ sec.23, T.17 N., R.14 E., on left bank at Central Sierra Snow Laboratory, U.S. Forest Service, 0.25 mile upstream from mouth and 0.6 mile east of Soda Springs.

Drainage area.--3.96 sq mi.

Gage.--Recording. Altitude of gage is 6,850 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 170 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by the U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	June 18, 1958	2.88	261	1961	May 20, 1961	1.84	127
1959	May 12, 1959	1.75	118	1962	May 4, 1962	1.97	147
1960	May 11, 1960	2.30	182	1963	Jan. 31, 1963	-	1,300

4140. South Yuba River near Cisco, Calif.

(Published as South Fork Yuba River prior to October 1949)

Location.--Lat 39°19'12", long 120°33'38", in SW¼ sec.19, T.17 N., R.13 E., on right bank 0.7 mile downstream from Rattlesnake Creek, 1.3 miles west of Cisco Grove, and 1.5 miles northwest of Cisco.

Drainage area.--51.8 sq mi.

Gage.--Recording. Prior to October 1945, at site 200 ft upstream at same datum. Altitude of gage is 5,520 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs prior to October 1945; below 4,600 cfs and extended above on basis of slope-area measurement at 11,700 cfs thereafter.

Bankfull stage.--16 ft.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges of South Yuba River near Cisco, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1943	Jan. 21, 1943	12.35	8,080	1986	Jan. 16, 1986	6.41	2,830
1944	May 7, 1944	7.80	1,760	1986	May 4, 1986	6.77	1,870
1945	Feb. 2, 1945	10.5	4,200	1986	May 22, 1986	6.06	2,560
1946	May 5, 1946	7.23	1,770	1987	Feb. 24, 1987	6.62	1,560
1947	Feb. 12, 1947	6.62	1,530	1987	May 16, 1987	11.20	5,420
1948	Jan. 7, 1948	7.62	2,120	1987	June 1, 1987	6.55	1,540
1948	May 6, 1948	-	1,550	1986	Feb. 24, 1986	6.06	2,560
1948	May 18, 1948	-	1,600	1986	May 5, 1986	6.64	1,710
1948	May 25, 1948	-	2,110	1986	May 9, 1986	7.20	1,950
1949	May 14, 1949	7.36	1,860	1986	May 16, 1986	8.01	2,500
1950	May 16, 1950	-	1,650	1986	May 25, 1986	7.99	2,460
1950	May 24, 1950	7.45	1,900	1986	June 2, 1986	7.11	1,860
1951	Nov. 20, 1950	15.62	11,700	1986	June 17, 1986	6.72	1,840
1951	Dec. 3, 1950	13.26	7,980	1989	Feb. 16, 1989	5.96	1,190
1951	Dec. 6, 1950	10.47	4,530	1980	Feb. 6, 1980	8.49	2,690
1951	Dec. 14, 1950	8.76	2,690	1980	Mar. 7, 1980	6.59	1,560
1951	May 11, 1951	6.97	1,610	1981	May 16, 1981	5.75	1,070
1952	May 2, 1952	6.63	1,540	1982	May 4, 1982	6.62	1,590
1952	May 27, 1952	8.02	2,300	1983	Oct. 13, 1982	12.00	6,330
1952	June 6, 1952	8.12	2,380	1983	Dec. 15, 1982	6.92	1,770
1953	Jan. 9, 1953	7.15	1,720	1983	Jan. 31, 1983	19.6	16,400
1953	Apr. 27, 1953	9.31	3,360	1983	May 5, 1983	6.99	1,800
1953	May 19, 1953	7.05	1,660	1983	May 26, 1983	6.26	2,710
1953	June 17, 1953	7.56	1,960	1984	Nov. 14, 1983	10.40	4,600
1954	Mar. 9, 1954	9.10	3,190	1984	May 19, 1984	6.62	1,560
1955	May 20, 1955	6.95	1,600	1985	Dec. 23, 1984	17.49	14,400
1956	Dec. 23, 1955	14.64	10,200	1985	Dec. 26, 1984	7.05	1,600
				1985	Apr. 29, 1985	7.17	1,890
				1985	May 18, 1985	6.93	1,740

4145. Canyon Creek above Jackson Creek, near Cisco, Calif.
(Previously published as Canyon Creek above Jackson Creek)

Location.--Lat 39°27'10", long 120°36'25", in SE¼ sec. 3, T.18 N., R.12 E., a quarter of a mile upstream from Jackson Creek, 3 miles upstream from Bowman Dam, and 8 miles south of Sierra City.

Drainage area.--16.7 sq mi (revised).

Gage.--Recording. Altitude of gage is 5,600 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 900 cfs.

Remarks.--Peaks regulated by French, Faucherie, Sawmill, and Island Lakes (total capacity, about 16,000 acre-ft) beginning prior to 1926. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Apr. 7, 1926	5.03	445	1929	June 16, 1929	5.50	710
1927	Nov. 23, 1926	7.52	2,220	1930	Dec. 15, 1929	6.15	1,060
1928	Mar. 25, 1928	8.55	3,200				

4150. Jackson Creek at mouth, near Cisco, Calif.
(Previously published as Jackson Creek at mouth)

Location.--Lat 39°27'25", long 120°36'15", in NW¼ sec.2, T.18 N., R.12 E.,
8 miles upstream from Bowman Dam and 8 miles south of Sierra City.

Drainage area.--5.53 sq mi (revised).

Gage.--Recording. Altitude of gage is 5,600 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 230 cfs.

Remarks.--Peaks regulated by Jackson Lake (capacity, 1,000 acre-ft beginning prior to 1926. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1926	Apr. 5, 1926	3.03	226	1929	June 15, 1929	2.77	143
1927	Feb. 21, 1927	3.65	445	1930	Dec. 10, 1929	3.02	200
1928	Mar. 25, 1928	5.30	1,270				

4175. South Yuba River at Jones Bar, near Grass Valley, Calif.
(Published as South Fork Yuba River at Jones Bar, 1941-46 and as South Yuba River at Jones Bar, 1960-63)

Location.--Lat 39°17'32", long 121°06'13", near center of sec.32, T.17 N.,
R.8 E., on left bank 100 ft upstream from Rush Creek, 0.9 mile downstream from bridge on State Highway 49, and 5 miles northwest of Grass Valley.

Drainage area.--310 sq mi.

Gage.--Recording. Prior to Sept. 30, 1948, at site 150 ft upstream at datum 2.00 ft higher. Altitude of gage is 1,080 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs prior to Sept. 30, 1948; below 11,200 cfs thereafter.

Bankfull stage.--33 ft.

Remarks.--Peaks regulated by Lake Spaulding (capacity, 74,600 acre-ft) beginning in 1912, Fordyce Lake (capacity, 46,700 acre-ft) beginning in 1873, Bowman Lake (capacity, 68,200 acre-ft) beginning in November 1926, and many smaller reservoirs. Peaks may be affected by diversions into and out of basin for several powerhouses, and for irrigation of about 20,000 acres. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Feb. 10, May 13, 1941	11.00	5,830	1956	December 1955	50.7	-
1942	Jan. 27, 1942	17.5	18,200	1960	Feb. 8, 1960	14.74	11,400
1943	Jan. 22, 1943	17.80	19,000				
1944	Mar. 4, 1944	9.45	5,800	1981	Feb. 10, 1981	7.40	1,140
1945	Feb. 2, 1945	12.35	7,800	1982	Feb. 10, 1982	12.85	5,930
				1983	Jan. 31, 1983	21.8	40,000
1945	Dec. 22, 1945	12.37	7,880	1984	Jan. 21, 1984	9.02	2,500
1947	Feb. 12, 1947	11.15	5,880	1985	Dec. 22, 1984	21.0	55,600
1948	June 4, 1948	9.88	4,160				

4180. Yuba River at Englebright Dam, Calif.
(Published as "at Narrows Dam" prior to October 1953)

Location.--Lat 39°14'22", long 121°16'00", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.14, T.16 N., R.6 E., on left bank upstream from spillway of Englebright Dam, 1 mile upstream from Deer Creek and 2.5 miles northeast of Smartville.

Drainage area.--1,109 sq mi.

Gage.--Recording. Prior to Sept. 19, 1958, at datum 526.99 ft higher. Datum of gage is at mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 25,000 cfs and extended above on basis of computation of flow over spillway at 80,000 and 148,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records of flow through powerplant furnished by Pacific Gas & Electric Co. Peaks regulated by Lake Spaulding (capacity, 74,500 acre-ft) beginning in 1912, Englebright Reservoir (capacity, 70,000 acre-ft) beginning in 1941, Bowman Lake (capacity, 68,200 acre-ft) beginning in November 1926, Fordyce Lake (capacity, 46,700 acre-ft) beginning in 1926, and many smaller reservoirs. Peaks may be affected by diversions for power and irrigation above station and by diversion of up to 670 cfs into Bear River basin; 250 cfs can bypass station. Peak discharges given herein represent the total flow over Englebright Dam spillway and through and past powerplant. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 13,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Feb. 6, 1942	9.17	48,700	1956	Dec. 26, 1955	-	39,500
1943	Jan. 21, 1943	12.31	81,100		Jan. 15, 1956	-	50,300
1944	Mar. 4, 1944	3.69	12,000		Jan. 23, 1956	-	16,200
1945	Feb. 2, 1945	8.42	43,600		Jan. 26, 1956	-	17,000
					Feb. 23, 1956	-	22,600
1946	Dec. 29, 1945	6.76	30,500		May 4, 1956	-	16,400
1947	Feb. 12, 1947	6.27	27,200		May 24, 1956	-	(a)
					June 4, 1956	-	-
1948	Jan. 7, 1948	-	18,100				
	Apr. 17, 1948	5.43	21,800	1957	Feb. 24, 1957	-	41,900
1949	May 14, 1949	2.64	7,500		Mar. 5, 1957	-	16,100
					May 18, 1957	-	48,600
1950	Jan. 23, 1950	-	16,300	1958	Feb. 12, 1958	-	22,100
	Feb. 6, 1950	6.02	25,600		Feb. 16, 1958	-	14,900
					Feb. 19, 1958	-	20,400
1951	Nov. 18, 1950	-	69,000		Feb. 25, 1958	-	50,900
	Nov. 21, 1950	14.69	109,000		Mar. 30, 1958	-	16,800
	Dec. 3, 1950	-	68,100		Apr. 2, 1958	-	20,800
	Dec. 8, 1950	-	49,000		May 10, 1958	-	13,200
	Dec. 15, 1950	-	25,700		May 19, 1958	-	15,600
	Jan. 18, 1951	-	22,000				
	Jan. 22, 1951	-	27,200	1959	Feb. 16, 1959	-	16,700
	Feb. 5, 1951	-	16,700				
1952	Dec. 1, 1951	5.31	21,200	1960	Feb. 8, 1960	-	86,000
	Dec. 29, 1951	5.01	19,300		Mar. 7, 1960	-	23,700
	Jan. 12, 15, 25, 1952	-	(a)	1961	Feb. 10, 1961	-	6,080
	Feb. 2, 1952	7.88	39,000	1962	Feb. 10, 1962	34.53	35,800
	Feb. 16, 1952	4.11	14,300		Feb. 15, 1962	-	20,500
	Apr. 26, 1952	4.02	13,800				
	May 8, 1952	4.31	15,400	1963	Oct. 13, 1962	-	91,700
	May 28, 1952	4.72	17,600		Dec. 3, 1962	-	15,600
1953	Jan. 9, 1953	8.68	45,800		Feb. 1, 1963	-	150,000
	Jan. 13, 1953	4.78	17,900		Mar. 28, 1963	-	16,600
	Jan. 20, 1953	5.58	22,700		Apr. 6, 1963	-	32,300
	Apr. 27, 1953	6.58	29,500		Apr. 14, 1963	-	16,400
					May 29, 1963	-	15,400
1954	Jan. 23, 1954	4.67	17,300	1964	Nov. 15, 1963	-	11,400
	Feb. 17, 1954	3.86	13,000				
	Mar. 9, 1954	7.30	34,500	1965	Dec. 22, 1964	-	171,000
	Apr. 5, 1954	4.33	15,500		Dec. 27, 1964	-	64,400
1955	May 9, 1955	2.61	7,150		Jan. 6, 1965	-	42,700
					Jan. 24, 1965	-	16,600
1956	Dec. 19, 1955	-	53,300		Apr. 16, 1965	-	18,100
	Dec. 23, 1955	17.73	148,000		Apr. 21, 1965	-	13,800

a Discharge unknown; exceeded base.

Note.--Gage heights apply to spill over dam only.

4185. Deer Creek near Smartville, Calif.

Location.--Lat 39°13'28", long 121°16'03", in SW¹SE¹ sec.23, T.16 N., R.6 E., on left bank 400 ft upstream from county road bridge, 0.9 mile upstream from mouth, and 2 miles northeast of Smartville.

Drainage area.--84.6 sq mi.

Gage.--Nonrecording prior to Nov. 30, 1938; recording thereafter. Altitude of gage is 630 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 5,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks are slightly regulated by Scotts Flat Reservoir (usable capacity, 26,300 acre-ft) beginning in 1948, Deer Creek Reservoir (capacity, 1,400 acre-ft) beginning in 1930, and power developments. Peaks may be affected by importation of water into Deer Creek from South Yuba River (combined capacity, about 200 cfs) beginning in 1850, and diversion from Deer Creek into Bear River. Peaks for the years 1936 and 1937 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 3,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	March 1928	14.5	14,000	1954	Jan. 17, 1954	8.98	4,330
1936	Feb. 21, 1936	10.6	6,260		Feb. 14, 1954	8.25	3,520
1937	Feb. 4, 1937	11.5	7,520	1955	Dec. 9, 1954	6.51	1,780
1938	Dec. 11, 1937	13.2	10,800				
1939	Mar. 8, 1939	7.25	2,400	1956	Dec. 6, 1955	8.31	3,590
1940	Mar. 30, 1940	10.44	6,210		Dec. 23, 1955	13.60	11,300
					Dec. 26, 1955	9.79	5,300
1941	Feb. 10, 1941	8.83	4,210		Jan. 15, 1956	10.83	6,680
1942	Feb. 6, 1942	10.37	5,980		Feb. 22, 1956	8.63	3,940
1943	Mar. 9, 1943	13.62	11,300				
1944	Mar. 4, 1944	9.46	4,850	1957	May 18, 1957	9.05	4,410
1945	Feb. 1, 1945	-	4,750	1958	Jan. 29, 1958	8.25	3,520
	Feb. 3, 1945	9.82	5,330		Feb. 2, 1958	8.49	3,790
	Feb. 5, 1945	-	3,890		Feb. 24, 1958	9.96	5,450
1946	Dec. 21, 1945	9.57	5,030		Mar. 30, 1958	8.88	4,040
					Apr. 2, 1958	10.75	6,550
1947	Feb. 12, 1947	9.88	5,410	1959	Feb. 17, 1959	7.87	2,900
1948	Jan. 7, 1948	8.17	3,440	1960	Feb. 8, 1960	11.88	8,280
1949	Mar. 2, 1949	9.50	4,950	1961	Mar. 24, 1961	6.58	1,730
1950	Jan. 17, 1950	-	4,830	1962	Jan. 20, 1962	9.15	4,400
	Feb. 4, 1950	9.63	5,110		Feb. 9, 1962	12.14	8,690
					Feb. 15, 1962	8.46	3,540
1951	Nov. 20, 1950	10.35	5,970				
	Dec. 3, 1950	9.10	4,470	1963	Oct. 13, 1962	13.77	11,600
	Dec. 14, 1950	8.58	3,890		Jan. 31, 1963	10.10	5,810
	Jan. 18, 1951	9.54	5,000		Mar. 27, 1963	8.99	4,400
	Jan. 22, 1951	9.67	5,150		Apr. 6, 1963	10.51	6,380
					Apr. 13, 1963	8.71	4,080
1952	Dec. 1, 1951	9.03	4,390				
	Dec. 29, 1951	8.62	3,930	1964	Jan. 20, 1964	10.36	6,170
	Jan. 12, 1952	9.80	5,510				
	Jan. 14, 1952	10.27	5,870	1965	Dec. 22, 1964	11.85	8,260
	Jan. 24, 1952	8.31	3,590		Jan. 3, 1965	10.12	5,840
	Feb. 1, 1952	9.74	5,240		Jan. 5, 1965	9.69	5,240
					Apr. 16, 1965	8.42	3,630
1953	Apr. 27, 1953	8.38	3,670				

4190. Yuba River at Smartville, Calif.
(Published as "at Smartville" 1903-26)

Location.--Lat 39°13'25", long 121°17'33", in SW $\frac{1}{4}$ sec.22, T.16 N., R.6 E., at Narrows, 1 mile downstream from Deer Creek and 1 mile north of Smartville.

Drainage area.--1,200 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1928; recording thereafter. Prior to July 31, 1906, at datum 15.2 ft higher. Aug. 1, 1906, to Aug. 11, 1930, at datum 5.2 ft higher. Datum of gage is 264.17 ft above mean sea level, adjustment of 1912.

Stage-discharge relation.--Defined by current-meter measurements below 56,000 cfs, and extended above on basis of slope-area measurement at 120,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Lake Spaulding (capacity, 74,500 acre-ft) beginning in 1912, Bowman Lake (capacity, 68,200 acre-ft) beginning in November 1926, Fordyce Lake (capacity, 46,700 acre-ft) beginning in 1927, and many smaller reservoirs. Peaks for the years 1904-21, 1923, and 1924 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	Feb. 22, 24, 1904	20.3	59,800	1922	Feb. 19, 1922	12.1	22,200
1905	Dec. 30, 1904	-	19,500	1923	Dec. 15, 1922	13.5	28,000
1906	Jan. 16, 1906	17.0	46,000	1924	Feb. 8, 1924	6.1	9,960
1907	Mar. 19, 1907	29.20	100,000	1925	Feb. 6, 1925	17.2	43,800
1908	Apr. 20, 1908	12.9	6,410	1926	Feb. 4, 1926	12.7	23,200
1909	Jan. 15, 1909	28.3	111,000	1927	Feb. 21, 1927	16.4	49,000
1910	Nov. 21, 1909	18.0	37,000	1928	Mar. 26, 1926	26.0	120,000
1911	Jan. 31, 1911	19.0	39,000	1929	Feb. 4, 1929	6.50	6,600
1912	Mar. 8, May 13, 16, 1912	9.0	7,640	1930	Dec. 12, 1929	12.00	21,100
1913	Nov. 6, 1912, May 5, 10, 1913	10.0	10,000	1931	Mar. 18, 1931	11.55	7,130
1914	Dec. 31, 1913	24.0	61,200	1932	Dec. 24, 1931	15.00	16,400
1915	May 12, 1915	20.0	46,500	1933	May 30, 1933	12.94	9,350
1916	Jan. 3, 1916	15.6	25,100	1934	Mar. 29, 1934	15.20	16,200
1917	Feb. 25, 1917	18.0	45,800	1935	Apr. 6, 1935	20.35	41,200
1918	Feb. 6, Mar. 19, 1918	9.7	13,100	1936	Feb. 22, 1936	20.0	44,500
1919	Feb. 11, 1919	14.2	29,400	1937	Feb. 14, 1937	13.67	18,800
1920	Apr. 15, 1920	12.3	20,600	1938	Dec. 11, 1937	26.0	95,000
1921	Jan. 18, 1921	13.4	24,600	1939	Mar. 27, 1939	7.32	5,600
				1940	Mar. 30, 1940	20.1	64,700
				1941	Feb. 10, 1941	14.85	41,200

4200. Dry Creek near Brownsville, Calif.

Location.--Lat 39°28'40", long 121°15'15", in NW $\frac{1}{4}$ sec.25, T.19 N., R.6 E., on left bank 0.2 mile downstream from New York Creek and 0.9 mile northeast of Brownsville.

Drainage area.--20.4 sq mi.

Gage.--Recording. Altitude of gage is 2,220 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 920 cfs.

Remarks.--Base for partial-duration series, 500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Mar. 10, 1949	4.64	572	1951	Nov. 20, 1950	5.40	837
1950	Jan. 17, 1950	-	635		Dec. 3, 1950	4.82	706
	Feb. 4, 1950	5.39	622		Jan. 18, 1951	5.23	790
	Mar. 19, 1950	-	536		Jan. 21, 1951	5.25	796
1951	Nov. 18, 1950	4.44	512	1952	Dec. 1, 1951	4.49	592
					Dec. 4, 1951	4.14	507

Peak stages and discharges of Dry Creek near Brownsville, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Jan. 24, 1952	4.88	852	1957	Feb. 24, 1957	5.80	935
	Feb. 1, 1952	5.85	1,190		May 18, 1957	5.80	935
1953	Jan. 8, 1953	5.38	827	1958	Dec. 18, 1957	5.00	890
	Mar. 19, 1953	4.18	511		Jan. 28, 1958	4.98	883
	Apr. 27, 1953	4.58	810		Jan. 29, 1958	4.98	878
1954	Jan. 17, 1954	4.54	805		Feb. 2, 1958	4.50	515
	Feb. 17, 1954	4.35	552		Feb. 7, 1958	4.70	585
1955	Dec. 9, 1954	3.97	289		Feb. 12, 1958	5.47	878
1956	Dec. 8, 1955	6.25	1,240		Feb. 14, 1958	4.60	620
	Dec. 19, 1955	6.36	1,300		Feb. 24, 1958	5.40	850
	Dec. 22, 1955	7.48	1,690		Mar. 21, 1958	4.60	550
	Dec. 28, 1955	5.80	935		Mar. 29, 1958	4.60	620
	Jan. 7, 1956	4.87	633		Apr. 2, 1958	5.40	1,320
	Jan. 15, 1956	6.45	1,340	1959	Feb. 16, 1959	5.79	1,020
	Jan. 22, 1956	4.58	525	1960	Feb. 8, 1960	6.6	1,520
	Jan. 26, 1956	4.87	560		Mar. 5, 1960	-	-
	Feb. 22, 1956	6.65	1,450				

4205. Dry Creek at Virginia Ranch, Calif.

Location.--Lat 39°19'20", long 121°18'45", in NW¹ sec. 21, T.17 N., R.6 E., on right bank 0.4 mile south of Virginia Ranch, 3.0 miles downstream from Willow Glen Creek, and 5.5 miles east of Loma Rica.

Drainage area.--71.3 sq mi.

Gage.--Recording. Altitude of gage is 1,060 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,700 cfs and extended above on basis of slope-area measurement at 7,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Lake Mildred (capacity, 1,500 acre-ft) since beginning of record. Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Feb. 11, 1949	-	1,940	1954	Mar. 9, 1954	6.17	1,950
	Mar. 3, 1949	-	2,600				
	Mar. 10, 1949	7.07	2,950	1955	Feb. 27, 1955	5.43	1,270
1950	Jan. 17, 1950	-	3,300	1956	Dec. 6, 1955	6.39	5,870
	Feb. 4, 1950	9.02	7,090		Dec. 19, 1955	9.54	6,350
	Mar. 19, 1950	-	2,110		Dec. 22, 1955	9.85	9,120
	Mar. 24, 1950	-	2,470		Dec. 26, 1955	7.90	4,640
1951	Nov. 20, 1950	9.15	7,400		Jan. 7, 1956	6.38	2,170
	Dec. 3, 1950	8.14	5,130		Jan. 15, 1956	9.40	6,000
	Dec. 6, 1950	6.63	2,780		Jan. 22, 1956	6.73	2,640
	Dec. 14, 1950	6.49	2,530		Jan. 26, 1956	6.57	2,430
	Jan. 11, 1951	6.55	2,400		Feb. 22, 1956	6.61	6,150
	Jan. 16, 1951	7.95	4,740	1957	Feb. 24, 1957	7.62	4,100
	Jan. 21, 1951	6.23	5,320		May 16, 1957	6.46	5,620
	Feb. 4, 1951	6.78	2,610	1958	Dec. 16, 1957	6.80	2,740
1952	Dec. 1, 1951	6.24	5,340		Jan. 26, 1958	7.52	3,950
	Dec. 4, 1951	6.68	2,630		Jan. 29, 1958	6.33	2,140
	Dec. 26, 1951	7.41	3,720		Feb. 3, 1958	6.58	2,200
	Jan. 12, 1952	6.62	6,170		Feb. 7, 1958	7.25	3,470
	Jan. 14, 1952	7.67	4,190		Feb. 12, 1958	7.65	4,190
	Jan. 24, 1952	6.38	5,650		Feb. 14, 1958	6.16	1,950
	Feb. 1, 1952	9.00	7,040		Feb. 24, 1958	7.70	4,280
	Mar. 15, 1952	6.41	2,230		Mar. 21, 1958	6.67	2,570
	Mar. 18, 1952	6.98	3,010		Mar. 30, 1958	6.94	2,940
1953	Jan. 9, 1953	6.40	5,690		Apr. 2, 1958	8.93	6,670
	Jan. 19, 1953	6.27	2,080	1959	Jan. 12, 1959	6.40	2,200
	Mar. 19, 1953	7.26	3,480		Feb. 10, 1959	8.09	1,870
	Apr. 27, 1953	6.59	5,670		Feb. 18, 1959	7.60	4,100
1954	Jan. 18, 1954	6.27	5,410	1960	Feb. 6, 1960	10.06	9,730
	Jan. 23, 1954	8.34	2,180		Mar. 5, 1960	7.76	4,400
	Feb. 12, 1954	7.05	3,120	1961	Feb. 9, 1961	6.01	1,790
	Feb. 17, 1954	7.76	4,360				

4230. Bear River near Auburn, Calif.

Location.--Lat 39°00'45", long 121°06'10", in NE $\frac{1}{4}$ sec.5, T.13 N., R.8 E., on right bank 200 ft upstream from bridge on State Highway 49, 2.6 miles upstream from Wolf Creek, and 8 miles north of Auburn. Prior to Nov. 21, 1961, at site 300 ft downstream.

Drainage area.--140 sq mi.

Gage.--Recording; nonrecording June 28, to Nov. 21, 1961. Prior to June 28, 1961, at site 2,200 ft upstream at different datums. June 28 to Nov. 21, 1961, at site 1,900 ft upstream at different datum. Nov. 22, 1961, to Mar. 31, 1964, at site 2,200 ft upstream at different datum. Altitude of gage is 1,230 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above on basis of computed flow over Van Giesen Dam.

Bankfull stage.--17 ft.

Remarks.--Peaks regulated by Lake Combie (capacity, 7,840 acre-ft) beginning in 1928, and other reservoirs. Peaks may be affected by inflow from Yuba and American River basins and by diversions upstream for power development and irrigation since 1850. Only annual peaks are shown prior to Oct. 1, 1948. Base for partial-duration series, 3,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1941	Dec. 27, 1940	7.06	5,200	1955	Dec. 10, 1954	7.43	1,410
1942	Feb. 6, 1942	8.49	7,930				
1943	Jan. 21, 1943	13.05	19,300	1956	Dec. 19, 1955	12.26	8,380
1944	Mar. 4, 1944	6.92	5,140		Dec. 22, 1955	16.56	19,700
1945	Feb. 2, 1945	8.68	8,670		Dec. 26, 1955	11.39	6,620
					Jan. 15, 1956	13.14	10,300
1946	Dec. 22, 1945	7.93	7,210				
1947	Mar. 10, 1947	9.34	3,700	1957	Feb. 24, 1957	10.57	5,200
1948	Apr. 10, 1948	9.66	4,210		May 18, 1957	12.30	8,470
1949	Mar. 4, 1949	8.02	1,780	1958	Feb. 12, 1958	9.75	4,100
					Feb. 24, 1958	9.94	4,970
1950	Jan. 18, 1950	-	4,180		Mar. 30, 1958	10.47	5,900
	Jan. 23, 1950	-	3,870		Apr. 2, 1958	11.94	8,810
	Feb. 4, 1950	10.68	5,930				
1951	Nov. 18, 1950	11.90	8,030	1959	Feb. 16, 1959	9.68	4,030
	Nov. 20, 1950	15.00	14,800				
	Dec. 3, 1950	12.75	9,740	1960	Feb. 8, 1960	15.53	16,300
	Dec. 8, 1950	10.07	4,900				
	Dec. 15, 1950	9.51	4,060	1961	Mar. 25, 1961	6.33	908
	Jan. 18, 1951	11.15	6,660				
	Jan. 22, 1951	12.61	9,440	1962	Feb. 10, 1962	10.94	7,230
					Feb. 15, 1962	10.09	5,500
1952	Dec. 29, 1951	9.67	4,300	1963	Oct. 13, 1962	13.15	12,100
	Jan. 12, 1952	9.38	3,880		Jan. 31, 1963	16.15	19,100
	Jan. 15, 1952	10.82	6,090		Mar. 28, 1963	10.10	5,520
	Jan. 25, 1952	9.62	4,220		Apr. 6, 1963	10.79	6,900
	Feb. 1, 1952	12.39	9,000				
	Feb. 16, 1952	9.82	4,520	1964	Jan. 21, 1964	9.19	3,940
1953	Apr. 27, 1953	9.35	3,840	1965	Jan. 6, 1965	14.03	7,900
1954	Jan. 23, 1954	9.73	4,380				

4235. Bear River at Van Trent, Calif.

Location.--Lat 39°02'40", long 121°17'35", in S $\frac{1}{2}$ sec.22, T.14 N., R.6 E., downstream from highway bridge at McCourtney Crossing, 0.75 mile upstream from Rock Creek, 1 mile north of Van Trent, and 7 miles northeast of Wheatland.

Drainage area.--265 sq mi (revised).

Gage.--Nonrecording. Altitude of gage is 180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 8,700 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversion to Bear River Canal (capacity, about 400 cfs) beginning prior to 1860, and Boardman Canal. Peaks may also be affected by imported water from South Yuba Canal (capacity, about 100 cfs) beginning in 1850. All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	Mar. 19, 1905	10.5	6,930	1917	Feb. 24, 1917	13.2	16,200
1906	Mar. 31, 1906	-	18,600	1918	Mar. 19, 1918	7.8	4,930
1907	Feb. 2, 1907	18.5	28,200	1919	Feb. 11, 1919	14.5	19,800
1908	Jan. 21, 1908	-	2,510	1920	Apr. 15, 1920	11.5	11,900
1909	Jan. 14, 1909	18.9	29,600	1921	Jan. 18, 1921	14	18,400
1910	Dec. 9, 1909	-	11,000	1922	Feb. 9, 1922	13.0	15,700
1911	Jan. 31, 1911	-	26,500	1923	Dec. 13, 1922	15.5	22,600
1912	Apr. 30, 1912	4.3	1,370	1924	Feb. 9, 1924	2.48	760
1913	Jan. 18, 1913	8.4	5,780	1925	Feb. 6, 1925	16.5	25,200
1914	Dec. 31, 1913	13.5	17,000	1926	Feb. 4, 1926	9.6	8,080
1915	May 12, 1915	10.6	12,700	1927	Feb. 21, 1927	16.7	24,100
1916	Jan. 3, 1916	13.7	19,400				

4240. Bear River near Wheatland, Calif.

Location.--Lat 39°00'00", long 121°24'20", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.3, T.13 N., R.5 E., in midstream on downstream side of bridge on U.S. Highway 99E, 1 mile southeast of Wheatland and 6.5 miles downstream from Rock Creek.

Drainage area.--292 sq mi.

Gage.--Nonrecording prior to July 17, 1929; recording thereafter. Prior to Oct. 22, 1943, at datum 4.58 ft higher. Oct. 23, 1943, to June 23, 1964, at datum 2.00 ft higher. Datum of gage is 78.92 ft above mean sea level (levels by California Department of Water Resources).

Stage-discharge relation.--Defined by current-meter measurements below 27,100 cfs and extended above on basis of slope-area measurement at 29,100 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly affected by Camp Far West Reservoir (capacity, 5,000 acre-ft) beginning in 1928 and Combie Reservoir (capacity, 7,840 acre-ft) beginning in 1928. Only annual peaks are shown prior to Oct. 1, 1943. Base for partial-duration series, 3,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Feb. 4, 1929	6.6	4,520	1937	Mar. 21, 1937	11.25	12,000
1930	Mar. 5, 1930	9.50	11,100	1938	Feb. 11, 1938	12.0	12,300
1931	Nov. 16, 1930	4.67	2,460	1939	Mar. 9, 1939	5.12	3,060
1932	Dec. 27, 1931	8.73	8,540	1940	Mar. 30, 1940	14.46	16,500
1933	Mar. 28, 1933	4.87	2,720	1941	Apr. 4, 1941	10.48	9,470
1934	Jan. 1, 1934	6.35	4,760	1942	Feb. 6, 1942	12.65	13,000
1935	Apr. 8, 1935	15.15	21,600	1943	Jan. 21, 1943	16.95	31,300
1936	Feb. 12, 1936	12.80	15,100	1944	Feb. 3, 1944	-	4,460

a Includes flow through break in levee one half mile upstream from gage.

SACRAMENTO RIVER BASIN

Peak stages and discharges of Bear River near Wheatland, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 22, 1944	-	5,310	1954	Jan. 23, 1954	11.88	8,230
	Feb. 29, 1944	-	4,800		Feb. 14, 1954	10.78	7,090
	Mar. 4, 1944	13.43	9,940		Feb. 18, 1954	8.08	3,720
					Mar. 10, 1954	8.73	4,800
1945	Feb. 2, 1945	15.18	15,300	1955	Dec. 9, 1954	8.35	4,040
	Feb. 3, 1945	-	12,400		Jan. 1, 1955	8.24	3,930
	Feb. 5, 1945	-	5,330				
	Mar. 28, 1945	-	5,800	1956	Dec. 8, 1955	7.72	3,680
1946	Dec. 22, 1945	14.73	12,400		Dec. 19, 1955	14.72	18,000
	Dec. 28, 1945	-	5,820		Dec. 22, 1955	19.30	33,000
	Dec. 29, 1945	-	6,770		Dec. 28, 1955	12.49	11,300
	Jan. 4, 1946	-	3,390		Jan. 5, 1956	6.94	5,420
	Mar. 30, 1946	-	4,210		Jan. 15, 1956	14.98	18,800
1947	Feb. 12, 1947	11.00	8,900		Jan. 22, 1956	5.78	5,850
	Mar. 10, 1947	-	6,610		Jan. 28, 1956	6.98	5,940
1948	Jan. 7, 1948	-	3,520		Feb. 23, 1956	9.11	6,150
	Mar. 24, 1948	-	3,690	1957	Feb. 25, 1957	10.05	7,900
	Apr. 10, 1948	10.80	6,390		Mar. 5, 1957	7.60	4,550
1949	Mar. 3, 1949	11.78	7,690		May 18, 1957	12.11	11,200
	Mar. 11, 1949	-	5,790	1958	Jan. 28, 1958	7.52	5,270
1950	Jan. 18, 1950	-	7,450		Jan. 30, 1958	7.18	4,780
	Jan. 23, 1950	-	4,020		Feb. 3, 1958	6.13	6,210
	Feb. 5, 1950	14.49	12,200		Feb. 12, 1958	6.65	7,010
	Mar. 19, 1950	-	3,110		Feb. 19, 1958	6.72	4,150
	Mar. 24, 1950	-	6,690		Feb. 25, 1958	6.80	7,240
1951	Nov. 21, 1950	20.83	29,100		Mar. 15, 1958	6.93	4,390
	Dec. 4, 1950	15.63	11,600		Mar. 22, 1958	6.70	7,090
	Dec. 6, 1950	12.25	6,220		Mar. 30, 1958	10.98	11,600
	Dec. 15, 1950	13.25	9,550		Apr. 2, 1958	12.93	16,000
	Jan. 11, 1951	9.28	4,680	1959	Feb. 11, 1959	8.37	4,210
	Jan. 18, 1951	14.57	11,500		Feb. 18, 1959	7.70	6,100
	Jan. 22, 1951	17.64	18,900		Feb. 18, 1959	6.68	4,590
	Feb. 5, 1951	8.30	3,870	1960	Feb. 8, 1960	16.60	27,500
	Mar. 7, 1951	6.81	4,190		Mar. 5, 1960	5.97	3,520
	May 4, 1951	6.74	4,110	1961	Jan. 31, 1961	4.30	1,900
1952	Dec. 29, 1951	-	(b)	1962	Jan. 20, 1962	6.28	3,890
	Jan. 12, 1952	15.49	18,000		Feb. 10, 1962	12.79	18,100
	Jan. 15, 1952	14.88	15,200		Feb. 15, 1962	9.53	8,610
	Jan. 25, 1952	12.38	6,690		Mar. 8, 1962	6.04	3,620
	Feb. 2, 1952	-	(b)	1963	Oct. 13, 1962	16.65	27,700
	Feb. 16, 1952	10.28	5,660		Dec. 3, 1962	6.42	4,080
	Feb. 20, 1952	6.48	3,630		Dec. 16, 1962	6.00	3,820
	Mar. 6, 1952	9.88	5,350		Feb. 1, 1963	13.95	22,000
	Mar. 15, 1952	9.75	5,220		Feb. 13, 1963	5.87	3,690
	Mar. 18, 1952	9.85	5,340		Mar. 28, 1963	6.98	9,560
1953	Jan. 9, 1953	7.76	3,480		Apr. 6, 1963	9.02	9,840
	Jan. 14, 1953	6.99	4,870		Apr. 15, 1963	6.20	5,280
	Jan. 20, 1953	9.42	5,360	1964	Jan. 21, 1964	2.66	1,280
	Mar. 20, 1953	7.94	3,660	1965	Jan. 8, 1965	10.53	12,700
	Apr. 27, 1953	10.09	6,220				
1954	Jan. 17, 1954	10.26	6,440				

b Discharge unknown; exceeded base.

4245. Dry Creek near Wheatland, Calif.

Location.--Lat 39°01'35", long 121°26'10", in Johnson Rancho land grant, on left bank 2,300 ft upstream from bridge on U.S. Highway 99E, 1.3 miles north-west of Wheatland, and 5 miles upstream from mouth.

Drainage area.--99.9 sq mi.

Gage.--Recording. Datum of gage is 62.83 ft above mean sea level (levels by California Department of Water Resources).

Stage-discharge relation.--Defined by current-meter measurements below 6,400 cfs:

Remarks.--Portion of flow may overflow into Best Slough above station. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Feb. 12, 1947	9.65	3,280	1954	Feb. 14, 1954	9.80	2,980
1948	Jan. 7, 1948	8.37	1,990		Feb. 17, 1954	9.00	2,170
1949	Mar. 3, 1949	10.08	3,230	1955	Jan. 18, 1955	8.52	1,680
	Mar. 11, 1949	10.19	3,880	1958	Dec. 19, 1958	11.88	5,800
1950	Jan. 17, 1950	9.09	2,490		Dec. 22, 1958	13.45	8,790
	Feb. 4, 1950	11.16	5,080		Dec. 28, 1958	10.20	3,190
1951	Nov. 18, 1950	9.47	2,980		Jan. 18, 1959	12.23	8,280
	Nov. 20, 1950	11.84	5,780		Jan. 22, 1959	9.30	2,310
	Dec. 3, 1950	9.80	3,080	1957	Jan. 25, 1958	9.36	2,380
	Dec. 8, 1950	8.71	2,370		Feb. 24, 1957	8.65	1,780
	Dec. 15, 1950	10.20	3,610	1958	Feb. 3, 1958	9.50	3,340
	Jan. 18, 1951	8.83	2,300		Feb. 12, 1958	8.66	2,800
	Jan. 22, 1951	11.03	4,360		Feb. 24, 1958	8.99	2,910
1952	Dec. 1, 1951	8.80	2,450		Mar. 30, 1958	8.38	2,400
	Dec. 29, 1951	9.43	3,050		Apr. 2, 1958	11.43	5,590
	Jan. 12, 1952	11.54	5,610	1959	Feb. 17, 1959	8.07	2,140
	Jan. 15, 1952	11.37	5,370	1960	Feb. 8, 1960	10.44	4,170
	Jan. 25, 1952	9.18	2,800	1961	Jan. 31, 1961	8.58	1,160
	Feb. 1, 1952	9.03	2,680	1962	Feb. 10, 1962	11.60	5,000
	Mar. 8, 1952	9.93	3,590		Feb. 15, 1962	10.80	4,300
1953	Jan. 9, 1953	8.37	1,610				
1954	Jan. 17, 1954	9.86	3,050				

4250. Feather River at Nicolaus, Calif.

Location.--Lat 38°54'00", long 121°35'00", on left bank at Nicolaus, Sutter County, at highway bridge 2.9 miles downstream from Bear River.

Drainage area.--5,923 sq mi.

Gage.--Recording. Gage is set to datum of Corps of Engineers.

Stage-discharge relation.--Defined by current-meter measurements below 181,000 cfs and extended above on basis of float measurement at 328,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by reservoirs and powerplants beginning prior to 1892. Only annual peaks are shown.

Peak stages and discharges of Feather River at Nicolaus, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Mar. 5, 1944	38.63	29,700	1955	May 10, 1955	31.54	15,200
1945	Feb. 3, 1945	44.45	87,800	1956	Dec. 23, 1955	51.60	357,000
1946	Dec. 30, 1945	45.23	94,000	1957	Feb. 25, 1957	44.48	93,000
1947	Feb. 14, 1947	39.29	34,400	1958	Feb. 26, 1958	46.13	-
1948	Apr. 19, 1948	41.11	42,000	1959	Feb. 19, 1959	41.19	48,500
1949	Mar. 12, 1949	37.00	25,700	1960	Feb. 9, 1960	46.06	136,000
1950	Feb. 7, 1950	43.82	78,300	1961	Feb. 12, 1961	33.73	19,500
1951	Nov. 21, 1950	47.80	145,000	1962	Feb. 11, 1962	43.29	82,200
1952	Feb. 3, 1952	43.90	81,600	1963	Oct. 14, 1962	50.15	264,000
1953	Jan. 10, 1953	44.67	127,000	1964	Jan. 22, 1964	37.78	34,000
1954	Mar. 11, 1954	42.63	80,800	1965	Dec. 23, 1964	51.55	281,000

a Occurred at different time than peak discharge.

4261.1. Onion Creek tributary No. 3 near Soda Springs, Calif.

Location.--Lat 39°17'04", long 120°21'20", in E½NW¼ sec.1, T.16 N., R.14 E., 0.8 mile upstream from Onion Creek campground and 3.0 miles southeast of Soda Springs.

Drainage area.--0.65 sq mi.

Gage.--Recording. Altitude of gage is 6,300 ft (from topographic map).

Stage-discharge relation.--Discharge is determined by Cone formula, $Q = 4.4H^{2.49}$.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Apr. 6, 1959	1.20	6.9	1962	May 5, 1962	1.54	13
1960	Apr. 9, 1960	1.43	11	1963	Jan. 31, 1963	5.00	242
1961	Apr. 4, 1961	1.17	6.5	1964	Nov. 14, 1963	1.54	13

4261.2. Onion Creek tributary No. 5A near Soda Springs, Calif.

Location.--Lat 39°17'04", long 120°20'44", in SE¼NE¼ sec.1, T.16 N., R.14 E., 1.1 miles upstream from Onion Creek campground and 3.3 miles southeast of Soda Springs.

Drainage area.--0.39 sq mi.

Gage.--Recording. Altitude of gage is 6,520 ft (from topographic map).

Stage-discharge relation.--Discharge determined from Cone formula, $Q = 4.4H^{2.49}$.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges of Onion Creek tributary No. 5A near Soda Springs, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Apr. 4, 1959	1.25	7.7	1962	May 4, 1962	1.43	11
1960	Feb. 8, 1960	1.72	17	1963	Jan. 31, 1963	3.96	135
				1964	Nov. 14, 1963	2.04	26
1961	Apr. 3, 1961	1.51	12				

4261.3. Onion Creek tributary No. 2 near Soda Springs, Calif.

Location.--Lat 39°16'34", long 120°21'57", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T.16 N., R.14 E., 0.25 mile above junction with Onion Creek and 3.4 miles southeast of Soda Springs.

Drainage area.--0.48 sq mi.

Gage.--Recording. Altitude of gage is 6,160 ft (from topographic map).

Stage-discharge relation.--Discharge determined by Cone formula, $Q = 4.4H^{2.49}$.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 18, 1958	2.10	28	1962	Apr. 14, 1962	1.67	16
1959	Apr. 6, 1959	1.26	7.8	1963	Jan. 31, 1963	3.72	116
1960	Apr. 9, 1960	1.54	13	1964	Nov. 14, 1963	1.56	13
1961	Apr. 3, 1961	1.25	7.7				

4261.4. Onion Creek tributary No. 1 near Soda Springs, Calif.

Location.--Lat 39°16'30", long 120°21'58", in SE $\frac{1}{4}$ sec. 2, T.16 N., R.14 E., 0.25 mile west of Onion Creek campground and 3.4 miles southeast of Soda Springs.

Drainage area.--0.19 sq mi.

Gage.--Recording. Altitude of gage is 6,200 ft (from topographic map).

Stage-discharge relation.--Discharge determined by Cone formula, $Q = 4.4H^{2.49}$.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	May 24, 1958	1.40	10	1962	May 4, 5, 1962	0.98	4.2
1959	Apr. 29, 1959	.71	1.9	1963	Jan. 31, 1963	2.75	55
1960	Apr. 6, 1960	.89	3.3	1964	May 12, 1964	.90	3.4
1961	May 18, 1961	.75	2.1				

SACRAMENTO RIVER BASIN

4261.6. Onion Creek tributary No. 7 near Soda Springs, Calif.

Location.--Lat 39°15'56", long 120°21'19", in NE¼SW¼ sec.12, T.16 N., R.14 E., 0.4 mile upstream from junction with Onion Creek, 0.6 mile southeast of Onion Creek campground, and 4.1 miles southeast of Soda Springs.

Drainage area.--0.80 sq mi.

Gage.--Recording. Altitude of gage is 6,120 ft (from topographic map).

Stage-discharge relation.--Discharge is determined by Cone formula, $Q = 4.4H^{2.46}$.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by U.S. Forest Service. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	May 12, 1959	1.35	9.3	1962	May 5, 1962	1.61	19
1960	Feb. 8, 1960	1.63	20	1963	Jan. 31, 1963	as 3.2	161
				1964	Nov. 14, 1963	1.97	24
1961	May 18, 1961	1.47	11				

a Occurred Feb. 1, 1963, result of temporary drift jam.

4262. North Fork Forbes Creek near Dutch Flat, Calif.

Location.--Lat 39°08'37", long 120°45'30", in SE¼ sec.17, T.15 N., R.11 E., on right bank 0.2 mile downstream from Big Reservoir and 6.0 miles southeast of Dutch Flat.

Drainage area.--1.68 sq mi.

Gage.--Recording. Altitude of gage is 3,980 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 35 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by Bureau of Reclamation. Peaks regulated by Big Reservoir (capacity, 2,200 acre-ft) beginning in 1870. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	6.40	-	1961	Apr. 30, 1961	2.19	9.1
				1962	Feb. 14, 1962	3.64	91
1957	May 20, 1957	2.82	30	1963	Feb. 1, 1963	4.16	200
1958	Apr. 1, 1958	3.01	42	1964	Jan. 20, 1964	2.64	19
1959	Feb. 18, 1959	1.79	2.9	1965	Jan. 6, 1965	3.99	162
1960	Mar. 19, 1960	2.64	25				

4264. North Shitrtail Creek near Dutch Flat, Calif.

Location.--Lat 39°07'49", long 120°47'44", in SE $\frac{1}{4}$ sec.24, T.15 N., R.10 E., on right bank 200 ft downstream from Forbes Creek and 7.0 miles southeast of Dutch Flat.

Drainage area.--9.10 sq mi.

Gage.--Recording. Altitude of gage is 3,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 210 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by Bureau of Reclamation. Peaks slightly regulated by Big Reservoir (capacity, 2,200 acre-ft) beginning in 1870. Only annual peak is shown in 1957. Base for partial-duration series, 180 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1956	7.30	-	1961	Dec. 1, 1960	3.08	151
1957	Feb. 24, 1957	4.14	586	1962	Feb. 10, 1962	4.45	495
1958	Feb. 8, 1958	3.34	187	1963	Oct. 13, 1962	4.97	737
	Feb. 12, 1958	3.39	194		Jan. 31, 1963	6.36	1,250
	Feb. 24, 1958	3.59	224		Mar. 27, 1963	3.65	294
	Mar. 21, 1958	3.62	229		Apr. 14, 1963	3.94	362
	Mar. 23, 1958	3.58	219	1964	Jan. 20, 1964	3.31	209
	Mar. 30, 1958	3.63	262	1965	Dec. 22, 1964	7.56	1,780
	Apr. 1, 1958	3.78	254		Jan. 8, 1965	6.30	1,230
1959	Feb. 16, 1959	3.24	174		Apr. 16, 1965	3.46	218
1960	Feb. 8, 1960	4.87	551				

4265. North Fork American River near Colfax, Calif.

Location.--Lat 39°02'25", long 120°54'08", near south line of sec.19, T.14 N., R.10 E., 50 ft downstream from bridge, 200 ft downstream from Shitrtail Canyon Creek, and 5 miles southeast of Colfax.

Drainage area.--309 sq mi (revised).

Gage.--Nonrecording prior to Nov. 10, 1929; recording thereafter. Prior to Nov. 10, 1929, at datum 5.0 ft higher. Datum of gage is 897.29 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 20,200 cfs and extended above on basis of slope-area measurement at 37,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Lake Valley Reservoir (capacity, 8,130 acre-ft) beginning in 1887 and by Big Reservoir (capacity, 2,200 acre-ft) beginning in 1870. Peaks for the years 1912-13, 1915-29, are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 28, 1912	-	1,800	1927	Feb. 21, 1927	12.5	16,800
1913	Apr. 27, 1913	-	3,340	1928	Mar. 25, 1928	20.2	37,000
1914	Jan. 1, 1914	16.0	23,000	1929	Mar. 10, 1929	6.2	2,960
1915	May 11, 1915	11.2	13,200	1930	Dec. 12, 1929	5.7	6,700
1916	Mar. 20, 1916	9.6	9,640	1931	Mar. 18, 1931	7.35	4,360
1917	Feb. 25, 1917	10.25	11,000	1932	Dec. 24, 1931	7.65	5,180
1918	Apr. 9, 1918	6.55	3,310	1933	May 25, 1933	7.12	3,520
1919	Feb. 10, 1919	10.8	12,000	1934	Mar. 25, 1934	5.64	6,350
1920	Apr. 16, 1920	9.0	7,700	1935	Apr. 7, 1935	14.0	17,000
1921	Jan. 18, 1921	7.9	5,370	1936	Feb. 21, 1936	12.70	14,300
1922	May 20, 1922	8.5	6,430	1937	Feb. 14, 1937	6.60	6,680
1923	Dec. 13, 1922	10.0	9,800	1938	Dec. 11, 1937	15.2	26,700
1924	Feb. 6, 1924	7.1	3,750	1939	Mar. 23, 1939	6.12	1,980
1925	Feb. 6, 1925	13.4	18,000	1940	Mar. 30, 1940	14.6	17,800
1926	Feb. 4, 1926	7.0	6,450	1941	Feb. 10, 1941	11.45	12,100

4270. North Fork American River at North Fork Dam, Calif.

Location.--Lat 38°56'15", long 121°01'25", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.13 N., R.9 E., on left bank 50 ft upstream from spillway of North Fork Dam, 2 miles upstream from Middle Fork, and 4 miles northeast of Auburn.

Drainage area.--343 sq mi.

Gage.--Recording. Datum of gage is 715.0 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 22,000 cfs and extended above on basis of computed flow over dam.

Bankfull stage.--12 ft.

Historical data.--Peak of Mar. 30, 1940, reached a stage of 6.85 ft (Corps of Engineers observation).

Remarks.--Peaks slightly regulated by Lake Clementine (capacity, 12,800 acre-ft) beginning in 1939, Big Reservoir (capacity, 2,200 acre-ft) beginning in 1939, Big Reservoir (capacity, 2,200 acre-ft) beginning in 1870, and Lake Valley Reservoir (capacity, 8,130 acre-ft) beginning in 1887. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 4,300 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Jan. 27, 1942	6.73	21,600	1956	Jan. 5, 1956	3.69	4,910
1943	Jan. 21, 1943	9.53	42,600		Jan. 15, 1956	7.10	22,900
1944	Mar. 4, 1944	3.83	5,390		Jan. 23, 1956	4.33	7,290
1945	Feb. 2, 1945	7.49	25,700		Jan. 26, 1956	4.00	6,000
					Feb. 23, 1956	3.67	4,840
1946	Dec. 29, 1945	5.04	10,600		May 4, 1956	3.64	4,750
1947	Feb. 12, 1947	4.82	9,480		May 23, 1956	3.53	4,410
				1957	Feb. 24, 1957	5.64	13,800
1948	Jan. 8, 1948	-	6,610		Mar. 5, 1957	4.16	6,610
	Apr. 17, 1948	4.21	6,800		May 18, 1957	6.31	17,700
1949	Mar. 3, 1949	3.73	5,040	1958	Feb. 12, 1958	4.22	6,840
					Feb. 19, 1958	3.63	4,720
1950	Jan. 18, 1950	-	5,140		Feb. 24, 1958	6.18	16,900
	Jan. 23, 1950	-	8,310		Mar. 22, 1958	3.94	5,780
	Feb. 6, 1950	4.60	8,440		Mar. 30, 1958	4.19	6,720
	Mar. 19, 1950	-	4,350		Apr. 2, 1958	4.98	10,300
1951	Nov. 20, 1950	9.96	46,600		May 10, 1958	3.73	5,040
	Dec. 3, 1950	7.92	29,000		May 19, 1958	3.84	5,420
	Dec. 8, 1950	5.88	15,100	1959	Jan. 10, 1959	3.55	4,470
	Dec. 14, 1950	4.90	9,860		Feb. 16, 1959	4.47	7,870
	Jan. 18, 1951	4.33	7,290	1960	Feb. 8, 1960	7.57	26,300
	Jan. 22, 1951	5.60	13,500		Mar. 7, 1960	4.75	9,140
	Feb. 5, 1951	3.72	5,010	1961	Feb. 10, 1961	2.69	2,510
1952	Dec. 1, 1951	4.43	7,710				
	Dec. 29, 1951	3.82	5,350	1962	Feb. 10, 1962	5.40	12,500
	Jan. 12, 1952	3.75	5,110		Feb. 15, 1962	4.41	7,410
	Jan. 15, 1952	4.1	6,380	1963	Oct. 13, 1962	8.18	31,000
	Jan. 25, 1952	3.7	4,940		Dec. 3, 1962	3.61	4,650
	Feb. 2, 1952	5.2	11,400		Jan. 31, 1963	11.30	59,700
	Feb. 16, 1952	3.75	5,110		Mar. 28, 1963	4.23	6,880
	May 28, 1952	3.85	5,140		Apr. 7, 1963	4.82	9,480
1953	Jan. 9, 1953	5.12	11,000		Apr. 14, 1963	3.80	5,280
	Jan. 13, 1953	4.10	6,380		May 6, 1963	3.50	4,320
	Jan. 20, 1953	4.16	6,610	1964	Nov. 15, 1963	4.86	9,670
	Apr. 27, 1953	5.58	13,400				
1954	Jan. 23, 1954	3.93	5,600	1965	Dec. 23, 1964	11.87	65,400
	Mar. 9, 1954	5.60	13,500		Dec. 27, 1964	6.76	18,500
	Apr. 5, 1954	3.87	5,530		Jan. 6, 1965	5.69	14,000
1955	May 9, 1955	2.86	2,810		Jan. 24, 1965	3.77	5,180
1956	Dec. 19, 1955	5.73	14,300		Apr. 16, 1965	3.99	5,960
	Dec. 23, 1955	10.22	49,100		Apr. 21, 1965	3.59	4,590
	Dec. 26, 1955	5.77	14,500				

4275. Middle Fork American River at French Meadows, Calif.

Location.--Lat 39°06'35", long 120°28'49", in W¹/₄ NW¹/₄ sec.36, T.15 N., R.13 E. on left bank 0.6 mile downstream from French Meadows, 4.1 miles upstream from Chipmunk Creek, and 14 miles south of Cisco.

Drainage area.--47.9 sq mi.

Gage.--Recording. Prior to Oct. 1, 1962, at site 0.8 mile upstream at different datum. Altitude of gage is 4,920 ft (from Bureau of Reclamation reservoir map).

Stage-discharge relation.--Defined by current-meter measurements below 1,800 cfs and extended above on basis of slope-area measurement at 16,300 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Base for partial-duration series, 1,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	May 27, 1952	7.58	2,100	1958	May 9, 1958	7.28	1,570
	June 8, 1952	7.38	1,860		May 23, 1958	7.78	2,060
1953	Jan. 9, 1953	7.43	1,940	1959	Feb. 16, 1959	6.27	835
	Apr. 27, 1953	8.84	3,310		Feb. 8, 1960	8.67	3,080
1954	Mar. 9, 1954	8.78	3,240		Mar. 7, 1960	7.81	2,090
1955	May 20, 1955	6.41	1,040	1961	Feb. 9, 1961	6.11	736
	Dec. 23, 1955	14.95	16,300		Apr. 28, 1962	6.84	1,190
1956	Dec. 26, 1955	7.18	1,560	1962	Oct. 13, 1962	10.05	4,340
	Jan. 15, 1956	9.09	3,650		Jan. 31, 1963	14.20	21,500
	May 4, 1956	6.98	1,400		May 19, 1963	8.28	1,570
	May 22, 1956	7.29	1,660		Nov. 14, 1963	8.92	2,260
1957	Feb. 24, 1957	7.62	1,960	1965	Apr. 30, 1965	7.68	1,310
	May 18, 1957	8.99	3,510				
1958	Feb. 24, 1958	8.61	3,010				

4280. Rubicon River at Rubicon Springs, near Meeks Bay, Calif.

Location.--Lat 39°01'10", long 120°14'46", in SW¹/₄ NE¹/₄ sec.31, T.14 N., R.16 E., on right bank 200 ft downstream from Rubicon Springs, 0.7 mile upstream from Miller Creek, and 7 miles west of Meeks Bay.

Drainage area.--31.4 sq mi.

Gage.--Recording. Datum of gage is 6,052.97 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs.

Bankfull stage.--7 ft.

Remarks.--Only annual peak is shown in 1956. Base for partial-duration series, 700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	13.0	-	1959	Jan. 9, 1959	5.51	887
1957	Feb. 14, 1957	5.18	711		Jan. 12, 1959	5.32	789
	May 6, 1957	5.35	795		Feb. 16, 1959	5.45	846
	May 18, 1957	8.27	3,030		Sept. 19, 1959	5.34	800
	June 1, 1957	6.26	1,310	1960	Feb. 8, 1960	7.70	2,460
1958	Feb. 24, 1958	5.91	1,090		Mar. 7, 1960	6.17	1,250
	May 10, 1958	5.62	875		May 11, 1960	5.59	915
	May 23, 1958	6.90	1,660		June 2, 1960	5.54	890
	June 17, 1958	6.10	1,140		Feb. 9, 1961	5.45	850

Peak stages and discharges of Rubicon River at Rubicon Springs, near Meeks Bay, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Oct. 21, 1961	5.20	720	1963	May 5, 1963	5.35	795
	May 8, 1962	5.68	960		May 28, 1963	6.29	1,330
1963	Oct. 13, 1962	8.33	3,060	1964	Nov. 14, 1963	8.62	3,350
	Dec. 15, 1962	7.30	2,100				
	Feb. 1, 1963	14.28	11,500	1965	Dec. 13, 1964	13.51	10,100
	Feb. 4, 1963	5.92	1,100				

4305. South Fork Rubicon River at mouth, near Georgetown, Calif.

Location.--Lat 38°58'05", long 120°27'55", in SE $\frac{1}{4}$ sec.13, T.13 N., R.13 E., on left bank 0.2 mile upstream from mouth, 0.4 mile downstream from South Creek, and 21 miles east of Georgetown.

Drainage area.--56.9 sq mi.

Gage.--Recording. Altitude of gage is 3,600 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,200 cfs and extended above on basis of slope-area measurement at 11,700 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Beginning in 1884, peaks regulated by Loon Lake (usable capacity, 8,000 acre-ft) where most of stored water from Gerle Creek was diverted out of watershed in Georgetown Divide ditch (capacity about 30 cfs) until Dec 3, 1961, when diversion ceased. Only annual peak is shown in 1956. Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 23, 1955	19.2	11,700	1960	Feb. 8, 1960	6.85	2,370
1957	Feb. 24, 1957	6.26	1,330		Mar. 7, 1960	6.23	1,980
	Mar. 5, 1957	5.89	1,180		Mar. 27, 1960	4.91	1,190
	May 18, 1957	8.02	2,170	1961	Feb. 9, 1961	3.85	660
1958	Feb. 24, 1958	7.83	2,940	1962	Feb. 9, 1962	4.79	1,060
	Apr. 21, 1958	5.07	1,280		Apr. 14, 1962	4.95	1,160
	May 9, 1958	5.90	1,780		Apr. 28, 1962	5.33	1,400
	May 23, 1958	6.76	2,300				
1959	Feb. 16, 1959	4.92	1,190				

4310. Rubicon River near Georgetown, Calif.

Location.--Lat 38°57'30", long 120°29'05", in SE $\frac{1}{4}$ sec.23, T.13 N., R.13 E., on left bank 1.3 miles downstream from South Fork and 20 miles east of Georgetown.

Drainage area.--195 sq mi.

Gage.--Recording. Altitude of gage is 3,350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs and extended above on basis of slope-area measurement at 44,600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Beginning in 1884, peaks slightly regulated by Loon Lake (usable capacity, 8,000 acre-ft) where most of stored water from Gerle Creek was diverted out of watershed until Dec. 3, 1961, when diversion ceased. Only annual peaks are shown prior to Oct. 1, 1947. Base for partial-duration series, 3,500 cfs.

Peak stages and discharges of Rubicon River near Georgetown, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	May 7, 1944	8.93	3,500	1955	May 20, 1955	8.58	3,440
1945	Feb. 2, 1945	13.25	12,800	1956	Dec. 23, 1955	18.76	51,000
1946	Dec. 29, 1945	9.83	4,540		Dec. 26, 1955	11.25	5,950
1947	Nov. 23, 1946	9.66	4,330		Jan. 15, 1956	12.30	10,900
1948	Jan. 7, 1948	-	3,960		Jan. 22, 1956	9.65	4,890
	Apr. 17, 1948	-	3,560		May 4, 1956	9.80	5,130
	May 6, 1948	-	3,730		May 22, 1956	9.70	4,970
	May 13, 1948	-	3,570	1957	Feb. 24, 1957	9.39	4,500
	May 16, 1948	9.52	4,160		Mar. 5, 1957	8.79	3,700
	May 25, 1948	-	3,980		May 18, 1957	12.51	11,500
1949	Apr. 23, 1949	-	3,510	1958	Feb. 24, 1958	11.57	8,880
	May 14, 1949	10.00	4,740		May 9, 1958	9.41	4,720
1950	Jan. 22, 1950	10.40	5,320		May 23, 1958	10.64	6,780
	Jan. 23, 1950	-	3,730		June 17, 1958	8.47	3,520
	May 21, 1950	-	3,690	1959	Feb. 16, 1959	8.48	3,550
1951	Nov. 18, 1950	18.10	44,600	1960	Feb. 8, 1960	11.59	8,980
	Dec. 3, 1950	16.77	30,600		Mar. 7, 1960	10.18	5,920
	Dec. 8, 1950	14.50	17,000	1961	Feb. 9, 1961	7.56	2,560
	Dec. 14, 1950	10.65	6,380	1962	Feb. 9, 1962	8.61	3,690
	Jan. 22, 1951	9.56	4,720		Apr. 14, 1962	8.58	3,660
1952	Apr. 27, 1952	9.14	4,150		Apr. 28, 1962	8.66	3,750
	May 2, 1952	9.33	4,400		May 4, 1962	8.48	3,540
	May 20, 1952	9.92	5,230	1963	Oct. 13, 1962	12.69	12,100
	May 27, 1952	10.32	5,850		Dec. 16, 1962	8.60	3,680
1953	Jan. 9, 1953	9.40	4,510		Feb. 1, 1963	25.8	58,000
	Apr. 27, 1953	11.97	9,920	1964	Nov. 15, 1963	10.45	5,630
	May 19, 1953	9.40	4,510	1965	Dec. 23, 1964	a71	-
	June 6, 1953	9.09	4,090				
	June 17, 1953	8.95	3,900				
1954	Mar. 9, 1954	12.6	11,800				

a Caused by failure of Hell Hole Dam; discharge unknown.

4325. Pilot Creek near Georgetown, Calif.

Location.--Lat 38°54'14", long 120°36'11", in NW¹ sec.11, T.12 N., R.12 E., on left bank 2.6 miles upstream from Mutton Canyon and 12 miles east of Georgetown.

Drainage area.--15.1 sq mi.

Gage.--Recording. Prior to June 25, 1952, at site 300 ft downstream at datum 5.67 ft lower. Altitude of gage is 4,120 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 190 cfs prior to June 25, 1952, and extended above on basis of slope-area measurement at 3,040 cfs; defined below 160 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by importation of water from Gerle Creek, Rubicon River basin, and its subsequent diversion 1 mile above station through Georgetown Divide ditch (capacity, about 40 cfs) since at least 1910. Base for partial-duration series, 150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1947	Nov. 19, 1946	-	152	1950	Feb. 6, 1950	8.78	435
	Nov. 23, 1946	-	184		Mar. 19, 1950	-	158
	Feb. 12, 1947	-	178	1951	Nov. 18, 1950	10.84	3,040
	Mar. 10, 1947	7.62	199		Nov. 20, 1950	10.37	1,840
1948	Apr. 17, 1948	7.86	218		Dec. 3, 1950	10.30	1,710
	Apr. 22, 1948	-	214		Dec. 8, 1950	9.61	952
	Apr. 27, 1948	-	158		Dec. 14, 1950	8.01	285
1949	Apr. 23, 1949	7.75	190		Jan. 22, 1951	7.92	268
	Apr. 28, 1949	-	152	1952	Dec. 1, 1951	7.67	222

Peak stages and discharges of Pilot Creek near Georgetown, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 28, 1951	7.79	243	1957	Feb. 24, 1957	4.37	474
	Feb. 2, 1952	8.26	342		Mar. 5, 1957	3.45	192
	Apr. 25, 1952	-	(a)		May 18, 1957	3.39	178
1953	Jan. 9, 1953	3.95	180	1958	Feb. 12, 1958	3.94	332
	Apr. 27, 1953	4.27	252		Feb. 24, 1958	4.16	401
1954	Jan. 23, 1954	3.80	152		Mar. 22, 1958	3.44	190
	Mar. 10, 1954	4.27	252		Mar. 30, 1958	3.42	185
1955	Mar. 29, 1955	3.18	78		Apr. 21, 1958	3.46	195
					May 5, 1958	3.48	200
1956	Dec. 23, 1955	8.06	3,040	1959	Feb. 16, 1959	3.45	170
	Jan. 15, 1956	4.47	440		1960	Feb. 8, 1960	5.50
	Jan. 23, 1956	3.86	253	Mar. 7, 1960		4.05	365
	Jan. 25, 1956	4.07	311	Mar. 12, 1960		3.52	210

a Discharge unknown; exceeded base.

4332. Rubicon River near Foresthill, Calif.

Location.--Lat 38°59'23", long 120°41'15", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.7, T.13 N., R.12 E., on right bank 150 ft downstream from Ralston Bridge, 400 ft downstream from Long Canyon Creek, and 7.3 miles southeast of Foresthill.

Drainage area.--311 sq mi.

Gage.--Recording. Datum of gage is 1,362.20 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,800 cfs and extended above on basis of slope-area measurement at 16,500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Loon Lake on Gerle Creek (usable capacity, 8,000 acre-ft) beginning in 1884. Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	December 1937	30.44	-	1961	Feb. 10, 1961	9.58	2,800
1951	November 1950	33.58	-	1962	Feb. 9, 1962	11.18	4,390
1956	Dec. 22, 1955	37.46	-		Apr. 28, 1962	10.93	4,100
1959				Feb. 16, 1959	11.16	4,330	1963
1960	Feb. 8, 1960	15.55	16,500	1964	Nov. 15, 1963	15.97	
	Mar. 7, 1960	12.98	7,430				

4333. Middle Fork American River near Foresthill, Calif.

Location.--Lat 38°59'58", long 120°47'27", near center sec.6, T.13 N., R.11 E., on right bank 800 ft downstream from Josephine Canyon and 2 miles southeast of Foresthill.

Drainage area.--534 sq mi.

Gage.--Recording. Altitude of gage is 940 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,400 cfs and extended above on basis of slope-area measurement at 37,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Loon Lake on Gerle Creek (usable capacity, 8,000 acre-ft) beginning in 1884. Base for partial-duration series, 6,000 cfs.

Peak stages and discharges of Middle Fork American River near Foresthill, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Feb. 16, 1959	13.20	6,570	1962	May 5, 1962	12.42	6,120
1960	Feb. 8, 1960	20.12	39,000	1963	Oct. 14, 1962	20.70	29,800
	Mar. 7, 1960	16.59	18,200		Feb. 1, 1963	38.00	112,700
	Mar. 12, 1960	12.53	6,100		Apr. 7, 1963	15.85	13,400
	Mar. 28, 1960	12.64	6,280		Apr. 14, 1963	13.33	7,170
1961	Feb. 10, 1961	11.47	4,560		May 6, 1963	13.36	7,230
1962	Feb. 10, 1962	14.70	11,350		May 19, 1963	13.70	7,900
	Feb. 13, 1962	12.65	6,530		May 29, 1963	12.88	6,370
	Apr. 15, 1962	13.15	7,500	1964	Nov. 15, 1963	16.25	14,600
	Apr. 28, 1962	13.20	7,600	1965	Dec. 23, 1964	69.0	310,000

4335. Middle Fork American River near Auburn, Calif.
(Published as "near East Auburn" prior to October, 1934)

Location.--Lat 38°55'05", long 121°00'20", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.12 N., R.9 E., at Mountain Quarry Co. plant, 1.5 miles upstream from mouth and 3.3 miles northeast of Auburn.

Drainage area.--612 sq mi.

Gage.--Nonrecording prior to December 1930; recording thereafter. Prior to December 1930, near present site at different datums (datum raised 6.24 ft Nov. 8, 1928). December 1930 to Mar 1, 1963, at site 0.4 mile upstream at different datum. Altitude of gage 560 ft.

Stage-discharge relation.--Defined by current-meter measurements below 7,900 cfs prior to December 1930; below 32,000 cfs and extended above on basis of float measurement at 68,200 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Loon Lake (usable capacity, 8,000 acre-ft) beginning in 1884. Peaks for the years 1912-20, 1922, 1924-26, are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946, and for 1951. Base for partial-duration series, 6,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 30, 1912	7.4	5,350	1938	Dec. 11, 1937	27.3	47,900
1913	Apr. 26, 1913	8.1	6,460	1939	Apr. 4, 8, 1939	9.05	3,830
1914	Jan. 1, 1914	18.0	26,400	1940	Mar. 30, 1940	23.2	35,600
1915	May 11, 1915	16.0	22,000				
1916	Mar. 20, 1916	13.7	17,100	1941	Dec. 27, 1940	16.9	18,400
1917	Feb. 25, 1917	13.0	15,600	1942	Jan. 27, 1942	21.60	32,300
1918	Apr. 10, 1918	8.0	6,100	1943	Jan. 21, 1943	28.0	58,000
1919	Feb. 11, 1919	17.5	25,000	1944	May 8, 1944	11.1	6,440
1920	Apr. 16, 1920	10.5	9,000	1945	Feb. 2, 1945	23.90	40,400
1921	Jan. 18, 1921	11.5	9,840	1946	Dec. 29, 1945	216.62	16,300
1922	May 20, 1922	12.7	11,400	1947	Nov. 23, 1946	-	9,600
1923	Dec. 13, 1922	17.7	21,100		Feb. 12, 1947	14.15	11,600
1924	Feb. 8, 1924	8.3	5,100		Mar. 10, 1947	-	6,620
1925	Feb. 6, 1925	25.0	36,300				
1926	Apr. 6, 1926	11.5	9,920	1948	Jan. 8, 1948	-	8,900
1927	Feb. 21, 1927	21.5	29,200		Apr. 17, 1948	13.38	10,100
1928	Mar. 25, 1928	35.6	62,000		May 7, 1948	-	7,940
1929	June 16, 1929	11.3	12,000		May 17, 1948	-	7,760
1930	Dec. 10, 1929	9.8	8,180		May 26, 1948	-	7,220
1931	Mar. 18, 1931	10.88	6,110	1949	Apr. 24, 1949	-	7,220
1932	May 12, 1932	12.40	8,740		May 14, 1949	12.70	8,700
1933	May 30, 1933	11.6	6,770	1950	Jan. 23, 1950	15.60	14,900
1934	Mar. 29, 1934	12.30	7,830		Feb. 6, 1950	-	9,030
1935	Apr. 8, 1935	19.5	25,000		Mar. 19, 1950	-	7,860
1936	Feb. 22, 1936	19.4	24,700		Apr. 22, 1950	-	7,090
1937	Feb. 14, 1937	13.5	10,600	1951	Nov. 20, 1950	34.7	68,500

a Occurred Dec. 22, 1945.

SACRAMENTO RIVER BASIN

Peak stages and discharges of Middle Fork American River near Auburn, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1952	Dec. 1, 1951	13.08	9,560	1958	Feb. 12, 1958	13.12	9,680
	Dec. 28, 1951	11.68	6,890		Feb. 25, 1958	18.92	24,500
	Jan. 25, 1952	11.48	6,570		Mar. 22, 1958	12.40	7,640
	Feb. 2, 1952	15.15	13,900		Mar. 30, 1958	12.44	7,710
	Feb. 16, 1952	11.57	6,850		Apr. 2, 1958	15.05	13,400
	Apr. 7, 1952	11.74	7,120		Apr. 22, 1958	11.95	6,900
	Apr. 28, 1952	13.20	9,800		May 23, 1958	14.40	11,900
	May 28, 1952	13.95	11,300	1959	Feb. 16, 1959	12.41	7,690
1953	Jan. 9, 1953	14.17	11,800		Feb. 8, 1960	22.74	36,700
	Jan. 20, 1953	12.3	8,100	1960	Mar. 7, 1960	16.65	17,700
	Apr. 27, 1953	18.55	22,300		Feb. 10, 1961	9.73	4,220
	May 19, 1953	11.72	7,090	1962	Feb. 10, 1962	15.27	14,000
1954	Jan. 23, 1954	11.80	7,220		Feb. 13, 1962	12.07	7,090
	Mar. 9, 1954	18.65	22,600		Apr. 15, 1962	11.75	6,610
	Apr. 5, 1954	12.15	7,830		Apr. 23, 1962	11.95	6,900
	Apr. 27, 1954	11.37	6,530	1963	Oct. 14, 1962	22.69	36,500
1955	May 13, 1955	10.87	5,820		Dec. 16, 1962	10.68	6,610
	Dec. 19, 1955	15.18	14,300		Feb. 1, 1963	43.1	121,000
1956	Dec. 23, 1955	33.9	79,000		Mar. 28, 1963	11.67	7,540
	Dec. 26, 1955	18.65	23,600	1964	Apr. 7, 1963	16.20	14,500
	Jan. 5, 1956	11.37	6,530		Apr. 14, 1963	12.30	7,620
	Jan. 15, 1956	22.21	34,900	1965	Nov. 15, 1963	15.90	13,900
	Jan. 23, 1956	15.62	15,400		Dec. 23, 1964	38.85	83,600
	Jan. 25, 1956	14.28	12,200		Dec. 23, 1964	60.4	253,000
	May 4, 1956	13.33	10,100		Dec. 27, 1964	20.02	21,900
	May 23, 1956	12.62	8,680		Jan. 6, 1965	18.92	19,200
	Feb. 25, 1957	17.2	19,600		Apr. 16, 1965	12.67	6,580
	Mar. 5, 1957	14.22	12,000				
1957	May 18, 1957	19.55	26,400				

4340. North Fork American River at Rattlesnake Bridge, Calif.

Location.--Lat 38°48'50", long 121°05'35", in SW $\frac{1}{4}$ sec.9 T.11 N., R.8 E., 800 ft downstream from Rattlesnake Bridge, 3.6 miles downstream from Pilot Creek, and 6 miles south of Auburn.

Drainage area.--998 sq mi (revised).

Gage.--Recording. Datum of gage is 343.65 ft above mean sea level (river-profile survey).

Stage-discharge relation.--Defined by current-meter measurements below 70,000 cfs.

Remarks.--Peaks slightly regulated by small reservoirs above station since 1870. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 12,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	March 1928	30	-	1946	Dec. 29, 1945	12.88	27,900
1931	Mar. 18, 1931	8.44	9,600	1947	Nov. 23, 1946	-	16,400
1932	May 12, 1932	9.70	12,900		Feb. 12, 1947	10.8	20,100
1933	May 30, 1933	9.24	11,600		Mar. 10, 1947	-	12,000
1934	Mar. 29, 1934	10.20	14,300	1948	Jan. 8, 1948	-	15,300
1935	Apr. 8, 1935	17.6	41,500		Apr. 17, 1948	9.75	16,600
1936	Feb. 22, 1936	16.6	37,600		May 7, 1948	-	12,000
	Feb. 14, 1937	10.93	18,000	1949	Mar. 3, 1949	-	12,000
1938	Dec. 11, 1938	25.9	78,000		May 14, 1949	8.27	12,400
1939	Mar. 23, 1939	5.97	5,930		Jan. 22, 1950	-	18,900
1940	Mar. 30, 1940	21.50	54,000	1950	Jan. 23, 1950	12.18	25,100
1941	Dec. 27, 1940	14.2	26,800		Feb. 4, 1950	-	15,700
1942	Jan. 27, 1942	18.70	55,800		Feb. 6, 1950	-	18,600
1943	Jan. 21, 1943	26.5	95,000		Mar. 19, 1950	-	12,100
1944	Mar. 4, 1944	8.06	11,900				
1945	Feb. 2, 1945	20.85	69,600				

Peak stages and discharges of North Fork American River at Rattlesnake Bridge, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 21, 1950	29.5	115,000	1952	May 3, 1952	8.67	13,400
	Dec. 3, 1950	25.05	83,400		May 28, 1952	9.54	15,900
	Dec. 8, 1950	18.32	43,000	1953	Jan. 9, 1953	11.31	21,900
	Dec. 14, 1950	12.41	21,100		Jan. 13, 1953	8.63	13,700
	Jan. 18, 1951	10.11	15,100		Jan. 20, 1953	9.16	15,100
1952	Jan. 22, 1951	13.85	25,500		Apr. 27, 1953	14.30	33,800
	Dec. 1, 1951	9.80	16,700	1954	Jan. 23, 1954	8.57	13,500
	Dec. 29, 1951	8.29	12,300		Mar. 9, 1954	14.54	34,800
	Jan. 12, 1952	8.29	12,300		Apr. 5, 1954	8.76	14,100
	Jan. 15, 1952	9.12	14,700	1955	Jan. 1, 1955	5.63	6,760
	Jan. 25, 1952	8.31	12,400				
	Feb. 2, 1952	11.78	23,500				
	Apr. 28, 1952	9.01	14,400				

4380. Silver Fork of South Fork American River near Kyburz, Calif.

Location.--Lat 38°46'20", long 120°16'50", in NE $\frac{1}{4}$ sec.34, T.11 N., R.15 E., 1.3 miles southeast of Kyburz and 2 miles upstream from mouth.

Drainage area.--107 sq mi (revised).

Gage.--Recording. Prior to Aug. 7, 1938, at datum 0.10 ft higher. Altitude of gage is 4,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,300 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks partly regulated by Twin Lakes (capacity, 21,580 acre-ft) beginning in 1917 and by Silver Lake (capacity, 8,590 acre-ft) beginning in 1922. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 6, 1925	5.25	1,880	1936	May 13, 1936	4.85	1,480
1926	Apr. 5, 1926	4.02	830	1937	May 13, 1937	5.05	1,680
1927	May 18, 1927	5.05	1,680	1938	Dec. 11, 1937	8.30	5,450
1928	Mar. 25, 1928	6.54	3,620	1939	Apr. 3, 1939	3.92	703
1929	June 16, 1929	4.52	1,190	1940	Mar. 26, 1940	6.70	3,400
1930	Apr. 22, 1930	4.07	880	1941	May 11, 1941	5.50	2,080
1931	Apr. 28, 1931	3.66	549	1942	Dec. 3, 1941	6.1	2,680
1932	May 16, 1932	4.73	1,380	1943	Jan. 21, 1943	6.83	3,540
1933	May 29, 1933	4.79	1,430	1944	May 5, 1944	4.67	1,230
1934	Mar. 29, 1934	4.20	1,010				
1935	May 25, 1935	4.66	1,310				

4395. South Fork American River near Kyburz, Calif.

Location.--Lat 38°45'49", long 120°19'39", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.29, T.11 N., R.15 E., on right bank beside U.S. Highway 50, 0.8 mile downstream from Silver Fork of South Fork and 1.9 miles southwest of Kyburz.

Drainage area.--193 sq mi.

Gage.--Recording. Altitude of gage is 3,840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 6,500 cfs, and extended above on basis of contracted-opening measurement at 14,500 cfs.

Remarks.--Water-stage recorder graph and some discharge measurements furnished by the Pacific Gas and Electric Co. Peaks are partly regulated by four reservoirs (total usable capacity, 37,100 acre-ft) since beginning of record. Peaks may be affected by diversion through El Dorado Canal (capacity, 40 cfs) for power and irrigation. Only annual peaks are shown prior to Oct. 1, 1944. Base for partial-duration series, 2,000 cfs.

SACRAMENTO RIVER BASIN

Peak stages and discharges of South Fork American River near Kyburz, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	May 16, 1924	6.08	3,040	1952	May 3, 1952	5.79	2,590
1924	May 3, 1924	4.20	755		May 27, 1952	6.89	4,720
1925	Feb. 6, 1925	6.45	3,790		June 18, 1952	5.46	2,140
1926	Apr. 15, 1926	4.68	1,120	1953	Apr. 27, 1953	6.68	4,220
1927	May 16, 1927	6.57	4,010		May 19, 1953	5.39	2,050
1928	Mar. 25, 1928	7.60	6,700		June 18, 1953	6.02	2,930
1929	June 16, 1929	6.16	2,700	1954	Mar. 9, 1954	6.17	3,190
1930	May 20, 1930	5.06	1,440		May 8, 1954	5.52	2,220
1931	Apr. 29, 1931	4.39	848	1955	May 21, 1955	5.40	2,060
1932	May 16, 1932	6.06	2,560	1956	Dec. 23, 1955	9.25	13,800
1933	May 29, 1933	5.96	2,440		Jan. 15, 1956	5.93	3,330
1934	Mar. 29, 1934	5.48	1,880		May 4, 1956	5.72	2,990
1935	May 25, 1935	6.18	3,040		May 23, 1956	6.46	4,320
1936	May 13, 1936	6.54	3,790	1957	May 18, 1957	6.31	4,020
1937	May 14, 1937	6.60	3,900		July 1, 1957	5.39	2,510
1938	Dec. 11, 1937	8.55	9,700	1958	May 9, 1958	5.82	3,150
1939	Apr. 21, 1939	4.60	1,070		May 23, 1958	6.51	4,420
1940	Mar. 26, 1940	7.00	4,900		June 18, 1958	5.82	3,150
1941	May 11, 1941	6.33	3,310	1959	Feb. 16, 1959	3.85	945
1942	Dec. 3, 1941	6.55	3,770	1960	Feb. 8, 1960	4.55	1,550
1943	Jan. 21, 1943	7.10	5,200	1961	May 22, 1961	3.85	935
1944	May 14, 1944	5.41	1,870	1962	May 8, 1962	5.23	2,190
1945	Feb. 2, 1945	7.00	4,900	1963	Oct. 14, 1962	5.33	2,420
1946	May 5, 1946	6.09	2,860		Feb. 1, 1963	10.53	15,500
1947	May 2, 1947	5.52	2,010		May 8, 1963	5.02	2,360
1948	May 16, 1948	-	2,540		May 23, 1963	6.10	4,100
	May 26, 1948	6.14	2,950	1964	Nov. 15, 1963	6.40	2,890
	June 9, 1948	-	2,460	1965	Dec. 23, 1964	10.92	17,400
1949	May 14, 1949	5.77	2,360		Apr. 29, 1965	6.64	3,340
1950	May 31, 1950	6.20	3,060		May 17, 1965	6.25	2,680
1951	Nov. 21, 1950	9.40	14,500		June 4, 1965	6.08	2,470
	Dec. 3, 1950	8.65	10,900				
	Dec. 8, 1950	8.13	8,620				
	Dec. 14, 1950	5.74	2,730				

4400. Alder Creek near White Hall, Calif.
(Published as "near Whitehall" prior to October 1953)

Location.--Lat 38°45'19", long 120°22'17", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.35, T.11 N., R.14 E., on right bank 0.9 mile upstream from mouth and 2.2 miles southeast of White Hall.

Drainage area.--22.1 sq mi.

Gage.--Nonrecording prior to July 23, 1924; recording thereafter. Altitude of gage is 3,840 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 500 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks may be affected by diversion 1,000 ft above station (capacity, about 20 cfs) since beginning of record. Peaks for the years 1923 and 1924 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 120 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Apr. 6, 1923	3.45	312	1927	Feb. 21, 1927	3.38	428
1924	Feb. 8, 1924	2.30	92	1928	Mar. 25, 1928	7.1	3,700
1925	Feb. 6, 1925	4.95	950	1929	May 3, 1929	2.13	108
1926	Apr. 7, 1926	2.79	263	1930	Mar. 30, 1930	2.30	148

Peak stages and discharges of Alder Creek near White Hall, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1931	Mar. 18, 1931	2.04	96	1953	May 19, 1953	2.32	146
1932	May 13, 1932	2.80	236		June 6, 1953	2.29	139
1933	May 29, 1933	2.49	168				
1934	Dec. 13, 1933	2.34	139	1954	Mar. 9, 1954	3.30	455
1935	Apr. 8, 1935	3.27	418		Apr. 6, 1954	2.51	192
					Apr. 27, 1954	2.61	219
1936	Feb. 22, 1936	3.45	498				
1937	May 5, 1937	2.85	247	1955	May 12, 1955	2.36	143
1938	Dec. 11, 1937	4.50	1,140				
1939	Apr. 3, 1939	2.15	115	1956	Dec. 6, 1955	2.41	156
1940	Mar. 26, 1940	4.70	1,300		Dec. 23, 1955	8.40	5,500
					Dec. 26, 1955	4.46	1,120
1941	Dec. 27, 1940	2.97	330		Jan. 15, 1956	4.37	1,060
1942	Jan. 27, 1942	4.34	1,040		Jan. 22, 1956	3.64	602
1943	Jan. 21, 1943	5.4	1,880		Jan. 25, 1956	3.40	470
1944	May 14, 1944	2.51	193		Apr. 26, 1956	2.61	171
1945	Feb. 2, 1945	5.05	1,580		May 4, 1956	3.38	460
1946	Dec. 22, 1945	3.65	501	1957	Feb. 24, 1957	3.89	749
					Mar. 5, 1957	3.16	379
1947	Nov. 19, 1946	-	222		May 18, 1957	3.09	351
	Nov. 23, 1946	2.96	326				
	Feb. 12, 1947	-	271	1958	Feb. 12, 1958	2.91	264
	Mar. 10, 1947	-	168		Feb. 24, 1958	4.30	1,010
					Mar. 21, 1958	2.44	148
1948	Apr. 17, 1948	2.91	309		Apr. 21, 1958	3.03	307
	Apr. 22, 1948	-	268		May 9, 1958	3.30	430
	Apr. 27, 1948	-	253				
	May 6, 1948	-	281	1959	Feb. 16, 1959	2.90	265
	May 16, 1948	-	256				
	May 26, 1948	-	219	1960	Feb. 8, 1960	4.12	893
					Mar. 7, 1960	3.09	351
1949	Apr. 16, 1949	-	224		Mar. 12, 1960	2.45	157
	Apr. 23, 1949	2.79	265		Mar. 27, 1960	2.68	215
	May 14, 1949	-	211		Apr. 6, 1960	2.28	124
1950	Jan. 23, 1950	-	227	1961	Apr. 3, 1961	1.72	42
	Feb. 6, 1950	-	274				
	Mar. 19, 1950	-	274	1962	Feb. 9, 1962	3.50	535
	Apr. 6, 1950	-	253		Feb. 15, 1962	2.52	173
	Apr. 21, 1950	3.05	358		Apr. 14, 1962	2.88	262
	May 16, 1950	-	215		Apr. 28, 1962	2.89	256
1951	Nov. 20, 1950	5.56	2,020	1963	Oct. 13, 1962	3.32	449
	Dec. 3, 1950	5.32	1,810		Jan. 31, 1963	7.37	4,430
	Dec. 8, 1950	4.23	961		Apr. 7, 1963	3.27	490
	Dec. 14, 1950	3.26	439		Apr. 14, 1963	2.71	254
	Jan. 22, 1951	2.79	271		May 8, 1963	3.07	394
	Feb. 5, 1951	2.73	253		May 23, 1963	2.56	205
	Apr. 13, 1951	2.27	130		May 28, 1963	2.43	165
	May 11, 1951	2.52	193				
				1964	Nov. 15, 1963	2.41	136
1952	Dec. 1, 1951	2.45	176		Nov. 23, 1963	2.30	120
	Dec. 28, 1951	2.31	143				
	Feb. 2, 1952	2.43	172	1965	Dec. 23, 1964	6.94	2,980
	Apr. 6, 1952	2.84	287		Jan. 6, 1965	3.52	273
	Apr. 25, 1952	3.28	447		Jan. 23, 1965	3.47	257
					Feb. 5, 1965	3.03	138
1953	Jan. 9, 1953	2.25	130		Apr. 21, 1965	3.55	282
	Apr. 5, 1953	2.28	137		May 17, 1965	3.02	135
	Apr. 27, 1953	3.96	791				

4405. Plum Creek near Riverton, Calif.

Location.--Lat 38°45'15", long 120°25'35", in SE¹ sec.32, T.11 N., R.14 E., 1½ miles upstream from mouth and 2 miles southeast of Riverton.

Drainage area.--7.32 sq mi (revised).

Gage.--Nonrecording prior to Aug. 1, 1924; recording thereafter. Prior to Aug. 1, 1924, at site 200 ft downstream at different datum. Altitude of gage is 3,850 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 170 cfs prior to Aug. 1, 1924; below 110 cfs thereafter.

Remarks.--Peaks for the years 1923 and 1924 are maximum observed. Only annual peaks are shown.

Peak stages and discharges of Flum Creek near Riverton, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Dec. 13, 1922, Apr. 5, 1923	3.0	301	1931	Mar. 18, 1931	1.36	38
1924	Feb. 8, 1924	1.70	34	1932	Feb. 6, 1932	3.00	290
1925	Feb. 6, 1925	3.70	500	1933	Mar. 16, 1933	1.70	62
1926	Apr. 8, 1926	2.12	114	1935	Apr. 3, 1935	3.20	300
1927	Apr. 3, 1927	3.15	334	1936	Feb. 22, 1936	3.75	512
1928	Mar. 25, 1928	4.10	635	1937	Feb. 13, 1937	2.67	213
1929	Apr. 19, 1929	1.34	37	1938	Dec. 11, 1937	3.10	315
1930	Jan. 16, 1930	2.08	108	1939	Mar. 21, 1939	1.40	33

4410. Silver Creek at Union Valley, Calif.

Location.--Lat 38°51'55", long 120°25'35", in SE $\frac{1}{4}$ sec.20, T.12 N., R.14 E., on right bank 0.6 mile downstream from confluence of Big Silver Creek and Jones Fork Silver Creek, near lower end of Union Valley, and 6.6 miles north of Riverton.

Drainage area.--83.0 sq mi (revised).

Gage.--Recording. Altitude of gage is 4,530 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,200 cfs and extended above on basis of slope-area measurement at 12,107 cfs.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1947. Bas $\frac{3}{4}$ for partial-duration series, 960 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 6, 1925	11.0	5,770	1951	Dec. 8, 1950	13.13	7,410
1926	Apr. 5, 1926	5.60	1,420		Dec. 14, 1950	7.86	2,700
1927	May 16, 1927	7.03	2,350		Jan. 22, 1951	5.81	1,480
1928	Mar. 25, 1928	14.7	9,430		Feb. 5, 1951	4.77	1,010
1929	June 15, 1929	8.8	3,560		Apr. 10, 1951	-	(a)
1930	Apr. 21, 1930	4.72	950		May 11, 1951	5.67	1,420
1931	Mar. 18, 1931	4.03	680	1952	Apr. 7, 1952	4.66	964
1932	May 16, 1932	6.60	2,040		Apr. 27, 1952	6.75	2,010
1933	May 29, 1933	6.52	1,970		May 2, 1952	6.46	1,840
1934	Mar. 29, 1934	7.01	2,330		May 27, 1952	8.04	2,830
1935	May 21, 1935	6.93	2,250	1953	Jan. 9, 1953	5.90	1,530
1936	June 7, 1936	8.84	3,390		Apr. 27, 1953	9.01	3,510
1937	May 13, 1937	7.38	2,390		May 4, 1953	4.86	1,050
1938	Dec. 11, 1937	15.28	10,200		May 19, 1953	6.42	1,810
1939	Apr. 7, 1939	4.80	960		June 6, 1953	6.52	1,870
1940	Mar. 26, 1940	12.0	5,800		June 17, 1953	6.60	1,920
1941	May 11, 1941	6.94	2,120	1954	Mar. 9, 1954	9.06	3,540
1942	Dec. 3, 1941	9.51	3,860		Apr. 22, 1954	5.78	1,470
1943	Jan. 21, 1943	12.8	7,010		May 8, 1954	5.40	1,300
1944	May 7, 1944	6.20	1,690	1955	May 12, 1955	5.59	1,380
1945	Feb. 2, 1945	9.98	4,190		May 21, 1955	6.05	1,610
1946	May 5, 1946	6.47	1,840		May 29, 1955	5.63	1,400
1947	May 2, 1947	5.76	1,450		June 5, 1955	4.91	1,070
1948	Oct. 16, 1947	-	1,400	1956	Dec. 23, 1955	18.85	15,800
	Jan. 7, 1948	-	1,400		Jan. 15, 1956	9.88	4,180
	Apr. 17, 1948	-	994		Jan. 22, 1956	7.43	2,420
	May 6, 1948	-	1,590		Jan. 25, 1956	6.41	1,810
	May 16, 1948	-	2,140		Apr. 22, 1956	5.32	1,260
	May 26, 1948	7.00	2,160		May 4, 1956	7.32	2,350
	June 6, 1948	-	1,890		May 8, 1956	4.75	1,000
1949	Apr. 22, 1949	-	1,590	1957	May 22, 1956	7.13	2,240
	May 14, 1949	7.28	2,330		Feb. 25, 1957	6.33	1,760
	May 25, 1949	-	1,200		Mar. 5, 1957	5.85	1,500
1951	Nov. 18, 1950	16.21	11,600		Apr. 28, 1957	4.75	1,000
	Nov. 20, 1950	16.55	12,100		May 1, 1957	4.75	1,000
	Dec. 3, 1950	16.13	11,500		May 5, 1957	5.50	1,340
					May 18, 1957	17.18	4,430
					June 1, 1957	5.91	1,540

a Discharge unknown; exceeded base.

Peak stages and discharges of Silver Creek at Union Valley, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Feb. 24, 1958	7.06	2,190	1960	Feb. 8, 1960	8.04	2,830
	Apr. 22, 1958	4.91	1,070		Mar. 7, 1960	7.22	2,290
	May 9, 1958	6.81	2,050		Mar. 27, 1960	4.98	1,110
	May 23, 1958	8.15	2,890		Apr. 7, 1960	5.16	1,190
	June 18, 1958	6.64	1,940		May 11, 1960	5.30	1,250
1959	Jan. 10, 1959	4.24	796				

4415. South Fork Silver Creek near Ice House, Calif.

Location.--Lat 38°49'08", long 120°21'51", in NW 1/4 sec. 12, T. 11 N., R. 14 E., on right bank 300 ft upstream from Peavine Creek, 0.4 mile downstream from Ice House Dam, and 4.8 miles northwest of town of Kyburz.

Drainage area.--27.5 sq mi.

Gage.--Recording. Prior to Oct. 1, 1959, at site 0.3 mile upstream at different datum. Altitude of gage is 5,290 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 540 cfs and extended above on basis of slope-area measurement at 3,900 cfs prior to Oct. 1, 1959; defined by current-meter measurements below 610 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Ice House Reservoir (usable capacity, 45,800 acre-ft) beginning Dec. 15, 1959. Only annual peaks are shown prior to Oct. 1, 1947, and subsequent to Oct. 1, 1958. Base for partial-duration series, 340 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1925	Feb. 6, 1925	3.87	785	1950	May 29, 1950	-	764
1926	Apr. 28, 1926	3.10	450	1951	Nov. 18, 1950	6.69	3,900
1927	May 16, 1927	3.92	800		Dec. 3, 1950	6.28	3,170
1928	Mar. 25, 1928	5.35	1,950		Dec. 7, 1950	5.22	1,820
1929	June 15, 1929	3.83	775		Dec. 14, 1950	3.33	609
1930	May 20, 1930	2.98	409		Jan. 22, 1951	2.86	445
					Apr. 12, 1951	2.54	346
1931	Apr. 28, 1931	2.32	217		May 11, 1951	2.86	445
1932	May 16, 1932	3.55	648		May 25, 1951	2.77	416
1933	May 30, 1933	3.65	692	1952	May 2, 1952	2.87	474
1934	Mar. 29, 1934	3.35	558		May 27, 1952	3.83	865
1935	May 23, 1935	3.78	760		June 7, 1952	3.73	818
					June 18, 1952	2.99	516
1936	June 7, 1936	3.95	828	1953	Jan. 10, 1953	4.25	1,090
1937	May 14, 1937	3.85	782		Apr. 27, 1953	3.35	655
1938	Dec. 11, 1937	5.80	2,640		May 19, 1953	3.25	615
1939	Apr. 20, 1939	2.61	339		June 6, 1953	3.21	599
1940	Mar. 26, 1940	4.05	942		June 17, 1953	3.62	769
				1954	Mar. 9, 1954	3.57	746
1941	May 11, 1941	3.67	750		Apr. 22, 1954	2.90	485
1942	Dec. 3, 1941	4.08	959		May 8, 1954	3.14	571
1943	June 1, 1943	4.34	1,110	1955	May 12, 1955	2.76	438
1944	May 7, 1944	3.10	526		May 21, 1955	3.30	635
1945	June 4, 1945	3.67	750		May 29, 1955	3.10	555
					June 5, 1955	2.81	454
1946	May 5, 1946	3.40	636	1956	Dec. 23, 1955	6.71	3,940
1947	May 2, 1947	3.31	602		Jan. 15, 1956	3.54	733
					Jan. 22, 1956	2.97	510
1948	Oct. 16, 1947	-	445		May 4, 1956	3.18	587
	Apr. 18, 1948	-	416		May 23, 1956	3.56	742
	May 7, 1948	-	394	1957	May 6, 1957	2.71	423
	May 16, 1948	-	584		May 18, 1957	4.22	1,070
	May 26, 1948	3.53	689		May 27, 1957	2.87	474
	June 9, 1948	-	672		June 1, 1957	3.05	558
1949	Apr. 23, 1949	-	436	1958	May 9, 1958	3.02	527
	May 7, 1949	-	385		May 23, 1958	3.74	823
	May 14, 1949	3.76	792		June 18, 1958	3.63	773
	May 25, 1949	-	530				
1950	Jan. 23, 1950	a4.18	-				
	Apr. 22, 1950	-	460				
	Apr. 27, 1950	-	454				
	May 16, 1950	-	587				

a Annual maximum stage; backwater from ice; peak discharge less than 1,600 cfs.

Peak stages and discharges of South Fork Silver Creek near Ice House,
Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	May 9, 1959	3.95	587	1962	June 11, 1962	4.72	802
1960	Mar. 31, 1960	4.14	-	1963	June 1-4, 1963	4.60	560
				1964	June 3-5, 1964	4.60	602
1961	May 23, 1961	4.42	568	1965	Aug. 25, 26, 1965	4.66	627

4420. Silver Creek near Placerville, Calif.

Location.--Lat 38°47'30", long 120°35'15", in NE $\frac{1}{4}$ sec.24, T.11 N., R.12 E., on right bank 0.2 mile upstream from mouth and 12 miles northeast of Placerville.

Drainage area.--177 sq mi.

Gage.--Recording. Prior to Oct. 19, 1930, at site 400 ft downstream at different datum. Altitude of gage is 2,070 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,600 cfs prior to Oct. 19, 1930; below 3,900 cfs and extended above on basis of slope-area measurement at 25,800 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks slightly regulated by Ice House Reservoir (usable capacity, 45,800 acre-ft) beginning Dec. 15, 1959. Only annual peaks are shown prior to Oct. 1, 1946 and for 1961. Base for partial-duration series, 1,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1922	May 30, 1922	8.58	3,860	1950	Feb. 6, 1950	-	1,740
1923	Apr. 6, 1923	7.8	3,020		Mar. 19, 1950	-	2,130
1924	Feb. 8, 1924	4.70	915		Apr. 22, 1950	-	2,650
1925	Feb. 6, 1925	12.0	7,330		May 16, 1950	-	2,550
					May 29, 1950	-	2,840
1926	Apr. 5, 1926	6.96	2,250	1951	Nov. 18, 1950	14.25	25,800
1927	Feb. 21, 1927	9.17	4,260		Nov. 20, 1950	13.40	20,700
1928	Mar. 25, 1928	18.0	17,600		Dec. 3, 1950	13.01	18,600
1929	June 16, 1929	9.60	4,660		Dec. 8, 1950	11.62	12,500
1930	Apr. 22, 1930	5.95	1,560		Dec. 14, 1950	7.99	3,940
1931	Mar. 18, 1931	4.97	1,070		Jan. 22, 1951	7.42	3,200
1932	May 12, 1932	7.0	2,780		Feb. 5, 1951	6.11	1,870
1933	May 30, 1933	7.20	3,040		Apr. 10, 1951	6.00	1,780
1934	Mar. 29, 1934	7.10	2,910		May 11, 1951	6.28	2,020
1935	Apr. 8, 1935	8.8	6,240	1952	Feb. 2, 1952	6.19	1,940
1936	Feb. 22, 1936	9.0	6,800		May 27, 1952	8.08	4,060
1937	May 14, 1937	7.70	3,840	1953	Jan. 9, 1953	5.80	1,630
1938	Dec. 11, 1937	13.8	23,000		Apr. 27, 1953	8.57	4,820
1939	Apr. 8, 1939	5.58	1,470		May 19, 1953	6.70	2,420
1940	Mar. 26, 1940	11.1	10,800		June 6, 1953	6.80	2,520
					June 17, 1953	6.90	2,620
1941	May 11, 1941	7.40	3,180	1954	Mar. 9, 1954	8.31	4,410
1942	Jan. 27, 1942	9.24	5,790		Apr. 23, 1954	6.19	1,940
1943	Jan. 21, 1943	12.4	15,800		May 9, 1954	6.01	1,790
1944	May 8, 1944	6.60	2,320	1955	May 13, 1955	6.05	1,820
1945	Feb. 2, 1945	11.0	10,400		May 22, 1955	6.42	2,150
1946	Dec. 29, 1945	7.40	3,180	1956	Dec. 20, 1955	6.13	1,890
1947	Mar. 10, 1947	-	1,730		Dec. 23, 1955	14.50	27,500
	May 3, 1947	6.38	2,110		Dec. 26, 1955	8.22	4,260
1948	Oct. 16, 1947	-	1,720		Jan. 15, 1956	10.10	7,990
	Jan. 8, 1948	-	1,860		Jan. 23, 1956	8.42	4,580
	May 7, 1948	-	2,460		Jan. 25, 1956	7.95	3,880
	May 17, 1948	-	3,060		Apr. 23, 1956	5.97	1,740
	May 26, 1948	7.34	3,110		May 4, 1956	7.50	3,300
	June 6, 1948	-	2,620		May 9, 1956	6.15	1,900
1949	Apr. 24, 1949	-	2,570		May 22, 1956	7.42	3,200
	May 14, 1949	7.60	3,420	1957	Feb. 25, 1957	7.65	3,480
	May 25, 1949	-	1,860		Mar. 5, 1957	7.20	2,950
1950	Jan. 22, 1950	7.80	3,680		May 7, 1957	5.99	1,750

Peak stages and discharges of Silver Creek near Placerville, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	May 18, 1957	9.22	6,030	1959	Jan. 10, 1959	5.30	1,300
	May 27, 1957	6.11	1,860	1960	Feb. 8, 1960	9.15	6,500
	June 1, 1957	6.44	2,160		Mar. 7, 1960	7.80	4,080
1958	Feb. 12, 1958	6.15	1,900		Mar. 12, 1960	5.68	1,600
	Feb. 24, 1958	7.88	4,190		Mar. 27, 1960	5.77	1,680
	Apr. 22, 1958	6.23	2,110	1961	May 23, 1961	5.96	1,850
	May 9, 1958	7.35	3,450				
	May 23, 1958	8.12	4,540				
	June 19, 1958	7.19	3,230				

4435. South Fork American River near Camino, Calif.

Location.--Lat 38°46'20", long 120°42'15", in SE¹NW¹ sec.25, T.11 N., R.11 E., on right bank 400 ft upstream from Iowa Canyon Creek, 1.1 miles downstream from intake of American River flume, and 2.8 miles northwest of Camino.

Drainage area.--493 sq mi.

Gage.--Recording, except Nov. 1, 1950, to Dec. 5, 1951, which was nonrecording. Altitude of gage is 1,630 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 24,000 cfs and extended above on basis of computation of flow over dam at 49,800 cfs.

Remarks.--Water-stage-recorder graph and some discharge measurements furnished by Pacific Gas and Electric Co. Peaks partly regulated by four reservoirs (total usable capacity, 37,100 acre-ft) beginning in 1876 and by Ice House Reservoir (usable capacity, 45,800 acre-ft) beginning Dec. 15, 1959. Peaks may be affected by diversions to American River flume and to El Dorado Canal (capacity, 40 cfs). Peaks may also be affected by regulation by Jaybird powerhouse on Silver Creek since April 1916. Only annual peaks are shown prior to Oct. 1, 1946, and subsequent to Oct. 1, 1960. Base for partial-duration series, 4,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Apr. 6, 1923	12.52	7,350	1949	Apr. 24, 1949	-	5,460
1924	Feb. 8, 1924	7.12	1,970		May 14, 1949	11.93	6,460
1925	Feb. 6, 1925	19.0	18,000	1950	Jan. 23, 1950	-	5,320
1926	Apr. 5, 1926	10.1	4,510		Apr. 22, 1950	-	5,270
	Feb. 21, 1927	13.94	9,350		May 29, 1950	11.62	6,080
1928	Mar. 25, 1928	24.4	31,500	1951	Nov. 21, 1950	29.4	46,000
1929	June 16, 1929	13.18	8,300		Dec. 3, 1950	-	38,000
1930	Apr. 8, 1930	9.70	4,100		Dec. 8, 1950	21.5	25,100
1931	Apr. 29, 1931	6.59	1,620		Dec. 14, 1950	13.1	9,260
1932	May 12, 1932	11.66	6,200		Jan. 22, 1951	12.8	8,620
1933	May 30, 1933	11.50	5,930		May 11, 1951	9.7	4,790
1934	Mar. 29, 1934	9.90	4,010	1952	Feb. 1, 1952	10.82	6,170
1935	Apr. 8, 1935	14.7	10,700		Apr. 7, 1952	9.38	4,420
1936	Feb. 22, 1936	15.35	11,700		Apr. 28, 1952	11.58	7,150
1937	May 14, 1937	12.70	7,140		May 28, 1952	13.20	9,420
1938	Dec. 11, 1937	25.5	34,400		June 19, 1952	9.33	4,360
1939	Apr. 8, 1939	8.21	2,650	1953	Apr. 27, 1953	13.95	10,600
1940	Mar. 27, 1940	18.55	18,400		May 19, 1953	10.22	5,410
1941	May 12, 1941	12.34	6,990		June 6, 1953	10.31	5,520
1942	Jan. 27, 1942	16.15	13,300		June 17, 1953	10.98	6,370
1943	Jan. 21, 1943	20.7	23,100	1954	Mar. 9, 1954	13.15	9,340
1944	May 9, 1944	10.15	4,450		Apr. 23, 1954	9.35	4,380
1945	Feb. 2, 1945	18.85	19,100		May 9, 1954	9.58	4,650
1946	Dec. 22, 1945	12.43	7,110	1955	May 22, 1955	9.63	4,950
1947	May 3, 1947	10.20	4,500		May 30, 1955	9.33	4,360
1948	Apr. 17, 1948	-	4,260	1956	Dec. 23, 1955	32.6	49,800
	May 7, 1948	-	5,240		Jan. 15, 1956	16.79	15,400
	May 17, 1948	-	6,150		Jan. 23, 1956	13.12	9,090
	May 27, 1948	12.02	6,580		Jan. 25, 1956	12.27	7,830
	June 8, 1948	-	5,350		May 4, 1956	12.16	7,670

SACRAMENTO RIVER BASIN

Peak stages and discharges of South Fork American River near Camino,
Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	May 24, 1956	12.71	8,460	1958	May 23, 1958	13.42	8,350
	June 4, 1956	10.53	5,490		June 19, 1958	10.85	5,400
	June 11, 1956	9.76	4,590	1959	Feb. 16, 1959	7.98	2,850
1957	Feb. 25, 1957	11.68	6,300		Feb. 8, 1960	14.82	10,200
	Mar. 5, 1957	10.73	5,280	1960	Mar. 7, 1960	11.62	6,230
	May 18, 1957	14.91	10,400		May 23, 1961	7.51	2,320
	June 2, 1957	10.42	4,970	1962	Apr. 15, 1962	9.96	4,410
1958	Feb. 25, 1958	12.80	7,610	1963	Feb. 1, 1963	29.2	37,200
	Apr. 3, 1958	10.19	4,740	1964	Nov. 15, 1963	9.95	4,450
	Apr. 22, 1958	9.98	4,530	1965	Dec. 23, 1964	21.01	36,000
	May 10, 1958	11.95	6,600				

4445. South Fork American River near Placerville, Calif.

Location.--Lat 38°46'00", long 120°49'25", in SE $\frac{1}{4}$ sec.26, T.11 N., R.10 E., 1,000 ft downstream from Big Canyon Creek and bridge at Chilli Bar and 3 miles northwest of Placerville.

Drainage area.--600 sq mi (revised).

Gage.--Nonrecording. Altitude of gage is 920 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks may be affected by diversions for irrigation, mining, power development, and municipal supply for Placerville since beginning of record. All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 3, 1912	10.67	4,740	1917	Feb. 25, 1917	13.25	7,620
1913	May 18, 1913	12.0	6,200	1918	Mar. 12, 1918	11.3	5,430
1914	Jan. 25, 1914	19.00	15,000	1919	Feb. 10, 1919	16.5	11,800
1915	May 10, 1915	13.50	7,980	1920	May 21, 1920	10.70	4,770
1916	Mar. 20, 1916	14.0	8,580	1965	Dec. 23, 1964	17.4	47,300

4450. South Fork American River at Coloma, Calif.

Location.--Lat 38°48'06", long 120°53'24", in SW $\frac{1}{4}$ sec.17, T.11 N., R.10 E., at highway bridge at Coloma and 0.6 mile downstream from Dutch Creek.

Drainage area.--631 sq mi (revised).

Gage.--Recording. Datum of gage is 730.64 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended on basis of corresponding maximum at station near Camino.

Remarks.--Peaks partly regulated by four reservoirs (total usable capacity, 35,500 acre-ft) since beginning of record. Peaks may be affected by diversion above station through El Dorado Canal (capacity, 40 cfs). Only annual peaks are shown.

Peak stages and discharges of South Fork American River at Coloma, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1928	Mar. 26, 1928	19.5	-	1936	Feb. 22, 1936	16.50	12,400
1930	Mar. 5, 1930	11.95	4,380	1937	Feb. 14, 1937	14.36	7,790
1931	Mar. 18, 1931	9.94	1,840	1938	Dec. 11, 1937	20.5	38,500
1932	Feb. 6, 1932	13.50	6,680	1939	Apr. 8, 1939	11.01	2,720
1933	May 30, 1933	13.20	6,000	1940	Mar. 27, 30, 1940	18.10	22,000
1934	Mar. 29, 1934	12.60	4,920	1941	May 12, 1941	14.13	8,130
1935	Apr. 8, 1935	16.85	15,000				

4455. South Fork American River near Lotus, Calif.

Location.--Lat 38°49'05", long 120°56'45", in SW $\frac{1}{4}$ sec.11, T.11 N., R.9 E., on left bank 0.4 mile downstream from Greenwood Creek, 2.4 miles northwest of Lotus, and 3.3 miles northwest of Coloma.

Drainage area.--673 sq mi.

Gage.--Recording. Altitude of gage is 635 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 70,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Maximum stage known since 1862 and prior to beginning of record in May 1951, 20.4 ft, Nov. 21, 1950, from floodmarks (discharge, 64,500 cfs).

Remarks.--Peaks regulated by four reservoirs (total usable capacity, 37,100 acre-ft) beginning in 1876 and by Ice House Reservoir (usable capacity, 45,800 acre-ft) beginning Dec. 15, 1959. Peaks may be affected by diversions to El Dorado Canal (capacity, 40 cfs) and by other diversions for power, irrigation, and domestic use. Only annual peaks are shown for 1951 and 1962-65. Base for partial-duration series, 5,600 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Nov. 21, 1950	20.4	64,500	1957	Feb. 25, 1957	9.82	7,900
1952	Dec. 28, 1951	9.68	7,480	Mar. 5, 1957	9.88	8,080	
	Jan. 12, 1952	10.09	8,710	May 19, 1957	11.67	14,100	
	Jan. 15, 1952	9.66	7,430	1958	Feb. 25, 1958	-	18,000
	Jan. 25, 1952	9.76	7,720		Mar. 22, 1958	9.95	8,280
	Feb. 2, 1952	10.07	8,650		Mar. 30, 1958	10.45	9,880
	Apr. 28, 1952	9.57	7,180		Apr. 2, 1958	12.79	18,600
	May 28, 1952	10.31	9,390		Apr. 5, 1958	8.95	5,810
1953	Apr. 27, 1953	10.43	9,780	May 10, 1958	9.45	7,050	
	June 18, 1953	9.13	5,980	May 23, 1958	10.18	9,040	
				June 19, 1958	8.88	5,660	
1954	Mar. 9, 1954	10.51	10,000	1959	Feb. 17, 1959	8.07	3,690
1955	May 22, 1955	8.64	4,790	1960	Feb. 8, 1960	10.15	8,890
1956	Dec. 20, 1955	9.29	6,390	Mar. 7, 1960	9.43	6,780	
	Dec. 23, 1955	21.37	71,800	1961	May 23, 1961	7.08	2,190
	Dec. 26, 1955	11.95	15,200		1962	Feb. 10, 1962	9.91
	Jan. 5, 1956	9.42	6,760	Feb. 1, 1963	19.85	60,400	
	Jan. 15, 1956	13.53	21,800	Jan. 20, 1964	8.31	4,000	
	Jan. 23, 1956	10.78	10,900	1964	Dec. 23, 1964	20.00	61,500
	Jan. 25, 1956	10.28	9,300	1965			
	May 4, 1956	9.77	7,750				
	May 24, 1956	9.79	7,810				

4460. Weber Creek near Salmon Falls, Calif.
(Published as "Webber Creek" prior to October 1954)

Location.--Lat 38°45'40", long 120°59'20", in sec.32, T.11 N., R.9 E., 1 mile upstream from mouth, 3.9 miles east of Salmon Falls, and 6 miles southwest of Coloma.

Drainage area.--97.6 sq mi (revised).

Gage.--Recording. Prior to Dec. 12, 1951, at site 150 ft upstream at same datum. Altitude of gage is 610 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,800 cfs prior to Dec. 12, 1951; subject to changes owing to alterations to channel during mining operations subsequent to 1949. Defined by current-meater measurements below 6,900 cfs thereafter.

Remarks.--Peaks slightly regulated by storage reservoirs (combined capacity, about 3,800 acre-ft) since beginning of record. Peaks may be affected by diversions into and out of basin, for irrigation, mining, municipal and industrial use. Base for partial-duration series, 2,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Feb. 28, 1944	-	2,660	1952	Feb. 1, 1952	11.37	2,750
	Mar. 4, 1944	12.70	4,460		Mar. 15, 1952	11.86	3,330
1945	Feb. 2, 1945	13.70	5,960	1953	Mar. 18, 1952	11.21	2,570
	Feb. 3, 1945	-	3,250		Jan. 20, 1953	11.14	2,490
1946	Dec. 22, 1945	12.45	4,080	1954	Mar. 30, 1954	11.02	2,360
	Dec. 23, 1945	-	3,180		Dec. 9, 1954	11.08	2,200
1947	Feb. 12, 1947	11.06	2,350	1956	Dec. 23, 1955	15.92	11,800
	Mar. 24, 1948	11.43	2,690		Dec. 26, 1955	12.64	4,290
1949	Mar. 4, 1949	14.34	6,610		Jan. 5, 1956	11.28	2,420
					Jan. 15, 1956	12.57	4,180
1950	Feb. 4, 1950	12.48	4,130	1957	Mar. 5, 1957	11.33	2,440
	Feb. 6, 1950	-	2,710		May 18, 1957	11.83	3,070
1951	Nov. 18, 1950	14.2	6,740	1958	Jan. 26, 1958	11.61	2,780
	Dec. 3, 1950	12.50	4,160		Feb. 12, 1958	11.63	2,840
	Dec. 9, 1950	12.15	3,640		Feb. 24, 1958	11.50	2,670
	Jan. 18, 1951	12.75	4,540		Mar. 16, 1958	13.13	5,160
	Jan. 22, 1951	12.50	4,160		Mar. 21, 1958	13.61	6,090
1952	Dec. 28, 1951	11.50	2,900		Mar. 30, 1958	13.79	6,450
	Jan. 12, 1952	13.57	5,760		Apr. 2, 1958	16.05	12,200
	Jan. 15, 1952	12.46	4,120		Apr. 6, 1958	12.10	3,450
	Jan. 25, 1952	11.90	3,380	1959	Feb. 17, 1959	10.55	1,660

4465. American River at Fair Oaks, Calif.

Location.--Lat 38°38'08", long 121°13'36", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.17, T.9 N., R.7 E., on right bank 2,100 ft downstream from Nimbus Dam, 2.4 miles east of Fair Oaks, 8.1 miles downstream from South Fork, and at mile 19.3.

Drainage area.--1,888 sq mi.

Gage.--Nonrecording prior to 1909 and at times until Nov. 7, 1930; recording at times subsequent to 1909 and continuously subsequent to Nov. 7, 1930. Prior to Nov. 7, 1930, at several sites $2\frac{1}{2}$ miles downstream, all at datum 11.74 ft lower. Nov. 7, 1930, to Dec. 31, 1957, at site 2.2 miles downstream at datum 12.74 ft lower. Datum of gage is 77.53 ft above mean sea level.

Stage-discharge relation.--Defined by current-meter measurements below 79,000 cfs prior to Nov. 7, 1930; below 143,000 cfs for period Nov. 7, 1930, to Dec. 31, 1957; and below 30,000 cfs thereafter.

Bankfull stage.--22 ft.

Remarks.--Peaks regulated by Folsom Lake (usable capacity, 1,000,000 acre-ft) beginning Feb. 25, 1955, and by Nimbus Reservoir (usable capacity, 2,800 acre-ft) beginning in 1955. Peaks may be affected by powerplant operation and by many diversions above station for irrigation, municipal and domestic water supply. Peaks shown for the years 1905, 1906, 1908, 1909, and 1911-14 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1946 and subsequent to Sept. 30, 1954. Base for partial-duration series, 20,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	Jan. 10, 1862	38	-	1946	Dec. 22, 1945	15.85	42,200
1905	Mar. 19, 1905	11.2	24,200	1947	Feb. 13, 1947	12.60	27,900
1906	Jan. 18, 1906	-	59,700	1948	Apr. 17, 1948	10.68	21,000
1907	Mar. 19, 1907	30.4	156,000	1949	Mar. 3, 1949	14.66	37,500
1908	Dec. 27, 1907	-	10,500	1950	Jan. 23, 1950	14.00	34,400
1909	Jan. 14, 1909	26.7	119,000		Feb. 6, 1950	-	28,300
1911	Jan. 31, 1911	21.9	81,300	1951	Nov. 19, 1950	30.65	163,000
1912	June 2, 1912	-	12,100		Nov. 21, 1950	31.85	180,000
1913	May 18, 1913	8.8	12,700		Dec. 3, 1950	28.35	136,000
1914	Jan. 1, 1914	16.0	74,100		Dec. 8, 1950	22.58	86,000
1915	May 12, 1915	15.04	47,900		Dec. 14, 1950	13.89	36,200
1916	Jan. 3, 1916	13.7	40,700		Jan. 18, 1951	13.30	33,600
1917	Feb. 25, 1917	13.98	42,500		Jan. 22, 1951	16.90	52,900
1919	Feb. 11, 1919	18.5	67,500	1952	Dec. 1, 1951	11.18	25,200
1920	Apr. 16, 1920	10.70	20,100		Dec. 29, 1951	10.82	23,700
1921	Jan. 18, 1921	14.1	39,200		Jan. 12, 1952	13.44	35,300
1922	Feb. 20, 1922	12.5	31,600		Jan. 15, 1952	12.59	31,400
1923	Dec. 13, 1922	14.2	39,000		Jan. 25, 1952	11.28	25,600
1924	Feb. 8, 1924	7.75	14,000		Feb. 2, 1952	13.83	37,200
1925	Feb. 6, 1925	25.0	99,500		Apr. 28, 1952	10.54	22,500
1926	Apr. 6, 1926	11.6	27,400		May 28, 1952	11.32	25,800
1927	Feb. 21, 1927	19.4	67,700	1953	Jan. 9, 1953	16.30	49,700
1928	Mar. 25, 1928	30.45	163,000		Jan. 21, 1953	10.54	22,900
1929	June 16, 1929	11.3	26,000		Apr. 27, 1953	16.04	48,400
1930	Mar. 5, 1930	11.33	24,400		May 20, 1953	11.92	28,400
1931	Mar. 18, 1931	8.87	9,900	1954	Mar. 9, 1954	15.28	42,600
1932	Feb. 7, 1932	12.6	21,100	1955	Jan. 2, 1955	7.34	10,800
1933	May 30, 1933	11.52	16,500	1956	Dec. 24, 1955	20.35	71,500
1934	Jan. 1, 1934	15.50	22,600	1957	Mar. 6, 1957	12.69	29,900
1935	Apr. 8, 1935	20.73	60,900	1958	Apr. 7, 1958	12.20	36,200
1936	Feb. 22, 1936	20.7	58,300	1959	July 30, 1959	4.46	6,300
1937	Mar. 21, 1937	15.88	33,000	1960	Mar. 16, 1960	4.00	5,280
1938	Dec. 11, 1937	29.06	114,000	1961	July 19, 1961	3.83	4,720
1939	Mar. 9, 1939	9.72	10,900	1962	Mar. 4, 1962	5.12	8,230
1940	Mar. 30, 1940	25.57	89,200	1963	Feb. 2, 1963	21.44	101,000
1941	Dec. 27, 1940	16.9	38,800	1964	Dec. 7, 1963	3.98	5,210
1942	Jan. 27, 1942	24.65	83,200	1965	Dec. 23-25, 1964	21.65	115,000
1943	Jan. 22, 1943	31.00	152,000				
1944	Mar. 4, 1944	12.50	20,100				
1945	Feb. 2, 1945	25.25	94,400				

4470. American River at Sacramento, Calif.

Location.--Lat 38°34'05", long 121°25'20", on left bank at H Street Bridge, just east of Sacramento, Sacramento County, 6.5 miles upstream from mouth.

Drainage area.--1,938 sq mi.

Gage.--Recording. Gage is set to datum of Corps of Engineers.

Stage-discharge relation.--Defined by current-meter measurements below 79,000 cfs.

Remarks.--Records collected and prepared in cooperation with California Department of Water Resources. Peaks regulated by Folsom Reservoir (usable capacity, 1,000,000 acre-ft) beginning Feb. 25, 1955, and by Nimbus Reservoir (capacity, 2,800 acre-ft) beginning in 1955. Peaks may be affected by operation of powerplants, and by inflow from Bear and Yuba River basins. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Mar. 4, 1944	30.48	-	1952	Feb. 2, 1952	d32.72	31,000
1945	Feb. 2, 1945	40.50	-	1953	Apr. 28, 1953	31.60	34,300
				1954	Mar. 10, 1954	31.95	41,800
1946	Dec. 29, 1945	35.15	38,700	1955	Jan. 2, 1955	22.95	10,500
1947	Feb. 13, 1947	30.1	24,600				
1948	Apr. 17, 1948	a28.93	21,700	1956	Dec. 26, 1955	38.93	72,100
1949	Mar. 3, 1949	31.23	29,800	1957	Mar. 6, 1957	e32.04	30,000
1950	Jan. 24, 1950	b31.32	29,700	1958	Apr. 7, 1958	34.11	37,300
				1959	July 31, 1959	f25.19	5,840
1951	Nov. 21, 1950	45.73	c176,000				

a Occurred Apr. 18, 1948.

b Occurred Feb. 6, 1950, backwater from Sacramento River.

c Includes estimated overflow of 70,000 cfs.

d Occurred Jan. 15, 1952.

e Occurred at different time than peak discharge.

f Occurred Feb. 20, 1959.

4840. Miller Creek near Lorella, Oreg.

Location.--Lat 42°06'50", long 121°12'45", on line between secs. 7 and 8, T.40 S., R.14 E., at upstream side of former highway bridge near left bank, 0.3 mile downstream from present Lorella-Langell highway, 3.4 miles southeast of Lorella, and 9.5 miles downstream from Gerber damsite.

Drainage area.--270 sq mi, approximately.

Gage.--Recording. Altitude of gage is 4,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,600 cfs.

Bankfull stage.--9 ft.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Mar. 1, 1910	10.3	5,000	1916	Mar. 17, 1916	7.21	1,490
1911	Mar. 29, 1911	8.5	2,620	1917	Apr. 26, 1917	8.85	2,970
1912	Feb. 17, 1912	8.7	2,840	1918	Mar. 25, 1918	7.20	1,490
1913	Apr. 11, 1913	8.8	2,960	1919	Apr. 3, 1919	9.93	4,060
1914	Mar. 6, 1914	7.82	2,000	1920	Apr. 18, 1920	7.1	1,410
1915	Mar. 24, 1915	6.88	1,250				

4850. Lost River at Olene, Oreg.
(Published as "near Merrill" 1904-7)

Location.--Lat 42°10'25", long 121°37'00", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.39 S., R.10 E., at highway bridge at Olene and 9.5 miles southeast of Klamath Falls.

Drainage area.--1,590 sq mi, approximately, of which 160 sq mi in Swan Lake Valley is noncontributing; 1,670 sq mi, approximately, of which 160 sq mi is noncontributing, at site near Merrill used 1904-7.

Gage.--Nonrecording. August 1904 to May 1907 at site near Merrill about 12 miles downstream at different datum. Altitude of gage is 4,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,500 cfs at site near Merrill; below 2,600 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for the years 1905 and 1907-11 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1905	Apr. 4, 1905	7.0	1,340	1909	Jan. 19, 1909	10.70	5,600
1906	Apr. 2, 1906	13.6	4,380	1910	Mar. 3, 1910	9.74	3,970
1907	Feb. 7, 1907	18.5	9,600	1911	Mar. 25, 1911	9.25	3,520
1908	Mar. 17, 1908	7.00	1,700				

LOST RIVER BASIN

4870. Lost River at Wilson Bridge, near Olene, Oreg.

Location.--Lat 42°08'25", long 121°40'40", at corner of secs. 29 and 32, T.39 S., R.10 E., at Wilson Bridge 0.3 mile downstream from Lost River Dam and 3.3 miles southwest of Olene.

Drainage area.--1,620 sq mi, approximately, of which 160 sq mi in Swan Lake Valley is noncontributing.

Gage.--Nonrecording prior to Oct. 23, 1918; recording thereafter. Prior to Oct. 23, 1918, at datums up to 0.17 ft higher. Datum of gage is 4,005.01 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Peaks may be affected by Lost River diversion (capacity, 2,100 cfs) and "G" canal (capacity, 400 cfs) at Lost River Dam beginning Mar. 16, 1912. Peaks for the years 1913-17 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Apr. 13, 1913	68.6	1,650	1917	Apr. 25, 1917	73.24	2,920
1914	Mar. 9, 1914	68.5	1,630	1918	Mar. 21, 1918	65.20	696
1915	Mar. 21, 1915	63.4	522	1919	Apr. 6, 1919	72.1	2,190
				1920	Mar. 27, 1920	61.0	120
1916	Mar. 21, 1916	65.1	850				

LOWER KLAMATH LAKE BASIN

4895. Antelope Creek near Tennant, Calif.

Location.--Lat 41°32'45", long 121°55'05", in NW¹/₄ sec.25, T.43 N., R.1 W., on right bank 2.5 miles south of Tennant, 4 miles downstream from Frog Lake, and 17 miles southeast of town of Mount Hebron.

Drainage area.--18.6 sq mi.

Gage.--Recording. Altitude of gage is 5,080 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for water year 1962. Base for partial-duration series, 100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 9, 1953	a5.33	-	1956	May 22, 1956	2.93	228
	Apr. 27, 1953	2.61	157		June 3, 1956	2.81	209
					June 19, 1956	2.33	138
1954	Nov. 13, 1953	2.22	102	1957	Feb. 24, 1957	3.15	266
	Nov. 15, 1953	2.35	118		Apr. 14, 1957	2.07	110
	Apr. 4, 1954	2.30	126		May 2, 1957	2.10	113
	Apr. 27, 1954	2.58	165		May 13, 1957	2.18	122
	May 8, 1954	2.58	165		May 18, 1957	3.76	382
	May 19, 1954	2.67	179		May 31, 1957	2.02	105
	Aug. 28, 1954	b3.23	-				
1955	Nov. 11, 1954	2.78	99	1958	Dec. 16, 1957	2.24	142
	Jan. 19, 1955	a3.22	-		Jan. 29, 1957	1.96	110
					Feb. 16, 1958	2.16	132
1956	Dec. 22, 1955	3.93	422		Feb. 18, 1958	2.33	153
	Jan. 15, 1956	2.13	114		Feb. 24, 1958	3.85	405
	Feb. 24, 1956	2.83	212		May 11, 1958	2.88	232
	Apr. 24, 1956	2.22	124		May 23, 1958	3.18	281
	May 5, 1956	2.34	139		June 2, 1958	3.15	276

a Annual maximum stage; backwater from ice.

b Annual maximum stage; backwater from temporary dam.

Peak stages and discharges of Antelope Creek near Tennant, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1958	June 19, 1958	2.54	182	1962	May 8, 1962	2.52	186	
	July 29, 1958	2.14	130					
1959	Jan. 9, 1959	2.11	126	1963	Oct. 10, 1962	2.66	212	
	Jan. 11, 1959	3.64	364		Oct. 12, 1962	4.31	538	
	Apr. 26, 1959	1.92	110		Dec. 15, 1962	2.87	249	
	May 14, 1959	1.88	106		Jan. 31, 1963	3.33	333	
					Feb. 4, 1963	3.67	399	
1960	Jan. 14, 1960	a3.38	-	Apr. 14, 1963	2.72	222		
	June 3, 1960	1.88	101	May 7, 1963	2.95	263		
1961				May 20, 1963	2.58	199		
	Nov. 25, 1960	1.92	101	1964	Nov. 14, 1963	2.76	215	
	Jan. 5, 1961	a3.06	-					
	May 10, 1961	2.03	112		1965	Dec. 22, 1964	4.00	638
	June 2, 1961	2.74	198			Apr. 29, 1965	2.64	171
1962	Nov. 26, 1961	a3.90	-		May 22, 1965	2.37	117	

a Annual maximum stage; backwater from ice.

KLAMATH RIVER BASIN

4935. Williamson River near Klamath Agency, Oreg.

Location.--Lat 42°44'25", long 121°50'00", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.1, T.33 S., R.7 E., on right bank 250 ft downstream from highway bridge, 0.6 mile southwest of railroad station at Kirk, 10 miles upstream from Spring Creek, and 10 miles northeast of Klamath Agency.

Drainage area.--1,290 sq mi, approximately.

Gage.--Nonrecording prior to June 30, 1910; recording subsequent to Oct. 1, 1954. Prior to June 30, 1910, at sites about half a mile upstream at different datums. Oct. 1, 1954, to Sept. 30, 1955, at datum 2.05 ft higher; gage height for 1955 adjusted to present datum. Datum of gage is 4,481.34 ft above mean sea level, datum of 1929, supplementary adjustment of 1956.

Stage-discharge relation.--Defined by current-meter measurements below 800 cfs prior to June 30, 1910; below 1,200 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1910	Mar. 13, 1910	3.7	1,590	1960	Apr. 3, 1960	5.14	742
1955	Apr. 4, 1955	5.29	683	1961	Feb. 18, 1961	4.83	528
1956	Apr. 13, 1956	5.71	1,200	1962	Apr. 11, 1962	5.12	685
1957	Mar. 7, 1957	5.50	1,060	1963	Feb. 21, 1963	4.71	425
1958	Mar. 3, 1958	5.75	1,310	1964	Apr. 13, 1964	4.83	501
1959	Feb. 1, 1959	5.05	550	1965	Dec. 27, 1964	5.42	1,000

4940. Williamson River above Spring Creek, near Klamath Agency, Oreg.
(Published as "near Chiloquin" 1912-13)

Location.--Lat 42°39', long 121°51", in NW¼ sec.2, T.34 S., R.7 E., 3 miles upstream from Spring Creek and 5 miles northeast of Klamath Agency.

Drainage area.--1,330 sq mi, approximately.

Gage.--Nonrecording May 1, 1912, to Oct. 4, 1913, Dec. 1, 1918, to Feb. 4, 1919, and Aug. 23, 1919, to May 6, 1920; recording Nov. 9, 1917, to Nov. 30, 1918, Feb. 5 to June 30, 1919, and May 23, 1920, to Sept. 25, 1925. May 1, 1912, to Oct. 4, 1913, at site 3 miles upstream at different datum. Nov. 9, 1917, to Sept. 30, 1923, at datum 1.13 ft higher; gage heights herein for 1918-19, 1922-23 adjusted to described datum. Altitude of gage is 4,400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 330 cfs prior to Oct. 4, 1913; below 1,100 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of Apr. 27, 1917, reached a stage of 6.8 ft, from flood-marks (discharge, 2,500 cfs).

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Apr. 16, 1913	7.3	1,600	1922	Apr. 27, 1922	4.37	1,140
1917	Apr. 27, 1917	6.8	2,500	1923	Apr. 6, 1923	3.71	810
1918	Mar. 29, 1918	3.01	475	1924	Feb. 14, 1924	2.65	369
1919	Apr. 13, 1919	4.97	1,400	1925	Feb. 16, 1925	3.72	795

4945. Williamson River at Chiloquin, Oreg.

Location.--Lat 42°34'20", long 121°52'20", in NW¼ sec.3, T.35 S., R.7 E., at former highway bridge at Chiloquin and 500 ft upstream from Sprague River.

Drainage area.--1,400 sq mi, approximately.

Gage.--Nonrecording. Altitude of gage is 4,200 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--8 ft.

Historical data.--Maximum stage known, about 9 ft in April or May 1904, from information by local residents.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	April or May 1904	9.0	-	1914	Mar. 24, 1914	5.4	1,520
1912	Mar. 7, 1912	5.3	1,360	1915	Apr. 1, 1915	5.3	1,420
1913	Apr. 16, 1913	6.6	2,520	1916	Apr. 1, 1916	5.4	1,520

4975. Sprague River near Beatty, Oreg.
(Published as "near Yainax" 1912-17)

Location.--Lat 42°26'50", long 121°14'15", in NW¹SE¹ sec.13, T.36 S., R.12 E., on right bank 200 ft downstream from highway bridge, 1.6 miles east of Beatty, and 4.6 miles upstream from Sycan River.

Drainage area.--513 sq mi.

Gage.--Nonrecording prior to Feb. 19, 1914, and Sept. 12, 1917, to Sept. 30, 1926; recording Feb. 20, 1914, to Sept. 11, 1917, and subsequent to Oct. 8, 1953. Prior to Oct. 1, 1953, at site 2 miles upstream at different datum. Datum of gage is 4,305.35 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Stage-discharge relation.--Defined by current-meter measurements below 1,500 cfs prior to Oct. 1, 1953; below 2,200 cfs thereafter.

Remarks.--Peaks for the years 1920-23 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Apr. 17, 1914	5.41	961	1955	Mar. 29, 1955	4.43	572
1915	Mar. 30, 1915	3.06	416	1956	Dec. 23, 1955	9.44	3,340
1917	Apr. 8, 1917	6.10	1,570	1957	Feb. 27, 1957	8.03	2,090
1918	Mar. 29, 1918	3.04	460	1958	May 12, 1958	8.51	2,440
1920	May 10, 1920	2.6	377	1959	Jan. 28, 1959	3.70	424
1921	Mar. 6, 1921	5.60	1,270	1960	Feb. 9, 1960	6.93	1,440
1922	May 21, 1922	5.35	1,150	1961	Feb. 10, 1961	4.83	645
1923	Apr. 9, 1923	3.00	430	1962	Feb. 11, 1962	5.92	977
1954	Mar. 10, 1954	7.96	2,020	1963	Feb. 2, 1963	8.82	2,480
				1964	Apr. 1, 1964	6.37	1,150
				1965	Dec. 23, 1964	12.19	6,980

4985. Long Creek near Silver Lake, Oreg.

Location.--Lat 42°50', long 121°13', in sec.6, T.32 S., R.13 E., 22 miles south of town of Silver Lake and 35 miles west of Paisley.

Drainage area.--40 sq mi, approximately.

Gage.--Recording. Prior to Aug. 31, 1920, at site $1\frac{1}{2}$ miles downstream at different datum. May 10 to Aug. 31, 1921, 1 mile downstream at different datum. Altitude of gage is 5,100 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 62 cfs prior to Aug. 31, 1920; below 140 cfs for period May 10 to Aug. 31, 1921; and below 90 cfs thereafter.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1918	Mar. 26, 1918	2.00	62	1923	May 10, 1923	2.00	111
1919	Apr. 3, 1919	2.95	108	1927	Apr. 26, 1927	2.66	145
1920	May 9, 1920	2.45	66	1928	Mar. 26, 1928	2.13	124
1921	May 17, 1921	3.02	166	1929	May 3, 1929	1.60	90
1922	May 19, 1922	3.61	307				

4990. Sycan River near Beatty, Oreg.
(Published as "near Yainax" 1911-17)

Location--Lat 42°33', long 121°19', in SE $\frac{1}{4}$ sec.8, T.35 S., R.12 E., 8 miles upstream from mouth and 8 miles north of Beatty.

Drainage area--540 sq mi, approximately.

Gage--Nonrecording prior to June 30, 1913; recording thereafter. Prior to June 30, 1913, at site $5\frac{1}{2}$ miles downstream at different datum. Apr. 16, 1914, to Sept. 30, 1917, at site 2 miles downstream at different datum. Altitude of gage is 4,400 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 1,150 cfs prior to Apr. 16, 1914; below 900 cfs for period Apr. 16, 1914 to Sept. 30, 1917; and below 1,400 cfs thereafter.

Remarks--Peaks for the years 1912-14 are maximum observed. Only annual peaks are shown prior to 1918. Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 22, 1912	5.8	680	1921	Apr. 11, 1921	3.96	1,240
1913	Apr. 13, 1913	10.1	1,680		May 18, 1921	3.49	900
1914	Mar. 21, 1914	8.0	1,150				
1916	Mar. 21, 1916	9.7	1,720	1922	Apr. 26, 1922	5.12	2,110
1917	Apr. 25, 1917	11.25	2,250		May 20, 1922	3.82	1,130
1918	Mar. 24, 1918	3.39	760	1923	Mar. 28, 1923	3.62	990
1919	Apr. 1, 1919	4.67	1,600	1924	Feb. 8, 1924	3.25	777
	Apr. 4, 1919	4.42	1,420				
	Apr. 11, 1919	3.85	1,090	1925	Feb. 4, 1925	4.47	1,580
					Apr. 20, 1925	3.65	1,020
1921	Mar. 10, 1921	4.36	1,510		Apr. 22, 1925	3.60	980
	Mar. 17, 1921	3.92	1,200		May 20, 1925	3.68	1,150

5010. Sprague River near Chiloquin, Oreg.
(Published as "at McCready Ranch, near Chiloquin" prior to Oct. 1, 1931)

Location--Lat 42°35'05", long 121°50'55", in NE $\frac{1}{4}$ sec.35, T.35 S., R.7 E., on right bank 1.0 mile northeast of Chiloquin, 4.6 miles upstream from Modoc Point Canal intake, and 5.4 miles upstream from mouth.

Drainage area--1,580 sq mi, approximately; 1,470 sq mi, approximately, at site used 1920-31.

Gage--Nonrecording at sites 12 miles upstream at different datums prior to Oct. 1, 1931; recording thereafter. Datum of gage is 4,202.43 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Stage-discharge relation--Defined by current-meter measurements below 2,800 cfs prior to Oct. 1, 1931; below 5,500 cfs thereafter.

Remarks--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1921	Mar. 9, 1921	5.70	2,380	1935	Apr. 20, 1935	3.76	1,700
1922	Apr. 29, 1922	6.55	3,560				
1923	Apr. 1, 1923	3.7	1,120	1936	Apr. 29, 1936	4.27	2,240
1924	Feb. 10, 1924	3.08	745	1937	Apr. 19, 1937	4.11	2,080
1925	Apr. 23, 1925	5.85	1,970	1938	Apr. 22, 1938	7.34	6,380
				1939	Mar. 30, 1939	3.23	1,310
1926	Feb. 7, 1926	2.81	865	1940	Apr. 3, 1940	6.30	4,870
1927	Apr. 6, 1927	7.3	3,520				
1928	Mar. 29, 1928	7.52	3,920	1941	Feb. 16, 1941	2.99	1,130
1929	June 3, 1929	3.12	625	1942	Jan. 14, 1942	b4.56	-
	June 30, 1929	a5.65	-		Feb. 1, 1942	4.07	2,020
1930	Feb. 12, 1930	5.72	1,200	1943	Apr. 1, 1943	7.47	6,650
				1944	June 27, 1944	2.72	934
1931	Apr. 19, 1931	3.10	480	1945	May 31, 1945	3.49	1,540
	June 24, 1931	a5.90	-				
1932	Mar. 24, 1932	4.26	2,000	1946	Apr. 24, 1946	4.35	2,340
1933	Apr. 9, 1933	2.99	1,040	1947	Feb. 16, 1947	2.77	956
1934	Apr. 3, 1934	2.55	738	1948	June 1, 1948	3.87	1,890

a Backwater from McCready diversion dam.

b Annual maximum stage; backwater from ice.

Peak stages and discharges of Sprague River near Chiloquin, Oreg.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1949	Apr. 29, 1949	3.13	1,240	1957	Mar. 2, 1957	5.27	3,380
1950	May 27, 1950	3.22	1,320	1958	Feb. 28, 1958	6.55	5,250
1951	Apr. 21, 1951	4.40	2,420	1959	Mar. 6, 1959	2.46	724
1952	Apr. 12, 1952	6.51	5,180	1960	Feb. 12, 1960	3.09	1,180
1953	May 2, 1953	4.94	2,970	1961	Feb. 14, 1961	3.02	1,170
1954	Apr. 9, 1954	5.80	4,110	1962	Apr. 11, 1962	3.86	1,860
1955	Apr. 1, 1955	2.78	976	1963	Oct. 17, 1962	5.22	3,320
1956	Apr. 14, 1956	6.70	5,490	1964	Apr. 14, 1964	4.00	1,860
				1965	Dec. 26, 1964	10.37	14,900

5020. Sprague River at Chiloquin, Oreg.

Location.--Lat 42°34'00", long 121°51'45", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.3, T.35 S., R.7 E., 0.25 mile downstream from Modoc Point Canal, 0.6 mile upstream from mouth, and 0.5 mile south of Chiloquin.

Drainage area.--1,600 sq mi, approximately.

Gage.--Nonrecording prior to June 25, 1917; recording thereafter. Prior to June 25, 1917, at sites within half a mile downstream at different datums. Altitude of gage is 4,180 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,490 cfs prior to June 25, 1917; below 1,390 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for the years 1915 and 1917 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	May 25, 1912	2.6	1,630	1916	Mar. 24, 1916	3.95	2,750
1913	Apr. 16, 1913	4.0	3,350	1917	Apr. 27, 1917	5.3	4,490
1914	Mar. 19, 1914	3.7	3,030	1918	Mar. 28, 1918	2.27	1,400
1915	Mar. 27, 1915	1.95	1,060				

5025. Williamson River below Sprague River, near Chiloquin, Oreg.

Location.--Lat. 42°34'15", long 121°52'35", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.35 S., R.7 E., on right bank 0.2 mile downstream from Sprague River and 0.8 mile southwest of Chiloquin.

Drainage area.--3,000 sq mi, approximately.

Gage.--Recording. Prior to Aug. 31, 1923, at different datum. Datum of gage is 4,155.55 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 6,700 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peak for 1944 is maximum recorded for year. Only annual peaks are shown.

Peak stages and discharges of Williamson River below Sprague River, near Chiloquin, Oreg.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Apr. 27, 1917	-	7,000	1942	Apr. 19, 1942	4.28	2,470
1918	Mar. 28, 1918	2.38	2,000	1943	Apr. 1, 1943	7.29	7,660
1919	Apr. 9, 1919	3.58	3,480	1944	Mar. 22, 1944	3.24	1,300
1920	Mar. 28, 1920	3.37	3,230	1945	May 29, 1945	3.92	2,070
1921	Mar. 13, 1921	3.42	3,260	1946	Apr. 24, 1946	4.71	3,140
1922	Apr. 30, 1922	4.10	4,730	1947	Feb. 16, 1947	3.47	1,550
1923	Apr. 1, 1923	-	2,250	1948	May 24, 1948	4.15	2,310
1924	Feb. 11, 1924	3.75	1,700	1949	May 23, 1949	3.93	2,010
1925	Feb. 8, 1925	4.70	2,890	1950	Apr. 10, 1950	3.80	1,920
1926	Feb. 11, 1926	3.67	1,560	1951	Apr. 21, 1951	4.75	3,200
1927	Apr. 6, 1927	5.69	4,340	1952	Apr. 13, 1952	6.83	6,790
1928	Mar. 30, 1928	5.85	4,490	1953	May 25, 1953	5.23	3,940
1929	Mar. 25, 1929	3.41	1,290	1954	Apr. 10, 1954	6.17	5,420
1930	Feb. 13, 1930	3.92	1,800	1955	Apr. 1, 1955	3.94	2,120
1931	Apr. 19, 1931	3.23	1,080	1956	Apr. 14, 1956	7.09	6,480
1932	Mar. 24, 1932	4.51	2,680	1957	Mar. 2, 1957	5.74	4,650
1933	Apr. 9, 1933	3.57	1,520	1958	Feb. 28, 1958	6.98	6,560
1934	Apr. 3, 1934	3.13	1,090	1959	Jan. 30, 1959	3.59	1,640
1935	Apr. 20, 1935	4.26	2,300	1960	Mar. 11, 1960	3.91	2,050
1936	Apr. 29, 1936	4.57	2,680	1961	Feb. 14, 1961	3.91	2,050
1937	Apr. 19, 1937	4.47	2,540	1962	Apr. 11, 1962	4.53	2,810
1938	Apr. 22, 1938	7.27	7,620	1963	Oct. 17, 1962	5.05	3,700
1939	Mar. 30, 1939	3.75	1,810	1964	Apr. 14, 1964	4.50	2,720
1940	Apr. 3, 1940	6.14	5,550	1965	Dec. 26, 1964	10.56	16,100
1941	Feb. 16, 1941	3.48	1,560				

5035. Annie Creek near Fort Klamath, Oreg.

Location.--Lat 42°46', long 122°03', in NE $\frac{1}{4}$ sec.36, T.32 S., R.6 E., 3 miles south of boundary of Crater Lake National Park and 5 miles northwest of Fort Klamath.

Drainage area.--40 sq mi, approximately.

Gage.--Nonrecording. Prior to May 4, 1923, at site 400 ft upstream at different datum. May 4, 1923, to Apr. 14, 1925, at site 200 ft upstream at different datum. Altitude of gage is 4,300 ft (estimated from bench mark near gage).

Stage-discharge relation.--Defined by current-meter measurements below 54 cfs prior to May 4, 1923; below 86 cfs for period May 4, 1923, to Apr. 14, 1925; and below 150 cfs thereafter.

Bankfull stage.--4 ft.

Remarks.--Peaks for the years 1925 and 1926 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Feb. 13, 1923	24.67	-	1926	May 4, 1926	1.32	86
	July 14, 1923	1.83	108	1927	June 21, 1927	2.42	6179
1924	May 15, 1924	1.72	685				
1925	May 28, 1925	2.40	175				

a Annual maximum stage; backwater from ice.

b Maximum natural flow. Higher peaks for which discharge was not determined occurred during dam breaks.

5040. Wood River at Fort Klamath, Oreg.

Location.--Lat 42°42'05", long 121°59'20", in NW¼ sec.22, T.33 S., R.7½ E., at bridge on State Highway 62 at Fort Klamath.

Drainage area.--90 sq mi, approximately.

Gage.--Nonrecording. Datum of gage is 4,166.65 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--All peaks are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Feb. 17, 1912	2.61	-	1925	Feb. 5, 1925	2.71	470
1913	July 24, 1913	2.31	495				
1914	Apr. 5, 1914	2.11	445	1926a/	Feb. 10, 1926	-	-
1915	Mar. 25, 1915	1.76	370	1927	Dec. 1, 1926	1.98	288
				1928	Mar. 26, 1928	2.80	416
1916	Mar. 19, 1916	1.76	370	1929	Mar. 21, 1929	2.46	380
1917	May 1, 1917	1.71	370	1930	Dec. 18, 1929	2.88	420
1918a/	Feb. 6, 1918	2.31	-				
1919	Apr. 7, 1919	1.46	362	1931	Mar. 13, 1931	1.64	216
1920	Dec. 7, 1919	1.41	348	1932	Mar. 19, 1932	1.84	279
				1933	Apr. 6, 1933	2.38	362
1921a/	Nov. 17, 1920	2.41	520	1934	Jan. 3, 1934	2.70	323
1922	Nov. 24, 1921	-	500	1935	Apr. 14, 1935	2.10	306
1923	Dec. 28, 1922	2.76	324				
1924	Feb. 8, 1924	2.07	380	1936	Apr. 12, 1936	2.34	323

a Partial year.

5055. Fourmile Creek near Odessa, Oreg.

Location.--Lat 42°27'20", long 122°14'30", in NW¼ sec.9, T.36 S., R.5 E., 500 ft downstream from outlet of Fourmile Lake, 8 miles west of Recreation, and 9 miles west of former town of Odessa.

Drainage area.--10.6 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1912; recording thereafter. Prior to Oct. 1, 1912, at site 500 ft upstream at different datum. Altitude of gage is 5,730 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 59 cfs prior to Oct. 1, 1912; below 50 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood of June 7, 1921, reached a stage of 2.85 ft (discharge, about 200 cfs), caused by blasting out gates at outlet of Fourmile Lake.

Remarks.--Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	June 8, 1912	-	99	1915	May 29, 1915	-	66
1913	May 26, June 6, 1913	-	71	1916	June 17-20, 1916	-	50
				1917	June 26-27, 1917	-	96
1914	May 22, 27, 1914	-	56				

5075. Link River at Klamath Falls, Oreg.

Location.--Lat 42°13'25", long 121°47'35", in SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.32, T.38 S., R.9 E., on left bank 600 ft upstream from outlet of Keno Canal and 0.4 mile upstream from Main Street Bridge (U.S. Highway 97) at Klamath Falls.

Drainage area.--3,810 sq mi, approximately, including 27 sq mi in closed basin of Crater Lake.

Gage.--Nonrecording prior to June 6, 1908; recording thereafter. Prior to Sept. 14, 1912, at several sites within half a mile of present site at various datums. Sept. 14, 1912, to Nov. 23, 1923, at site 600 ft downstream at datum 5.42 ft lower. Datum of gage is 4,083.71 ft above mean sea level, datum of 1929, or 4,085.50 ft above mean sea level, datum of Bureau of Reclamation.

Stage-discharge relation.--Defined by current-meter measurements.

Remarks.--Peaks regulated by Upper Klamath Lake (capacity, 584,000 acre-ft between elevations 4,135.0 and 4,143.3 ft beginning in April 1919. Records herein include flow in Keno Canal which, since September 1908, has diverted from Upper Klamath Lake and returns flow 600 ft below station. Peaks are affected by diversion up to 1,200 cfs through Main or "A" Canal of Klamath project during irrigation seasons April to October since at least 1910. Peaks for the years 1905-8 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1904	May 12, 1904	7.30	9,400	1935	Apr. 16, 1935	3.19	4,030
1905	Mar. 29, 1905	4.60	3,400	1936	May 5, 1936	2.95	3,100
1906	Apr. 28, 1906	5.15	4,440	1937	Nov. 6, 1936	2.38	2,270
1907	Apr. 4, 1907	5.8	5,790	1938	Apr. 30, 1938	4.06	6,440
1908	Apr. 7, 1908	-	3,540	1939	Apr. 21, 1939	2.22	2,020
1909	Feb. 20, 1909	3.50	4,990	1940	Mar. 31, 1940	4.00	6,260
1910	Apr. 2, 1910	3.90	5,710	1941	Aug. 9, 1941	2.40	2,300
1911	Apr. 29, 1911	3.85	6,220	1942	Apr. 17, 1942	2.97	3,450
1912	Apr. 18, 1912	3.11	4,810	1943	May 4, 1943	3.88	5,910
1913	Apr. 26, 1913	7.66	4,570	1944	Oct. 4, 1943	2.29	2,180
1914	Apr. 20, 1914	7.85	4,900	1945	Aug. 19, 1945	2.35	2,260
1915	Apr. 29, 1915	7.29	3,960	1946	Mar. 7, 1946	3.07	3,700
1916	Apr. 10, 1916	7.41	4,170	1947	Nov. 16, 1946	2.77	2,990
1917	May 9, 1917	7.8	4,330	1948	June 18, 1948	2.48	2,410
1918	Apr. 1, 1918	6.90	3,350	1949	Dec. 14, 1948	2.52	2,560
1919	Apr. 7, 1919	6.95	3,430	1950	Dec. 16, 1949	2.42	2,340
1920	Dec. 25, 1919	6.00	2,000	1951	May 8, 1951	3.42	4,620
1921	Apr. 4, 1921	8.30	5,000	1952	Apr. 18, 1952	4.19	6,870
1922	May 9, 1922	7.70	3,850	1953	May 27, 1953	3.97	6,180
1923	Jan. 16, 1923	7.18	3,250	1954	Mar. 16, 1954	3.87	5,870
1924	Jan. 15, 1924	2.74	2,820	1955	Mar. 20, 1955	2.48	2,560
1925	Apr. 30, 1925	2.43	2,350	1956	Apr. 17, 1956	3.91	6,260
1926	Dec. 18, 1925	2.96	3,090	1957	Mar. 9, 1957	4.14	6,660
1927	Mar. 17, 1927	2.92	3,030	1958	Mar. 5, 1958	4.07	6,690
1928	Apr. 3, 1928	2.89	3,020	1959	Jan. 5, 1959	2.87	3,320
1929	Oct. 9, 1928	2.35	2,110	1960	Apr. 10, 1960	2.47	2,640
1930	Jan. 9, 1930	2.08	1,750	1961	June 16, 1961	2.25	2,230
1931	Dec. 10, 1930	2.11	1,750	1962	Apr. 11, 1962	2.76	2,870
1932	May 3, 1932	2.80	2,770	1963	Apr. 23, 1963	-	5,040
1933	May 12, 1933	2.56	2,450	1964	Feb. 2, 1964	-	2,880
1934	Mar. 30, 1934	2.99	3,200	1965	Jan. 2, 1965	-	6,940

5105. Klamath River at Spencer Bridge, near Keno, Oreg.

Location.--Lat 42°08'00", long 122°01'55", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.39 S., R.7 E., on right bank 500 ft downstream from Spencer Bridge on State Highway 66, 1.7 miles downstream from Spencer Creek, and 5.5 miles west of Keno.

Drainage area.--4,050 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

Gage.--Nonrecording prior to Sept. 1, 1923; recording thereafter. Prior to Sept. 1, 1923, at site 300 ft upstream at different datums. Datum of gage is 3,774.72 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks regulated by Upper Klamath Lake (usable capacity, 584,000 acre-ft) beginning Apr. 15, 1919. Peaks are affected by large diversions into and out of Klamath River by Lost River diversion canal (capacity, 2,100 cfs) and "A" canal (capacity, 1,100 cfs) beginning prior to period of record and by Midland Canal since 1947. Peaks are maximum observed in 1914-23. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1914	Apr. 21, 1914	2.42	5,130	1923	Jan. 20, 1923	3.65	3,890
1915	Apr. 15, 1915	1.42	3,110	1924	Jan. 14, 1924	5.86	3,220
				1925	Jan. 7, 1925	4.78	2,340
1916	Apr. 1, 1916	1.78	3,810				
1917	May 11, 1917	2.10	4,450	1926	Dec. 21, 1925	5.65	3,000
1918	Apr. 3, 1918	2.4	3,070	1927	Apr. 2, 1927	6.36	3,550
1919	Apr. 17, 1919	2.65	3,430	1928	Apr. 2, 1928	6.27	3,320
1920	Feb. 12, 1920	1.70	1,840	1929	Oct. 11, 1928	4.80	2,240
				1930	Jan. 27, 1930	5.30	2,590
1921	Mar. 24, 1921	3.32	4,270				
1922	May 9, 1922	-	-	1931	Dec. 15, 1930	3.57	1,530

5120. Fall Creek at Copco, Calif.

Location.--Lat 41°58'22", long 122°21'45", in NE $\frac{1}{4}$ sec.36, T.48 N., R.5 W., 1,500 ft upstream from mouth and 0.8 mile south of Fall Creek powerplant and Copco Post Office.

Drainage area.--14.6 sq mi (revised).

Gage.--Nonrecording prior to Aug. 23, 1949; recording thereafter. Prior to Dec. 16, 1937, at site 1,000 ft downstream at different datum. Datum of gage is 2,362.77 ft above mean sea level, datum of 1929, supplementary adjustment of 1947.

Stage-discharge relation.--Defined by current-meter measurements below 42 cfs prior to Dec. 16, 1937; below 90 cfs and extended above on basis of slope-area measurements at 182 and 875 cfs thereafter.

Remarks.--Power company diverts about 4 cfs into Fall Creek from Spring Creek. Peaks are maximum observed for 1929-34, 1937, and 1939-49. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1929	Dec. 27, 1928	1.50	123	1945	Feb. 13, 1945	2.06	130
1930	Feb. 2, 1930	.96	63	1946	Jan. 4, 1946	2.52	198
1931	Dec. 7, 1930	.55	35	1947	Nov. 19, 1946	1.58	62
1932	Feb. 28, 1932	.90	60	1948	Jan. 7, 1948	3.22	392
1933	Mar. 12, 1933	1.32	98	1949	Feb. 22, 1949	2.42	182
1934	Jan. 14, 1934	.65	42	1950	Mar. 18, 1950	2.02	120
1936	Jan. 10, 1936	2.60	360	1951	Oct. 29, 1950	2.42	182
1937	Apr. 13, 1937	1.90	187	1952	Feb. 1, 1952	2.85	262
1938	Dec. 11, 1937	2.25	240	1953	Jan. 18, 1953	3.00	298
1939	Mar. 12, 1939	1.98	125	1954	Jan. 17, 1954	2.47	191
1940	Feb. 28, 1940	2.64	241	1955	Oct. 29, 1954	1.74	85
1941	Feb. 11, 1941	1.77	95	1956	Dec. 22, 1955	4.35	875
1942	Feb. 6, 1942	1.83	103	1957	Feb. 24, 1957	2.86	271
1943	Dec. 27, 1942	2.50	213	1958	Jan. 28, 1958	3.24	372
1944	Feb. 3, 1944	1.68	73	1959	July 2, 1959	1.65	68

5130. Grizzly Creek near Lilyglen, Oreg.
(Published as Beaver Creek near Ashland for 1930-31 and
as Beaver Creek near Lilyglen for 1917-19, 1948-53)

Location.--Lat 42°13'00", long 122°21'40", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.33, T.38 S., R.4 E.,
1.0 mile downstream from Howard Prairie damsite, 6.9 miles north of Pinehurst,
and 7 miles southeast of former post office of Lilyglen.

Drainage area.--29.3 sq mi; at site used prior to Oct. 1, 1948, 27.6 sq mi.

Gage.--Recording. Prior to June 20, 1919, and October 1941 to September 1943 at
site 1 mile upstream at different datums. Datum of gage is 4,406.78 ft above
mean sea level, datum of 1929 (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 210 cfs
prior to June 20, 1919; below 220 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Records for 1942-43, furnished by State engineer of Oregon. Only
annual peaks are shown prior to 1949. Base for partial-duration series,
150 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	May 12, 1917	2.42	470	1951	Dec. 11, 1950	3.07	190
1918	Feb. 6, 1918	1.68	132		Dec. 14, 1950	3.04	181
1919	Mar. 24, 1919	2.53	525		Feb. 4, 1951	a4.07	-
					Feb. 7, 1951	a3.34	-
1942	Jan. 26, 1942	3.25	136				
1943	Nov. 29, 1942	4.35	179	1952	Dec. 1, 1951	2.93	159
					Dec. 27, 1951	a3.37	-
1949	Feb. 26, 1949	a4.71	-		Feb. 3, 1952	a4.68	-
	Apr. 11, 1949	3.13	241		Mar. 25, 1952	3.50	438
	May 2, 1949	3.07	217		Apr. 7, 1952	3.29	330
					May 8, 1952	2.98	194
1950	Jan. 22, 1950	a4.26	-	1953	Jan. 18, 1953	a5.78	350
	Apr. 5, 1950	2.96	156		Feb. 3, 1953	3.00	165
	Apr. 21, 1950	3.09	197		Feb. 6, 1953	3.24	251
1951	Oct. 29, 1950	3.29	276		Apr. 5, 1953	3.02	171
	Dec. 4, 1950	3.08	194		Apr. 27, 1953	3.19	231
	Dec. 7, 1950	3.09	197				

a Annual maximum stage; backwater from ice.

5135. Beaver Creek at Pinehurst, Oreg.
(Published as Little Beaver Creek)

Location.--Lat 42°07'05", long 122°21'55", in SW $\frac{1}{4}$ sec.4, T.40 S., R.4 E., at
Pinehurst, 150 ft upstream from mouth, 0.2 mile downstream from Corral Creek,
and 18 miles southeast of Ashland.

Drainage area.--12.9 sq mi.

Gage.--Recording. Datum of gage is 3,348.81 ft above mean sea level, datum of
1929 (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 270 cfs.

Remarks.--Records for 1943-45 furnished by State engineer of Oregon. Only
annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1944	Mar. 9, 1944	1.69	54	1947	Feb. 12, 1947	2.53	120
1945	Feb. 13, 1945	2.46	114	1948	Jan. 7, 1948	5.05	407
1946	Dec. 28, 1945	2.69	143				

5145. Keene Creek near Ashland, Oreg.
(Published as "at Hyatt Prairie" 1918-22, 1948-58)

Location.--Lat 42°10'15", long 122°28'40", in NW $\frac{1}{4}$ sec.21, T.38 S., R.3 E., on right bank, 0.3 mile upstream from Burnt Creek, 0.6 mile downstream from Hyatt Dam, and 12 miles east of Ashland.

Drainage area.--11.6 sq mi (revised).

Gage.--Recording. Prior to June 30, 1922, at site half a mile upstream at different datum. Datum of gage is 4,706 ft above mean sea level, datum of 1929 (by stadia survey).

Stage-discharge relation.--Prior to June 30, 1922, defined by current-meter measurements below 160 cfs; below 72 cfs thereafter.

Remarks.--Peaks regulated by Hyatt Reservoir (usable capacity, 16,180 acre-ft) since December 1922. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1917	Apr. 25, 1917	4.08	194	1954	May 3, 1954	5.33	b751
1918	Jan. 12, 1918	3.65	186	1955	July 19, 1955	3.13	75
1919	Apr. 24, 1919	3.51	158				
1920	May 9, 1920	3.52	158	1956	July 25, 1956	3.03	68
				1957	Aug. 19, 1957	-	70
1921	Apr. 25, 1921	3.60	176	1958	July 19, 1958	3.31	100
1922	Apr. 21, 1922	a4.72	315	1959	July 31, 1959	3.01	70
				1960	July 19, 1960	3.20	103
1949	July 29, 1949	3.19	74				
1950	Sept. 1, 1950	3.24	82	1961	Aug. 24, 26, 1961	2.97	54
				1962	Aug. 13, 1962	3.05	64
1951	Aug. 6, 1951	3.22	80	1963	July 20, 1963	3.08	74
1952	Aug. 16, 1952	3.21	80	1964	Feb. 22, 1964	3.17	67
1953	Aug. 16, 1953	3.16	80	1965	Feb. 2, 1965	3.33	84

a Annual maximum stage; backwater from ice.

b Caused by failure of flashboards on spillway of Hyatt Reservoir.

5165. Jenny Creek near Copco, Calif.

Location.--Lat 41°58'30", long 122°23'50", in NW $\frac{1}{4}$ sec.35, T.48 N., R.5 W., 0.4 mile upstream from mouth and 2 miles southwest of Copco.

Drainage area.--205 sq mi, of which 11.7 sq mi is noncontributing.

Gage.--Recording. Altitude of gage is 2,300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 740 cfs.

Remarks.--Flow from 11.7 sq mi is regulated by Hyatt Reservoir (usable capacity, 16,180 acre-ft) beginning in December 1922 and diverted into Rogue River basin. Base for partial-duration series, 420 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1923	Jan. 17, 1923	3.69	445	1927	Nov. 30, 1926	7.50	1,540
					Jan. 2, 1927	5.5	900
1924	Feb. 7, 1924	3.64	420		Jan. 6, 1927	4.01	495
					Feb. 3, 1927	5.0	755
1925	Nov. 20, 1924	3.8	445		Feb. 18, 1927	5.10	783
	Dec. 30, 1924	4.5	623		Feb. 20, 1927	8.16	1,960
	Jan. 30, 1925	4.24	545		Mar. 2, 1927	4.09	663
	Feb. 4, 1925	6.24	1,110		Apr. 2, 1927	5.58	1,100
	Feb. 11, 1925	4.65	649		Apr. 28, 1927	4.35	747
	Apr. 19, 1925	4.60	649				
1926	Feb. 4, 1926	4.59	649	1928	Mar. 26, 1928	7.10	1,430
					Apr. 6, 1928	3.70	445
1927	Nov. 25, 1926	4.0	600				

5169. Little Shasta River near Montague, Calif.

Location.--Lat 41°45'11", long 122°17'58", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.15, T.45 N., R.4 W., on right bank three-quarters of a mile downstream from Dry Creek and 12 miles east of Montague.

Drainage area.--48.2 sq mi.

Gage.--Recording. Altitude of gage is 3,280 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	4.76	741	1962	Dec. 20, 1961	2.86	123
1959	Jan. 12, 1959	2.53	75	1963	Oct. 12, 1962	4.23	525
1960	Mar. 7, 1960	3.29	218	1964	June 7, 1964	3.17	147
				1965	Dec. 22, 1964	10.66	5,910
1961	Dec. 1, 1960	2.92	130				

5170. Shasta River near Montague, Calif.

Location.--Lat 41°42'30", long 122°32'20", in NE $\frac{1}{4}$ sec.33, T.45 N., R.6 W., at highway bridge, three-quarters of a mile below Little Shasta River and $\frac{1}{4}$ miles southwest of Montague.

Drainage area.--673 wq mi (revised).

Gage.--Nonrecording prior to June 26, 1923; recording thereafter. Altitude of gage is 2,500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 950 cfs.

Bankfull stage.--7 ft.

Historical data.--Discharge for the peak of Dec. 22, 1956, was 4,870 cfs determined by contracted-opening measurement.

Remarks.--Peaks regulated by Lake Dwinnell (allowable capacity, 30,000 acre-ft) beginning in 1928. Peaks are maximum observed for the years 1912-22. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Feb. 18, 1912	4.0	570	1926	Apr. 9, 1926	6.44	1,160
1913	Jan. 19, 1913	4.3	712	1927	Nov. 30, 1926	10.78	3,210
				1928	Mar. 27, 1928	6.86	1,360
1917	Feb. 24, 1917	5.0	700	1929	Feb. 5, 1929	4.49	449
1918	Mar. 19, 1918	4.1	440	1930	Dec. 15, 1929	4.89	594
1919	Feb. 10, 1919	5.05	980				
1920	Dec. 20, 1919	3.8	315	1931	Mar. 22, 1931	3.60	192
1921	Feb. 21, 1921	8.0	2,000	1932	Mar. 19, 1932	4.16	363
1922	May 20, 1922	4.8	645	1933	Mar. 29, 1933	3.56	208
				1956	Dec. 22, 1955	-	4,870
1924	Feb. 8, 1924	4.48	449				
1925	Feb. 11, 1925	14.9	5,700				

5175. Shasta River near Yreka, Calif.

Location.--Lat 41°49'30", long 122°35'40", in E $\frac{1}{2}$ sec.24, T.46 N., R.7 W., on right bank 0.5 mile upstream from mouth and 7 miles north of Yreka.

Drainage area.--793 sq mi, which includes 139 sq mi above Lake D'innell that is noncontributing.

Gage.--Recording. Altitude of gage is 2,000 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 4,100 cfs.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known. The flood of February 1904 was probably the third largest since 1861. The three next highest floods occurred December 1867, January 1881, and January 1890, but the relative rank of these floods is not known. The seventh greatest flood since 1861 was that of January 1958.

Remarks.--Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1934	Jan. 3, 1934	2.89	166	1948	Jan. 7, 1948	5.02	1,060
1935	Jan. 7, 1935	3.25	331		Apr. 30, 1948	3.73	410
1936	Jan. 9, 1936	3.48	400	1949	Dec. 7, 1948	3.89	466
	Jan. 11, 1936	3.85	554		Feb. 10, 1949	4.15	568
	Jan. 13, 1936	3.83	545		Feb. 23, 1949	3.93	487
	Jan. 15, 1936	4.80	1,000	1950	Jan. 19, 1950	4.92	924
1937	Apr. 15, 1937	3.86	500		Jan. 23, 1950	4.60	735
1938					Feb. 5, 1950	4.43	642
	Nov. 23, 1937	3.72	449	1951	Oct. 30, 1950	4.69	784
	Dec. 11, 1937	6.17	1,880		Dec. 4, 1950	4.75	820
	Dec. 16, 1937	3.79	450		Dec. 14, 1950	4.50	680
	Jan. 17, 1938	4.04	546		Jan. 18, 1951	4.94	938
	Feb. 3, 1938	4.38	691		Jan. 21, 1951	5.06	1,020
	Feb. 7, 1938	5.61	1,440		Feb. 5, 1951	5.98	1,700
	Feb. 14, 1938	4.74	877	1952			
	Feb. 25, 1938	4.31	660		Dec. 5, 1951	4.09	470
	Mar. 3, 1938	5.20	1,150		Dec. 27, 1951	5.82	1,580
	Mar. 23, 1938	6.24	1,930		Jan. 24, 1952	4.47	664
	Apr. 20, 1938	4.45	725		Feb. 2, 1952	6.26	1,940
	May 16, 1938	4.16	594		Feb. 16, 1952	4.94	938
1939	Mar. 27, 1939	3.42	303		Mar. 24, 1952	4.67	774
1940				1953			
	Dec. 11, 1939	4.08	562		Dec. 10, 1952	5.08	1,040
	Jan. 4, 1940	3.94	507		Jan. 18, 1953	6.90	2,520
	Feb. 6, 1940	3.91	496		Feb. 8, 1953	4.61	740
	Feb. 27, 1940	4.45	725		Mar. 21, 1953	4.02	439
	Feb. 29, 1940	6.72	2,440		May 24, 1953	4.54	702
	Mar. 2, 1940	5.36	1,330	1954			
	Mar. 27, 1940	4.16	623		Nov. 24, 1953	4.12	485
	Mar. 31, 1940	5.64	1,530		Jan. 17, 1954	4.32	585
1941					Jan. 23, 1954	4.50	680
	Dec. 25, 1940	5.41	1,370		Jan. 28, 1954	6.30	1,980
	Jan. 26, 1941	3.78	454		Feb. 13, 1954	5.44	1,290
	Feb. 12, 1941	5.27	1,280		Mar. 11, 1954	4.77	832
	Feb. 24, 1941	4.19	637	1955			
	Mar. 1, 1941	6.35	2,100		Nov. 13, 1954	3.52	228
	Mar. 31, 1941	5.67	1,550	1956			
	Apr. 2, 1941	5.36	1,330		Nov. 21, 1955	4.14	518
	Apr. 5, 1941	5.70	1,570		Dec. 22, 1955	9.43	6,090
	May 14, 1941	4.23	657		Jan. 8, 1956	4.60	750
1942					Jan. 15, 1956	6.94	2,790
	Dec. 4, 1941	3.90	504		Feb. 21, 1956	6.73	2,560
	Dec. 18, 1941	5.27	1,270		Mar. 26, 1956	4.22	554
	Jan. 9, 1942	3.96	530		May 11, 1956	4.03	468
1945				1957			
	Feb. 9, 1945	3.87	438		Feb. 26, 1957	5.74	1,500
	Feb. 14, 1945	4.67	847		Mar. 5, 1957	4.50	665
	May 26, 1945	3.93	464		Mar. 12, 1957	6.30	2,000
1946					Mar. 26, 1957	4.05	438
	Dec. 28, 1945	4.62	817	1958			
	Jan. 4, 1946	4.63	823		Nov. 14, 1957	5.17	1,090
1947					Dec. 21, 1957	5.44	1,260
	Feb. 13, 1947	3.78	403		Dec. 28, 1957	5.50	1,300
1948					Jan. 29, 1958	7.89	3,780
	Jan. 5, 1948	4.02	513		Feb. 16, 1958	6.02	1,750
					Feb. 25, 1958	7.39	3,200

Peak stages and discharges of Shasta River near Yreka, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Apr. 3, 1958	5.51	1,310	1963	Dec. 2, 1962	6.76	2,410
	June 5, 1958	4.37	596		Dec. 17, 1962	4.31	519
1959	Feb. 22, 1959	4.15	492		Feb. 3, 1963	6.18	1,700
1960	Feb. 9, 1960	6.02	1,740		Feb. 20, 1963	4.22	459
	Mar. 7, 1960	4.15	505		Apr. 15, 1963	4.46	582
1961	Nov. 25, 1960	4.02	444	1964	Jan. 20, 1964	7.83	3,720
	Dec. 1, 1960	5.58	1,370	1965	Dec. 22, 1964	12.92	21,500
	Feb. 11, 1961	4.87	892		Jan. 7, 1965	8.05	1,760
1962	Nov. 28, 1961	4.40	620		Jan. 11, 1965	6.42	2,120
	Dec. 21, 1961	4.69	784		Jan. 24, 1965	4.96	856
	Feb. 9, 1962	-	-		Jan. 30, 1965	4.54	630
1963	Oct. 13, 1962	5.85	1,590		Apr. 1, 1965	4.16	464
	Nov. 27, 1962	4.45	655		Apr. 6, 1965	4.33	533
					Apr. 17, 1965	4.34	533
					Apr. 22, 1965	4.21	474

5178. Beaver Creek near Klamath River, Calif.

Location.--Lat 41°53'40", long 122°49'20", in NE¹/₄SW¹/₄ sec.30, T.47 N., R.8 W., on left bank 0.1 mile downstream from Buckhorn Gulch, 1.9 miles upstream from mouth, and 14.8 miles northwest of Yreka.

Drainage area.--106 sq mi.

Gage.--Nonrecording prior to Mar. 17, 1959; recording thereafter. Prior to June 12, 1959, at site 0.6 mile downstream at different datum. Altitude of gage is 1,920 ft (from topographic map).

Stage-discharge relation.--Peak discharge of 1956, defined by rating used subsequent to June 12, 1959, which was defined by current-meter measurements below 600 cfs.

Bankfull stage.--10 ft.

Remarks.--Only annual peaks are shown for the years 1953 and 1956. Base for partial-duration series, 400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	Jan. 18, 1953	8.0	4,000	1963	Oct. 12, 1962	5.31	535
1956	Aug. 20, 1956	10.6	8,000		Nov. 26, 1962	5.01	404
1960	Feb. 8, 1960	6.11	937		Dec. 2, 1962	6.80	2,000
	Mar. 7, 1960	5.12	485		Dec. 15, 1962	4.17	495
	June 2, 1960	4.94	404		Feb. 3, 1963	5.25	1,160
1961	Feb. 10, 1961	6.74	1,500		Apr. 6, 1963	4.10	540
1962	Apr. 27, 1962	4.84	396		May 21, 1963	4.33	625
				1964	Nov. 8, 1963	4.12	550
				1965	Dec. 22, 1964	10.6	7,700

a Adjusted to present datum.

5195. Scott River near Fort Jones, Calif.

Location.--Lat 41°38'28", long 123°00'54", in NE¼NE¼ sec.29, T.44 N., R.10 W., on right bank 1.7 miles upstream from Snow Creek and 10.8 miles downstream from Fort Jones.

Drainage area.--653 sq mi.

Gage.--Recording. Datum of gage is 2,625.80 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs and extended above on basis of slope-area measurement at 38,500 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known. The flood of February 1904 was probably the third largest since 1861. The four next highest floods occurred December 1864, December 1867, January 1881, and January 1890, but the relative rank of these four floods is not known. The eighth greatest flood since 1861 was that of January 1953.

Remarks.--Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1942	Dec. 17, 1941	9.50	5,500	1952	May 28, 1952	7.53	3,170
	Jan. 8, 1942	-	-		June 7, 1952	7.19	2,830
	Jan. 27, 1942	-	-				
	Feb. 6, 1942	-	-	1953	Jan. 9, 1953	9.60	5,640
	May 26, 1942	8.54	4,250		Jan. 13, 1953	-	5,400
					Jan. 19, 1953	15.08	16,000
1943	Nov. 27, 1942	7.99	3,640		Feb. 4, 1953	7.16	2,810
	Nov. 30, 1942	7.28	2,900		Apr. 27, 1953	7.67	3,330
	Dec. 2, 1942	7.29	2,910		May 13, 1953	7.30	2,950
	Dec. 28, 1942	10.78	7,450		June 7, 1953	7.11	2,760
	Dec. 31, 1942	6.86	4,420		June 18, 1953	6.66	2,340
	Jan. 22, 1943	11.65	8,870				
	Mar. 29, 1943	6.85	2,520	1954	Nov. 24, 1953	8.79	4,570
	Apr. 5, 1943	6.65	2,340		Jan. 17, 1954	6.96	2,610
	Apr. 21, 1943	6.63	2,320		Jan. 23, 1954	6.38	2,040
	June 1, 1943	6.30	2,050		Jan. 28, 1954	8.53	4,270
					Feb. 13, 1954	9.58	5,610
1944	May 7, 1944	5.41	1,350		Mar. 10, 1954	9.61	5,650
					Apr. 5, 1954	6.38	2,040
1945	Feb. 9, 1945	7.16	2,790		Apr. 18, 1954	6.82	2,640
	Feb. 14, 1945	7.65	3,240		Apr. 24, 1954	6.50	2,150
					May 9, 1954	6.34	2,010
1946	Dec. 29, 1945	11.38	8,410				
	Jan. 5, 1946	7.58	3,180	1955	May 21, 1955	5.66	1,480
	Apr. 19, 1946	6.27	2,030				
	Apr. 26, 1946	6.41	2,140	1956	Dec. 22, 1955	21.40	38,500
					Jan. 4, 1956	6.72	2,600
1947	Nov. 23, 1946	6.59	2,280		Jan. 7, 1956	6.60	2,480
	Feb. 12, 1947	7.10	2,740		Jan. 15, 1956	14.05	15,100
					Jan. 23, 1956	9.11	5,550
1948	Jan. 4, 1948	6.47	2,100		Feb. 21, 1956	9.76	6,520
	Jan. 8, 1948	11.61	8,800		Mar. 26, 1956	6.48	2,130
	May 27, 1948	6.67	2,260		Apr. 24, 1956	7.24	2,880
	June 6, 1948	6.67	2,260		May 4, 1956	6.62	2,260
					May 23, 1956	7.38	3,020
1949	Apr. 18, 1949	6.42	2,000		May 31, 1956	6.69	2,330
	May 13, 1949	7.03	2,470				
				1957	Feb. 26, 1957	10.45	7,210
1950	Jan. 23, 1950	6.95	2,410		Mar. 5, 1957	7.59	3,240
	Mar. 19, 1950	7.09	2,520		Mar. 9, 1957	7.30	2,940
					Mar. 12, 1957	8.60	4,400
1951	Oct. 30, 1950	11.22	8,740		May 18, 1957	7.28	2,920
	Dec. 4, 1950	10.25	6,850				
	Dec. 7, 1950	9.08	4,880	1958	Nov. 14, 1957	9.01	4,910
	Jan. 18, 1951	6.56	2,200		Dec. 21, 1957	7.42	3,040
	Feb. 5, 1951	12.02	10,400		Dec. 28, 1957	7.79	5,460
					Jan. 29, 1958	12.35	11,400
1952	Dec. 1, 1951	7.43	3,070		Feb. 7, 1958	7.28	2,970
	Dec. 28, 1951	8.13	3,830		Feb. 12, 1958	9.92	6,640
	Feb. 2, 1952	12.11	10,600		Feb. 16, 1958	12.03	10,600
	Feb. 16, 1952	7.22	2,860		Feb. 19, 1958	11.91	10,400
	Mar. 26, 1952	7.24	2,880		Feb. 28, 1958	13.43	14,000
	Apr. 7, 1952	7.27	2,910		Apr. 18, 1958	6.71	2,370
	Apr. 28, 1952	7.24	2,880		May 12, 1958	8.05	3,910
	May 20, 1952	7.54	3,180		June 2, 1958	6.57	2,240

Peak stages and discharges of Scott River near Fort Jones, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	June 18, 1958	6.59	2,260	1963	Feb. 1, 1963	11.26	7,970
1959	Jan. 12, 1959	9.12	5,470		Feb. 3, 1963	12.88	11,300
					Apr. 6, 1963	8.08	3,420
1960	Feb. 8, 1960	10.79	8,220		Apr. 15, 1963	8.71	4,170
	Mar. 7, 1960	7.40	3,130		May 7, 1963	7.33	2,620
	May 27, 1960	6.64	2,220		May 21, 1963	7.43	2,720
1961	Jan. 31, 1961	6.74	2,340	1964	Nov. 9, 1963	8.46	3,870
	Feb. 11, 1961	10.42	7,560		Nov. 14, 1963	7.68	2,980
	June 2, 1961	6.57	2,130		Jan. 20, 1964	8.96	5,860
1962	Dec. 20, 1961	6.91	2,540	1965	Dec. 11, 1964	8.18	3,540
					Dec. 22, 1964	25.34	54,600
1963	Oct. 13, 1962	10.92	8,460		Jan. 6, 1965	7.48	2,980
	Nov. 12, 1962	6.46	2,000		Jan. 11, 1965	7.76	3,280
	Nov. 26, 1962	9.49	5,980		Jan. 24, 1965	8.50	5,500
	Dec. 3, 1962	13.22	13,500		Apr. 19, 1965	7.98	3,520
	Dec. 15, 1962	8.16	3,510		Apr. 29, 1965	7.28	2,780

5205. Klamath River near Seiad Valley, Calif.

Location.--Lat 41°51'20", long 123°13'50", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.3, T.46 N., R.12 W., on right bank 0.4 mile upstream from Bittenbender Creek, 1.4 miles downstream from Grider Creek, and 2.2 miles west of Seiad Valley.

Drainage area.--6,980 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

Gage.--Nonrecording prior to June 1925; recording subsequent to July 1951.

Prior to July 1925, at site $3\frac{1}{2}$ miles upstream at different datum. Altitude of gage is 1,320 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 8,300 cfs prior to July 1925; defined below 25,000 cfs and extended above on basis of slope-area measurements at 55,200 and 122,000 cfs thereafter.

Historical data.--Flood of 1927 reached a peak stage of 22 ft, from information furnished by local residents.

Remarks.--Peaks regulated by reservoirs and powerplants above station since beginning of record (regulation increased considerably after April 1919) and may be affected by large diversions for irrigation. Peaks for the years 1913-25 observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1913	Apr. 26, 1913	7.5	9,190	1952	Feb. 2, 1952	14.10	25,400
1914	Dec. 31, 1913	13.3	26,500	1953	Jan. 19, 1953	20.10	55,200
1915	Feb. 3, 1915	9.5	14,600	1954	Feb. 13, 1954	-	20,900
				1955	May 21, 1955	6.44	5,990
1916	Feb. 10, 1916	10.2	16,800				
1917	May 14, 1917	7.9	9,780	1956	Dec. 22, 1955	29.2	122,000
1918	Dec. 1, 1917	6.4	6,380	1957	Feb. 26, 1957	-	25,000
1919	Feb. 9, 1919	10.0	15,300	1958	Feb. 25, 1958	16.92	38,800
1920	Dec. 22, 1919	5.0	3,650	1959	Jan. 12, 1959	8.90	11,000
				1960	Feb. 8, 1960	11.90	19,600
1921	Feb. 21, 1921	12.1	21,800				
1922	May 18, 1922	7.9	9,780	1961	Feb. 11, 1961	11.03	17,000
1923	Dec. 28, 1922	6.8	7,250	1962	Dec. 21, 1961	7.55	7,910
1924	Feb. 9, 1924	6.3	6,170	1963	Dec. 2, 1962	16.08	35,100
1925	Feb. 4, 1925	12.7	23,700	1964	Jan. 20, 1964	12.05	20,100
				1965	Dec. 23, 1964	33.75	165,000
1927	-	22	-				

5215. Indian Creek near Happy Camp, Calif.

Location.--Lat 41°50'50", long 123°23'10", in SE $\frac{1}{4}$ sec.22, T.17 N., R.7 E., on left bank 1.5 miles upstream from Slater Creek, 3.8 miles north of Happy Camp, and 4.5 miles upstream from mouth.

Drainage area.--118 sq mi.

Gage.--Nonrecording prior to December 1956; recording thereafter. Prior to September 1921, at sites 0.25 mile upstream at different datums. Altitude of gage is 1,300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,300 cfs prior to 1921; defined below 4,200 cfs and extended above on basis of slope-area measurement at 23,000 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks for period 1912-15 are maximum observed and may be affected by diversion through Reeve Davis flume for mining purposes. Only annual peaks are shown prior to 1957. Base for partial-duration series, 2,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Feb. 17, 1912	10.6	8,430	1961	Nov. 24, 1960	12.16	3,850
1913	Nov. 9, 1912	6.7	2,830		Jan. 31, 1961	13.95	5,060
1914	Jan. 2, 1914	7.5	3,150		Feb. 10, 1961	15.80	6,540
1915	Feb. 1, 1915	9.2	5,180		Mar. 14, 1961	8.94	2,300
1956	Dec. 21, 1955	29.0	23,000	1962	Nov. 23, 1961	9.72	2,610
					Dec. 19, 1961	11.28	3,390
1957	Feb. 24, 1957	13.65	4,610	1963	Oct. 12, 1962	12.12	3,720
	Feb. 26, 1957	19.85	10,200		Nov. 26, 1962	13.27	4,410
	Mar. 4, 1957	9.73	2,530		Dec. 2, 1962	19.34	9,570
	Mar. 11, 1957	10.10	2,700		Jan. 31, 1963	15.12	5,700
1958	Nov. 13, 1957	13.45	4,490		Feb. 3, 1963	14.15	5,000
	Dec. 21, 1957	13.05	4,160		Apr. 14, 1963	10.22	2,760
	Dec. 28, 1957	8.60	2,080		May 5, 1963	10.50	2,900
	Jan. 29, 1958	19.39	8,100	1964	Nov. 8, 1963	-	2,500
	Feb. 12, 1958	14.75	5,250		Jan. 20, 1964	10.32	2,810
	Feb. 15, 1958	19.30	8,050	1965	Dec. 1, 1964	9.80	2,580
	Feb. 18, 1958	16.50	6,300		Dec. 10, 1964	15.74	4,720
	Feb. 24, 1958	17.80	7,080		Dec. 22, 1964	36.59	39,000
1959	Jan. 12, 1959	23.54	14,400		Jan. 23, 1965	14.35	4,430
	Jan. 27, 1959	11.55	3,480		Jan. 31, 1965	11.44	2,160
1960	Feb. 8, 1960	17.70	8,100		Feb. 5, 1965	11.32	2,020
	Mar. 7, 1960	11.06	3,190		Apr. 19, 1965	14.68	4,690
	May 26, 1960	10.60	2,950				

5222. Elk Creek near Happy Camp, Calif.

Location.--Lat 41°44'40", long 123°20'50", in NE $\frac{1}{4}$ sec.36, T.16 N., R.7 E., on left bank 0.15 mile downstream from East Fork, 4 miles upstream from mouth, and 4 miles south of Happy Camp.

Drainage area.--90.4 sq mi.

Gage.--Recording. Altitude of gage is 1,300 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,600 cfs and extended above on basis of slope-area measurement at 14,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1957. Base for partial-duration series, 800 cfs.

Peak stages and discharges of Elk Creek near Happy Camp, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 21, 1955	15.3	14,400	1961	Jan. 31, 1961	5.59	1,670
1957	Feb. 26, 1957	-	4,000		Feb. 10, 1961	6.62	2,830
1958	Nov. 13, 1957	5.48	1,540	1962	Dec. 20, 1961	4.92	1,010
	Dec. 21, 1957	5.78	1,860				
	Dec. 28, 1957	-	(a)	1963	Oct. 9, 1962	4.92	1,010
	Jan. 12, 1958	-	(a)		Oct. 12, 1962	6.54	2,740
	Jan. 29, 1958	7.72	4,150		Nov. 12, 1962	5.42	1,480
	Feb. 12, 1958	6.24	2,380		Nov. 26, 1962	6.26	2,400
	Feb. 15, 1958	7.37	3,730		Dec. 2, 1962	7.90	4,370
	Feb. 24, 1958	6.91	3,180		Dec. 15, 1962	4.85	950
	May 10, 1958	4.83	1,000		Jan. 31, 1963	6.57	2,770
	May 17, 1958	4.79	963		Feb. 3, 1963	6.56	2,760
1959	Jan. 12, 1959	7.26	3,600		Apr. 6, 1963	5.47	1,530
	Jan. 27, 1959	4.82	986		Apr. 14, 1963	5.02	1,100
1960	Feb. 8, 1960	6.69	2,920	1964	May 7, 1963	5.12	1,190
	Mar. 7, 1960	5.46	1,540		May 20, 1963	4.98	1,060
	May 26, 1960	5.38	1,470				
1961	Nov. 25, 1960	5.56	1,640		Nov. 8, 1963	6.32	2,470
	Dec. 18, 1960	4.77	946		Nov. 14, 1963	5.52	1,600
					Nov. 23, 1963	4.79	962
					Jan. 20, 1964	6.54	2,740

a Discharge unknown; exceeded base.

5223. South Fork Salmon River near Forks of Salmon, Calif.

Location.--Lat 41°13'20", long 123°15'00", in SE¹ sec.30, T.39 N., R.12 W., on left bank 100 ft downstream from Methodist Creek and 4.5 miles southeast of town of Forks of Salmon.

Drainage area.--252 sq mi.

Gage.--Nonrecording prior to Aug. 23, 1957; recording thereafter. Prior to Aug. 23, 1957, at datum 6.66 ft higher. Altitude of gage is 1,450 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,800 cfs and extended above on basis of slope-area measurement at 24,200 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peaks are shown prior to Oct. 1, 1957. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Nov. 24, 1953	-	5,400	1962	Dec. 19, 1961	7.94	3,230
1955	Dec. 31, 1954	-	2,800	1963	Oct. 12, 1962	11.88	9,300
1956	Dec. 22, 1955	12.2	24,200		Nov. 26, 1962	9.60	5,600
1957	Feb. 26, 1957	-	2,600		Dec. 2, 1962	12.58	10,600
1958	Nov. 14, 1957	-	3,300		Feb. 1, 1963	10.10	6,640
	Dec. 21, 1957	8.61	3,950		Feb. 3, 1963	9.98	6,470
	Dec. 28, 1957	8.36	3,600		Apr. 6, 1963	7.84	3,660
	Jan. 29, 1958	11.16	7,970		Apr. 14, 1963	7.77	3,570
	Feb. 15, 1958	11.10	7,870	1964	Nov. 8, 1963	9.11	5,290
	Feb. 18, 1958	-	6,000		Nov. 14, 1963	8.45	4,440
	Feb. 24, 1958	11.15	7,960		Jan. 20, 1964	11.10	8,110
1959	Jan. 12, 1959	10.99	7,690	1965	Dec. 1, 1964	-	3,800
1960	Feb. 8, 1960	10.75	7,330		Dec. 10, 1964	-	5,800
	Mar. 7, 1960	7.95	3,230		Dec. 22, 1964	21.73	31,400
1961	Nov. 25, 1960	7.80	3,030		Jan. 6, 1965	-	5,600
	Feb. 11, 1961	9.62	5,630		Jan. 24, 1965	-	5,300
					Apr. 19, 1965	9.26	3,470

5224. North Fork Salmon River near Forks of Salmon, Calif.

Location.--Lat 41°16'02", long 123°18'12", in NE $\frac{1}{4}$ sec.18, T.10 N., R.8 E., on right bank 0.4 mile downstream from Pollocks Gulch, 1.2 miles upstream from Forks of Salmon, and 1.3 miles upstream from mouth.

Drainage area.--203 sq mi.

Gage.--Recording. Altitude of gage is 1,240 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 2,100 cfs and extended above on basis of slope-area measurement at 7,880 cfs.

Remarks.--Base for partial-duration series, 2,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 12, 1959	12.17	7,000	1963	Nov. 12, 1962	8.67	2,700
	Jan. 27, 1959	8.99	2,990		Nov. 26, 1962	11.26	5,520
1960	Feb. 8, 1960	12.80	7,880		Dec. 2, 1962	14.27	10,500
	Mar. 7, 1960	9.58	3,620		Jan. 31, 1963	11.30	5,580
	May 26, 1960	9.29	3,290		Feb. 3, 1963	12.44	7,280
1961	Nov. 24, 1960	9.08	2,940	1964	Apr. 6, 1963	10.69	4,790
	Feb. 11, 1961	11.02	5,190		May 20, 1963	8.48	2,530
1962	Dec. 19, 1961	11.00	5,160		Nov. 8, 1963	11.61	6,010
					Nov. 14, 1963	8.94	2,950
1963	Oct. 9, 1962	8.83	2,690	1965	Jan. 20, 1964	9.69	3,650
	Oct. 12, 1962	11.47	5,820		Dec. 22, 1964	28.2	30,000

5225. Salmon River at Somesbar, Calif.

Location.--Lat 41°22'50", long 123°28'10", in NW $\frac{1}{4}$ sec.2, T.11 N., R.6 E., on right bank 0.5 mile east of Somesbar Post Office and 1.5 miles upstream from mouth.

Drainage area.--746 sq mi.

Gage.--Nonrecording at different datum prior to October 1927; recording thereafter. Altitude of gage is 500 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 15,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known. The floods of January 1881 and January 1890 were probably equivalent and are next largest. These four floods are followed in magnitude by the floods of February 1927 and January 1953.

Remarks.--Peaks for the years 1912 and 1914-15 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1935. Base for partial-duration series, 7,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Feb. 17, 1912	14.1	23,800	1936	Jan. 2, 1936	9.18	11,000
1913	-	-	-		Jan. 11, 1936	10.16	13,600
1914	Dec. 31, 1913	14.0	23,500		Jan. 14, 1936	13.0	21,600
1915	Feb. 1, 1915	11.8	17,400		Feb. 21, 1936	8.05	8,530
1927	February 1927	24.8	49,000	1937	Apr. 13, 1937	12.18	19,400
1928	Mar. 26, 1928	13.0	21,200				
1929	May 21, 1929	6.30	3,770	1938	Nov. 20, 1937	12.42	20,300
1931	Mar. 18, 1931	7.69	7,250		Nov. 23, 1937	8.24	9,350
1932	Mar. 19, 1932	12.3	19,300		Dec. 11, 1937	14.8	27,000
1933	May 29, 1933	7.79	7,480		Jan. 22, 1938	7.65	7,880
	June 10, 1933	7.90	7,750		Feb. 7, 1938	7.60	7,750
1934	Mar. 28, 1934	9.00	10,600		Mar. 16, 1938	8.30	9,500
	Apr. 29, 1935	7.14	5,880		Mar. 19, 1938	8.79	10,500
1935					Mar. 23, 1938	9.00	11,300

Peak stages and discharges of Salmon River at Somesbar, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1938	Apr. 19, 1938	8.35	9,700	1953	Jan. 18, 1953	19.23	45,900
	Apr. 30, 1938	7.93	8,690		Feb. 3, 1953	7.53	8,000
	May 15, 1938	9.00	11,300		Feb. 6, 1953	7.29	7,370
	May 28, 1938	7.44	7,530		Apr. 27, 1953	8.34	10,200
					May 19, 1953	7.90	8,960
1939	Mar. 13, 1939	7.50	7,660		June 7, 1953	7.42	7,710
1940	Feb. 6, 1940	7.54	7,760	1954	Nov. 24, 1953	11.66	19,500
	Feb. 28, 1940	12.75	21,200		Jan. 17, 1954	8.31	10,100
	Mar. 30, 1940	9.00	11,300		Jan. 23, 1954	7.40	7,660
1941	Dec. 21, 1940	7.59	8,100		Jan. 28, 1954	9.77	14,200
	Dec. 27, 1940	7.14	7,110		Feb. 12, 1954	9.15	12,400
1942	Dec. 2, 1941	12.70	21,100	1955	Dec. 31, 1954	7.27	7,500
	Dec. 16, 1941	9.10	11,600	1956	Nov. 19, 1955	8.01	9,380
	Dec. 18, 1941	8.80	10,900		Dec. 19, 1955	11.42	18,800
	Jan. 7, 1942	7.49	7,880		Dec. 22, 1955	28.80	84,000
	Feb. 6, 1942	8.82	11,000		Jan. 15, 1956	18.73	43,000
	May 25, 1943	8.45	10,100		Jan. 22, 1956	12.17	20,000
1943	Nov. 24, 1942	8.31	9,740		Feb. 21, 1956	9.85	13,200
	Nov. 27, 1942	9.31	12,100		May 23, 1956	7.66	7,070
	Nov. 29, 1942	8.07	9,180	1957	Oct. 30, 1956	7.69	7,140
	Dec. 1, 1942	8.39	9,940		Dec. 11, 1956	8.50	9,350
	Dec. 24, 1942	8.15	9,580		Feb. 26, 1957	12.99	22,700
	Dec. 27, 1942	13.20	22,400		Mar. 5, 1957	9.12	11,100
	Dec. 31, 1942	10.65	15,600		Mar. 12, 1957	9.57	12,400
	Jan. 21, 1943	12.68	21,000		May 18, 1957	8.15	8,370
1944	Mar. 10, 1944	5.87	4,420	1958	Nov. 13, 1957	11.64	18,300
1945	Feb. 8, 1945	8.65	10,500		Dec. 21, 1957	9.54	12,300
	Feb. 13, 1945	10.72	15,700		Dec. 28, 1957	9.58	12,400
1946	Nov. 28, 1945	7.80	8,970		Jan. 29, 1958	15.00	34,400
	Dec. 28, 1945	15.82	33,000		Feb. 12, 1958	10.77	17,800
	Jan. 4, 1946	8.23	10,100		Feb. 16, 1958	13.35	27,500
1947	Nov. 19, 1946	7.69	8,120		Feb. 18, 1958	11.62	20,600
	Feb. 12, 1947	7.37	7,750		Feb. 24, 1958	12.48	23,900
	Mar. 10, 1947	7.18	7,310	1959	Jan. 12, 1959	11.70	21,000
1948	Oct. 16, 1947	8.06	9,290		Jan. 27, 1959	7.90	9,530
	Jan. 4, 1948	8.44	10,200	1960	Feb. 8, 1960	12.97	25,900
	Jan. 7, 1948	15.68	32,500		Mar. 7, 1960	8.43	10,400
	Feb. 22, 1948	7.39	7,700		May 26, 1960	8.12	9,500
1949	Feb. 22, 1949	6.97	6,730	1961	Nov. 24, 1960	7.64	8,160
1950	Jan. 18, 1950	8.98	11,500		Feb. 11, 1961	10.48	16,700
	Jan. 23, 1950	7.93	8,980	1962	Dec. 19, 1961	9.27	13,100
	Mar. 17, 1950	9.30	12,300	1963	Oct. 12, 1962	11.32	19,600
1951	Oct. 29, 1950	12.75	21,200		Nov. 12, 1962	7.23	7,500
	Nov. 18, 1950	7.27	7,400		Nov. 26, 1962	10.14	15,700
	Dec. 3, 1950	12.18	20,500		Dec. 2, 1962	15.57	37,100
	Dec. 7, 1950	9.54	13,700		Dec. 15, 1962	7.10	7,160
	Jan. 18, 1951	8.12	9,960		Feb. 1, 1963	11.20	19,200
	Jan. 21, 1951	7.72	8,920		Feb. 3, 1963	11.37	19,800
	Feb. 5, 1951	14.1	25,500		Apr. 6, 1963	9.75	14,600
1952	Dec. 1, 1951	9.62	13,900		Apr. 14, 1963	7.83	9,060
	Dec. 27, 1951	8.60	11,200		May 20, 1963	7.17	7,240
	Feb. 2, 1952	12.88	22,500	1964	Nov. 9, 1963	10.90	18,200
	Feb. 16, 1952	8.05	9,780		Nov. 14, 1963	7.87	9,160
	Mar. 26, 1952	7.15	7,440		Jan. 20, 1964	11.23	19,300
	Apr. 28, 1952	7.03	7,130	1965	Dec. 1, 1964	7.70	9,660
	May 20, 1952	7.25	7,700		Dec. 10, 1964	-	17,000
	May 27, 1952	7.39	8,060		Dec. 22, 1964	45.3	133,000
1953	Jan. 9, 1953	10.08	15,100		Jan. 6, 1965	-	18,000
	Jan. 13, 1953	9.10	12,500		Jan. 24, 1965	-	16,000
					Apr. 19, 1965	-	14,000

5230. Klamath River at Somesbar, Calif.

Location.--Lat 41°22'40", long 123°29'30", in NE $\frac{1}{4}$ sec.4, T.11 N., R.6 E., on left bank 300 ft downstream from Salmon River and 1 mile west of Somesbar Post Office.

Drainage area.--8,480 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

Gage.--Recording. Altitude of gage is 450 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 50,000 cfs and extended above to 202,000 cfs on basis of slope-conveyance study.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks are partly regulated by reservoirs and powerplants above station. Only annual peaks are shown prior to Oct. 1, 1946. Base for partial-duration series, 25,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	Feb. 21, 1927	50.8	141,000	1951	Dec. 7, 1950	22.55	45,100
1928	Mar. 26, 1928	27.9	60,300		Jan. 18, 1951	19.35	36,200
1929	Dec. 29, 1928	10.57	13,700		Jan. 21, 1951	18.05	32,700
					Feb. 4, 1951	31.8	72,400
1931	Mar. 18, 1931	12.10	17,600				
1932	Mar. 19, 1932	24.8	51,600	1952	Dec. 1, 1951	21.65	42,600
1933	June 9, 1933	13.01	19,900		Dec. 27, 1951	20.70	40,000
1934	Mar. 28, 1934	13.75	21,300		Feb. 2, 1952	30.20	67,600
1935	Apr. 16, 1935	12.48	18,000		Feb. 16, 1952	17.06	30,100
					Mar. 26, 1952	17.30	30,700
1936	Jan. 15, 1936	27.8	60,000		Apr. 30, 1952	16.00	27,200
1937	Apr. 14, 1937	27.6	59,500				
1938	Dec. 11, 1937	32.3	73,700	1953	Jan. 9, 1953	27.5	59,500
1939	Dec. 3, 1938	15.77	26,500		Jan. 18, 1953	49.7	137,000
1940	Feb. 28, 1940	31.1	70,300		Feb. 6, 1953	17.55	31,400
					Apr. 27, 1953	18.43	33,800
1941	Dec. 21, 1940	19.48	36,500				
1942	Dec. 2, 1941	27.00	58,000	1954	Nov. 23, 1953	26.16	57,500
1943	Jan. 21, 1943	30.45	68,400		Jan. 17, 1954	22.18	45,500
1944	Mar. 10, 1944	11.25	13,500		Jan. 23, 1954	16.88	31,200
1945	Feb. 13, 1945	23.70	48,400		Jan. 28, 1954	24.51	52,500
					Feb. 12, 1954	25.00	54,000
1946	Dec. 28, 1945	40.0	97,000		Mar. 9, 1954	24.00	51,000
					Apr. 5, 1954	16.30	29,200
1947	Nov. 19, 1946	15.82	26,700				
	Nov. 23, 1946	-	25,100	1955	Dec. 31, 1954	15.45	26,900
	Feb. 12, 1947	-	26,000				
1948	Oct. 16, 1947	-	26,800	1956	Nov. 19, 1955	17.52	32,500
	Jan. 4, 1948	-	33,300		Dec. 19, 1955	26.20	57,600
	Jan. 7, 1948	38.4	92,200		Dec. 22, 1955	59.4	202,000
	Feb. 22, 1948	-	27,100		Jan. 15, 1956	-	115,000
					Feb. 22, 1956	24.20	51,600
1949	Dec. 12, 1948	-	26,600		Mar. 26, 1956	15.35	26,600
	Feb. 22, 1949	17.10	30,200		Apr. 21, 1956	16.30	29,200
					May 4, 1956	14.90	25,400
1950	Jan. 18, 1950	-	35,300		May 23, 1956	15.42	26,800
	Jan. 23, 1950	-	31,400	1957	Oct. 30, 1956	16.30	29,200
	Mar. 17, 1950	21.4	41,900		Dec. 11, 1956	17.75	33,100
					Feb. 26, 1957	33.00	79,200
1951	Oct. 29, 1950	32.45	74,400		Mar. 6, 1957	18.53	35,200
	Nov. 18, 1950	16.59	28,800		Mar. 12, 1957	24.32	52,000
	Dec. 3, 1950	30.65	69,000				

Peak stages and discharges of Klamath River at Somesbar, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1958	Nov. 13, 1957	20.70	41,300	1962	Dec. 19, 1961	19.62	38,300
	Dec. 21, 1957	23.46	49,400	1963	Oct. 12, 1962	22.90	47,700
	Dec. 28, 1957	19.80	38,800		Nov. 26, 1962	21.40	43,400
	Jan. 29, 1958	38.10	96,800		Dec. 2, 1962	34.80	85,300
	Feb. 16, 1958	-	90,000		Feb. 1, 1963	25.48	55,400
	Feb. 18, 1958	31.44	74,200		Feb. 3, 1963	27.61	62,000
	Feb. 25, 1958	33.09	79,500		Apr. 6, 1963	19.17	38,500
	Apr. 18, 1958	15.80	27,900		Apr. 15, 1963	18.10	35,300
1959	Jan. 10, 1959	18.55	35,300	1964	May 5, 1963	16.15	29,400
	Jan. 12, 1959	31.28	73,700		Nov. 8, 1963	23.70	52,100
	Jan. 27, 1959	17.88	33,500		Nov. 23, 1963	14.90	25,700
1960	Feb. 8, 1960	30.35	70,700	1965	Jan. 20, 1964	26.30	59,900
	Mar. 7, 1960	18.69	35,700		Dec. 11, 1964	-	48,000
	May 26, 1960	18.07	34,000		Dec. 22, 1964	76.5	307,000
1961	Nov. 24, 1960	17.70	33,000		Jan. 7, 1965	-	70,000
	Jan. 31, 1961	17.70	33,000		Jan. 24, 1965	-	73,000
	Feb. 11, 1961	26.20	57,600		Apr. 19, 1965	19.73	33,300
	Mar. 15, 1961	15.18	26,200				

5230.3. Red Cap Creek near Orleans, Calif.

Location--Lat 41°14'25", long 123°32'35", in SW $\frac{1}{4}$ sec.19, T.10 N., R.6 E., on left bank 0.5 mile downstream from Leary Creek, 4.4 miles south of Orleans, and 4.9 miles upstream from mouth.

Drainage area--56.1 sq mi.

Gage--Recording. Altitude of gage is 630 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 760 cfs and extended above on basis of slope-area measurement at 3,240 cfs.

Remarks--Base for partial-duration series, 1,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 12, 1959	7.96	2,060	1963	Feb. 1, 1963	7.69	1,740
	Jan. 27, 1959	7.11	1,370		Feb. 3, 1963	6.88	1,110
1960	Feb. 8, 1960	9.12	3,240		Apr. 6, 1963	7.17	1,320
	Mar. 7, 1960	6.70	1,070		Apr. 14, 1963	7.03	1,210
	May 26, 1960	6.81	1,150	1964	Nov. 8, 1963	8.11	2,140
					Jan. 20, 1964	9.50	3,700
1961	Nov. 23, 1960	6.93	1,140	1965	Dec. 1, 1964	6.78	1,200
	Feb. 11, 1961	7.95	1,980		Dec. 22, 1964	-	15,000
1962	Dec. 19, 1961	7.73	1,780		Jan. 6, 1965	-	2,500
					Jan. 20, 1965	-	1,400
1963	Oct. 9, 1962	6.99	1,180		Jan. 24, 1965	-	5,000
	Oct. 12, 1962	8.15	2,180		Jan. 31, 1965	-	1,000
	Nov. 26, 1962	7.94	1,970		Apr. 18, 1965	-	3,300
	Dec. 2, 1962	10.69	5,340				

5230.5 Bluff Creek near Weitchpec, Calif.

Location.--Lat 41°14'25", long 123°39'25", in SW $\frac{1}{4}$ sec. 19, T.10 N., R.4 E., on left bank 0.8 mile upstream from Aikens Creek, 1.2 miles upstream from mouth, and 4.4 miles northeast of Weitchpec.

Drainage area.--74.6 sq mi.

Gage.--Nonrecording at site 0.2 mile downstream at different datum prior to Sept. 30, 1956; recording thereafter. Altitude of gage is 400 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 3,010 cfs and extended above on basis of slope-area measurement at 20,200 cfs.

Remarks.--Only annual peak is shown for 1956. Base for partial-duration series, 2,700 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	13.7	20,200	1963	Nov. 26, 1962	8.10	3,300
1959	Jan. 9, 1959	8.08	3,540		Dec. 2, 1962	10.32	7,960
	Jan. 12, 1959	9.07	5,350		Feb. 1, 1963	8.07	2,960
	Jan. 27, 1959	8.46	4,230		Mar. 30, 1963	8.10	2,850
1960	Feb. 7, 1960	8.13	3,190		Apr. 6, 1963	8.24	3,060
	Feb. 9, 1960	9.64	6,200	1964	Nov. 8, 1963	9.77	6,530
	May 26, 1960	8.13	3,190		Jan. 20, 1964	10.16	7,500
1961	Nov. 23, 1960	8.17	3,410	1965	Dec. 1, 1964	8.33	3,680
	Jan. 31, 1961	7.71	2,720		Dec. 22, 1964	-	27,000
	Feb. 11, 1961	8.46	3,910		Jan. 6, 1965	-	5,800
1962	Dec. 19, 1961	9.88	6,800		Jan. 20, 1965	-	3,200
					Jan. 24, 1965	-	10,700
					Apr. 18, 1965	-	8,000

a Gage height adjusted to present datum.

5232. Trinity River above Coffee Creek, near Trinity Center, Calif.

Location.--Lat 41°06'26", long 122°42'23", on line between secs. 31 and 32, T.38 N., R.7 W., on right bank 250 ft downstream from Chinquapin Gulch, 1.8 miles upstream from Coffee Creek, and 8.5 miles north of new location of Trinity Center.

Drainage area.--149 sq mi.

Gage.--Recording. Datum of gage is 2,533.36 ft above mean sea level, datum of 1929, supplementary adjustment of 1956.

Stage-discharge relation.--Defined by current-meter measurements below 2,700 cfs and extended above on basis of slope-area measurement at 10,800 cfs.

Bankfull stage.--8 ft.

Remarks.--Only annual peak is shown for the year 1956. Base for partial-duration series, 1,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	10.5	-	1960	Mar. 7, 1960	5.91	2,570
1958	Oct. 10, 1957	5.57	2,130	1961	Nov. 25, 1960	5.57	2,230
	Nov. 13, 1957	6.49	3,220		Jan. 31, 1961	7.12	4,210
	Dec. 21, 1957	5.34	1,920		Feb. 11, 1961	8.25	6,270
	Jan. 29, 1958	6.87	3,730		May 19, 1961	5.25	1,920
	Feb. 7, 1958	6.58	3,340		June 1, 1961	5.55	2,210
	Feb. 18, 1958	9.48	9,370	1962	Feb. 9, 1962	5.28	1,950
	Feb. 24, 1958	10.50	12,800		Apr. 7, 1962	5.17	1,980
	Apr. 21, 1958	5.49	2,050		Apr. 14, 1962	5.60	2,400
	May 11, 1958	7.13	4,190	1963	Oct. 12, 1962	9.33	8,990
	May 18, 1958	7.07	4,090		Dec. 2, 1962	5.60	2,280
	June 2, 1958	6.34	3,040		Dec. 15, 1962	7.28	4,470
1959	Jan. 12, 1959	9.91	10,800		Jan. 31, 1963	6.66	3,520
1960	Feb. 8, 1960	6.82	3,750		Feb. 3, 1963	7.75	5,290

Peak stages and discharges of Trinity River above Coffee Creek, near Trinity Center, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Feb. 6, 1963	5.83	2,490	1965	Dec. 22, 1964	12.30	20,800
	Apr. 14, 1963	8.35	6,490		Apr. 20, 1965	5.80	2,400
	May 5, 1963	6.26	2,990		Apr. 28, 1965	5.78	2,360
	May 19, 1963	5.51	2,170				
1964	Nov. 14, 1963	7.31	4,520				

5237. Coffee Creek near Trinity Center, Calif.

Location.--Lat 41°05'35", long 122°45'10", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T.37 N., R.8 W., on left bank 0.75 mile upstream from Little Boulder Creek, 3.2 miles upstream from mouth, and 8 miles northwest of new location of Trinity Center.

Drainage area.--107 sq mi.

Gage.--Recording. Altitude of gage is 2,750 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,920 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Only annual peak is shown for the year 1956. Base for partial-duration series, 800 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	December 1955	5.7	-	1961	Feb. 10, 1961	4.35	1,760
1958	Oct. 10, 1957	4.21	1,630		Apr. 16, 1961	3.47	989
	Oct. 12, 1957	3.28	824		June 1, 1961	4.62	2,050
	Nov. 13, 1957	4.93	2,430	1962	Apr. 14, 1962	3.96	1,340
	Jan. 29, 1958	3.57	1,040		Apr. 27, 1962	3.90	1,290
	Feb. 7, 1958	3.59	1,060		May 8, 1962	3.72	1,110
	Feb. 16, 1958	5.30	2,830		June 2, 1962	3.44	882
	Feb. 24, 1958	5.63	3,240	1963	Oct. 12, 1962	5.72	3,360
	Apr. 21, 1958	3.95	1,380		Dec. 2, 1962	3.76	956
	May 11, 1958	5.04	2,510		Dec. 15, 1962	4.16	1,220
	May 22, 1958	5.23	2,740		Jan. 31, 1963	4.24	1,280
	June 1, 1958	4.99	2,450		Feb. 4, 1963	4.65	1,640
	June 19, 1958	4.82	2,270		Apr. 14, 1963	5.21	2,180
	Jan. 12, 1959	4.84	2,290		May 5, 1963	4.33	1,350
	Apr. 5, 1959	3.59	1,090		May 21, 1963	4.93	1,900
	Apr. 24, 1959	3.72	1,200	1964	Oct. 11, 1963	3.59	854
	May 12, 1959	4.12	1,550		Nov. 8, 1963	3.85	1,010
					Nov. 14, 1963	4.63	1,620
1960	Feb. 8, 1960	3.68	1,070	1965	Dec. 22, 1964	10.90	17,700
	Apr. 7, 1960	3.56	826		May 16, 1965	8.80	1,610
	May 11, 1960	4.09	1,480		May 28, 1965	8.68	1,370
	June 3, 1960	4.37	1,780				
1961	Jan. 31, 1961	3.59	1,070				

5255. Trinity River at Lewiston, Calif.

Location.--Lat 40°43'10", long 122°48'09", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.17, T.33 N., R.8 W., 400 ft upstream from Deadwood Creek and 0.8 mile northeast of Lewiston.

Drainage area.--728 sq mi.

Gage.--Nonrecording prior to Oct. 16, 1930; recording thereafter. At site 1.1 miles downstream at different datum prior to Oct. 1, 1958. At site 0.8 mile downstream at datum 1,797.70 ft above mean sea level, datum of 1929, for period Oct. 1, 1958, to July 6, 1964. Altitude of gage is 1,810 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 40,000 cfs prior to Sept. 30, 1958; below 21,100 cfs thereafter.

Bankfull stage.--16 ft.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known. The flood of January 1881 was probably the third greatest and is followed in order of magnitude by the floods of February 1940 and January 1948.

Remarks.--Peaks regulated by Trinity Lake (usable capacity, 2,437,700 acre-ft) beginning Nov. 23, 1960. Peaks for the years 1913, 1916-17, 1920-23, and 1926 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1934, and subsequent to Oct. 1, 1960. Base for partial-duration series, 7,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1862	-	21.6	-	1938	Mar. 16, 1938	12.38	12,000
1881	-	20.4	-		Apr. 19, 1938	12.04	11,000
					May 1, 1938	11.90	10,600
1912	Jan. 25, 1912	10.5	11,600		May 15, 1938	13.38	14,800
1913	Nov. 9, 1912	8.9	8,050		May 26, 1938	11.48	9,530
1914	Jan. 2, 1914	16.7	26,900		June 5, 1938	17.86	7,940
1915	Feb. 2, 1915	15.2	23,000	1939	Mar. 13, 1939	9.16	4,370
1916	Mar. 20, 1916	15.4	23,500	1940	Dec. 10, 1939	13.51	15,200
1917	Feb. 25, 1917	10.1	10,600		Dec. 31, 1939	11.63	9,920
1918	Apr. 9, 1918	8.9	8,050		Jan. 1, 1940	14.02	16,800
1919	Feb. 9, 1919	14.7	21,800		Jan. 4, 1940	11.96	10,800
1920	May 18, 1920	5.85	3,060		Feb. 6, 1940	12.00	10,900
1921	Nov. 18, 1920	13.4	18,500		Feb. 27, 1940	17.35	27,900
1922	May 15, 1922	8.55	7,700		Feb. 28, 1940	27.80	40,300
1923	May 9, 1923	6.85	4,530		Mar. 26, 1940	13.70	15,800
1924	Feb. 7, 1924	9.20	8,920		Mar. 30, 1940	15.44	21,300
1925	Feb. 4, 1925	14.0	20,000	1941	Dec. 21, 1940	-	-
1926	Apr. 8, 1926	12.8	17,100		Dec. 24, 1940	-	-
1927	Nov. 30, 1926	18.3	31,900		Dec. 27, 1940	14.07	11,500
1928	Mar. 26, 1928	17.2	28,700		Jan. 14, 1941	12.68	8,460
1929	Feb. 4, 1929	7.05	4,690		Jan. 26, 1941	13.54	10,200
1930	Dec. 14, 1929	15.8	24,800		Feb. 9, 1941	12.49	8,100
1931	June 16, 1931	7.32	5,180		Feb. 11, 1941	14.28	12,000
1932	Mar. 19, 1932	9.27	8,840		Mar. 1, 1941	27.3	32,500
1933	Mar. 28, 1933	9.44	8,600		Mar. 31, 1941	15.95	18,800
1934	Mar. 28, 1934	11.21	12,400		Apr. 4, 1941	15.18	16,500
1935	Nov. 15, 1934	9.57	8,700		Apr. 30, 1941	12.70	10,300
	Apr. 15, 1935	9.73	8,970		May 6, 1941	12.04	8,790
	Apr. 29, 1935	9.73	8,970		May 12, 1941	14.35	14,200
1936	Jan. 11, 1936	9.65	8,860		May 25, 1941	14.16	13,800
	Jan. 15, 1936	11.18	12,200		June 12, 1941	12.35	9,460
	Feb. 21, 1936	13.0	16,500	1942	Dec. 1, 1941	18.25	26,400
1937	Apr. 13, 1937	13.50	13,500		Dec. 16, 1941	18.98	28,900
	May 4, 1937	12.14	9,460		Dec. 20, 1941	12.92	10,800
	May 14, 1937	12.23	9,670		Jan. 24, 1942	13.02	11,400
	May 18, 1937	11.54	8,130		Jan. 27, 1942	14.46	15,600
1938	Nov. 20, 1937	16.59	25,300		Feb. 2, 1942	13.18	12,300
	Nov. 23, 1937	13.0	13,700		Feb. 4, 1942	13.25	12,400
	Dec. 11, 1937	19.90	37,000		Feb. 5, 1942	13.81	13,900
	Mar. 2, 1938	12.60	12,600		May 22, 1942	14.70	14,900
					May 25, 1942	17.11	23,800
					June 5, 1942	12.05	7,630
				1943	Mar. 29, 1943	12.03	7,350
				1944	May 7, 1944	11.10	5,560

Peak stages and discharges of Trinity River at Lewiston, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Dec. 22, 1944	11.94	8,000	1954	Nov. 14, 1953	12.30	9,480
	Feb. 2, 1945	12.35	8,990		Nov. 24, 1953	12.87	10,900
	Feb. 5, 1945	11.75	7,600		Feb. 12, 1954	14.69	16,000
1946	Oct. 30, 1945	12.91	8,710		Mar. 9, 1954	15.89	19,700
	Dec. 27, 1945	14.20	13,500		Apr. 4, 1954	13.66	12,900
	Dec. 29, 1945	16.35	21,400		Apr. 18, 1954	12.33	9,550
	Apr. 18, 1946	12.33	8,330	1955	May 21, 1955	11.13	6,880
	Apr. 26, 1946	12.78	9,430	1956	Dec. 19, 1955	16.01	20,100
	May 4, 1946	12.00	7,600		Dec. 22, 1955	27.3	71,600
1947	Nov. 22, 1946	12.33	8,390		Jan. 7, 1956	12.21	9,060
	Feb. 12, 1947	11.95	7,590		Jan. 15, 1956	17.68	26,000
1948	Oct. 16, 1947	13.49	11,600		Feb. 21, 1956	13.33	12,000
	Jan. 7, 1948	21.1	39,700		Apr. 24, 1956	12.71	10,300
	Apr. 15, 1948	12.65	9,910		May 20, 1956	12.88	10,800
	May 27, 1948	11.83	8,010		May 23, 1956	13.09	11,400
	June 6, 1948	12.21	8,900		May 31, 1956	11.82	8,130
	June 10, 1948	11.86	8,080	1957	Feb. 24, 1957	16.99	23,500
1949	Mar. 18, 1949	14.78	15,700		Feb. 26, 1957	16.71	22,500
	Apr. 12, 1949	11.78	7,890		Mar. 9, 1957	11.59	7,580
	Apr. 18, 1949	11.95	8,280		May 18, 1957	15.15	17,400
	May. 13, 1949	12.66	9,980	1958	Oct. 10, 1957	14.76	16,200
1950	Apr. 21, 1950	11.08	6,360		Nov. 14, 1957	14.04	14,000
1951	Oct. 30, 1950	21.00	39,300		Dec. 21, 1957	12.70	10,500
	Dec. 9, 1950	14.11	14,200		Jan. 29, 1958	16.20	20,800
	Feb. 4, 1951	12.84	10,800		Feb. 5, 1958	12.78	10,700
	Feb. 11, 1951	12.74	10,600		Feb. 7, 1958	14.44	15,200
1952	Dec. 1, 1951	15.49	18,500		Feb. 12, 1958	13.53	12,600
	Dec. 27, 1951	13.04	11,300		Feb. 16, 1958	15.07	17,100
	Feb. 2, 1952	15.80	19,500		Feb. 19, 1958	18.56	33,300
	Mar. 26, 1952	12.81	10,700		Feb. 24, 1958	20.56	37,500
	Apr. 7, 1952	11.85	8,300		Apr. 22, 1958	10.82	7,860
	Apr. 19, 1952	11.87	8,350		May 11, 1958	13.02	13,700
	Apr. 28, 1952	12.61	10,200		May 19, 1958	13.24	14,400
	May 7, 1952	11.93	8,490		June 2, 1958	12.21	11,600
	May 19, 1952	12.52	9,950	1959	Jan. 12, 1959	14.80	21,200
	May 28, 1952	12.34	9,480	1960	Feb. 8, 1960	13.88	17,900
1953	Jan. 9, 1953	15.32	17,900		Mar. 7, 1960	11.88	11,700
	Jan. 13, 1953	15.00	16,900	1961	Dec. 27, 1960	6.26	1,200
	Jan. 18, 1953	15.23	17,600	1962	Mar. 5, 1962	6.73	1,670
	Apr. 27, 1953	14.04	14,000	1963	Apr. 20, 1963	12.38	12,700
	May 20, 1953	11.77	8,110	1964	Jan. 20, 1964	4.99	570
				1965	July 31, 1965	3.75	392

5258. Weaver Creek near Douglas City, Calif.

Location.--Lat 40°40'15", long 122°56'30", in NE 1/4 sec. 36, T.33 N., R.10 W., on left bank 0.2 mile downstream from highway bridge and 1.3 miles north of Douglas City.

Drainage area.--48.4 sq mi.

Gage.--Recording. Altitude of gage is 1,680 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 600 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1959	Jan. 12, 1959	9.45	1,750	1962	Feb. 13, 1962	9.07	1,550
1960	Feb. 8, 1960	10.37	2,300	1963	Jan. 31, 1963	11.40	2,920
				1964	Jan. 20, 1964	11.32	2,860
1961	Jan. 31, 1961	9.68	1,900	1965	Dec. 22, 1964	12.72	3,980

KLAMATH RIVER BASIN

5259. Browns Creek near Douglas City, Calif.

Location.--Lat 40°38'35", long 122°58'45", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.10, T.32 N., R.10 W., on right bank 2 miles upstream from mouth and 2.1 miles west of Douglas City.

Drainage area.--71.6 sq mi.

Gage.--Recording. Altitude of gage is 1,640 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 1,400 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1957	Feb. 24, 1957	13.24	1,530	1962	Feb. 13, 1962	12.82	1,290
1958	Feb. 18, 1958	16.60	3,950	1963	Mar. 27, 1963	12.89	1,270
1959	Jan. 12, 1959	14.03	1,830	1964	Jan. 20, 1964	13.37	1,660
1960	Feb. 8, 1960	13.51	1,690	1965	Dec. 22, 1964	16.29	3,790
1961	Jan. 31, 1961	12.28	932				

5260. Trinity River near Douglas City, Calif.

Location.--Lat 40°40', long 122°59', in SW $\frac{1}{4}$ sec.34, T.33 N., R.10 W., 800 ft downstream from Browns Creek and 2.6 miles northwest of Douglas City.

Drainage area.--1,014 sq mi.

Gage.--Recording. Datum of gage is 1,520.89 ft above mean sea level (levels by Bureau of Reclamation).

Stage-discharge relation.--Defined by current-meter measurements below 9,100 cfs and extended on basis of comparison with peak flows at Lewiston gage.

Remarks.--Base for partial-duration series, 6,400 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1945	Dec. 22, 1944	-	8,140	1948	June 10, 1948	-	8,700
	Feb. 3, 1945	14.16	11,500				
	Feb. 5, 1945	-	8,830	1949	Feb. 22, 1949	-	8,400
	Feb. 14, 1945	-	8,200		Mar. 18, 1949	20.65	22,500
					Apr. 12, 1949	-	9,120
1946	Dec. 27, 1945	-	20,400		Apr. 18, 1949	-	9,580
	Dec. 29, 1945	21.93	24,900		May 13, 1949	-	11,100
1947	Nov. 23, 1946	-	9,720	1950	Apr. 21, 1950	10.82	7,080
	Feb. 12, 1947	13.27	10,300		May 15, 1950	-	6,480
1948	Oct. 16, 1947	-	13,000	1951	Oct. 30, 1950	28.57	41,200
	Jan. 7, 1948	30.00	41,800		Dec. 9, 1950	17.00	16,100
	Apr. 15, 1948	-	12,200		Dec. 14, 1950	14.60	12,200
	May 7, 1948	-	6,690		Feb. 5, 1951	17.38	16,800
	May 17, 1948	-	6,720		Feb. 11, 1951	15.56	13,700
	May 27, 1948	-	8,510		Apr. 17, 1951	10.56	6,770
	June 6, 1948	-	9,480		May 4, 1951	10.62	6,840

5265. North Fork Trinity River at Helena, Calif.

Location.--Lat 40°46'55", long 123°07'40", in SW $\frac{1}{4}$ sec. 21, T.34 N., R.11 W., on right bank 500 ft downstream from East Fork of North Fork, 0.6 mile north of Helena, 1.0 mile upstream from mouth, and 6 miles northwest of Junction City.

Drainage area.--151 sq mi.

Gage.--Nonrecording prior to October 1913; recording subsequent to January 1957. Prior to October 1913, at site three-quarters of a mile downstream at different datum. Altitude of gage is 1,380 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 725 cfs prior to October 1913; below 7,400 cfs thereafter.

Bankfull stage.--Not subject to overflow.

Remarks.--Records furnished by California Department of Water Resources. Peaks for the years 1912-13 are maximum observed. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 25, 1912	8.1	6,500	1961	Feb. 11, 1961	14.01	6,740
1913	Nov. 6, 1912	7.2	5,000	1962	Dec. 19, 1961	11.90	3,290
				1963	Dec. 2, 1962	16.41	7,890
1957	Feb. 26, 1957	15.29	6,150	1964	Jan. 20, 1964	13.49	4,820
1958	Feb. 24, 1958	18.35	11,000	1965	Dec. 22, 1964	27.93	35,800
1959	Jan. 12, 1959	19.66	13,500				
1960	Feb. 8, 1960	17.44	12,600				

5270. Trinity River near Burnt Ranch, Calif.

Location.--Lat 40°47'20", long 123°26'20", in S $\frac{1}{2}$ sec. 19, T.5 N., R.7 E., on left bank 500 ft upstream from Cedar Flat Creek, 700 ft upstream from highway bridge at Cedar Flat, and 2.3 miles southeast of town of Burnt Ranch.

Drainage area.--1,439 sq mi.

Gage.--Recording. Prior to Jan. 19, 1940, at site 2 miles upstream at different datum. Altitude of gage is 950 ft (from topographic map).

Stage-discharge relation.--Prior to Jan. 19, 1940, defined by current-meter measurements below 24,000 cfs and extended to 80,700 cfs on basis of slope-conveyance study. Subsequent to October 1956, defined by current-meter measurements below 40,000 cfs and extended above on basis of slope-area measurement at 172,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--Flood history is probably similar to that of station near Hoopa. The highest known flood is that of December 1861, but it may have been equaled by that of December 1955 (172,000 cfs).

Remarks.--Peaks regulated by Trinity Lake (usable capacity, 2,437,700 acre-ft) beginning in November 1960. Only annual peaks are shown for 1956 and subsequent to 1960. Base for partial-duration series 12,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1932	Mar. 9, 1932	13.75	16,800	1938	Nov. 20, 1937	20.84	35,900
					Nov. 23, 1937	14.30	17,900
1933	Mar. 28, 1933	12.38	13,200		Dec. 11, 1937	21.4	71,800
					Feb. 8, 1938	13.08	14,600
1934	Mar. 28, 1934	14.42	18,500		Feb. 10, 1938	12.80	13,900
					Mar. 2, 1938	16.50	23,400
1935	Apr. 8, 1935	13.15	15,200		Mar. 16, 1938	16.25	22,700
	Apr. 15, 1935	12.78	14,200		Mar. 23, 1938	12.55	13,300
	Apr. 29, 1935	12.45	13,300		Apr. 19, 1938	14.67	18,500
1936	Jan. 11, 1936	14.92	19,200		May 1, 1938	13.83	16,400
	Jan. 15, 1936	19.27	31,000		May 15, 1938	16.07	22,200
	Feb. 22, 1936	18.40	28,500		May 26, 1938	12.64	13,500
				1939	Mar. 13, 1939	10.58	9,110
1937	Mar. 13, 1937	12.80	14,300				
	Apr. 14, 1937	16.50	23,400	1940	Dec. 11, 1939	14.75	18,700

Peak stages and discharges of Trinity River near Burnt Ranch, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1940	Jan. 1, 1940	13.42	15,400	1958	Apr. 3, 1958	11.74	12,500
	Jan. 2, 1940	16.48	23,300		Apr. 22, 1958	11.52	12,000
	Jan. 4, 1940	15.25	20,000		May 12, 1958	13.70	16,900
	Feb. 28, 1940	33.8	80,700		May 19, 1958	13.82	17,200
1956	Dec. 22, 1955	43.2	172,000		May 23, 1958	13.27	15,900
					June 2, 1958	12.18	13,500
1957	Feb. 24, 1957	20.55	36,200	1959	Jan. 9, 1959	12.68	14,600
	Feb. 26, 1957	19.65	32,800		Jan. 12, 1959	21.30	39,300
	Mar. 12, 1957	11.52	12,000		Feb. 17, 1959	12.54	14,300
	May 18, 1957	15.88	22,000	1960	Feb. 8, 1960	19.25	31,400
1958	Nov. 22 or 23, 1957	16.53	23,600		Mar. 8, 1960	14.15	17,900
	Dec. 21, 1957	13.76	17,000	1961	Feb. 11, 1961	11.04	11,000
	Jan. 30, 1958	20.73	37,100		Feb. 13, 1962	9.42	7,460
	Feb. 4, 1958	14.00	17,500	1962	Apr. 15, 1963	14.01	17,100
	Feb. 12, 1958	17.50	26,400	1963	Jan. 20, 1964	13.46	15,800
	Feb. 19, 1958	29.87	78,400	1964	Dec. 22, 1964	27.62	78,100
	Feb. 25, 1958	30.50	81,500				
	Mar. 24, 1958	11.75	12,500				

5281. South Fork Trinity River at Forest Glen, Calif.

Location.--Lat 40°22'30", long 123°19'35", in SE¹/₄ sec.13, T.1 S., R.7 E., on right bank 15 ft downstream from bridge on State Highway 36, at Forest Glen, and 100 ft downstream from Glen Creek.

Drainage area.--208 sq mi.

Gage.--Nonrecording prior to Oct. 1, 1959; recording thereafter. Prior to Oct. 1, 1959, at datum 1.26 ft lower. Altitude of gage is 2,170 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 5,000 cfs and extended above on basis of slope-area measurement at 33,800 cfs.

Remarks.--Only annual peaks are shown for the years 1955-57. Base for partial-duration series, 3,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Nov. 23, 1954	15.47	14,300	1963	Nov. 26, 1962	11.60	4,520
1956	Dec. 22, 1955	25.26	33,800		Dec. 2, 1962	12.90	6,380
1957	Feb. 24, 1957	12.65	8,400		Jan. 31, 1963	18.63	16,300
					Mar. 27, 1963	11.67	4,600
1960	Feb. 8, 1960	13.92	16,800		Apr. 6, 1963	11.58	4,500
	Mar. 7, 1960	11.66	4,840		Apr. 14, 1963	11.31	4,170
1961	Dec. 1, 1960	10.37	3,230	1964	Nov. 23, 1963	10.94	3,600
	Dec. 17, 1960	10.52	3,380		Jan. 20, 1964	15.68	10,500
	Jan. 31, 1961	10.90	3,760	1965	Dec. 22, 1964	27.7	41,200
	Feb. 11, 1961	10.72	3,580		Jan. 6, 1965	-	5,000
1962	Feb. 13, 1962	10.67	3,530		Jan. 19, 1965	10.82	3,300
					Jan. 23, 1965	16.37	11,700
1963	Oct. 12, 1962	14.25	8,650		Apr. 19, 1965	10.92	3,580

5282. South Fork Trinity River near Hyampom, Calif.

Location.--Lat 40°36'30", long 123°27'00", in SW $\frac{1}{4}$ sec.25, T.3 N., R.6 E., on left bank 0.3 mile upstream from Deep Gulch, 0.5 mile upstream from Hayfork Creek, and 0.7 mile south of Hyampom.

Drainage area.--342 sq mi.

Gage.--Recording. At site 0.7 mile upstream at different datum prior to Aug. 15, 1962. Altitude of gage is 1,280 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 7,200 cfs and extended above on basis of slope-area measurement at 39,400 cfs.

Remarks.--Only annual peaks are shown for the years 1953 and 1956. Base for partial-duration series, 4,900 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1953	January 1953	16.3	-	1961	Jan. 31, 1961	10.19	6,190
1956	Dec. 22, 1955	22.2	39,400	1961	Feb. 11, 1961	10.22	6,240
1957	Feb. 24, 1957	15.20	11,600	1962	Feb. 13, 1962	9.36	5,020
1958	Nov. 14, 1957	13.52	7,540	1963	Oct. 12, 1962	12.10	9,060
	Dec. 21, 1957	13.29	7,120		Nov. 26, 1962	9.78	5,710
	Jan. 30, 1958	13.90	15,200		Dec. 2, 1962	11.40	7,780
	Feb. 12, 1958	13.85	15,000		Jan. 31, 1963	16.50	17,900
	Feb. 15, 1958	13.15	13,100		Mar. 27, 1963	10.80	7,120
	Feb. 18, 1958	15.03	19,200		Apr. 6, 1963	11.09	7,540
	Feb. 24, 1958	13.93	15,200		Apr. 14, 1963	11.70	8,450
1959	Jan. 9, 1959	11.53	8,820	1964	Nov. 23, 1963	9.92	5,900
	Jan. 12, 1959	13.62	14,300		Jan. 20, 1964	14.50	13,300
	Feb. 16, 1959	10.72	7,090	1965	Dec. 22, 1964	25.8	57,000
1960	Feb. 8, 1960	16.92	26,800		Jan. 6, 1965	-	5,400
	Mar. 7, 1960	10.05	5,790		Jan. 24, 1965	-	14,000
1961	Dec. 17, 1960	9.76	5,560		Apr. 19, 1965	-	7,000

5284. Hayfork Creek near Hayfork, Calif.

Location.--Lat 40°31'10", long 123°05'05", in SW $\frac{1}{4}$ sec.23, T.31 N., R.11 W., on left bank 1,300 ft downstream from Carrier Gulch and 5.8 miles southeast of town of Hayfork.

Drainage area.--86.7 sq mi.

Gage.--Recording. Datum of gage is 2,555.27 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements.

Bankfull stage.--26 ft.

Remarks.--Only annual peak is shown for the year 1956. Base for partial-duration series, 1,100 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Dec. 22, 1955	11.0	3,880	1959	Jan. 9, 1959	7.09	1,490
1957	Feb. 24, 1957	8.44	2,300		Jan. 12, 1959	9.07	2,680
1958	Oct. 13, 1957	6.70	1,280	1960	Feb. 8, 1960	11.67	4,210
	Nov. 13, 1957	6.78	1,320		Mar. 7, 1960	7.18	1,310
	Dec. 21, 1957	7.63	1,730	1961	Dec. 17, 1960	7.46	1,450
	Dec. 28, 1957	6.55	1,120		Jan. 31, 1961	8.18	1,870
	Jan. 29, 1958	9.90	3,180	1962	Feb. 13, 1962	6.53	1,010
	Feb. 7, 1958	8.12	2,110	1963	Oct. 12, 1962	8.90	2,330
	Feb. 12, 1958	8.98	2,630		Dec. 3, 1962	6.90	1,170
	Feb. 16, 1958	8.74	2,480		Jan. 31, 1963	10.81	3,610
	Feb. 18, 1958	11.35	4,050				
	Feb. 24, 1958	11.23	3,980				

Peak stages and discharges of Hayfork Creek near Hayfork, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Feb. 10, 1963	7.02	1,230	1965	Dec. 22, 1964	14.56	7,520
	Mar. 27, 1963	9.05	2,420		Jan. 23, 1965	9.73	2,910
	Apr. 14, 1963	8.26	1,920		Apr. 18, 1965	8.30	1,950
1964	Jan. 20, 1964	10.21	3,190				

5285. Hayfork Creek near Hyampom, Calif.

Location--Lat 40°37'35", long 123°26'00", in NW $\frac{1}{4}$ sec.19, T.3 N., R.7 E., on right bank 1.2 miles upstream from mouth and 1.3 miles northeast of Hyampom.

Drainage area--378 sq mi.

Gage--Recording. Altitude of gage is 1,280 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 6,700 cfs and extended above on basis of slope-area measurement at 25,300 cfs.

Bankfull stage--Not subject to overflow.

Historical data--It is believed that the flood of December 1861 is the highest known, but it may have been equaled by the flood of December 1955.

Remarks--Base for partial-duration series, 4,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1954	Jan. 17, 1954	15.37	17,900	1958	Feb. 24, 1958	14.98	16,800
	Jan. 23, 1954	9.54	5,010				
	Jan. 28, 1954	10.98	7,460	1959	Jan. 9, 1959	11.46	8,420
	Feb. 12, 1954	13.26	12,400		Jan. 12, 1959	12.38	10,300
	Mar. 9, 1954	11.56	8,620		Feb. 16, 1959	10.81	7,160
1955	Dec. 6, 1954	7.42	2,420	1960	Feb. 8, 1960	13.47	12,900
1956	Dec. 19, 1955	16.18	20,200	1961	Jan. 31, 1961	9.87	5,330
	Dec. 22, 1955	18.00	25,300				
	Jan. 15, 1956	14.37	15,300	1962	Feb. 13, 1962	8.95	3,940
	Jan. 23, 1956	8.87	4,040				
	Feb. 21, 1956	15.53	18,400	1963	Jan. 31, 1963	12.37	10,300
1957	Feb. 24, 1957	10.23	6,110		Mar. 27, 1963	10.80	7,000
					Apr. 14, 1963	9.85	5,290
1958	Dec. 21, 1957	9.31	4,960	1964	Jan. 20, 1964	13.98	14,200
	Jan. 29, 1958	12.45	10,500				
	Feb. 7, 1958	10.33	6,290	1965	Dec. 22, 1964	19.14	28,800
	Feb. 12, 1958	12.00	9,500		Jan. 6, 1965	10.07	5,690
	Feb. 14, 1958	11.63	8,760		Jan. 23, 1965	11.96	9,390
	Feb. 18, 1958	16.99	22,500		Apr. 18, 1965	9.08	4,120

5290. South Fork Trinity River near Salyer, Calif.

Location--Lat 40°50'30", long 123°34'00", in SE $\frac{1}{4}$ sec.1, T.5 N., R.5 E., on right bank 4 miles south of Salyer and 8 miles upstream from mouth.

Drainage area--898 sq mi.

Gage--Recording. Datum of gage is 541.1 ft above mean sea level (river-profile survey).

Stage-discharge relation--Defined by current-meter measurements below 37,000 cfs and extended above to 65,100 cfs by slope-conveyance study.

Bankfull stage--Not subject to overflow.

Historical data--It is believed that the flood of December 1861 is the highest known, but it may have been equaled by the flood of December 1955.

Remarks--Base for partial-duration series, 8,000 cfs.

Peak stages and discharges of South Fork Trinity River near Salyer, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1951	Oct. 30, 1950	-	25,000	1958	Dec. 21, 1957	18.17	14,700
	Dec. 3, 1950	22.12	20,500		Dec. 28, 1957	15.48	10,600
	Dec. 7, 1950	15.12	9,220		Jan. 13, 1958	15.27	10,200
	Dec. 14, 1950	20.42	17,700		Jan. 29, 1958	24.36	25,600
	Jan. 18, 1951	17.52	13,800		Feb. 7, 1958	19.23	16,500
	Jan. 21, 1951	21.68	19,800		Feb. 12, 1958	22.99	23,000
	Feb. 5, 1951	25.08	26,000		Feb. 15, 1958	23.50	24,000
	Feb. 11, 1951	16.11	11,000		Feb. 18, 1958	29.26	35,300
1952	Dec. 1, 1951	19.10	15,600		Feb. 24, 1958	27.33	31,400
	Dec. 27, 1951	25.64	27,100		Mar. 21, 1958	13.90	8,150
	Feb. 2, 1952	27.3	30,900		Apr. 2, 1958	15.17	10,100
	Feb. 16, 1952	16.33	12,000	1959	Jan. 9, 1959	21.16	19,800
	Mar. 26, 1952	14.13	8,210		Jan. 12, 1959	24.14	25,100
1953	Dec. 7, 1952	15.74	10,900		Jan. 28, 1959	14.24	8,640
	Dec. 10, 1952	16.06	11,500		Feb. 16, 1959	19.44	16,700
	Dec. 30, 1952	16.23	11,800	1960	Feb. 8, 1960	28.45	33,700
	Jan. 9, 1953	25.97	27,700		Mar. 7, 1960	16.13	11,200
	Jan. 13, 1953	19.76	16,600	1961	Dec. 1, 1960	14.12	8,370
	Jan. 18, 1953	27.30	30,900		Dec. 17, 1960	16.77	12,200
	Apr. 27, 1953	14.37	8,590		Jan. 31, 1961	17.74	13,600
1954	Jan. 17, 1954	27.80	32,100		Feb. 2, 1961	14.02	8,230
	Jan. 23, 1954	18.89	15,300		Feb. 11, 1961	18.68	15,000
	Jan. 28, 1954	22.60	21,300	1962	Feb. 9, 1962	14.85	9,390
	Feb. 12, 1954	22.87	21,800		Feb. 13, 1962	16.52	11,800
	Mar. 9, 1954	19.24	15,900	1963	Oct. 13, 1962	18.78	15,200
	Apr. 5, 1954	15.35	10,200		Nov. 26, 1962	14.66	9,120
1955	Dec. 31, 1954	14.30	8,480		Dec. 3, 1962	18.90	15,400
1956	Dec. 20, 1955	-	-		Jan. 31, 1963	26.68	29,400
	Dec. 22, 1955	39.4	65,100		Mar. 28, 1963	19.68	16,500
	Jan. 5, 1956	15.25	9,650		Apr. 6, 1963	17.21	12,800
	Jan. 7, 1956	15.53	10,200		Apr. 14, 1963	19.62	16,400
	Jan. 15, 1956	28.21	33,100	1964	Jan. 20, 1964	26.00	27,800
	Jan. 23, 1956	18.36	14,500	1965	Dec. 22, 1964	47.6	95,400
	Feb. 21, 1956	28.65	34,200		Jan. 6, 1965	-	10,500
1957	Feb. 24, 1957	22.10	20,500		Jan. 12, 1965	-	9,200
	Mar. 6, 1957	14.56	8,460		Jan. 20, 1965	-	9,000
	Mar. 12, 1957	15.08	9,340		Jan. 24, 1965	-	26,000
1958	Nov. 14, 1957	18.35	15,800		Apr. 19, 1965	24.00	12,500

5300. Trinity River near Hoopa, Calif.
(Published as "at Hoopa" prior to 1918)

Location.--Lat 41°01'50", long 123°39'05", in SE $\frac{1}{4}$ sec.31, T.8 N., R.5 E., in Hoopa Indian Reservation, on left bank 0.7 mile downstream from Campbell Creek and $\frac{1}{4}$ miles southeast of Hoopa.

Drainage area.--2,847 sq mi.

Gage.--Nonrecording prior to October 1931; recording thereafter. Prior to October 1931, at site 2.1 miles downstream at different datum. Altitude of gage is 315 ft (from river-profile map).

Stage-discharge relation.--Defined by current-meter measurements below 12,000 cfs prior to October 1931; below 56,000 cfs thereafter.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known. The flood of January 1890 was probably the third greatest and that of March 1907 the fourth greatest. Next in rank are the floods of November 1926 and February 1958, which were probably nearly equivalent. The seventh greatest flood known was probably that of February 1940.

Remarks.--Peaks regulated by Trinity Lake (usable capacity, 2,437,700 acre-ft) beginning in November 1960. Peaks for the years 1912-18 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1937. Base for partial-duration series, 22,000 cfs.

Peak stages and discharges of Trinity River near Hoopa, Calif.

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 25, 1912	23.0	63,100	1948	Jan. 8, 1948	23.7	73,000
1913	Nov. 6, 1912	13.2	17,800		Apr. 15, 1948	16.38	32,500
1914	Dec. 31, 1913	28.1	89,000	1949	Feb. 23, 1949	14.95	26,100
	Feb. 25, 1917	24.6	71,200		Mar. 18, 1949	20.65	54,100
1917	Nov. 30, 1917	14.0	20,900	1950	Jan. 23, 1950	14.58	24,500
					Mar. 19, 1950	16.70	34,000
1932	Mar. 19, 1932	16.00	27,400	1951	Oct. 30, 1950	22.08	62,700
1933	Mar. 28, 1933	14.58	22,500		Dec. 4, 1950	18.95	44,800
1934	Mar. 28, 1934	13.96	20,600		Dec. 9, 1950	16.28	32,100
1935	Apr. 8, 1935	16.80	30,200		Dec. 14, 1950	17.79	39,000
1936	Jan. 15, 1936	24.60	73,100		Jan. 18, 1951	16.04	31,000
1937	Apr. 14, 1937	18.25	39,700		Jan. 21, 1951	17.38	37,000
1938	Nov. 20, 1937	22.60	64,200		Feb. 5, 1951	23.63	72,500
	Nov. 23, 1937	15.55	27,400		Feb. 11, 1951	17.19	36,200
	Dec. 11, 1937	28.70	105,000	1952	Dec. 1, 1951	19.70	48,500
	Feb. 3, 1938	14.87	25,500		Dec. 27, 1951	21.98	62,100
	Feb. 8, 1938	17.88	39,400		Feb. 2, 1952	25.92	88,400
	Feb. 14, 1938	15.63	28,900		Feb. 16, 1952	16.04	31,000
	Mar. 2, 1938	17.70	38,600		Mar. 28, 1952	15.83	30,000
	Mar. 13, 1938	14.30	23,100		Apr. 6, 1952	14.40	23,900
	Mar. 16, 1938	19.49	47,500	1953	Jan. 9, 1953	21.68	60,300
	Mar. 20, 1938	18.31	41,600		Jan. 13, 1953	19.39	47,000
	Mar. 24, 1938	21.08	56,200		Jan. 18, 1953	27.28	98,200
	Apr. 19, 1938	16.15	31,300		Apr. 27, 1953	16.35	32,400
	May 1, 1938	14.65	24,600	1954	Nov. 24, 1953	16.46	32,900
	May 15, 1938	15.70	29,200		Jan. 17, 1954	21.73	60,600
1939	Dec. 3, 1938	16.25	31,800		Jan. 23, 1954	15.76	29,700
	Mar. 13, 1939	15.48	28,200		Jan. 28, 1954	18.74	43,700
1940	Jan. 2, 1940	16.60	33,400		Feb. 13, 1954	20.98	56,100
	Jan. 4, 1940	17.20	36,200		Mar. 9, 1954	20.01	50,300
	Jan. 10, 1940	14.32	23,200		Apr. 5, 1954	16.02	30,900
	Jan. 26, 1940	14.63	24,500	1955	Dec. 31, 1954	13.92	22,100
	Feb. 7, 1940	16.35	32,200	1956	Dec. 19, 1955	24.43	77,100
	Feb. 17, 1940	14.28	23,000		Dec. 22, 1955	36.90	190,000
	Feb. 28, 1940	31.2	124,000		Jan. 5, 1956	16.06	23,900
	Mar. 27, 1940	17.05	35,400		Jan. 7, 1956	17.07	29,900
	Mar. 30, 1940	20.90	55,100		Jan. 11, 1956	16.07	23,900
1941	Dec. 21, 1940	18.70	43,500		Jan. 15, 1956	28.60	108,000
	Dec. 24, 1940	20.68	53,900		Jan. 23, 1956	19.72	45,800
	Dec. 27, 1940	20.50	53,000		Feb. 21, 1956	23.95	73,600
	Jan. 14, 1941	14.22	22,800	1957	Feb. 25, 1957	22.21	61,900
	Jan. 19, 1941	16.08	31,000		Feb. 28, 1957	21.12	54,800
	Jan. 26, 1941	19.30	46,600		Mar. 6, 1957	15.71	25,700
	Feb. 11, 1941	20.35	52,100		Mar. 12, 1957	16.04	27,200
	Mar. 1, 1941	24.85	79,000		May 18, 1957	15.61	25,300
	Mar. 31, 1941	16.25	31,800	1958	Nov. 14, 1957	18.87	45,200
	Apr. 4, 1941	18.20	41,000		Dec. 22, 1957	17.50	37,900
1942	Dec. 3, 1941	21.28	57,200		Dec. 28, 1957	15.70	29,500
	Dec. 16, 1941	20.53	53,100		Jan. 13, 1958	14.38	23,700
	Dec. 18, 1941	20.00	50,200		Jan. 30, 1958	23.20	82,600
	Jan. 8, 1942	14.40	23,500		Feb. 7, 1958	19.00	45,900
	Jan. 25, 1942	15.47	28,200		Feb. 12, 1958	21.92	64,100
	Jan. 27, 1942	16.90	34,700		Feb. 16, 1958	23.60	76,200
	Feb. 6, 1942	23.25	69,000		Feb. 19, 1958	29.15	125,000
	May 25, 1942	16.34	32,200		Feb. 25, 1958	28.71	117,000
1943	Dec. 24, 1942	16.20	31,500		Apr. 3, 1958	15.16	26,600
	Dec. 28, 1942	17.90	39,500	1959	Jan. 9, 1959	17.93	40,200
	Dec. 31, 1942	15.00	26,100		Jan. 12, 1959	23.80	77,800
	Jan. 21, 1943	22.45	64,100		Jan. 28, 1959	14.44	23,900
1944	Feb. 3, 1944	11.45	13,200		Feb. 16, 1959	17.44	37,500
1945	Feb. 3, 1945	16.90	34,800	1960	Feb. 8, 1960	24.78	85,700
	Feb. 5, 1945	14.48	24,100		Mar. 7, 1960	16.44	32,700
	Feb. 9, 1945	15.90	30,400	1961	Dec. 17, 1960	14.12	22,700
	Feb. 14, 1945	16.69	33,900		Jan. 31, 1961	15.42	27,900
1946	Nov. 29, 1945	14.14	22,800		Feb. 11, 1961	17.16	36,300
	Dec. 4, 1945	16.61	33,500	1962	Feb. 14, 1962	14.42	23,800
	Dec. 23, 1945	15.63	29,100	1963	Oct. 13, 1962	16.48	32,900
	Dec. 29, 1945	23.92	74,500		Nov. 26, 1962	14.08	22,500
	Jan. 5, 1946	17.00	35,300				
1947	Feb. 12, 1947	16.70	34,000				
	Mar. 10, 1947	14.44	24,000				

Peak stages and discharges of Trinity River near Hoopa, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1963	Dec. 3, 1962	18.46	42,800	1965	Dec. 22, 1964	40.3	231,000
	Feb. 1, 1963	20.53	54,700		Jan. 6, 1965	-	27,000
	Mar. 28, 1963	15.89	30,000		Jan. 24, 1965	-	38,000
	Apr. 6, 1963	16.15	31,200		Apr. 19, 1965	-	23,000
	Apr. 15, 1963	18.00	40,500				
1964	Jan. 20, 1964	21.68	62,300				

5305. Klamath River near Klamath, Calif.
(Published as "near Requa" prior to December 1926)

Location.--Lat 41°30'45", long 123°58'30", in SW¹/₄ sec.17, T.13 N., R.2 E., on right bank 2.8 miles upstream from Turwar Creek and 3.3 miles east of Klamath.

Drainage area.--12,100 sq mi, approximately (not including Lost River or Lower Klamath Lake basins).

Gage.--Nonrecording at different datum prior to June 1926; recording thereafter. Datum of gage is 5.60 ft above mean sea level (levels by Corps of Engineers).

Stage-discharge relation.--Defined by current-meter measurements below 140,000 cfs and extended above on basis of flood-routing studies.

Remarks.--Peaks are considerably regulated by reservoirs and powerplants above station and may be affected by large diversions for irrigation above station. Peaks for the years 1911-18, 1920, 1922-26 are maximum observed. Only annual peaks are shown prior to 1951. Base for partial-duration series, 50,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)	
1862	December 1861	60	450,000	1946	December 1945	-	209,000	
1881	February 1881	-	360,000	1947	February 1947	-	73,900	
				1948	January 1948	-	202,000	
1890	February 1890	63	425,000	1949	March 1949	-	95,000	
				1950	March 1950	-	92,600	
1911	Jan. 20, 1911	19.0	68,700	1951	Oct. 29, 1950	-	170,000	
1912	Feb. 17, 1912	28.5	142,000		Nov. 18, 1950	16.82	57,700	
1913	Nov. 6, 1912	20.1	74,500		Dec. 4, 1950	28.85	150,000	
1914	Jan. 22, 1914	27.0	130,000		Dec. 7, 1950	22.85	102,000	
1915	Feb. 2, 1915	33.3	182,000		Dec. 15, 1950	20.75	85,200	
1916	Feb. 7, 1916	21.5	85,700	Jan. 18, 1951	-	85,000		
1917	Feb. 22, 1917	20.0	73,700	Jan. 22, 1951	-	75,000		
1918	Dec. 1, 1917	18.8	65,300	1952	Feb. 5, 1951	31.6	173,000	
1919	Jan. 18, 1919	27.4	133,000		Dec. 1, 1951	23.5	107,000	
1920	Apr. 17, 1920	13.0	27,900		Dec. 24, 1951	16.46	55,200	
1921	Dec. 31, 1920	27.0	130,000		Dec. 27, 1951	25.85	126,000	
					Feb. 2, 1952	33.98	195,000	
				Feb. 17, 1952	19.65	77,600		
				Mar. 26, 1952	18.38	68,700		
				Jan. 9, 1953	26.95	146,000		
1922	Nov. 30, 1921	18.0	59,700	1953	Jan. 13, 1953	24.84	127,000	
1923	Dec. 28, 1922	18.1	60,400		Jan. 18, 1953	43.67	297,000	
1924	Feb. 2, 1924	12.6	25,800		Feb. 6, 1953	18.90	74,200	
1925	Feb. 5, 1925	32.4	175,000		Apr. 27, 1953	18.99	74,900	
1926	Feb. 4, 1926	23.5	102,000		1954	Nov. 24, 1953	25.45	132,000
1927	February 1927	-	300,000	Jan. 17, 1954		25.5	132,000	
1932	March 1932	-	96,400			Jan. 23, 1954	19.37	78,000
						Jan. 28, 1954	25.53	133,000
						Feb. 13, 1954	25.13	129,000
						Mar. 10, 1954	24.28	122,000
						Apr. 5, 1954	18.46	70,700
1933	March 1933	-	46,200	1955	Dec. 31, 1954	18.90	74,200	
1934	March 1934	-	51,100		Nov. 20, 1955	16.23	53,600	
1935	April 1935	-	60,000		Dec. 20, 1955	28.60	180,000	
					Dec. 22, 1955	49.7	425,000	
1936	January 1936	-	162,000		Jan. 5, 1956	18.36	69,900	
1937	April 1937	-	121,000		1956	Jan. 8, 1956	18.02	67,200
1938	December 1937	-	218,000			Jan. 15, 1956	38.25	252,000
1939	December 1938	-	71,000			Jan. 23, 1956	26.60	142,000
1940	February 1940	-	237,000					
1941	March 1941	-	124,000			Nov. 20, 1955	16.23	53,600
					Dec. 20, 1955	28.60	180,000	
					Dec. 22, 1955	49.7	425,000	
					Jan. 5, 1956	18.36	69,900	
					Jan. 8, 1956	18.02	67,200	
1942	February 1942	-	151,000	1956	Jan. 15, 1956	38.25	252,000	
1943	January 1943	-	162,000		Jan. 23, 1956	26.60	142,000	
1944	March 1944	-	32,300					
1945	February 1945	-	102,000					

Peak stages and discharges of Klamath River near Klamath, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1956	Feb. 22, 1956	27.12	147,000	1961	Nov. 25, 1960	16.73	62,800
	Apr. 22, 1956	15.13	50,900		Dec. 18, 1960	15.54	53,800
1957	Oct. 30, 1956	15.37	52,600		Jan. 31, 1961	17.16	66,400
	Dec. 12, 1956	16.42	59,900		Feb. 11, 1961	23.16	123,000
	Feb. 26, 1957	27.75	160,000		Mar. 15, 1961	16.26	59,100
	Mar. 6, 1957	19.15	81,200	1962	Dec. 20, 1961	18.89	82,000
	Mar. 12, 1957	23.18	116,000		Feb. 14, 1962	15.08	50,600
	May 19, 1957	15.46	53,200	1963	Oct. 13, 1962	20.28	94,500
1958	Nov. 14, 1957	22.00	111,000		Nov. 26, 1962	17.30	67,700
	Dec. 22, 1957	-	120,000		Dec. 3, 1962	28.38	176,000
	Dec. 28, 1957	20.40	95,600		Feb. 1, 1963	24.46	136,000
	Jan. 13, 1958	16.59	61,800		Feb. 3, 1963	21.55	106,000
	Jan. 29, 1958	32.05	217,000		Mar. 28, 1963	16.18	58,400
	Feb. 3, 1958	17.67	70,900		Mar. 31, 1963	17.30	67,700
	Feb. 8, 1958	19.70	89,300		Apr. 6, 1963	20.06	92,500
	Feb. 12, 1958	27.62	168,000		Apr. 15, 1963	20.77	98,900
	Feb. 16, 1958	33.02	227,000		May 7, 1963	15.00	51,400
	Feb. 19, 1958	33.45	232,000	1964	Nov. 9, 1963	22.01	111,000
	Feb. 25, 1958	33.80	236,000		Nov. 24, 1963	15.71	55,000
	Apr. 3, 1958	16.96	64,600		Jan. 20, 1964	27.10	162,000
	Apr. 18, 1958	15.78	55,900		Feb. 1, 1964	15.60	54,200
1959	Jan. 9, 1959	19.37	86,300	1965	Dec. 2, 1964	16.99	64,900
	Jan. 12, 1959	28.30	175,000		Dec. 11, 1964	20.03	92,300
	Jan. 28, 1959	18.20	75,700		Dec. 23, 1964	55.3	557,000
	Feb. 19, 1959	18.08	74,600		Jan. 7, 1965	-	115,000
1960	Feb. 8, 1960	30.08	195,000		Jan. 24, 1965	22.72	118,000
	Mar. 8, 1960	18.39	77,500		Apr. 19, 1965	16.91	64,300
	Mar. 30, 1960	15.23	51,600				
	May 26, 1960	18.21	75,900				

SMITH RIVER BASIN

5310. Middle Fork Smith River at Gasquet, Calif.
(Published as "near Crescent City" prior to February 1918)

Location--Lat 41°50'40", long 123°57'35", in NW $\frac{1}{4}$ sec.28, T.16 N., R.2 E., on left bank 0.4 mile east of Gasquet and 0.6 mile upstream from confluence with North Fork Smith River.

Drainage area--130 sq mi.

Gage--Nonrecording to February 1918; crest-stage gage Sept. 23, 1953, to Sept. 30, 1956; recording thereafter. Prior to February 1918, at various sites within 0.4 mile downstream at different datums. Sept. 23, 1953, to Sept. 30, 1956, at site 0.2 mile upstream at different datum. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation--Defined by current-meter measurements below 5,400 cfs prior to February 1918; below 3,800 cfs and extended above on basis of slope-area measurement at 26,000 cfs for period Sept. 23, 1953, to Sept. 30, 1956; defined by current-meter measurements below 10,100 cfs thereafter.

Remarks--Peaks for the years 1913, 1915-18 are maximum observed. Only annual peaks are shown prior to Oct. 1, 1958. Base for partial-duration series, 7,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 12, 1912	-	17,800	1956	Dec. 22, 1955	11.5	26,000
1913	Jan. 18, 1913	14.2	10,500	1959	Jan. 9, 1959	7.32	7,600
1915	Feb. 1, 1915	15.0	11,800		Jan. 12, 1959	11.16	15,700
1916	Nov. 25, 1915	17.5	17,000	1960	Feb. 8, 1960	9.72	12,500
1917	Apr. 11, 1917	11.1	5,510	1961	Nov. 24, 1960	9.05	11,000
1918	Nov. 30, 1917	16.4	14,800		Feb. 10, 1961	9.02	10,900
1954	Nov. 23, 1953	-	18,700	1962	Nov. 23, 1961	8.76	10,400
1955	Dec. 31, 1954	-	9,500				

Peak stages and discharges of Middle Fork Smith River at Gasquet, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1962	Dec. 19, 1961	8.52	9,840	1964	Nov. 8, 1963	9.72	12,500
1963	Nov. 26, 1962	8.12	9,660		Jan. 20, 1964	10.52	14,200
	Dec. 2, 1962	12.28	18,100	1965	Dec. 10, 1964	8.70	10,200
	Feb. 1, 1963	8.29	10,200		Dec. 22, 1964	22.2	41,100

5315. North Fork Smith River near Crescent City, Calif.

Location.--Lat 41°51'17", long 123°58'09", in NW¹/₄NE¹/₄ sec.20, T.17 N., R.2 E., half a mile north of Gasquet, half a mile upstream from confluence with Middle Fork, and 14 miles northeast of Crescent City, Del Norte County.

Drainage area.--158 sq mi.

Gage.--Nonrecording. Altitude of gage is 350 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 11,000 cfs.

Bankfull stage.--Not subject to overflow.

Remarks.--Peaks are maximum observed except that of 1912, which is the momentary maximum. Only annual peaks are shown.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1912	Jan. 12, 1912	27.1	27,300	1916	Nov. 25, 1915	27.5	28,200
1913	Jan. 18, 1913	22.4	16,600	1917	Feb. 24, 1917	18.5	8,860
1914	Apr. 15, 1914	17.1	6,500	1918	Nov. 30, 1917	24.0	20,200
1915	Jan. 8, 1915	20.2	12,000				

5320. South Fork Smith River near Crescent City, Calif.

Location.--Lat 41°47'30", long 124°01'30", in SE¹/₄ sec.11, T.16 N., R.1 E., 300 ft downstream from Craigs Creek, 2.0 miles upstream from mouth, and 9.5 miles east of Crescent City.

Drainage area.--291 sq mi (revised).

Gage.--Recording. Altitude of gage is 150 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 42,000 cfs and extended above on basis of slope-area measurement at 108,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known.

Remarks.--Base for partial-duration series, 30,000 cfs. Only annual peak is shown in 1965.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 31, 1954	23.86	34,000	1958	Nov. 13, 1957	22.93	32,000
1956	Nov. 19, 1955	22.76	30,200		Dec. 20, 1957	23.44	33,500
	Dec. 22, 1955	36.95	108,000		Jan. 29, 1958	28.10	51,400
	Jan. 15, 1956	26.50	44,200		Feb. 15, 1958	25.56	41,300
	Jan. 22, 1956	22.90	30,700	1959	Jan. 12, 1959	27.54	49,200
	Feb. 21, 1956	25.85	41,400	1960	Feb. 8, 1960	25.70	41,700
1957	Dec. 11, 1956	22.45	30,400	1961	Nov. 24, 1960	23.56	33,900
	Feb. 26, 1957	23.47	33,600				
	Mar. 11, 1957	23.50	33,700	1965	Dec. 22, 1964	43.8	162,000

5325. Smith River near Crescent City, Calif.

Location.--Lat 41°47'20", long 124°03'20", in SW $\frac{1}{4}$ sec.10, T.16 N., R.1 E., on left bank 0.5 mile downstream from South Fork and 8 miles east of Crescent City.

Drainage area.--609 sq mi.

Gage.--Recording. Altitude of gage is 90 ft (from topographic map).

Stage-discharge relation.--Defined by current-meter measurements below 69,000 cfs and extended above on basis of slope-area measurement at 152,000 cfs.

Bankfull stage.--Not subject to overflow.

Historical data.--The floods of December 1861 and December 1955 were probably nearly equivalent and are the greatest known. The floods of January 1890, February 1927, and October 1950 were probably nearly equivalent and are next largest. These five floods are followed, in magnitude, by those of November 1953, January 1953, and December 1945.

Remarks.--Base for partial-duration series, 36,000 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1927	-	41.4	-	1949	Dec. 12, 1948	26.42	64,300
1932	Mar. 18, 1932	26.45	61,700		Feb. 10, 1949	21.62	38,200
1933	Jan. 2, 1933	24.30	51,500		Feb. 22, 1949	23.76	48,800
1934	Jan. 14, 1934	20.20	33,100		May 2, 1949	22.40	42,000
1935	Nov. 1, 1934	20.4	33,900	1950	Jan. 18, 1950	30.9	91,400
1936	Jan. 2, 1936	23.35	46,800		Jan. 23, 1950	23.1	45,500
	Jan. 11, 1936	22.85	44,300		Mar. 17, 1950	25.15	56,400
	Jan. 14, 1936	25.1	55,500	1951	Oct. 29, 1950	30.51	152,000
1937	Apr. 13, 1937	27.80	70,100		Nov. 18, 1950	24.35	51,900
1938	Dec. 11, 1937	29.4	78,900		Dec. 3, 1950	29.20	80,700
	Mar. 16, 1938	25.10	55,500		Jan. 17, 1951	28.85	78,600
	Mar. 18, 1938	25.95	59,900		Jan. 21, 1951	24.50	52,800
	Mar. 23, 1938	23.50	47,500		Feb. 4, 1951	25.85	60,600
1939	Nov. 4, 1938	22.2	41,400	1952	Nov. 11, 1951	23.05	48,800
	Dec. 2, 1938	24.2	51,000		Dec. 1, 1951	21.55	41,500
	Mar. 12, 1939	22.3	41,800		Dec. 23, 1951	21.72	42,200
1940	Feb. 28, 1940	21.22	37,200		Dec. 29, 1951	21.00	39,000
1941	Dec. 20, 1940	22.8	44,100		Feb. 1, 1952	25.60	61,500
	Dec. 26, 1940	21.65	38,900	1953	Dec. 7, 1952	20.71	37,700
	Jan. 25, 1941	23.2	46,000		Dec. 10, 1952	21.70	42,200
1942	Dec. 2, 1941	24.6	53,000		Jan. 9, 1953	26.32	65,300
	Dec. 18, 1941	26.4	62,400		Jan. 13, 1953	21.52	41,300
1943	Nov. 23, 1942	24.1	51,500		Jan. 18, 1953	27.80	139,000
	Nov. 29, 1942	20.85	36,000	1954	Nov. 23, 1953	28.0	141,000
	Dec. 31, 1942	30.9	91,400		Jan. 16, 1954	26.61	65,100
	Jan. 21, 1943	26.9	66,900		Jan. 22, 1954	21.70	38,500
1944	Nov. 4, 1943	21.92	40,600		Jan. 27, 1954	27.32	69,400
1945	Feb. 8, 1945	25.05	56,500	1955	Dec. 31, 1954	27.45	70,200
	Feb. 13, 1945	23.6	49,000	1956	Nov. 19, 1955	26.57	64,900
1946	Nov. 28, 1945	23.1	46,500		Dec. 19, 1955	21.25	36,300
	Dec. 28, 1945	35.6	123,000		Dec. 22, 1955	41.20	165,000
1947	Nov. 18, 1946	24.00	50,000		Dec. 26, 1955	22.64	43,200
	Nov. 22, 1946	22.54	42,700		Jan. 15, 1956	31.00	92,000
	Mar. 9, 1947	22.3	41,500		Jan. 22, 1956	26.72	65,800
1948	Oct. 16, 1947	23.56	47,800	1957	Oct. 30, 1956	21.9	39,500
	Jan. 2, 1948	23.7	48,500		Dec. 11, 1956	26.65	65,400
	Jan. 4, 1948	23.44	47,200		Feb. 26, 1957	26.93	67,100
	Jan. 6, 1948	29.6	83,100		Mar. 11, 1957	26.45	64,200
	Feb. 22, 1948	24.4	52,200	1958	Nov. 13, 1957	26.30	62,900
1949	Dec. 7, 1948	25.42	58,600		Dec. 20, 1957	27.16	68,300
					Dec. 28, 1957	22.05	40,300
					Jan. 29, 1958	31.30	94,300
					Feb. 12, 1958	22.36	41,900
					Feb. 15, 1958	29.30	81,800
					Feb. 24, 1958	22.25	41,400
				1959	Jan. 12, 1959	30.75	90,400
					Jan. 27, 1959	23.95	49,800

Peak stages and discharges of Smith River near Crescent City, Calif.--Continued

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1960	Feb. 8, 1960	28.13	74,300	1963	Dec. 2, 1962	34.10	113,000
	Mar. 7, 1960	22.49	42,500		Feb. 1, 1963	23.22	46,100
	Mar. 30, 1960	21.19	36,800		Feb. 3, 1963	21.03	36,100
1961	Nov. 24, 1960	27.28	69,200	1964	Nov. 8, 1963	30.57	89,200
	Jan. 31, 1961	21.10	36,400		Jan. 20, 1964	31.22	93,400
	Feb. 10, 1961	26.17	62,500	1965	Dec. 1, 1964	22.75	43,800
1962	Nov. 23, 1961	27.71	71,800		Dec. 10, 1964	26.26	63,100
	Dec. 19, 1961	26.29	63,200		Dec. 22, 1964	48.5	228,000
1963	Nov. 26, 1962	-	50,000				

5327. Rowdy Creek at Smith River, Calif.

Location.--Lat 41°55'18", long 124°08'45", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.18 N., R.1 W., on left bank 0.4 mile downstream from Dominie Creek, 0.6 mile south of town of Smith River, and 12.2 miles north of Crescent City.

Drainage area.--33.0 sq mi.

Gage.--Recording. Datum of gage is 25.39 ft above mean sea level, datum of 1929.

Stage-discharge relation.--Defined by current-meter measurements below 3,700 cfs and extended above on basis of slope-area measurement at 4,760 cfs.

Remarks.--Only annual peak is shown for 1956. Base for partial-duration series, 1,500 cfs.

Peak stages and discharges

Water year	Date	Gage height (feet)	Discharge (cfs)	Water year	Date	Gage height (feet)	Discharge (cfs)
1955	Dec. 22, 1955	10.8	4,760	1959	Jan. 27, 1959	6.69	2,380
1958	Nov. 13, 1957	8.31	3,910		Feb. 18, 1959	5.73	1,530
	Dec. 20, 1957	9.06	5,260	1960	Feb. 8, 1960	6.80	2,220
	Dec. 28, 1957	6.58	1,820		Mar. 7, 1960	7.27	2,720
	Jan. 29, 1958	8.35	4,080	1961	Nov. 24, 1960	7.70	3,570
	Feb. 12, 1958	6.73	2,130		Feb. 10, 1961	7.00	2,850
	Feb. 15, 1958	9.19	5,430		Feb. 14, 1961	5.62	1,710
	Feb. 24, 1958	6.50	1,880		Mar. 25, 1961	5.41	1,590
	Mar. 31, 1958	6.45	1,830	1962	Nov. 23, 1961	7.96	3,860
1959	Jan. 9, 1959	6.15	1,540		Dec. 20, 1961	6.00	2,510
	Jan. 12, 1959	8.94	5,020				

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