1973

Water Resources Data for California

Part 1. Surface Water Records

Volume 2: Northern Great Basin and Central Valley

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the California Department of Water Resources and with other agencies

CALENDAR FOR WATER YEAR 1973

1972

OCTOBER

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1973

JANUARY

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Water-resources records, 1973, for California are in the following reports of the U.S. Geological Survey:

1. Water Resources Data for California
   Part 1: Surface Water Records
   Volume 1: Colorado River Basin, Southern Great Basin, and Pacific Slope Basins excluding Central Valley

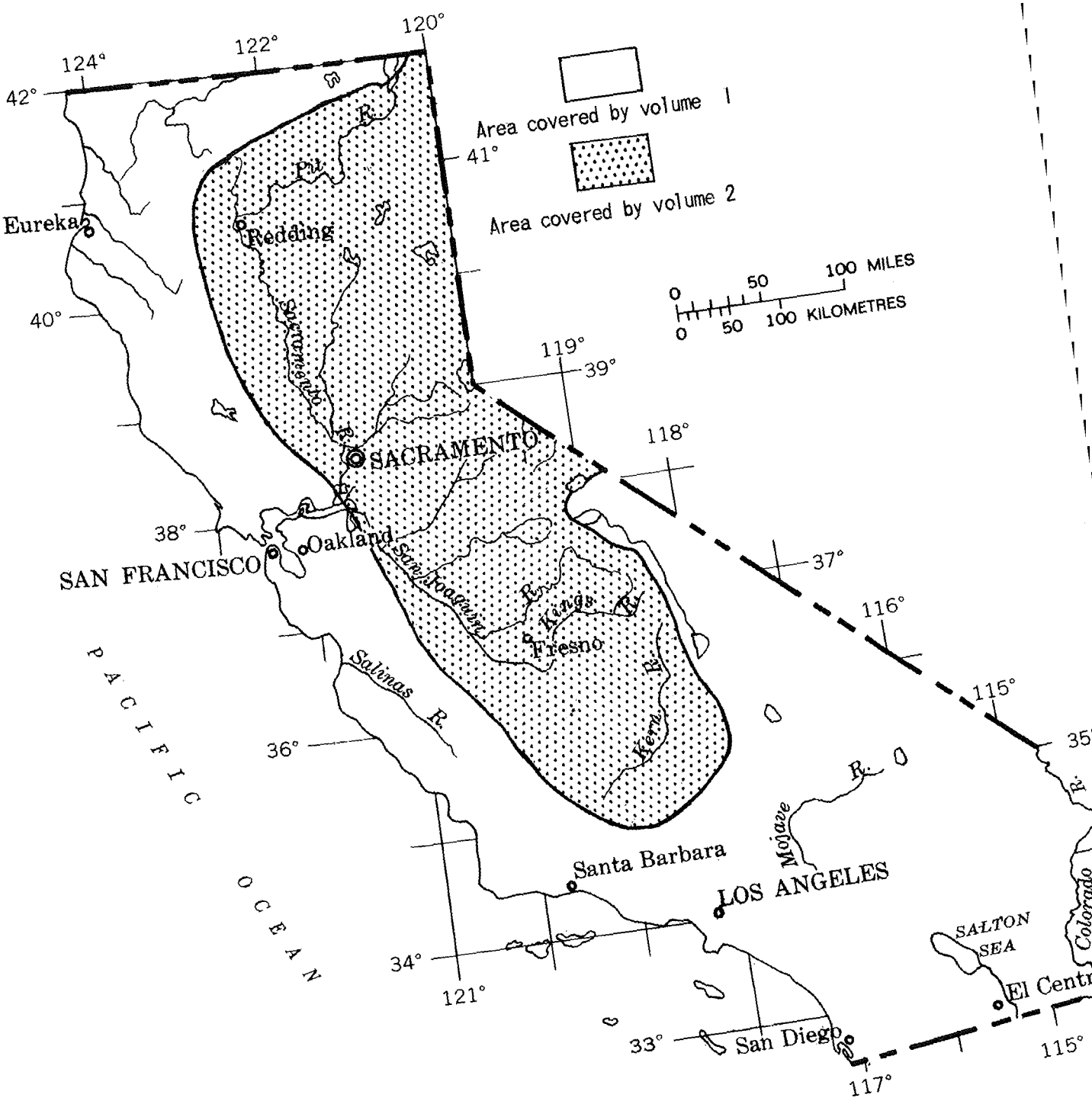
2. Water Resources Data for California
   Part 1: Surface Water Records
   Volume 2: Northern Great Basin and Central Valley

3. Water Resources Data for California
   Part 2: Water Quality Records

Copies of these reports may be obtained from District Chief,
Water Resources Division
U.S. Geological Survey
855 Oak Grove Avenue
Menlo Park, California 94025

Prepared in cooperation with

California Department of Water Resources
California Department of Transportation
Alameda County Flood Control and Water Conservation District
Alameda County Water District
Berrenda Mesa Water District
Casitas Municipal Water District
Coachella Valley County Water District
Contra Costa County Flood Control and Water Conservation District
Desert Water Agency
East Bay Municipal Utility District
Georgetown Divide Public Utility District
Imperial Irrigation District
Kern County Water Agency
Lake County Flood and Water Conservation District
Los Angeles County Flood Control District
Los Angeles Department of Water and Power
Madera Irrigation District
Merced Irrigation District
Modoc County Department of Public Works
Montecito County Water District
Monterey County Flood Control and Water Conservation District
Napa County Flood Control and Water Conservation District
Orange County Flood Control District
Oroville-Wyandotte Irrigation District
Paradise Irrigation District
Rio San Diego Municipal Water District
Riverside County Flood Control and Water Conservation District
Sacramento County Department of Public Works, Water Resources Division
San Benito County Water Conservation and Flood Control District
San Bernardino Valley Municipal Water District
San Diego (city) Water Utilities
San Diego (county) Department of Sanitation and Flood Control
San Francisco, City and County, Hetch-Hetchy Water and Power
San Francisco, City and County Water Department
San Luis Obispo County Flood Control and Water Conservation District
San Mateo County
San Rafael, City of, Department of Public Works
Santa Barbara City Water Department
Santa Barbara County Flood Control and Water Conservation District
Santa Barbara County Water Agency
Santa Clara County Flood Control and Water District
Santa Cruz County Flood Control and Water Conservation District
Santa Maria Valley Water Conservation District
Santa Ynez River Water Conservation District
Siskiyou County Flood Control and Water Conservation District
Tehachapi-Cummings County Water District
Terra Bella Irrigation District
Tulare County Flood Control District
Turlock Irrigation District
United Water Conservation District
University of California (Berkeley)
University of California (Davis), Division of Environmental Studies
Ventura County Department of Public Works
Western Municipal Water District
Woodbridge Irrigation District
Yolo County Flood Control and Water Conservation District
Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of the Interior
National Park Service, U.S. Department of the Interior
Forest Service, U.S. Department of Agriculture
Soil Conservation Service, U.S. Department of Agriculture
U.S. Atomic Energy Commission


Area covered by volume 1
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SACRAMENTO
Oakland
SAN FRANCISCO
San Joaquin R.
Kings R.
Fresno
Kern R.
Salinas R.
PACIFIC OCEAN
Santa Barbara
LOS ANGELES
Mojave R.
SALTON SEA
El Centro
San Diego
Colorado R.

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WATER RESOURCES DATA FOR CALIFORNIA, 1973

PART 1. SURFACE-WATER RECORDS

INTRODUCTION

Surface-water records for the 1973 water year for California, including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites, are given in this report. Records for a few pertinent gaging stations in bordering States also are included. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of Lee R. Peterson, district chief. These data represent that portion of the National Water Data System collected by the Geological Survey and cooperating State and Federal agencies in California.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. These reports are for limited distribution and are designed primarily for rapid release of data shortly after the end of the water year.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. More information is given under the heading "Publications" on page 519.

COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of surface-water records since 1903. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

California Department of Water Resources, J. R. Teerink, director.
California Department of Transportation, C. G. Beer, office engineer.
Alameda County Flood Control and Water Conservation District, P. E. Lanferman, engineer-manager.
Alameda County Water District, M. P. Whitfield, general manager-chief engineer.
Berrenda Mesa Water District, H. R. Lampson, engineer-manager.
Casitas Municipal Water District, Robert McKinney, general manager-chief engineer.
Coachella Valley County Water District, L. O. Weeks, general manager-chief engineer.
Contra Costa County Flood Control and Water Conservation District, C. C. Rich, chief engineer.
Desert Water Agency, P. G. Payne, general manager.
East Bay Municipal Utility District, J. S. Harnett, general manager.
Georgetown Divide Public Utility District, C. F. Gierau, general manager.
Imperial Irrigation District, R. F. Carter, general manager.
Kern County Water Agency, S. T. Pyle, engineer-manager.
Lake County Flood Control and Water Conservation District, W. D. Hansen, manager.
Los Angeles County Flood Control District, C. F. Eshelby, division engineer.
Los Angeles Department of Water and Power, J. V. Phillips, general manager and chief engineer.
Madera Irrigation District, F. G. Bandy, secretary-manager.
Merced Irrigation District, K. R. McSwain, chief engineer and manager.
Modoc County Department of Public Works, J. K. Grove, director.
Montecito County Water District, E. A. Elevatorski, general manager.
Monterey County Flood Control and Water Conservation District, Loran Bunte, Jr., district engineer.
Napa County Flood Control and Water Conservation District, Gene Norris, chairman.
Orange County Flood Control District, H. G. Osborne, chief engineer.
Oroville-Wyandotte Irrigation District, J. W. McDonald, general manager.
Paradise Irrigation District, C. P. Kelly, manager.
Rio San Diego Municipal Water District, E. W. Houser, manager-engineer.
Riverside County Flood Control and Water Conservation District, J. W. Bryant, chief engineer.
Sacramento County Department of Public Works, Water Resources Division, J. P. Alessandri, chief.
San Benito County Water Conservation and Flood Control District, R. G. Towle, secretary.
San Bernardino Valley Municipal Water District, J. A. Beaver, general manager.
San Diego, City of, Water Utilities, R. E. Dodson, director.
San Diego, County of, Department of Sanitation and Flood Control, C. J. Houson, director.
San Francisco, City and County, Hetch Hetchy Water and Power, O. L. Moore, general manager.
San Francisco, City and County Water Department, A. H. Frye, Jr., general manager and chief engineer.
San Luis Obispo County Engineering Department, G. C. Protopapas, county engineer.
San Mateo County Flood Control District, V. K. Sanders, manager.
San Rafael, City of, Department of Public Works, Ely Caillovette, Jr., director.

Santa Barbara City Water Department, Neil Mendenall, superintendent.
Santa Barbara County Flood Control and Water Conservation District, James Stubchaer, flood-control engineer.
Santa Barbara County Water Agency, F. H. Beattie, board of directors chairman.
Santa Clara Valley Water District, J. T. O'Halloran, general manager.
Santa Cruz County Flood Control and Water Conservation District, D. A. Porath, district engineer.
Santa Maria Valley Water Conservation District, M. F. Twitchell, secretary.
Santa Ynez River Conservation District, A. T. Petersen, president.
Siskiyou County Flood Control and Water Conservation District, D. A. Gravenkamp, director of public works.
Tehachapi-Cummings County Water District, R. J. Jasper, general manager.
Terra Bella Irrigation District, J. E. Boudreau, engineer-manager.
Tulare County Flood Control District, J. L. Carlsen, flood-control engineer.
Turlock Irrigation District, R. S. Tillner, secretary-general manager.
United Water Conservation District, R. A. Smith, general manager-chief engineer.
University of California (Berkeley), A. S. Leopold, professor of zoology.
University of California (Davis), Division of Environmental Studies, Dr. Robert Leonard, department of zoology.
Ventura County Department of Public Works, J. B. Quinn, deputy director.
Western Municipal Water District, H. A. Hicks, general manager.
Woodbridge Irrigation District, Mabel Hall, secretary.
Yolo County Flood Control and Water Conservation District, W. L. McAnlis, manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; U.S. Navy; Bureau of Reclamation and National Park Service, U.S. Department of the Interior; Forest Service and Soil Conservation Service, U.S. Department of Agriculture; U.S. Atomic Energy Commission.

The following organizations aided in collecting records: Pacific Power and Light Co., Bear Valley Mutual Water Co., Metropolitan Water District of Southern California, Fontana Union Water Co., Rancho California, Pacific Gas and Electric Co., Placer County Water Agency, Sacramento Municipal Utility District, Southern California Edison Co., Merced, Modesto, Nevada, Oroville-Wyandotte, Oakdale-South San Joaquin, and Vista Irrigation Districts, and Yuba County Water Agency.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System of units (SI) on page 524.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or 325,851 gallons or 1,233 cubic metres.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or 646,317 gallons or 2,445 cubic metres. It represents a runoff of 0.0372 inch from 1 square mile or 0.3468 millimetre from 1 square kilometre.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (CFS, cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second, and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic metres per second.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic average of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a given time.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Partial-record station is a particular site where limited streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Stage-discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

International Hydrological Decade (IHD) River Stations provide a general index of runoff and materials in the water balance (discharge of water, and dissolved and transported solids) of the world. In the United States, IHD Stations provide indices of runoff and of the general distribution of water in the principal river basins of the conterminous United States and Alaska.

DOWNSTREAM ORDER AND STATION NUMBERS

Records are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the series numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit station number for each station, such as 11120800, which appears to the left of the station name includes the 2-digit part number "11" plus the 6-digit number "120800." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 9 (Colorado River basin), Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

EXPLANATION OF SURFACE-WATER DATA

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous graph of the fluctuations or a tape punched at 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey

Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For a stream-gaging station rating tables giving the discharge for any stage are prepared from stage-discharge relation curves defined by discharge measurements. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on individual discharge measurements and notes by engineers and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of basic data. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the reverse side of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey, unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or the minimum contents), and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year:" the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in the PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) corresponds to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur at the same time as the maximum discharge or maximum contents, it is given separately. Information pertaining to the accuracy of the discharge records, to conditions that affect the natural flow at the gaging station, and availability of Water Quality records, is given under "REMARKS"; for reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is also given under "REMARKS."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to

September 30, 1933. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

Skeleton rating tables are published for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

Skeleton capacity tables are published for all reservoirs for which records of contents are published on a daily basis.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in acre-feet (line headed "AC-FT").

In the yearly summary below the monthly summary, the figures following "MAX" are the maximum daily discharges for the calendar and water years; likewise, those following "MIN" are the minimum daily discharges.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumptive use, regulation, evaporation, or other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or unadjusted losses (consumptive use, evaporation, seepage, etc.) are large in comparison with the observed discharge.

Publications

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in California for the period October 1960 to September 1965 are in Water-Supply Papers 1926, 1927, 1928, 1929, 1930, and 1931.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and monthend storage for all previously published records, as well as some records not contained in the annual series of water-supply papers. All records were reexamined and revised where warranted. Estimates of discharge were made to fill short gaps whenever practical. The yearly summary table for each gaging station lists the numbers of the water-supply papers in which daily records were published for that station. Records for stations in California are compiled in Water-Supply Papers 1313, 1314, 1315-A, and 1315-B through September 1950, and in 1733, 1734, and 1735 for October 1950 to September 1960.

Special reports on major floods or droughts or of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the district office.

Other Data Available

Occasionally, discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also at the end of this report. Data for most crest-stage partial-record stations in California are not included in this report. They are published separately in an annual report, "Floods from Small Drainage Areas," copies of which may be obtained from the district office.

More detailed information than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the district office. Many gaging-station records in California through 1968 have been analyzed to give several statistical summaries: (1) the number of days in each year that the daily discharge was between selected limits (duration tables); (2) the lowest mean discharge for selected numbers of consecutive days in each year; and (3) the highest mean discharge for selected numbers of consecutive days in each year.

At or near some gaging stations, water-quality records also are collected. Data are obtained on the chemical quality of the stream water, on water temperature, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material.. These data are given in Part 2 of this report. Under the "REMARKS" paragraph of the gaging-station description, reference is made to water-quality records collected on a regular basis.

Records of discharge collected by agencies other than the Geological Survey

Records of discharge not published by the Geological Survey have been collected at numerous sites by many other Federal, State, County, City, and local agencies, and by private organizations. A listing of stream-gaging stations and the agencies operating them is published in California Department of Water Resources Bulletin 157, "Index of Stream-Gaging Stations in and Adjacent to California." The Office of Water Data Coordination, Water Resources Division, U.S. Geological Survey, Reston, Virginia, 22092, maintains an index of such sites. Information on records at specific sites can be obtained upon request.

HYDROLOGIC CONDITIONS

Runoff during the year was above normal for most river basins in California and was below normal only in the river basins in extreme north-coastal California. The runoff distribution over the state was influenced by several major storms that caused heavy precipitation over the central and southern areas. High snowmelt runoff occurred in central and southern Sierra Nevada watersheds from an above-average snowpack that persisted well into May.

Storms October 9-18 brought heavy rain to the Sierra Nevada and to the California coast from the Oregon border to San Luis Obispo. The storms then moved southward and caused heavy rain along the central coast. Rainfall in San Francisco was reported to be the highest for October for more than 80 years. Severe flooding occurred in urban areas in and around San Francisco causing heavy property damage and one death. Heavy rains in the Big Sur State Park caused landslides which destroyed or damaged about 13 houses and some park buildings. Slides blocked coastal State Highway 1 several times. In southern California, intense precipitation occurred October 8 and 19, and as much as 1.5 inches of rain fell at the Los Angeles International Airport in 1 hour. Minor flooding occurred in some areas.

Moderate to heavy rains in November increased the seasonal precipitation 2 to 6 times normal except in the extreme north-coastal area. Runoff in November was above normal, but was deficient in north-coastal California. Local flooding and mudslides occurred in the Coast Range. Mudslides recurred in the Big Sur area and were more severe than in October.

Storms in December were accompanied by recordbreaking cold. Precipitation in the form of snow fell in many places in the Central Valley and San Francisco Bay areas and added to the snowpack in the Sierra Nevada. Runoff, however, was generally below normal.

Heavy rains fell throughout California during a 2-week period in the middle of January and were the heaviest along the central coast. Runoff was excessive or above normal for January throughout California, except for the north-coastal area where it continued to be deficient. The snowpack at higher elevations continued to be at or above normal.

Precipitation was near normal in March. However, owing to the heavy rains in the previous month, runoff continued to be excessive along the central coast and above normal elsewhere, except in the north-coastal area where it was nearly normal.

The months of April and May were dry with generally low temperatures which retarded snowmelt. Runoff was generally above or near normal in most areas, but was deficient in the north-coastal area.

Higher temperatures in late May and June caused rapid melting of the snowpack which produced excessive runoff in the southern Sierra Nevada and mountain areas in southern California. Runoff was near normal in the northern Sierra Nevada as the snowpack at the lower elevations had been depleted previously. Runoff in the north-coastal area continued to be deficient.

During the remainder of the water year, the runoff declined seasonally, but heavy rains in September in the north-coastal area produced excessive runoff in that area.

Runoff from the above-normal precipitation in the central and southern Sierra Nevada and other high mountain areas maintained the contents of most reservoirs above normal, with above normal holdover for the 1974 water year.

The areal trends in the total runoff in California for the 1973 water year is shown in figure 1, where runoff is given as a percentage of the median annual runoff for the 30-year period, 1941-70. The circled figures on the map are the percentages for index stream-gaging stations in the various hydrographic areas. The north-coastal area was the only area in which the runoff was below average. The runoff of over 300 percent of average in the south-coastal area was the highest in the State, while the

runoff was more than 200 percent of average in the San Francisco Bay and central-coastal areas, and well above normal in the Sacramento and San Joaquin areas. The average runoff at all of the index stations in the State was 184 percent of average.

SELECTED REFERENCES

Carter, R. W., and Davidian, Jacob, 1968, General procedure for gaging streams: U.S. Geol. Survey Techniques Water-Resources Inv., book 3, chap. A6, 13 p.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geol. Survey Water-Supply Paper 888, 245 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geol. Survey Water-Supply Paper 1541-A, 29 p.

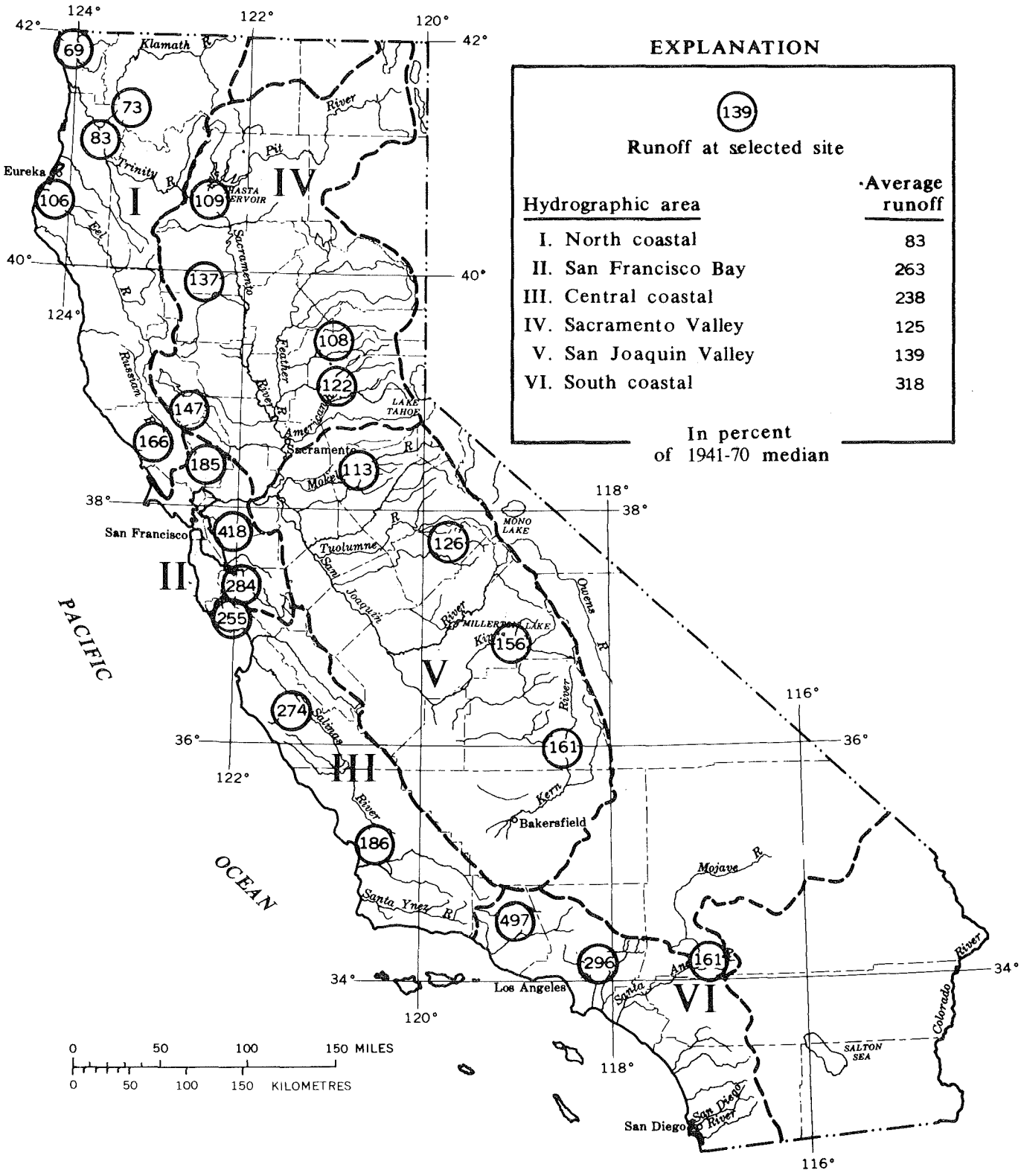

FIGURE 1.--Runoff for the current water year.

Table 1.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI). Subsequent reports will contain both the English and SI unit equivalents in the station manuscript descriptions until such time that all data will be published in SI units.

Multiply English units	By	To obtain SI units
	Length	
inches (in)	25.4	millimetres (mm)
	.0254	metres (m)
feet (ft)	.3048	metres (m)
yards (yd)	.9144	metres (m)
rods	5.0292	metres (m)
miles (mi)	1.609	kilometres (km)
	Area	
acres	4047	square metres (m^2)
	.4047	*hectares (ha)
	.4047	square hectometres (hm^2)
	.004047	square kilometres (km^2)
square miles (mi^2)	2.590	square kilometres (km^2)
	Volume	
gallons (gal)	3.785	**litres (l)
	3.785	cubic decimetres (dm^3)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (10^6 gal)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet (ft^3)	28.32	cubic decimetres (dm^3)
	.02832	cubic metres (m^3)
cfs-days [$(ft^3/s) \cdot d$]	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
	1.233×10^{-6}	cubic kilometres (km^3)
	Flow	
cubic feet per second (ft^3/s)	28.32	litres per second (l/s)
	28.32	cubic decimetres per second (dm^3/s)
	.02832	cubic metres per second (m^3/s)
gallons per minute (gpm)	.06309	litres per second (l/s)
	.06309	cubic decimetres per second (dm^3/s)
	6.309×10^{-5}	cubic metres per second (m^3/s)
million gallons per day (mgd)	43.81	cubic decimetres per second (dm^3/s)
	.04381	cubic metres per second (m^3/s)
	Mass	
tons (short)	.9072	tonnes (t)

*The unit hectare is approved for use with the International System (SI) for a limited time. See NBS Special Bulletin 330, p.15, 1972 edition.

**The unit litre is accepted for use with the International System (SI). See NBS Special Bulletin 330, p.13, 1972 edition.

10289000 VIRGINIA CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°11'30", long 119°12'30", near center of W½ sec.22, T.4 N., R.25 E., Mono County, on right bank 1.2 miles downstream from Clearwater Creek, 3 miles upstream from mouth, and 4.2 miles southeast of Bridgeport.

DRAINAGE AREA.--63.6 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (from topographic map).

AVERAGE DISCHARGE.--20 years, 17.7 cfs (11,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 123 cfs Apr. 28 (gage height, 4.06 ft); minimum, 2.2 cfs Oct. 31. Period of record: Maximum discharge, 1,300 cfs Dec. 23, 1955 (gage height, 8.40 ft), from rating curve extended above 170 cfs on basis of slope-area measurement of peak flow; minimum, 1.0 cfs Aug. 18, 1960, July 28, 1961.

REMARKS.--Records good except those for winter periods, which are poor. Flow partly regulated by Virginia Lakes and other lakes near headwaters. Diversions for irrigation of 3,000 acres above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	8.4	11	8.5	8.8	9.9	14	41	61	26	9.1	8.2
2	12	9.0	11	8.0	8.8	9.7	13	51	50	22	13	7.5
3	9.4	9.0	11	8.3	8.8	9.7	13	56	43	19	15	7.5
4	10	9.8	10	7.4	8.9	9.9	14	41	42	19	18	7.5
5	8.8	9.5	10	7.6	8.8	9.7	18	35	43	18	14	7.7
6	9.2	8.6	10	7.6	9.1	9.7	28	34	43	16	15	8.8
7	9.8	9.4	11	7.6	9.3	9.9	30	36	45	15	14	8.8
8	8.5	8.4	10	8.1	9.1	9.7	29	37	45	14	12	11
9	8.0	9.2	9.0	8.6	9.1	9.6	35	38	46	14	12	11
10	7.7	9.8	9.5	8.5	9.4	10	33	41	44	16	11	11
11	7.5	9.9	9.0	8.6	9.9	11	43	44	44	15	10	11
12	7.5	9.5	9.5	9.1	10	10	45	45	42	16	9.9	10
13	7.5	9.7	9.0	9.2	11	10	35	50	40	17	9.3	9.5
14	7.5	9.2	9.4	9.0	10	10	24	60	37	17	9.2	9.2
15	7.6	11	9.6	9.2	10	10	22	60	33	17	9.4	10
16	7.6	12	10	9.4	10	10	27	58	27	14	9.1	9.8
17	8.0	12	11	8.6	10	11	37	61	25	14	8.9	9.5
18	8.6	11	12	9.5	10	11	32	64	22	13	8.9	9.3
19	8.8	11	13	9.0	9.5	11	25	66	22	12	9.1	9.0
20	9.5	9.5	13	8.5	9.5	11	20	60	22	10	9.1	9.2
21	9.0	12	13	9.0	9.7	10	21	56	24	10	9.2	9.3
22	8.4	12	13	8.5	9.7	11	30	53	24	9.9	7.4	8.9
23	8.1	13	12	9.2	9.5	11	44	52	25	9.6	7.0	9.4
24	8.1	15	11	10	9.6	11	53	52	23	9.1	7.4	9.4
25	8.0	12	9.0	9.9	9.4	12	58	50	22	8.1	8.0	9.7
26	8.2	11	9.8	9.5	9.6	13	67	45	25	8.0	9.6	9.7
27	8.1	11	10	9.0	9.8	13	79	39	35	8.8	12	9.6
28	7.8	11	9.0	9.0	10	13	80	40	39	7.9	10	9.6
29	7.3	10	8.1	9.0	------	12	68	49	31	8.1	9.2	9.3
30	6.4	9.8	9.7	9.0	------	12	52	54	29	9.5	8.6	9.2
31	6.9	------	9.0	9.1	------	14	------	60	------	8.5	8.1	------
TOTAL	257.0	312.7	321.6	271.5	267.3	334.8	1,089	1,528	1,055	421.5	322.5	279.6
MEAN	8.29	10.4	10.4	8.76	9.55	10.8	36.3	49.3	35.2	13.6	10.4	9.32
MAX	12	15	13	10	11	14	80	66	61	26	18	11
MIN	6.4	8.4	8.1	7.4	8.8	9.6	13	34	22	7.9	7.0	7.5
AC-FT	510	620	638	539	530	664	2,160	3,030	2,090	836	640	555

CAL YR 1972 TOTAL 4,082.0 MEAN 11.2 MAX 33 MIN 1.9 AC-FT 8,100
WTR YR 1973 TOTAL 6,460.5 MEAN 17.7 MAX 80 MIN 6.4 AC-FT 12,810

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-11	1900	3.67	79	5-18	2400	3.63	70
4-28	2000	4.06	123	6-1	1000	3.63	68

10289500 GREEN CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'25", long 119°14'00", in NE¼SE¼ sec.29, T.4 N., R.25 E., Mono County, on right bank 130 ft downstream from county road bridge, 0.1 mile upstream from diversion to Summers Creek, and 5.5 miles south of Bridgeport.

DRAINAGE AREA.--19.5 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,850 ft (from topographic map).

AVERAGE DISCHARGE.--20 years, 28.7 cfs (20,790 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 182 cfs June 9 (gage height, 2.75 ft); maximum gage height, 3.55 ft Mar. 15 (backwater from ice); minimum discharge, 4.5 cfs Nov. 13, but may have been less during periods of ice effect.
Period of record: Maximum discharge, 351 cfs July 4, 1967 (gage height, 3.26 ft); maximum gage height, 4.09 ft Feb. 25, 1962 (backwater from ice); minimum discharge, 1.4 cfs Apr. 4, 1964.

REMARKS.--Records good except those for winter periods, which are poor. Flow regulated by West, Green, East, Summit, and other lakes.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	7.5	6.0	5.2	5.8	7.2	9.0	39	156	96	26	15
2	7.6	6.7	6.6	5.2	5.6	7.1	9.2	39	143	78	32	15
3	8.0	6.7	6.8	5.2	6.0	6.2	9.4	47	140	69	30	14
4	8.9	7.0	5.5	5.2	6.0	6.6	9.6	46	138	64	34	13
5	9.1	7.2	5.0	5.2	6.0	6.6	10	38	139	64	32	13
6	9.6	6.4	5.4	5.2	6.3	6.9	12	34	140	69	30	12
7	9.3	7.3	6.0	5.2	6.6	6.7	12	38	148	64	29	11
8	8.9	6.7	5.6	5.6	6.9	6.7	13	49	152	60	29	11
9	8.2	8.4	5.4	6.0	6.9	7.7	13	59	166	60	27	11
10	8.0	7.4	5.8	5.6	7.0	7.8	14	65	159	58	26	11
11	7.7	7.2	5.0	6.5	7.7	7.9	15	77	151	58	25	10
12	7.5	6.8	5.5	7.9	7.9	7.9	17	83	148	58	24	10
13	7.4	7.0	6.0	8.2	8.1	8.0	17	87	145	55	22	11
14	7.2	6.3	5.5	8.7	8.3	7.8	15	97	139	53	22	10
15	7.2	6.0	6.0	8.7	8.2	7.0	14	116	116	48	21	10
16	7.2	6.4	6.4	8.4	7.7	7.5	15	122	91	44	23	9.4
17	7.2	7.0	7.0	7.5	7.0	8.5	17	131	82	44	42	9.0
18	7.4	6.5	7.9	7.2	7.0	9.5	17	143	75	43	41	8.7
19	7.5	6.0	8.4	7.0	6.6	9.1	16	144	76	40	39	8.3
20	7.8	5.8	8.9	5.4	6.6	8.9	15	147	80	38	36	8.0
21	8.0	6.0	9.0	6.0	6.8	8.6	15	133	82	36	35	8.0
22	7.8	6.0	8.4	5.6	6.5	8.6	17	127	86	34	33	7.7
23	7.7	6.0	7.0	5.6	6.4	9.3	23	124	88	33	30	7.5
24	7.7	6.0	6.5	6.0	6.3	8.8	28	122	80	31	28	7.5
25	7.5	6.0	6.2	6.4	6.4	9.3	34	120	78	29	26	7.5
26	7.5	6.2	5.8	6.0	6.5	9.3	40	111	94	29	26	7.5
27	7.2	6.4	6.1	5.5	6.6	9.5	50	98	113	29	24	7.2
28	7.1	6.6	5.6	6.0	6.8	9.7	57	106	118	28	22	7.2
29	6.1	6.6	5.4	6.0	------	9.0	54	124	111	27	21	7.2
30	5.6	6.2	5.4	6.0	------	9.4	49	136	111	27	18	7.2
31	5.5	------	5.6	6.0	------	9.2	------	142	------	26	17	------
TOTAL	234.6	198.3	195.7	194.2	190.5	252.3	636.2	2,944	3,545	1,492	870	294.9
MEAN	7.57	6.61	6.31	6.26	6.80	8.14	21.2	95.0	118	48.1	28.1	9.83
MAX	9.6	8.4	9.0	8.7	8.3	9.7	57	147	166	96	42	15
MIN	5.2	5.8	5.0	5.2	5.6	6.2	9.0	34	75	26	17	7.2
AC-FT	465	393	388	385	378	500	1,260	5,840	7,030	2,960	1,730	585

CAL YR 1972 TOTAL 7,379.2 MEAN 20.2 MAX 106 MIN 4.4 AC-FT 14,640
WTR YR 1973 TOTAL 11,047.7 MEAN 30.3 MAX 166 MIN 5.0 AC-FT 21,910

10290300 UPPER TWIN LAKE NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°09'15", long 119°20'58", in NW¼NE¼ sec.5, T.3 N., R.24 E., Mono County, at outlet of upper lake dam on Robinson Creek, and 10 miles southwest of Bridgeport.

DRAINAGE AREA.--29.5 sq mi.

PERIOD OF RECORD.--December 1961 to February 1964, September 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (project datum of U.S. Indian Irrigation Service).

EXTREMES.--Current year: Maximum contents, 2,720 acre-ft May 31 (elevation, 7,209.03 ft); minimum, 484 acre-ft Oct. 12.
Period of record: Maximum contents observed, 2,900 acre-ft June 22, July 5, 6, 1967 (elevation, 7,209.58 ft); minimum observed, 62 acre-ft Oct. 31, Nov. 1, 1964 (elevation, 7,200.22 ft).
No contents Oct. 17, 1961.

REMARKS.--Contents regulated by dam at outlet. Figures given herein represent usable contents. Usable contents, 2,070 acre-ft between elevations 7,200 (natural rim) and 7,207 ft (spillway crest).

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,201.83	512	--
Oct. 31	7,202.03	568	+56
Nov. 30	7,204.28	1,220	+652
Dec. 31	--	a 2,120	+900
CAL YR 1972	--	--	-59
Jan. 31	--	a 2,120	0
Feb. 28	--	a 2,140	+20
Mar. 31	--	a 2,150	+10
Apr. 30	--	a 2,290	+140
May 31	7,209.02	2,720	+430
June 30	7,208.50	2,550	-170
July 31	7,207.71	2,300	-250
Aug. 31	7,206.92	2,040	-260
Sept. 30	7,202.15	602	-1,438
WTR YR 1973	--	--	+90

a Contents interpolated.

10290400 LOWER TWIN LAKE NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'05", long 119°19'33", in NE¼NE¼ sec.33, T.4 N., R.24 E., Mono County, at outlet of lower lake dam on Robinson Creek, and 8 miles southwest of Bridgeport.

DRAINAGE AREA.--38.9 sq mi.

PERIOD OF RECORD.--December 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (project datum of U.S. Indian Irrigation Service).

EXTREMES.--Current year: Maximum contents, 4,970 acre-ft June 12 (elevation, 7,202.24 ft); minimum observed, 620 acre-ft Nov. 9.
Period of record: Maximum contents, 5,490 acre-ft June 6, 1969 (elevation, 7,203.51 ft); no contents Nov. 17, 1966.

REMARKS.--Contents regulated by dam at outlet and by Upper Twin Lake. Figures given herein represent usable contents. Usable contents, 4,010 acre-ft between elevations 7,190 (natural rim) and 7,200 ft (spillway crest). One transarea diversion out of Tamarack Creek into Summers Creek.

ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	--	a 760	--
Oct. 31	--	a 628	-132
Nov. 30	--	a 736	+108
Dec. 31	7,192.51	1,000	+264
CAL YR 1972	--	--	-2,500
Jan. 31	--	a 2,080	+1,080
Feb. 28	--	a 3,020	+940
Mar. 31	7,199.23	3,700	+680
Apr. 30	7,199.13	3,650	-50
May 31	7,202.07	4,890	+1,240
June 30	7,201.85	4,800	-90
July 31	7,199.70	3,890	-910
Aug. 31	7,193.77	1,510	-2,380
Sept. 30	7,192.35	940	-570
WTR YR 1973	--	--	+180

a Contents interpolated.

10290500 ROBINSON CREEK AT TWIN LAKES OUTLET, NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°10'20", long 119°19'25", in SE¼SE¼ sec.28, T.4 N., R.24 E., Mono County, on left bank 0.2 mile downstream from Twin Lakes, and 8 miles southwest of Bridgeport.

DRAINAGE AREA.--39.1 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,050 ft (from topographic map).

AVERAGE DISCHARGE (unadjusted).--20 years, 59.1 cfs (42,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 316 cfs June 1, 2 (gage height, 3.83 ft); minimum daily, 0.70 cfs Dec. 5-15.
Period of record: Maximum discharge, 492 cfs June 20, 1963; maximum gage height, 4.62 ft June 6, 1969; no flow many days in some years.
Maximum discharge known, 660 cfs June 21, 1911 (gage height, 5.2 ft), at site 2.5 miles downstream.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by Twin Lakes.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	15	1.2	1.4	2.4	4.1	5.3	92	306	237	108	73
2	23	15	1.2	1.2	2.4	4.1	5.3	90	314	216	107	74
3	24	15	1.2	1.2	2.4	4.1	5.6	90	296	193	106	74
4	24	15	1.0	1.2	2.4	4.4	5.6	86	270	175	105	73
5	24	16	.70	1.2	2.6	4.4	5.6	84	266	165	103	73
6	24	15	.70	1.2	2.6	4.4	5.6	83	266	161	102	73
7	25	9.1	.70	1.2	2.6	4.4	5.6	82	274	160	101	73
8	24	5.3	.70	1.4	2.6	4.4	5.6	83	282	155	100	73
9	24	5.3	.70	1.4	2.6	4.4	5.9	90	292	153	99	72
10	23	4.3	.70	1.4	3.0	4.7	5.9	99	298	152	98	71
11	23	1.9	.70	1.4	3.2	4.7	5.9	99	300	152	96	70
12	27	1.9	.70	1.5	3.2	4.7	6.2	98	302	150	95	68
13	27	1.8	.70	1.6	3.2	4.7	6.2	101	300	138	94	67
14	24	1.9	.70	1.7	3.2	4.7	7.1	104	292	130	92	66
15	23	1.7	.70	1.7	3.2	4.7	24	108	270	127	95	65
16	23	1.8	.87	11	3.2	4.7	49	138	242	124	97	63
17	22	2.1	.94	16	3.2	4.7	49	182	214	120	105	62
18	22	1.8	.95	9.5	3.5	4.7	49	223	186	115	108	60
19	21	1.4	1.2	6.0	3.5	4.7	48	258	172	109	103	45
20	21	1.2	1.2	3.0	3.5	5.0	47	292	168	103	100	55
21	21	1.2	1.2	2.4	3.2	5.0	47	290	172	97	98	54
22	20	1.2	1.2	2.2	3.2	5.0	46	280	180	91	94	53
23	20	1.2	1.2	2.2	3.2	5.0	45	268	186	87	90	32
24	20	1.2	1.2	2.2	3.2	5.0	45	262	186	91	86	51
25	20	1.2	1.2	2.6	3.2	5.0	44	260	184	94	82	50
26	19	1.2	1.2	2.6	3.2	5.0	43	248	193	95	76	50
27	19	1.2	1.2	2.6	3.8	5.0	55	233	214	102	75	50
28	16	1.2	1.4	2.6	4.1	5.3	71	225	239	104	73	29
29	15	1.2	1.4	2.6	------	5.3	78	235	246	99	73	29
30	15	1.2	1.4	2.6	------	5.3	92	256	248	101	75	29
31	15	------	1.4	2.4	------	5.3	------	286	------	109	73	------
TOTAL	670	144.5	31.46	93.2	85.6	146.9	913.4	5,325	7,362	4,105	2,909	1,657
MEAN	21.6	4.82	1.01	3.01	3.06	4.74	30.4	172	245	132	93.8	54.6
MAX	27	16	1.4	16	4.1	5.3	92	292	314	237	108	74
MIN	15	1.2	.70	1.2	2.4	4.1	5.3	82	168	87	73	29
AC-FT	1,330	287	62	185	170	291	1,810	10,560	14,600	8,140	5,770	3,290

CAL YR 1972 TOTAL 18,131.56 MEAN 49.5 MAX 195 MIN .70 AC-FT 35,960
WTR YR 1973 TOTAL 23,423.06 MEAN 64.2 MAX 314 MIN .70 AC-FT 46,460

10291500 BUCKEYE CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°14'20", long 119°19'30", in NE¼NE¼ sec.4, T.4 N., R.24 E., Mono County, on right bank at Buckeye Hot Springs, 0.6 mile downstream from Eagle Creek, and 5.5 miles southwest of Bridgeport.

DRAINAGE AREA.--44.1 sq mi.

PERIOD OF RECORD.--November 1910 to September 1914 (fragmentary), October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,900 ft (from topographic map). November 1910 to September 1914, nonrecording gage at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--21 years (1911-12, 1953-73), 59.1 cfs (42,820 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 454 cfs May 31 (gage height, 3.60 ft); minimum, 4.8 cfs Feb. 25, result of freezeup.
Period of record (1953 to current year): Maximum discharge, 947 cfs Feb. 1, 1963 (gage height, 4.41 ft), from rating curve extended above 360 cfs on basis of slope-area measurement at gage height 4.00 ft and logarithmic plotting; minimum, 3.3 cfs Dec. 12, 1959, result of freezeup.
Flood of June 21, 1911, reached an observed stage of 4.8 ft (discharge not determined), site and datum then in use.

REMARKS.--Records good except those for winter periods, which are poor. No regulation or diversion above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	17	17	13	16	16	79	286	145	59	29
2	30	19	18	17	13	16	16	85	243	134	56	29
3	30	18	23	17	13	15	15	99	211	125	61	28
4	25	21	18	16	15	16	16	92	215	122	61	28
5	22	19	16	17	13	16	18	78	221	124	56	27
6	22	17	16	17	14	16	23	72	236	124	53	27
7	21	19	16	15	16	16	26	84	247	115	54	26
8	22	20	15	17	16	16	26	113	255	109	49	26
9	21	23	14	19	14	16	30	140	284	109	48	26
10	21	19	15	17	16	16	30	159	266	108	45	26
11	22	19	14	18	15	16	32	183	263	106	44	26
12	21	18	16	20	16	16	38	199	260	101	43	25
13	20	18	16	19	16	16	34	207	247	97	42	24
14	20	18	15	18	16	15	29	217	216	90	43	24
15	20	18	17	18	16	13	28	250	183	87	42	24
16	20	20	20	15	16	15	28	252	173	87	41	24
17	20	19	25	17	16	16	29	265	165	85	40	24
18	22	18	30	16	16	15	29	272	174	82	38	23
19	23	19	30	15	15	14	28	282	186	77	36	23
20	25	18	27	13	14	14	28	249	187	76	36	23
21	24	18	24	15	14	14	28	231	194	72	35	23
22	24	18	24	14	14	14	33	243	190	68	34	23
23	23	18	22	13	14	16	44	233	178	65	33	24
24	23	18	21	16	16	16	57	228	164	62	32	23
25	21	18	21	16	16	16	71	206	176	60	32	23
26	21	18	21	15	16	17	90	187	191	60	32	23
27	20	19	21	14	16	17	115	192	219	60	33	23
28	19	19	20	15	16	16	127	231	197	57	31	23
29	17	19	18	15	------	16	109	270	188	58	30	22
30	17	19	19	15	------	16	93	276	170	56	30	21
31	17	------	20	15	------	16	------	334	------	56	29	------
TOTAL	672	564	609	501	421	483	1,286	6,008	6,385	2,777	1,298	740
MEAN	21.7	18.8	19.6	16.2	15.0	15.6	42.9	194	213	89.6	41.9	24.7
MAX	30	23	30	20	16	17	127	334	286	145	61	29
MIN	17	17	14	13	13	13	15	72	164	56	29	21
AC-FT	1,330	1,120	1,210	994	835	958	2,550	11,920	12,660	5,510	2,570	1,470

CAL YR 1972 TOTAL 16,305 MEAN 44.5 MAX 224 MIN 12 AC-FT 32,340
WTR YR 1973 TOTAL 21,744 MEAN 59.6 MAX 334 MIN 13 AC-FT 43,130

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	2100	2.64	142	5-31	0300	3.60	454
5-19	0100	3.30	327	6-26	2400	2.95	230

10292000 SWAUGER CREEK NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°17'00", long 119°17'50", in SE¼NW¼ sec.23, T.5 N., R.24 E., Mono County, on right bank 0.8 mile downstream from Yaney Canyon, and 4 miles northwest of Bridgeport.

DRAINAGE AREA.--52.8 sq mi.

PERIOD OF RECORD.--June 1911 to September 1915 (fragmentary), October 1953 to current year. Prior to October 1971, published as Swager Creek near Bridgeport.

GAGE.--Water-stage recorder. Altitude of gage is 6,620 ft (from topographic map). June 1911 to September 1915 nonrecording gages at approximatly same site at different datums.

AVERAGE DISCHARGE.--21 years (1911-12, 1953-73), 12.5 cfs (9,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 89 cfs Apr. 27 (gage height, 2.94 ft); maximum gage height, 3.20 ft Dec. 14 (backwater from ice); minimum discharge, 2.0 cfs Oct. 30.
Period of record: Maximum discharge, 585 cfs Dec. 23, 1955 (gage height, 6.24 ft), from rating curve extended above 175 cfs on basis of slope-area measurement of peak flow; minimum observed, 0.50 cfs Apr. 20, 1912, Feb. 28, 1969.

REMARKS.--Records excellent except those for winter periods, which are poor. Diversions for irrigation of about 1,000 acres above station.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	7.6	6.4	6.0	7.0	8.0	11	40	47	6.9	5.8	7.3
2	9.3	7.3	7.0	6.0	7.4	7.8	10	48	42	6.3	6.3	7.3
3	7.1	7.0	7.8	6.6	7.5	7.3	10	50	38	6.3	8.1	7.2
4	6.3	7.9	6.0	6.0	7.5	7.9	12	40	35	5.6	7.5	7.0
5	6.4	7.4	5.0	5.4	7.0	7.5	18	34	33	5.6	7.2	5.9
6	6.7	6.6	5.3	5.4	7.6	8.0	27	34	34	5.8	6.9	7.0
7	6.3	7.6	4.5	5.0	7.8	7.8	27	47	32	5.6	6.6	6.8
8	6.3	6.7	4.4	7.0	7.6	7.8	27	53	32	5.4	6.3	7.0
9	6.1	6.8	4.0	7.3	7.2	8.1	29	53	30	5.8	4.8	7.1
10	6.2	7.3	4.3	7.0	7.5	9.0	32	54	26	6.3	4.2	7.1
11	6.2	7.3	4.0	7.1	7.9	9.0	36	54	26	5.6	4.6	6.7
12	6.2	6.8	5.0	8.4	8.1	8.4	34	54	21	4.6	4.0	6.6
13	6.3	7.4	4.7	7.9	8.0	8.1	28	56	17	3.8	3.5	6.8
14	6.2	5.2	4.5	7.7	7.9	8.1	24	63	16	5.2	4.9	6.6
15	6.3	6.7	5.5	7.9	7.8	7.6	24	64	16	6.6	6.1	6.7
16	6.3	7.7	6.5	8.2	7.8	8.4	25	59	18	7.8	7.3	6.8
17	6.7	8.1	7.5	7.6	7.4	8.7	26	59	18	6.9	7.7	6.8
18	7.3	7.4	8.3	7.8	7.0	8.7	25	61	18	7.5	7.5	6.8
19	7.4	7.6	10	7.2	7.0	8.7	22	61	17	6.6	7.4	6.8
20	8.5	7.4	10	6.4	7.0	8.7	21	58	16	4.4	7.0	6.9
21	7.9	7.0	9.9	7.0	7.0	7.8	21	56	9.7	3.3	6.8	7.0
22	7.9	7.0	11	6.4	7.0	8.1	24	57	7.5	3.3	6.7	6.9
23	7.9	7.0	8.4	6.0	7.2	8.4	29	59	9.7	4.4	7.2	7.2
24	7.5	7.0	8.5	7.6	7.8	8.7	35	54	11	5.4	7.9	7.1
25	7.2	7.4	6.6	7.8	7.4	9.7	39	50	10	4.8	8.0	7.3
26	7.3	8.2	8.4	7.0	7.4	10	46	46	8.7	5.6	8.7	7.3
27	7.2	7.9	8.5	6.4	7.9	11	63	44	13	5.4	9.0	7.2
28	7.1	7.8	7.3	7.4	8.0	10	70	43	13	4.8	8.5	7.0
29	6.4	7.1	6.0	7.0	------	9.4	62	43	11	5.8	8.0	6.9
30	4.7	6.8	6.5	7.0	------	10	49	45	7.5	6.3	7.4	6.6
31	6.0	------	6.9	7.5	------	11	------	50	------	5.2	7.3	------
TOTAL	211.3	217.0	208.7	215.0	209.7	267.7	906	1,589	633.1	172.9	209.2	207.7
MEAN	6.82	7.23	6.73	6.94	7.49	8.64	30.2	51.3	21.1	5.58	6.75	6.92
MAX	9.3	8.2	11	8.4	8.1	11	70	64	47	7.8	9.0	7.3
MIN	4.7	5.2	4.0	5.0	7.0	7.3	10	34	7.5	3.3	3.5	5.9
AC-FT	419	430	414	426	416	531	1,800	3,150	1,260	343	415	412

CAL YR 1972 TOTAL 3,227.0 MEAN 8.84 MAX 53 MIN 1.7 AC-FT 6,400
WTR YR 1973 TOTAL 5,047.3 MEAN 13.8 MAX 70 MIN 3.3 AC-FT 10,010

PEAK DISCHARGE (BASE, 25 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-11	1800	2.73	68	5-14	2100	2.90	85
4-27	2200	2.94	89	5-30	2300	2.60	56

10292300 BRIDGEPORT RESERVOIR TRIBUTARY NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°17'15", long 119°12'50", in SE¼SE¼ sec.16, T.5 N., R.25 E., Mono County, on left bank on upstream side of State Highway 22, 0.5 mile upstream from Rock Springs Canyon, and 2.4 miles north of Bridgeport.

DRAINAGE AREA.--0.79 sq mi.

PERIOD OF RECORD.--Water year 1963 (annual maximum), October 1963 to September 1973 (discontinued).

GAGE.--Water-stage recorder with rain-gage attachment and crest-stage gage. Altitude of gage is 6,500 ft (from topographic map). Oct. 1, 1962, to Sept. 30, 1963, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--10 years, 0.078 cfs (57 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12 cfs Mar. 27 (gage height, 4.65 ft); no flow most of year.
Period of record: Maximum discharge, 98 cfs Mar. 16, 1967 (gage height, 10.91 ft); no flow most of the time.

REMARKS.--Records of flow poor. No diversion above station. Mean daily flows of 0.05 cfs or less occur at times and are considered to be below reportable stage and are given as no flow.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	1.5		0				
2				0	0	.10		0				
3				0	0	0		0				
4				0	0	0		0				
5				0	0	0		0				
6				0	0	0		0				
7				0	0	0		0				
8				0	0	0		0				
9				0	0	0		0				
10				0	0	.90		0				
11				0	0	.26		0				
12				0	0	0		0				
13				0	0	0		0				
14				0	0	0		.02				
15				0	0	0		0				
16				.04	0	0		0				
17				0	0	0		0				
18				0	0	0		0				
19				0	0	1.1		0				
20				0	0	1.6		0				
21				0	0	0		0				
22				0	0	0		0				
23				0	0	0		0				
24				0	0	0		0				
25				0	0	0		0				
26				0	0	5.9		0				
27				0	.10	8.6		0				
28				0	.10	7.5		0				
29				0	------	4.2		0				
30				0	------	.12		0				
31		------		0	------	0	------	0	------			------
TOTAL	0	0	0	.04	.20	31.78	0	.02	0	0	0	0
MEAN	0	0	0	.001	.007	1.03	0	.0006	0	0	0	0
MAX	0	0	0	.04	.10	8.6	0	.02	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	.08	.4	63	0	.04	0	0	0	0

CAL YR 1972 TOTAL 8.82 MEAN .024 MAX 2.5 MIN 0 AC-FT 17
WTR YR 1973 TOTAL 32.04 MEAN .088 MAX 8.6 MIN 0 AC-FT 64

NOTE.--No gage-height record Mar. 23 to Apr. 16.

10292500 BRIDGEPORT RESERVOIR NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°19'30", long 119°12'40", in SE¼NE¼ sec.34, T.6 N., R.25 E., Mono County, at Bridgeport Dam on East Walker River, 4.5 miles north of Bridgeport.

DRAINAGE AREA.--358 sq mi.

PERIOD OF RECORD.--March 1926 to current year. Monthend contents only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (project datum).

EXTREMES.--Current year: Maximum contents, 44,430 acre-ft June 9 (elevation, 6,460.63 ft); minimum, 5,800 acre-ft Oct. 1 (elevation, 6,439.46 ft).
Period of record: Maximum contents, 44,580 acre-ft June 12, 1938, June 25, 26, 1958 (elevation, 6,460.7 ft); no contents during fall of 1929-30, 1960.

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1923. Dam completed in November 1924. Capacity, 42,460 acre-ft between elevations 6,415 (approximate elevation of bottom of reservoir) and 6,461 ft (crest of spillway is at elevation 6,460.75 ft, however, there are four siphons that become operative prior to reaching the spillway). Elevation of sill of outlet gate, 6,412 ft. No dead storage. Figures given herein represent total contents. Water is used for irrigation by Walker River Irrigation District.

REVISIONS (WATER YEARS).--WSP 1180: 1949. WSP 1927: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,439	5,440	6,447	13,990	6,456	31,570
6,441	7,120	6,450	18,780	6,461	45,490
6,444	10,200	6,453	24,660		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,800	9,760	13,580	18,010	21,890	25,320	30,360	33,090	43,520	43,980	31,700	19,330
2	5,840	9,870	13,720	18,090	21,890	25,430	30,610	32,970	43,820	43,980	31,570	18,960
3	6,000	9,980	13,850	18,180	22,090	25,540	30,850	32,840	44,130	43,820	31,450	18,520
4	6,080	10,140	13,990	18,260	22,090	25,760	31,090	32,710	44,130	43,820	31,450	18,180
5	6,160	10,260	14,060	18,260	22,190	25,870	31,570	32,590	43,980	43,670	31,450	17,830
6	6,280	10,380	14,210	18,350	22,380	25,980	32,460	32,590	43,980	43,220	31,330	17,490
7	6,370	10,500	14,290	18,440	22,480	26,090	32,970	32,460	43,980	42,920	31,450	17,060
8	6,460	10,550	14,360	18,610	22,580	26,200	33,480	32,460	44,130	42,460	31,450	16,740
9	6,540	10,670	14,430	18,690	22,680	26,310	33,980	32,460	44,130	42,170	31,450	16,420
10	6,640	10,850	14,580	18,780	22,890	26,530	34,380	32,460	44,130	41,580	31,330	16,110
11	6,810	10,970	14,660	18,870	23,200	26,640	34,510	32,590	44,130	41,150	31,090	15,870
12	6,940	11,080	14,730	19,060	23,310	26,750	34,770	32,710	44,130	40,710	30,850	15,710
13	7,080	11,260	14,880	19,240	23,410	26,860	34,770	33,090	44,130	40,120	30,610	15,320
14	7,220	11,440	14,950	19,420	23,520	26,980	34,640	33,600	43,980	39,690	30,360	15,100
15	7,360	11,570	15,100	19,610	23,620	27,090	34,510	34,110	43,980	39,260	29,880	14,730
16	7,500	11,760	15,170	19,880	23,720	27,320	34,640	34,640	44,130	38,840	29,160	14,430
17	7,700	11,880	15,320	20,160	23,830	27,440	34,240	35,300	44,130	38,430	28,360	14,060
18	7,840	12,070	15,470	20,340	23,930	27,550	34,380	35,960	44,130	38,150	27,550	13,790
19	7,980	12,190	15,790	20,440	24,040	27,780	34,110	36,900	44,130	37,730	26,640	13,650
20	8,180	12,260	15,950	20,620	24,140	27,900	33,980	37,870	44,130	37,180	25,870	13,310
21	8,340	12,380	16,260	20,720	24,240	27,900	33,730	38,710	44,130	36,760	24,880	13,170
22	8,490	12,570	16,660	20,820	24,350	28,120	33,730	39,260	43,980	36,230	24,040	12,970
23	8,640	12,630	16,900	20,920	24,560	28,240	33,480	39,980	43,820	35,570	23,100	12,830
24	8,790	12,770	17,060	21,010	24,660	28,360	33,350	40,420	43,820	35,040	22,480	12,630
25	8,900	12,830	17,230	21,210	24,770	28,580	33,350	40,850	43,670	34,380	21,890	12,500
26	9,050	13,040	17,400	21,210	24,990	28,820	33,220	41,150	43,520	33,860	21,500	12,380
27	9,160	13,110	17,580	21,400	25,100	29,040	33,220	41,580	43,670	33,350	21,110	12,260
28	9,320	13,240	17,660	21,400	25,210	29,280	33,220	41,880	43,980	32,840	20,820	12,130
29	9,380	13,380	17,660	21,500	------	29,520	33,220	42,020	43,980	32,460	20,440	12,000
30	9,480	13,450	17,830	21,700	------	29,760	33,090	42,460	43,980	32,200	20,070	11,940
31	9,600	------	17,920	21,800	------	30,000	------	43,070	------	31,820	19,700	------
MAX	9,600	13,450	17,920	21,800	25,210	30,000	34,770	43,070	44,130	43,980	31,700	19,330
MIN	5,800	9,760	13,580	18,010	21,890	25,320	30,360	32,460	43,520	31,820	19,700	11,940
(a)	6,443.45	6,446.60	6,449.48	6,451.58	6,453.25	6,455.37	6,456.61	6,460.19	6,460.52	6,456.12	6,450.48	6,445.45
(b)	+3,760	+3,850	+4,470	+3,880	+3,410	+4,790	+3,090	+9,980	+910	-12,160	-12,120	-7,760

CAL YR 1972 b -12,690
WTR YR 1973 b +6,100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10293000 EAST WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°19'40", long 119°12'50", in SW¼NE¼ sec.34, T.6 N., R.25 E., Mono County, on right bank 1,500 ft downstream from Bridgeport Reservoir, 5 miles north of Bridgeport, and 10 miles upstream from Sweetwater Creek.

DRAINAGE AREA.--359 sq mi.

PERIOD OF RECORD.--July 1911 to September 1914 (gage heights only), October 1921 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (from topographic map). Prior to Oct. 1, 1921, nonrecording gage at site 0.5 mile upstream at different datum. Oct. 1, 1921, to Feb. 21, 1924, water-stage recorder at site 1 mile downstream at different datum. Feb. 22, 1924, to Sept. 30, 1931, water-stage recorder and Oct. 1, 1931, to May 25, 1939, nonrecording gage at present site at datum 2.34 ft lower.

AVERAGE DISCHARGE (unadjusted).--50 years (1922-24, 1925-73), 138 cfs (99,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 668 cfs June 4 (gage height, 3.22 ft); minimum daily, 11 cfs Oct. 11, 12, 18-21, Nov. 10-16.
Period of record (1921 to current year): Maximum discharge, 1,390 cfs June 19, 1963 (gage height, 4.64 ft); maximum gage height, 4.95 ft Jan. 22, 1943 (top of surge); minimum daily discharge, 0.2 cfs Nov. 2-29, Dec. 1-22, 25-28, 1955, Jan. 17-25, 1956.

REMARKS.--Records good. Diversions for irrigation of meadow pasture lands near Bridgeport. Flow regulated by Bridgeport Reservoir. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	12	12	13	14	14	15	218	579	385	220	230
2	89	12	12	13	14	14	15	200	616	325	213	230
3	87	12	12	13	14	14	15	200	590	328	194	230
4	64	12	13	13	14	14	19	200	608	328	194	228
5	57	12	14	13	14	14	31	188	624	358	194	228
6	57	12	14	13	14	14	54	188	534	379	184	228
7	57	12	14	13	14	14	120	188	537	376	154	225
8	57	12	14	13	14	14	122	188	541	391	154	225
9	45	12	14	13	14	14	122	202	579	388	158	225
10	22	11	14	14	14	14	122	192	628	388	170	224
11	11	11	14	14	14	14	142	194	576	382	192	222
12	11	11	13	14	14	14	190	204	586	367	206	223
13	12	11	14	14	14	14	202	210	541	391	206	220
14	12	11	14	14	14	14	202	213	541	391	208	208
15	12	11	14	14	14	14	202	206	495	358	273	196
16	12	11	14	14	14	14	202	220	343	349	418	196
17	12	12	14	14	14	14	202	245	352	346	418	192
18	11	12	14	14	14	14	202	253	343	337	427	178
19	11	12	14	14	14	14	202	258	352	337	451	164
20	11	12	14	14	14	15	202	265	349	337	451	164
21	11	12	14	14	14	14	202	268	349	334	457	158
22	12	12	14	14	14	14	202	270	352	340	488	144
23	12	12	14	14	14	14	202	270	328	340	478	144
24	12	12	14	14	14	15	200	280	313	350	409	144
25	12	12	13	14	14	14	202	316	322	367	310	144
26	12	12	13	14	14	15	218	334	328	364	308	144
27	13	12	13	14	14	15	243	373	331	364	300	144
28	13	12	13	14	14	15	228	418	355	340	253	140
29	13	12	13	14	------	15	228	499	391	268	233	130
30	12	12	13	14	------	15	228	548	400	268	233	115
31	12	------	13	14	------	15	------	569	------	243	230	------
TOTAL	873	353	419	425	392	442	4,736	8,377	13,783	10,819	8,784	5,643
MEAN	28.2	11.8	13.5	13.7	14.0	14.3	158	270	459	349	283	188
MAX	89	12	14	14	14	15	243	569	628	391	488	230
MIN	11	11	12	13	14	14	15	188	313	243	154	115
AC-FT	1,730	700	831	843	778	877	9,390	16,620	27,340	21,460	17,420	11,190

CAL YR 1972 TOTAL 40,008.10 MEAN 109 MAX 322 MIN .60 AC-FT 79,360
WTR YR 1973 TOTAL 55,046.00 MEAN 151 MAX 628 MIN 11 AC-FT 109,200

NOTE.--No gage-height record Dec. 27 to Feb. 5.

10293500 EAST WALKER RIVER ABOVE STROSNIDER DITCH, NEAR MASON, NEV.

LOCATION.--Lat 38°48'50", long 119°02'50", in NW¼SW¼ sec.14, T.11 N., R.26 E., Lyon County, on right bank 0.8 mile upstream from head of Strosnider ditch, 12 miles southeast of Mason, and 13.5 miles southeast of Yerington.

DRAINAGE AREA.--1,100 sq mi, approximately.

PERIOD OF RECORD.--January 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,574.10 ft above mean sea level. Prior to Oct. 24, 1957, at site 400 ft upstream at datum 0.56 ft higher.

AVERAGE DISCHARGE.--26 years, 145 cfs (105,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 679 cfs June 6; maximum gage height, 3.91 ft; minimum daily discharge, 12 cfs Dec. 10, Jan. 5.
Period of record: Maximum discharge, 2,380 cfs Feb. 1, 1963 (gage height, 7.60 ft); minimum, 3.1 cfs Mar. 21, 1948; minimum daily, 3.4 cfs Mar. 21-24, 1948, Apr. 5, 1961.

REMARKS.--Records good except those for winter periods, which are poor. Diversions for irrigation above station. Flow regulated by Bridgeport Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	38	32	33	37	41	33	278	579	338	246	200
2	181	40	30	30	41	41	34	261	580	325	232	197
3	155	40	31	25	38	41	32	246	597	278	222	208
4	131	39	35	21	38	37	30	245	570	280	214	210
5	108	38	25	12	40	37	28	248	617	271	213	206
6	98	38	23	16	38	37	28	235	633	300	210	204
7	93	37	20	15	38	44	35	221	550	306	195	198
8	102	38	16	14	40	43	86	228	547	324	165	194
9	122	37	14	18	40	40	94	233	553	334	150	196
10	90	36	12	20	41	36	104	233	607	325	139	193
11	66	36	13	25	46	35	110	227	626	319	146	197
12	54	36	14	35	46	38	135	230	583	314	160	200
13	45	35	16	87	42	36	192	229	582	317	167	197
14	42	37	14	47	42	35	215	236	557	343	156	196
15	40	40	17	47	38	33	211	231	536	342	165	192
16	39	39	22	42	38	31	212	221	451	322	240	184
17	39	40	35	64	36	33	202	220	342	314	361	182
18	40	41	50	54	35	34	198	243	322	307	375	180
19	41	37	90	52	34	33	202	257	307	309	396	171
20	61	37	100	45	32	33	199	272	309	291	424	156
21	55	37	123	44	32	32	191	277	308	293	424	156
22	45	34	94	43	32	32	205	264	310	324	441	155
23	42	38	45	45	32	32	206	261	302	360	456	147
24	40	38	43	40	34	31	227	247	290	358	449	145
25	40	37	45	35	34	30	241	254	271	340	376	146
26	39	34	34	35	35	31	255	280	269	332	315	149
27	40	37	35	35	35	33	285	298	275	335	317	151
28	40	37	37	35	38	35	327	323	287	336	289	153
29	40	37	35	35	------	37	313	372	302	319	240	155
30	39	35	35	37	------	35	304	433	331	270	209	147
31	39	------	35	40	------	34	------	518	------	264	205	------
TOTAL	2,113	1,123	1,170	1,126	1,052	1,100	4,934	8,321	13,393	9,790	8,297	5,365
MEAN	68.2	37.4	37.7	36.3	37.6	35.5	164	268	446	316	268	179
MAX	181	41	123	87	46	44	327	518	633	360	456	210
MIN	39	34	12	12	32	30	28	220	269	264	139	145
AC-FT	4,190	2,230	2,320	2,230	2,090	2,180	9,790	16,500	26,570	19,420	16,460	10,640

CAL YR 1972 TOTAL 39,182 MEAN 107 MAX 275 MIN 12 AC-FT 77,720
WTR YR 1973 TOTAL 57,784 MEAN 158 MAX 633 MIN 12 AC-FT 114,600

10295500 LITTLE WALKER RIVER NEAR BRIDGEPORT, CALIF.

LOCATION.--Lat 38°21'30", long 119°26'30", in NW¼NW¼ sec.22, T.6 N., R.23 E., Mono County, on right bank 0.8 mile north of Sonora Junction, 1.5 miles upstream from mouth, and 14 miles northwest of Bridgeport.

DRAINAGE AREA.--63.0 sq mi.

PERIOD OF RECORD.--April to August 1910, October 1944 to current year. Prior to October 1958, published as East Fork West Walker River near Bridgeport.

GAGE.--Water-stage recorder. Altitude of gage is 6,790 ft (from topographic map). April to August 1910, nonrecording gage at site 1 mile upstream at different datum.

AVERAGE DISCHARGE.--29 years (1944-73), 50.9 cfs (36,880 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 489 cfs May 30 (gage height, 2.39 ft); minimum daily, 12 cfs Dec. 7-14, Jan. 23.
Period of record: Maximum discharge, 1,510 cfs Jan. 31, 1963 (gage height, 3.22 ft), from rating curve extended above 350 cfs on basis of slope-area measurement at gage height 2.80 ft and logarithmic plotting; maximum gage height recorded, 3.63 ft Jan. 3, 1945, (backwater from ice); minimum discharge recorded, 4.9 cfs Nov. 17, 1948, but may have been less during periods of ice effect.

REMARKS.--Records good except those for winter periods, which are poor. Small diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	18	18	16	17	19	17	88	303	123	47	18
2	27	17	20	16	17	18	17	94	247	113	45	18
3	23	17	22	16	18	16	16	102	229	106	49	19
4	19	21	16	15	18	16	18	93	220	102	50	19
5	17	18	14	14	16	16	22	80	217	102	44	20
6	17	16	13	16	20	16	29	78	225	98	41	21
7	16	17	12	14	20	16	32	87	238	91	39	21
8	16	21	12	15	18	16	34	102	257	90	36	21
9	16	25	12	18	19	16	45	119	277	89	33	21
10	16	22	12	16	18	17	52	135	259	88	32	21
11	17	18	12	17	18	18	58	147	255	85	30	21
12	17	17	12	18	18	18	63	162	236	82	29	20
13	17	19	12	20	17	17	53	166	220	81	28	19
14	17	19	12	19	16	16	43	186	188	78	28	19
15	17	17	14	16	17	15	42	223	157	79	26	19
16	17	18	15	16	16	16	48	245	143	76	25	18
17	18	18	16	16	15	17	58	268	133	77	23	18
18	19	17	16	16	15	17	51	291	131	74	23	18
19	20	18	23	15	14	17	44	297	134	67	22	18
20	24	17	26	14	14	16	40	262	133	63	22	18
21	20	16	25	16	14	18	42	241	144	59	21	18
22	20	16	27	14	15	20	52	239	144	56	21	18
23	20	16	23	12	15	16	70	248	136	54	20	18
24	19	16	19	16	18	17	82	249	128	51	20	18
25	18	17	18	18	17	17	91	223	134	48	20	18
26	18	16	18	16	16	17	106	193	147	44	21	18
27	18	20	18	12	16	18	123	198	177	43	21	18
28	16	20	18	18	18	17	133	219	171	43	20	18
29	15	20	16	17	------	17	123	256	159	46	18	18
30	15	18	17	17	------	16	107	310	141	47	18	17
31	14	------	18	18	------	16	------	350	------	45	18	------
TOTAL	561	545	526	497	470	522	1,711	5,951	5,683	2,300	890	566
MEAN	18.1	18.2	17.0	16.0	16.8	16.8	57.0	192	189	74.2	28.7	18.9
MAX	27	25	27	20	20	20	133	350	303	123	50	21
MIN	14	16	12	12	14	15	16	78	128	43	18	17
AC-FT	1,110	1,080	1,040	986	932	1,040	3,390	11,800	11,270	4,560	1,770	1,120

CAL YR 1972 TOTAL 12,720 MEAN 34.8 MAX 202 MIN 10 AC-FT 25,230
WTR YR 1973 TOTAL 20,222 MEAN 55.4 MAX 350 MIN 12 AC-FT 40,110

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-18	2200	2.12	346	6-8	2200	2.11	330
5-30	2300	2.39	489	6-27	2300	1.83	212

10296000 WEST WALKER RIVER BELOW LITTLE WALKER RIVER, NEAR COLEVILLE, CALIF.

LOCATION.--Lat 38°22'47", long 119°26'57", in NE¼SE¼ sec.9, T.6 N., R.23 E., Mono County, on right bank 150 ft downstream from Little Walker River, 60 ft upstream from bridge on U.S. Highway 395, and 13 miles southeast of Coleville.

DRAINAGE AREA.--180 sq mi.

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1958, published as "below East Fork."

GAGE.--Water-stage recorder. Datum of gage is 6,591.39 ft above mean sea level, supplementary adjustment of 1958. Oct. 1, 1939, to Sept. 30, 1969, at site 100 ft upstream at same datum. Prior to Oct. 1, 1939, at site 25 ft downstream at datum 1.00 ft higher.

AVERAGE DISCHARGE.--35 years, 258 cfs (186,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,400 cfs May 31 (gage height, 5.32 ft); minimum daily, 28 cfs Dec. 9, 11.
Period of record: Maximum discharge, 6,220 cfs Nov. 20, 1950 (gage height, 8.10 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurement of peak flow; minimum, 4.0 cfs Nov. 18, 1948, result of freezeup.
Maximum discharge observed prior to 1938, 5,800 cfs Dec. 11, 1937, by slope-area measurement.

REMARKS.--Records good except those for winter periods, which are poor. Station is above diversions except for a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown) 7 miles upstream. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	49	43	50	51	52	71	483	1,660	535	213	73
2	65	46	45	50	50	52	71	503	1,410	495	182	73
3	64	45	47	45	50	47	70	571	1,270	467	175	71
4	55	55	42	42	52	48	73	527	1,230	451	184	70
5	46	49	36	40	51	50	88	435	1,290	459	173	71
6	46	43	40	42	50	52	119	398	1,360	463	164	71
7	45	50	44	40	50	54	148	475	1,380	408	169	68
8	46	45	34	38	50	51	150	621	1,410	384	142	67
9	45	47	28	42	46	52	187	764	1,550	391	129	67
10	44	49	31	57	47	54	213	882	1,380	377	120	68
11	48	49	28	67	47	56	245	1,020	1,300	363	114	67
12	49	46	35	94	58	55	288	1,140	1,250	342	107	64
13	48	42	40	71	56	48	276	1,190	1,160	324	102	64
14	46	40	35	60	54	48	235	1,240	918	321	100	63
15	45	37	31	56	57	50	220	1,490	705	318	97	63
16	45	45	35	50	56	54	225	1,560	660	294	92	61
17	47	50	40	50	53	55	250	1,740	630	282	89	60
18	52	45	118	50	51	52	243	1,840	640	279	85	64
19	58	48	130	47	49	54	230	1,990	695	258	80	63
20	70	40	112	45	48	55	213	1,680	715	240	79	64
21	66	38	93	50	48	52	215	1,410	769	223	76	64
22	67	35	96	47	49	61	245	1,380	792	205	74	64
23	67	35	83	50	51	57	318	1,400	742	194	82	64
24	66	35	71	55	51	57	394	1,470	650	180	83	64
25	58	35	70	66	52	61	463	1,260	695	171	82	63
26	57	35	60	60	50	66	549	1,040	792	167	86	61
27	55	40	56	45	56	68	685	1,050	960	162	92	60
28	51	42	52	55	56	68	758	1,330	846	160	85	57
29	40	43	50	60	------	66	690	1,640	775	169	79	56
30	32	40	50	55	------	67	571	1,790	670	167	74	55
31	40	------	50	55	------	71	------	1,980	------	162	73	------
TOTAL	1,603	1,298	1,725	1,634	1,439	1,733	8,503	36,299	30,304	9,411	3,482	1,940
MEAN	51.7	43.3	55.6	52.7	51.4	55.9	283	1,171	1,010	304	112	64.7
MAX	70	55	130	94	58	71	758	1,990	1,660	535	213	73
MIN	32	35	28	38	46	47	70	398	630	160	73	55
AC-FT	3,180	2,570	3,420	3,240	2,850	3,440	16,870	72,000	60,110	18,670	6,910	3,850

CAL YR 1972 TOTAL 72,449 MEAN 198 MAX 1,370 MIN 28 AC-FT 143,700
WTR YR 1973 TOTAL 99,371 MEAN 272 MAX 1,990 MIN 28 AC-FT 197,100

PEAK DISCHARGE (BASE, 1,120 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-18	2400	5.23	2,310	6-8	2400	4.75	1,830
5-31	0300	5.32	2,400				

10296500 WEST WALKER RIVER NEAR COLEVILLE, CALIF.

LOCATION.--Lat 38°30'55", long 119°27'15", in NW¼NE¼ sec.28, T.8 N., R.23 E., Mono County, on left bank 0.2 mile downstream from Rock Creek, and 5 miles southeast of Coleville.

DRAINAGE AREA.--271 sq mi.

PERIOD OF RECORD.--October 1902 to July 1908 (published as West Fork of Walker River near Coleville 1903, 1905-8 and as Walker River, West Fork, near Coleville 1904), March 1909 to September 1910, June 1915 to March 1938, May 1957 to current year. Monthly discharge only for some periods, published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (from topographic map). Prior to July 31, 1908, nonrecording gage at site 0.5 mile upstream at different datum. Mar. 1, 1909, to Aug. 31, 1910, nonrecording gage, and June 18, 1915, to Aug. 15, 1919, water-stage recorder near present site at different datums. Aug. 16, 1919, to Mar. 31, 1938, water-stage recorder at site 1,000 ft upstream at different datum. May 26, 1957, to Sept. 10, 1963, water-stage recorder at site 10 ft downstream at datum 0.38 ft lower.

AVERAGE DISCHARGE.--44 years (1902-7, 1909-10, 1915-37, 1957-73), 274 cfs (198,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,200 cfs May 19 (gage height, 3.93 ft); minimum daily, 27 cfs Dec. 11.
Period of record (1915-38, 1957 to current year): Maximum discharge, 6,500 cfs Dec. 11, 1937, from slope-area measurement of peak flow; minimum, 5 cfs Dec. 3, 1924, Aug. 27, 1931.

REMARKS.--Records good except those for winter periods, which are poor. Station is above diversions except for a few small ranch ditches. Flow very slightly regulated by Poor Lake Reservoir (capacity unknown) 17 miles upstream.

REVISIONS (WATER YEARS).--WSP 880: 1917 (runoff in acre-feet). WSP 1514: 1918, 1923. WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	64	43	42	48	65	79	473	1,730	565	229	97
2	83	61	40	42	49	60	79	481	1,540	517	212	99
3	83	58	45	41	50	54	77	559	1,370	489	195	97
4	75	71	41	37	50	58	81	520	1,330	474	213	95
5	63	66	37	35	54	60	88	431	1,370	479	200	95
6	63	57	43	37	62	74	111	384	1,430	488	189	94
7	59	65	39	37	60	76	138	440	1,450	437	198	92
8	61	56	36	35	58	73	146	596	1,470	408	172	91
9	61	57	28	39	57	67	171	783	1,650	414	156	91
10	59	62	30	48	64	73	192	906	1,550	402	148	90
11	61	64	27	55	56	77	215	1,050	1,480	389	139	87
12	66	60	41	80	66	75	261	1,180	1,400	374	131	86
13	66	59	34	78	72	66	265	1,290	1,330	349	125	82
14	59	50	30	62	69	66	225	1,330	1,060	345	123	80
15	59	49	35	56	73	60	209	1,540	786	344	121	78
16	59	54	40	53	68	72	209	1,610	721	319	116	78
17	61	60	67	52	66	73	232	1,750	672	306	110	75
18	68	50	95	52	62	70	232	1,810	681	302	106	77
19	73	53	115	52	60	72	222	1,890	749	289	103	75
20	90	44	118	45	56	74	209	1,750	775	267	101	73
21	85	39	103	47	56	63	205	1,520	831	249	98	73
22	85	36	113	44	56	68	225	1,470	863	233	96	72
23	88	35	84	45	56	71	288	1,470	826	220	104	72
24	85	34	86	48	60	70	357	1,530	690	208	107	71
25	78	34	65	50	63	74	415	1,330	740	199	106	71
26	75	35	58	59	64	80	512	1,130	844	191	109	69
27	73	39	50	47	67	83	666	1,120	1,060	187	118	68
28	68	42	46	49	65	84	797	1,370	927	184	111	66
29	61	43	42	52	------	76	734	1,660	834	191	105	64
30	33	42	42	54	------	74	587	1,780	722	193	100	63
31	35	------	42	51	------	77	------	1,910	------	184	97	------
TOTAL	2,085	1,539	1,715	1,524	1,687	2,185	8,227	37,063	32,881	10,196	4,238	2,421
MEAN	67.3	51.3	55.3	49.2	60.3	70.5	274	1,196	1,096	329	137	80.7
MAX	90	71	118	80	73	84	797	1,910	1,730	565	229	99
MIN	33	34	27	35	48	54	77	384	672	184	96	63
AC-FT	4,140	3,050	3,400	3,020	3,350	4,330	16,320	73,510	65,220	20,220	8,410	4,800

CAL YR 1972 TOTAL 76,215 MEAN 208 MAX 1,430 MIN 27 AC-FT 151,200
WTR YR 1973 TOTAL 105,761 MEAN 290 MAX 1,910 MIN 27 AC-FT 209,800

PEAK DISCHARGE (BASE, 1,120 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-19	0200	3.93	2,200	6-9	0300	3.63	1,930
5-31	0200	3.89	2,160	6-28	0100	2.78	1,160

10297000 TOPAZ LAKE NEAR TOPAZ, CALIF.

LOCATION.--Lat 38°41'35", long 119°31'10", in NW¼NE¼ sec.33, T.10 N., R.22 E., Douglas County, Nevada, at outlet works of Topaz Lake on West Walker River, 5.5 miles north of Topaz.

PERIOD OF RECORD.--December 1921 to September 1931 (monthly contents only published in WSP 1734), October 1931 to current year.

GAGE.--Float and nonrecording gages read once daily. Datum of gage is at mean sea level (levels by Walker River Irrigation District).

EXTREMES.--Current year: Maximum contents, 59,850 acre-ft June 29, 30 (elevation, 5,005.18 ft); minimum, 9,420 acre-ft Oct. 1 (elevation, 4,978.32 ft).
Period of record: Maximum contents, 60,240 acre-ft June 30, 1941 (elevation, 5,005.35 ft); no contents Oct. 31, 1924, Sept. 22, 24-30, Oct. 1-15, 1960.

REMARKS.--Topaz Lake, formerly known as Alkali Lake and Topaz Reservoir, was formed by the diversion of water from West Walker River through a feeder canal and the construction of an outlet tunnel through a low saddle in rim of lake. Storage began about December 1921. Usable capacity, 59,440 acre-ft between elevations 4,972.3 ft (lowest practical elevation for diversion through tunnel, bottom of outlet tunnel at elevation 4,970 ft) and 5,005 ft (3 ft below top of levee). Usable capacity of reservoir increased from about 45,000 to 59,440 acre-ft in October 1937 by an earthfill, rock-faced levee at south end. Figures given herein represent usable contents. There is 65,000 acre-ft of lake volume below the point of controllable storage. Water is used for irrigation in Walker River Irrigation District.

COOPERATION.--Elevations furnished by Walker River Irrigation District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,978	8,910	4,995	38,100
4,980	12,130	5,000	48,350
4,985	20,390	5,006	61,750
4,990	28,970		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,420	11,690	15,890	21,100	27,180	32,980	39,410	37,630	59,050	59,760	40,080	19,840
2	9,460	11,810	16,060	21,240	--	33,180	39,570	37,340	59,000	59,510	39,650	19,150
3	9,500	11,890	16,210	--	--	33,360	39,770	37,000	58,640	59,030	39,090	18,570
4	9,520	12,050	16,390	--	--	33,560	39,950	36,770	58,270	58,480	38,780	18,030
5	9,550	12,160	16,550	--	--	33,650	40,120	36,420	58,300	57,770	38,350	17,470
6	9,580	12,290	16,670	--	--	33,890	40,360	36,010	58,460	57,180	37,860	16,900
7	9,630	12,410	16,870	--	--	34,110	40,400	34,930	58,320	56,620	37,480	16,400
8	9,730	12,470	16,970	--	39,590	34,310	40,320	34,540	58,820	55,960	36,900	15,890
9	9,820	12,580	17,080	--	28,660	34,530	40,220	34,310	59,320	55,200	36,420	15,410
10	9,890	12,670	17,180	--	28,850	34,730	40,160	34,290	59,550	54,510	35,970	15,040
11	9,950	12,760	17,270	22,440	29,200	34,980	40,140	34,530	59,550	53,770	35,450	14,710
12	10,020	12,880	17,350	--	29,370	35,190	40,160	35,020	59,480	53,040	34,860	14,430
13	10,070	13,010	17,470	--	29,580	35,390	40,160	35,750	59,460	52,450	34,160	14,130
14	10,160	13,150	17,550	--	29,800	35,580	40,100	36,880	59,320	51,480	33,330	13,770
15	10,210	13,320	17,680	--	29,990	35,800	39,970	38,000	59,160	50,670	32,320	13,580
16	10,270	13,450	17,810	--	30,180	36,030	39,770	39,370	59,120	49,890	31,350	13,380
17	10,340	13,640	17,960	--	30,390	36,390	39,230	41,090	59,140	49,140	30,710	13,220
18	10,420	13,840	18,130	--	30,610	36,580	39,000	43,020	59,120	48,280	30,080	13,060
19	10,520	14,000	18,450	24,760	30,800	36,770	38,820	45,300	59,050	47,470	29,370	12,880
20	10,730	14,180	18,800	24,920	30,980	36,920	38,470	47,860	59,120	47,010	28,670	12,710
21	10,820	14,330	19,100	25,120	31,210	37,070	38,170	50,020	59,190	46,160	27,990	12,550
22	10,920	14,510	19,440	25,330	31,390	37,260	37,610	51,390	59,280	45,530	27,300	12,420
23	11,010	14,680	19,650	25,480	31,580	37,480	37,420	52,560	59,350	45,090	26,610	12,290
24	11,130	14,810	19,870	25,670	31,810	37,670	37,030	53,750	59,420	44,430	25,900	12,150
25	11,220	14,950	20,060	25,900	32,030	37,860	36,840	54,800	59,370	43,780	25,090	12,110
26	11,320	15,120	20,220	26,090	32,210	38,040	36,840	55,510	59,350	43,270	24,180	12,070
27	11,390	15,280	20,410	--	32,460	38,330	36,800	55,990	59,440	42,590	23,500	12,050
28	11,450	15,450	20,560	--	32,730	38,600	37,150	56,500	59,780	42,040	22,750	11,990
29	11,500	15,610	20,710	--	------	38,840	37,530	57,180	59,850	41,510	22,010	11,900
30	11,550	15,760	20,850	26,830	------	39,030	37,730	57,910	59,850	41,190	21,270	11,770
31	11,630	------	20,980	--	------	39,210	------	58,590	------	40,630	20,530	------
MAX	11,630	15,760	20,980	--	--	39,210	40,400	58,590	59,850	59,760	40,080	19,840
MIN	9,420	11,690	15,890	--	--	32,980	36,800	34,290	58,270	40,630	20,530	11,770
(a)	4,979.69	4,982.22	4,985.35	4,988.77	4,992.12	4,995.57	4,994.81	5,004.63	5,005.18	4,996.28	4,985.08	4,979.74
(b)	+2,110	+4,130	+5,220	+5,850	+5,900	+6,480	-1,480	+20,860	+1,260	-19,220	-20,100	-8,820

CAL YR 1972 b -9,960
WTR YR 1973 b +2,190

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10297500 WEST WALKER RIVER AT HOYE BRIDGE, NEAR WELLINGTON, NEV.

LOCATION.--Lat 38°43'40", long 119°25'40", in NE¼SE¼ sec.17, T.10 N., R.23 E., Douglas County, on left bank 20 ft upstream from Hoye bridge, 2 miles upstream from head of Saroni Canal, and 4 miles southwest of Wellington.

DRAINAGE AREA.--533 sq mi.

PERIOD OF RECORD.--May to August 1910 (published as West Walker River near Wellington), July 1920 to September 1923, March 1924 to August 1925, October 1925 to September 1932, October 1957 to current year. Monthly discharge only for some periods published in WSP 1314.

GAGE.--Water-stage recorder. Altitude of gage is 4,980 ft (from topographic map). May to August 1910, nonrecording gage at same site at different datum. July 1, 1920, to Sept. 30, 1923, water-stage recorder at site 3 miles downstream (1 mile downstream from Saroni Canal) at different datum and supplemental nonrecording gage on Saroni Canal 1 mile downstream from head. Mar. 1, 1924, to Sept. 30, 1932, water-stage recorder at same site at different datum.

AVERAGE DISCHARGE (unadjusted).--26 years (1920-23, 1925-32, 1957-73), 232 cfs (168,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,720 cfs June 1 (gage height, 8.04 ft); minimum daily, 16 cfs Dec. 10, 11.
Period of record: Maximum discharge, 2,180 cfs June 6, 1922; minimum observed, 4.8 cfs Jan. 5, 1961.

REMARKS.--Records good except those for winter periods, which are fair. Flow regulated by off-channel storage in Topaz Reservoir since Jan. 30, 1922. Diversions for irrigation of 10,500 acres above station. Records include releases from Topaz Lake and all return flow from Antelope Valley.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	38	22	20	25	25	25	568	1,700	602	349	366
2	91	37	21	20	25	25	25	557	1,670	593	339	339
3	67	37	22	20	26	24	25	571	1,560	587	370	329
4	65	38	22	20	27	23	25	571	1,350	582	343	312
5	52	36	20	20	26	23	27	582	1,170	565	351	312
6	51	38	22	20	27	24	64	582	1,170	587	337	302
7	50	38	21	20	27	24	129	599	1,120	608	335	271
8	50	39	23	20	27	24	161	625	1,020	608	339	256
9	50	39	20	20	27	24	164	648	1,140	599	343	248
10	50	39	16	21	30	24	165	674	1,280	576	385	225
11	46	40	16	21	32	25	168	701	1,240	576	379	195
12	45	40	20	23	30	26	182	707	1,190	593	385	191
13	44	40	22	24	31	25	226	750	1,130	602	400	185
14	43	41	20	24	31	25	234	732	1,030	599	513	165
15	43	41	20	24	30	25	260	763	781	602	483	148
16	43	38	21	28	31	24	263	766	602	571	411	133
17	44	24	22	36	27	24	287	763	576	554	337	120
18	45	22	23	33	25	24	288	766	565	548	358	124
19	45	22	26	29	25	24	287	769	557	498	368	121
20	45	22	25	23	25	24	275	738	554	466	366	111
21	46	21	24	28	25	24	277	695	562	466	362	103
22	46	21	22	24	27	24	290	769	582	416	368	96
23	46	21	22	24	26	24	298	775	585	374	364	93
24	46	21	22	26	25	25	360	830	582	370	372	82
25	44	21	22	25	25	25	347	789	585	368	448	79
26	44	21	22	25	25	25	387	798	622	366	443	80
27	56	21	22	24	25	26	459	775	622	345	411	80
28	56	21	22	25	25	26	476	836	671	329	405	91
29	56	21	20	25	------	25	532	994	660	327	402	89
30	38	21	20	25	------	25	557	1,180	610	329	400	87
31	38	------	20	25	------	25	------	1,440	------	341	362	------
TOTAL	1,577	919	662	742	757	760	7,263	23,313	27,486	15,547	11,828	5,333
MEAN	50.9	30.6	21.4	23.9	27.0	24.5	242	752	916	502	382	178
MAX	92	41	26	36	32	26	557	1,440	1,700	608	513	366
MIN	38	21	16	20	25	23	25	557	554	327	335	79
AC-FT	3,130	1,820	1,310	1,470	1,500	1,510	14,410	46,240	54,520	30,840	23,460	10,580

CAL YR 1972 TOTAL 71,801 MEAN 196 MAX 628 MIN 16 AC-FT 142,400
WTR YR 1973 TOTAL 96,187 MEAN 264 MAX 1,700 MIN 16 AC-FT 190,800

NOTE.--No gage-height record May 15 to June 6.

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK, NEAR MARKLEEVILLE, CALIF.

LOCATION.--Lat 38°42'50", long 119°45'50", in SW¼NE¼ sec.15, T.10 N., R.20 E., Alpine County, on right bank 0.5 mile downstream from Markleeville Creek, and 1.5 miles north-northeast of Markleeville.

DRAINAGE AREA.--276 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (from topographic map). Prior to Oct. 1, 1967, at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE.--13 years, 363 cfs (263,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,200 cfs May 18 (gage height, 6.00 ft); minimum, 36 cfs Oct. 31. Period of record: Maximum discharge, 15,100 cfs Jan. 31, 1963 (gage height, 10.21 ft, present datum); minimum, 16 cfs Nov. 17, 1961.

REMARKS.--Records excellent except those for winter months, which are poor. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs (total capacity, 5,000 acre-ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	73	78	120	115	172	199	864	1,670	405	144	104
2	171	69	93	120	117	166	183	966	1,470	366	141	107
3	104	65	92	115	114	161	184	1,110	1,400	334	134	110
4	80	131	90	100	115	159	204	1,030	1,350	319	150	118
5	74	95	66	86	107	148	259	788	1,370	305	157	121
6	72	75	70	90	115	151	366	695	1,410	290	134	118
7	70	83	64	85	118	149	422	853	1,410	276	124	134
8	79	76	62	80	114	145	391	1,100	1,440	267	115	131
9	71	70	60	90	112	141	464	1,260	1,490	253	101	118
10	68	76	64	100	116	169	509	1,500	1,360	240	98	112
11	70	83	60	150	115	183	573	1,800	1,280	223	104	110
12	68	74	72	287	115	164	638	1,970	1,170	202	107	110
13	66	75	85	202	119	157	595	1,950	1,100	198	101	107
14	62	88	80	172	119	150	474	1,970	959	215	101	101
15	60	80	90	188	118	141	428	2,060	804	227	141	104
16	63	84	100	412	120	155	413	2,270	728	215	144	98
17	73	88	105	227	119	158	457	2,360	670	215	137	95
18	100	75	120	203	128	151	472	2,430	635	210	134	93
19	92	84	158	155	122	160	450	2,740	621	198	137	83
20	114	70	140	130	126	159	406	2,240	614	176	137	68
21	100	69	119	120	129	149	385	1,950	621	161	134	68
22	94	86	129	110	128	141	428	1,850	628	154	137	68
23	87	64	128	110	130	147	559	1,890	607	150	134	80
24	82	86	114	115	143	153	746	1,860	552	137	150	75
25	72	90	123	120	136	182	864	1,690	539	137	150	75
26	74	87	122	119	146	208	1,040	1,430	565	137	161	73
27	71	85	130	110	156	223	1,290	1,410	635	141	179	68
28	68	84	125	115	168	211	1,460	1,600	559	141	157	66
29	58	85	120	120	------	186	1,250	1,830	520	147	150	64
30	53	73	120	123	------	185	990	1,910	463	144	118	62
31	50	------	120	113	------	200	------	1,750	------	137	101	------
TOTAL	2,436	2,423	3,099	4,387	3,480	5,124	17,099	51,126	28,640	6,720	4,112	2,841
MEAN	78.6	80.8	100	142	124	165	570	1,649	955	217	133	94.7
MAX	171	131	158	412	168	223	1,460	2,740	1,670	405	179	134
MIN	50	64	60	80	107	141	183	695	463	137	98	62
AC-FT	4,830	4,810	6,150	8,700	6,900	10,160	33,920	101,400	56,810	13,330	8,160	5,640

CAL YR 1972 TOTAL 99,845 MEAN 273 MAX 1,470 MIN 44 AC-FT 198,000
WTR YR 1973 TOTAL 131,487 MEAN 360 MAX 2,740 MIN 50 AC-FT 260,800

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	2400	4.88	1,830	5-30	0100	5.23	2,130
5-18	2400	6.00	3,200	6-9	0100	4.86	1,700

10309000 EAST FORK CARSON RIVER NEAR GARDNERVILLE, NEV.

LOCATION.--Lat 38°50'40", long 119°42'10", in SW¼NE¼ sec.2, T.11 N., R.20 E., Douglas County, on left bank 0.1 mile downstream from Horseshoe Bend, 2 miles east of Mud Lake Reservoir, 4.5 miles downstream from Bryant Creek, and 7 miles southeast of Gardnerville.

DRAINAGE AREA.--341 sq mi.

PERIOD OF RECORD.--January 1890 to December 1893, October 1900 to December 1906 (gage heights only August to December 1904 and July to December 1905), January 1908 to December 1910, June to October 1917, December 1924 to September 1928, June to September 1929, October 1935 to December 1937, May 1939 to current year. Monthly discharge only for some periods published in WSP 1314.

GAGE.--Water-stage recorder and since July 1, 1955, thermograph attachment (thermograph removed Sept. 25, 1972). Datum of gage is 4,985.11 ft above mean sea level (levels by Bureau of Reclamation). Prior to May 19, 1939, nonrecording gages at several sites within 2 miles of present site at various datums.

AVERAGE DISCHARGE.--47 years (1890-93, 1900-1903, 1908-10, 1925-28, 1935-37, 1939-73), 390 cfs (282,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,980 cfs May 19 (gage height, 4.80 ft); minimum, 53 cfs Oct. 31. Period of record: Maximum discharge, 17,600 cfs Dec. 23, 1955 (gage height, 11.88 ft), from rating curve extended above 6,000 cfs on basis of slope-area measurements at gage heights 9.66 and 11.88 ft; minimum observed, 8 cfs Dec. 4-10, 19-23, 1904.

REMARKS.--Records good. Station is above all diversions in Carson Valley. Diversions for irrigation above station. Flow slightly regulated by several small reservoirs (total capacity, 5,000 acre-ft).

REVISIONS (WATER YEARS).--WSP 1214: 1938(M), 1942-43(M), 1945(M). WSP 1514: 1909-10. WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	76	79	128	127	200	221	893	1,650	409	155	97
2	158	78	90	131	134	192	198	974	1,470	371	151	102
3	124	74	94	125	132	178	192	1,130	1,390	339	147	104
4	90	123	95	110	132	177	211	1,080	1,350	320	150	113
5	81	110	71	102	127	164	267	838	1,350	308	178	117
6	79	86	73	105	132	167	390	721	1,390	296	147	116
7	77	88	70	100	135	162	466	873	1,400	279	134	125
8	88	86	66	94	132	158	420	1,100	1,400	273	129	126
9	83	79	64	110	127	151	500	1,250	1,470	260	114	117
10	79	83	70	145	146	171	549	1,450	1,360	246	109	110
11	81	90	65	174	141	214	618	1,740	1,290	231	113	106
12	79	84	80	303	134	182	689	1,900	1,170	208	118	107
13	77	80	90	267	138	174	633	1,900	1,120	201	112	105
14	75	94	85	200	137	164	506	2,000	979	225	104	102
15	75	85	95	182	139	149	452	2,100	815	230	140	101
16	79	96	110	473	136	166	436	2,160	733	218	147	100
17	83	95	200	317	133	170	483	2,180	674	222	144	94
18	119	86	300	269	148	163	495	2,230	635	227	138	91
19	109	91	510	208	138	170	469	2,590	621	207	140	89
20	126	80	401	169	142	173	423	2,190	607	185	142	68
21	116	72	303	140	148	159	407	1,900	617	170	134	68
22	106	98	344	130	146	151	464	1,820	626	162	135	68
23	99	72	259	120	148	158	641	1,810	613	160	132	76
24	94	70	224	130	158	158	800	1,850	548	147	147	77
25	88	90	182	130	152	186	897	1,660	542	144	150	74
26	84	93	176	130	159	219	1,050	1,450	542	143	154	73
27	81	93	177	120	181	244	1,260	1,400	637	148	186	70
28	79	91	161	125	194	240	1,420	1,540	562	147	158	68
29	74	94	136	130	------	204	1,290	1,760	516	154	154	66
30	63	80	138	142	------	195	1,040	1,850	467	151	122	64
31	59	------	135	137	------	208	------	1,730	------	149	101	------
TOTAL	2,770	2,617	4,943	5,146	3,996	5,567	17,887	50,069	28,544	6,930	4,285	2,794
MEAN	89.4	87.2	159	166	143	180	596	1,615	951	224	138	93.1
MAX	158	123	510	473	194	244	1,420	2,590	1,650	409	186	126
MIN	59	70	64	94	127	149	192	721	467	143	101	64
AC-FT	5,490	5,190	9,800	10,210	7,930	11,040	35,480	99,310	56,620	13,750	8,500	5,540

CAL YR 1972 TOTAL 102,243 MEAN 279 MAX 1,330 MIN 51 AC-FT 202,800
WTR YR 1973 TOTAL 135,548 MEAN 371 MAX 2,590 MIN 59 AC-FT 268,900

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-28	0100	3.59	1,640	5-30	0400	3.97	2,020
5-19	0300	4.80	2,980	6-9	0300	3.59	1,640

10310000 WEST FORK CARSON RIVER AT WOODFORDS, CALIF.

LOCATION.--Lat 38°46'10", long 119°49'55", in NW¼SE¼ sec.34, T.11 N., R.19 E., Alpine County, on left bank 0.3 mile downstream from bridge on State Highway 88-89, 0.6 mile southwest of Woodfords, and 3.8 miles downstream from Willow Creek.

DRAINAGE AREA.--65.6 sq mi.

PERIOD OF RECORD.--October 1900 to May 1907, 1910-11 (fragmentary), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1314. January 1890 to March 1892, June 1907 to September 1920 (except portions of 1910-11), at site 0.7 mile downstream; records not equivalent owing to diversions for irrigation.

GAGE.--Water-stage recorder. Altitude of gage is 5,760 ft (from river-profile map). Prior to Oct. 1, 1938, nonrecording gage at same site at different datum. Oct. 1, 1938, to Nov. 11, 1958, water-stage recorder at same site at datum 1.02 ft lower. Nov. 13, 1958, to Jan. 30, 1963, water-stage recorder at site 150 ft downstream at datum 3.06 ft lower.

AVERAGE DISCHARGE.--42 years (1900-1907, 1938-73), 114 cfs (82,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 837 cfs May 15 (gage height, 3.78 ft); minimum, 16 cfs Nov. 20, 23, 30, but may have been less during periods of ice effect.
Period of record: Maximum discharge, 4,890 cfs Feb. 1, 1963 (gage height, 9.0 ft), on basis of slope-area measurement of peak flow; minimum, about 5 cfs Dec. 23, 1961.
Flood of Dec. 11, 1937, reached a stage of 8.0 ft (present datum), from floodmarks (discharge, 3,500 cfs by slope-area measurement).

REMARKS.--Records good. One small diversion above station for irrigation. Flow slightly regulated by several small reservoirs (total capacity, about 1,500 acre-ft). Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1927: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	25	26	44	41	43	49	295	432	93	77	56
2	57	25	30	45	40	43	50	300	370	93	77	32
3	44	24	30	45	40	41	50	310	342	91	80	25
4	33	44	24	43	39	43	52	320	320	88	54	24
5	26	39	21	40	38	40	63	335	317	87	36	23
6	25	31	26	39	39	43	88	350	320	85	31	27
7	25	32	25	37	39	42	107	362	317	97	28	30
8	28	30	23	36	39	42	109	401	307	78	27	28
9	25	29	20	36	39	40	133	432	307	63	25	25
10	24	30	21	35	33	43	145	478	292	61	25	31
11	26	31	19	44	39	44	163	530	268	56	24	49
12	26	28	30	106	40	44	184	558	253	54	23	50
13	25	28	30	112	40	43	184	562	235	56	25	48
14	25	29	29	84	40	43	145	570	206	60	63	45
15	25	31	29	70	39	41	141	612	180	61	65	42
16	26	31	29	52	39	43	141	656	170	65	63	28
17	32	31	52	56	39	44	158	665	156	107	60	23
18	38	29	99	48	40	41	160	655	147	104	52	22
19	40	31	165	46	40	43	154	625	143	90	44	22
20	53	24	152	40	41	44	139	570	139	85	25	21
21	43	29	118	42	41	45	145	502	139	58	23	21
22	38	31	107	40	40	41	184	482	141	42	28	21
23	36	24	83	42	40	43	241	466	135	38	33	22
24	34	30	77	45	41	44	296	466	123	35	34	22
25	31	31	65	47	36	50	326	432	121	33	33	42
26	30	31	62	45	39	52	368	376	121	32	37	42
27	28	31	60	44	41	53	428	362	131	33	60	36
28	25	29	55	44	42	53	467	380	121	31	53	30
29	23	29	50	42	------	49	398	418	112	34	49	27
30	22	26	51	43	------	50	324	432	102	40	54	25
31	23	------	50	43	------	50	------	415	------	60	55	------
TOTAL	966	893	1,658	1,535	1,104	1,380	5,592	14,317	6,467	2,010	1,363	939
MEAN	31.2	29.8	53.5	49.5	39.4	44.5	186	462	216	64.8	44.0	31.3
MAX	57	44	165	112	42	53	467	665	432	107	80	56
MIN	22	24	19	35	33	40	49	295	102	31	23	21
AC-FT	1,920	1,770	3,290	3,040	2,190	2,740	11,090	28,400	12,830	3,990	2,700	1,860

CAL YR 1972 TOTAL 30,742 MEAN 84.0 MAX 324 MIN 16 AC-FT 60,980
WTR YR 1973 TOTAL 38,224 MEAN 105 MAX 665 MIN 19 AC-FT 75,820

PEAK DISCHARGE (BASE, 500 CFS).--Apr. 28 (2000) 578 cfs (3.29 ft); May 15 (2230) 837 cfs (3.78 ft).

10336593 GRASS LAKE CREEK NEAR MEYERS, CALIF.

LOCATION.--Lat 38°48'07", long 120°00'54", in SE¼NW¼ sec.11, T.11 N., R.18 E., El Dorado County, on left bank 60 ft upstream from Grass Lake Way, 300 ft upstream from confluence with Upper Truckee River, and 3.8 miles south of Meyers.

DRAINAGE AREA.--6.99 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 94 cfs May 17 (gage height, 2.62 ft); minimum daily, 1.4 cfs Aug. 17-25, Sept. 5-16, 30.
Period of record: Maximum discharge, 102 cfs June 4, 1972 (gage height, 2.72 ft); minimum daily, 1.4 cfs Aug. 17-25, Sept. 5-16, 30, 1973.

REMARKS.--Records good except those for the month of May, which are fair. No regulation or diversion above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.6	2.4	5.3	3.5	3.1	3.3	35	64	13	3.5	1.6
2	4.4	2.6	2.4	5.3	3.5	3.1	3.5	41	56	12	3.3	1.6
3	3.9	2.6	2.4	4.8	3.5	3.0	3.3	46	51	11	3.3	1.6
4	3.1	4.4	2.0	4.3	3.5	3.1	3.7	42	49	11	3.3	1.6
5	3.0	3.7	2.0	3.9	3.5	3.0	4.8	34	48	9.7	3.1	1.4
6	2.6	3.3	2.0	4.1	3.5	3.0	6.8	31	47	8.8	3.0	1.4
7	2.8	3.0	2.0	3.9	3.5	3.0	7.2	35	46	8.4	2.8	1.4
8	3.1	2.8	2.0	4.1	3.5	3.0	7.6	40	45	7.6	2.6	1.4
9	2.8	2.6	2.0	3.9	3.3	3.1	8.4	42	44	6.8	2.5	1.4
10	2.8	2.6	2.0	3.9	3.1	3.3	8.8	48	41	6.8	2.4	1.4
11	2.8	2.6	2.0	6.2	3.3	3.3	10	54	38	6.5	2.0	1.4
12	2.8	2.6	2.0	14	3.1	3.3	11	60	36	6.2	2.2	1.4
13	2.8	2.6	2.0	9.7	3.1	3.3	11	61	35	6.2	2.2	1.4
14	2.6	2.6	2.0	7.2	3.1	3.1	9.7	62	32	7.2	1.8	1.4
15	2.8	2.5	2.0	6.5	3.1	3.1	9.7	66	30	7.6	1.6	1.4
16	3.0	2.5	2.0	5.9	3.1	3.3	9.7	70	29	6.5	1.6	1.4
17	3.1	2.5	13	5.3	3.1	3.3	9.7	73	26	6.5	1.4	1.6
18	3.9	2.5	6.5	5.0	3.1	3.1	10	71	24	6.2	1.4	1.6
19	4.1	2.5	14	4.4	3.1	3.3	12	72	23	5.9	1.4	1.6
20	5.0	2.8	10	4.3	3.1	3.3	15	66	22	5.6	1.4	1.6
21	4.8	3.0	9.7	4.3	3.1	3.3	18	62	21	5.3	1.4	1.6
22	4.8	2.6	9.7	4.3	3.1	3.3	20	65	21	5.0	1.4	1.6
23	4.4	2.8	8.4	3.9	3.1	3.3	25	63	20	4.4	1.4	1.8
24	4.1	2.6	7.6	3.7	3.1	3.3	24	60	20	4.1	1.4	1.8
25	3.7	2.4	7.2	3.7	3.1	3.7	28	58	19	3.7	1.4	1.8
26	3.5	2.5	7.2	3.7	3.1	3.7	32	52	19	3.5	2.4	1.8
27	3.3	2.5	7.2	3.7	3.3	3.7	36	51	18	3.5	3.7	1.6
28	3.3	2.5	6.5	3.7	3.1	3.5	42	53	17	3.5	2.2	1.6
29	2.8	2.5	5.9	3.7	------	3.3	39	55	16	3.5	2.0	1.6
30	2.6	2.4	5.9	3.5	------	3.3	33	57	15	3.3	1.8	1.4
31	2.6	------	5.3	3.5	------	3.3	------	59	------	3.3	1.6	------
TOTAL	104.1	81.7	157.3	153.7	90.6	100.8	462.2	1,684	972	202.6	67.5	46.2
MEAN	3.36	2.72	5.07	4.96	3.24	3.25	15.4	54.3	32.4	6.54	2.18	1.54
MAX	5.0	4.4	14	14	3.5	3.7	42	73	64	13	3.7	1.8
MIN	2.6	2.4	2.0	3.5	3.1	3.0	3.3	31	15	3.3	1.4	1.4
AC-FT	206	162	312	305	180	200	917	3,340	1,930	402	134	92

CAL YR 1972 TOTAL 3,424.5 MEAN 9.36 MAX 44 MIN 1.5 AC-FT 6,790
WTR YR 1973 TOTAL 4,122.7 MEAN 11.3 MAX 73 MIN 1.4 AC-FT 8,180

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-28	1800	2.04	48	5-17	1930	2.62	94
5-3	2000	2.14	55				

10336600 UPPER TRUCKEE RIVER NEAR MEYERS, CALIF.

LOCATION.--Lat 38°50'35", long 120°01'25", in NE¼SE¼ sec.31, T.12 N., R.18 E., El Dorado County, on left bank 0.4 mile upstream from mouth of Echo Lake outlet, 1.1 miles southwest of Meyers, and 2.5 miles upstream from Angora Creek.

DRAINAGE AREA.--33.1 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,325 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 66.2 cfs (47,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 620 cfs May 18 (gage height, 8.32 ft); minimum daily, 4.8 cfs Aug. 23.
Period of record: Maximum discharge, 2,550 cfs Feb. 1, 1963 (gage height, 12.41 ft); minimum, 2.0 cfs Jan. 13, 1961.

REMARKS.--Records good except those for the winter months, which are fair. No regulation. Some small diversions above station for domestic use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	9.5	11	21	22	18	20	144	399	53	13	6.2
2	15	9.5	11	20	20	18	19	171	324	49	12	6.0
3	15	9.2	10	19	20	18	19	199	296	45	11	6.0
4	11	16	10	18	19	18	21	179	275	41	11	5.7
5	9.8	15	10	17	19	18	26	131	286	40	10	5.5
6	9.0	12	9.4	17	19	18	38	119	292	37	10	5.6
7	9.0	12	9.2	16	19	17	49	155	281	33	10	5.5
8	9.8	11	8.2	15	18	17	50	203	283	31	9.3	5.5
9	9.2	11	7.6	16	18	17	62	229	275	28	8.6	5.5
10	9.5	11	7.4	17	18	18	69	275	245	26	8.2	5.5
11	9.8	11	7.4	39	18	19	78	332	218	24	7.8	5.4
12	9.5	11	7.8	150	18	18	85	390	199	24	7.4	5.3
13	9.5	11	8.0	100	18	18	80	408	175	23	6.9	5.2
14	9.2	12	8.5	59	18	17	64	410	149	31	6.7	5.2
15	9.5	11	10	45	18	18	59	420	129	36	6.5	5.3
16	10	11	12	54	18	18	57	466	118	26	6.1	5.7
17	10	11	75	48	18	18	63	480	107	24	5.8	5.5
18	12	11	120	36	18	18	62	478	102	22	5.5	5.4
19	13	11	168	30	18	18	62	472	101	21	5.3	5.6
20	15	11	88	30	18	18	62	422	99	20	5.3	6.0
21	15	11	63	27	18	18	68	370	100	19	5.1	6.4
22	14	11	67	26	17	17	82	393	97	17	5.0	6.6
23	13	11	49	25	17	18	110	409	90	16	4.8	7.7
24	12	11	41	24	17	18	137	377	82	15	4.9	7.7
25	12	11	37	24	17	20	158	328	81	14	5.0	8.1
26	11	11	33	22	17	21	189	280	82	13	8.2	8.0
27	11	11	29	22	18	22	220	291	81	12	15	6.3
28	10	11	26	22	19	21	224	340	74	12	9.7	5.2
29	10	11	25	22	------	20	185	386	68	11	7.5	5.2
30	8.8	11	24	22	------	20	147	375	60	11	6.8	5.2
31	9.0	------	23	21	------	20	------	350	------	12	6.3	------
TOTAL	339.4	337.2	1,015.5	1,024	512	572	2,565	9,982	5,168	786	244.7	178.0
MEAN	10.9	11.2	32.8	33.0	18.3	18.5	85.5	322	172	25.4	7.89	5.93
MAX	15	16	168	150	22	22	224	480	399	53	15	8.1
MIN	8.8	9.2	7.4	15	17	17	19	119	60	11	4.8	5.2
AC-FT	673	669	2,010	2,030	1,020	1,130	5,090	19,800	10,250	1,560	485	353

CAL YR 1972 TOTAL 19,364.9 MEAN 52.9 MAX 299 MIN 4.4 AC-FT 38,410
WTR YR 1973 TOTAL 22,723.8 MEAN 62.3 MAX 480 MIN 4.8 AC-FT 45,070

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-19	0800	6.29	230	5-18	2200	8.32	620
1-12	1430	6.28	200	5-29	2100	7.73	486
4-27	2100	6.68	299				

10336610 UPPER TRUCKEE RIVER AT SOUTH LAKE TAHOE, CALIF.

LOCATION.--Lat 38°55'22", long 119°59'23", in NW¼SE¼ sec.4, T.12 N., R.18 E., El Dorado County, on right bank on downstream side of U.S. Highway 50 bridge, 1.0 mile northeast of South Lake Tahoe Post Office, and 1.4 miles upstream from Lake Tahoe.

DRAINAGE AREA.--54.8 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 754 cfs May 19 (gage height, 5.28 ft); minimum daily, 8.7 cfs Sept. 29, 30.
Period of record: Maximum discharge, 754 cfs May 19, 1973 (gage height, 5.28 ft); minimum daily, 8.5 cfs Aug. 25-27, Sept. 22, 1972.

REMARKS.--Records good except those for the winter months, which are fair. Two small dams may cause slight regulation at times. Some small diversions above station for domestic use. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	18	22	60	57	57	64	220	482	76	23	13
2	23	17	21	56	57	56	58	238	388	69	22	15
3	25	17	20	52	57	54	56	277	364	58	21	13
4	18	56	20	48	56	53	62	283	348	54	18	12
5	16	38	20	46	52	52	75	223	333	48	22	12
6	17	28	19	44	50	50	96	190	339	47	20	12
7	26	27	18	42	50	48	109	209	333	34	20	11
8	21	25	17	43	49	48	112	267	340	36	18	9.9
9	15	23	16	43	48	47	128	308	360	35	16	9.9
10	14	23	15	55	48	49	142	340	337	35	18	10
11	15	23	15	106	47	48	160	418	304	36	17	10
12	14	22	15	537	47	48	166	492	279	34	17	9.9
13	15	22	16	347	47	48	166	554	240	34	16	10
14	14	24	17	201	48	47	142	558	204	34	14	10
15	14	23	19	124	48	46	129	564	166	48	13	9.1
16	15	22	25	172	48	46	127	605	150	37	13	9.5
17	17	22	140	169	47	48	136	640	135	35	13	9.9
18	32	22	413	130	47	48	127	630	124	33	13	9.5
19	24	22	486	88	47	48	120	650	120	31	13	9.5
20	25	21	419	80	47	48	116	592	125	30	11	9.7
21	25	21	213	76	46	48	120	534	125	28	11	9.5
22	23	21	193	70	46	47	138	472	129	25	11	9.7
23	22	21	131	68	45	47	161	528	131	26	11	9.9
24	20	21	111	66	46	48	200	488	114	24	11	10
25	19	21	94	64	45	56	231	386	113	24	11	9.7
26	18	21	82	63	45	64	261	367	116	23	12	9.3
27	18	21	76	61	49	68	295	360	121	23	25	9.3
28	17	21	74	59	57	61	324	404	108	20	18	8.9
29	17	22	70	58	------	55	304	460	103	22	15	8.7
30	16	22	65	58	------	52	247	498	95	20	15	8.7
31	16	------	63	57	------	59	------	458	------	20	13	------
TOTAL	586	707	2,925	3,143	1,376	1,594	4,572	13,213	6,626	1,099	491	308.6
MEAN	18.9	23.6	94.4	101	49.1	51.4	152	426	221	35.5	15.8	10.3
MAX	32	56	486	537	57	68	324	650	482	76	25	15
MIN	14	17	15	42	45	46	56	190	95	20	11	8.7
AC-FT	1,160	1,400	5,800	6,230	2,730	3,160	9,070	26,210	13,140	2,180	974	612

CAL YR 1972 TOTAL 32,893.5 MEAN 89.9 MAX 486 MIN 8.5 AC-FT 65,240
WTR YR 1973 TOTAL 36,640.6 MEAN 100 MAX 650 MIN 8.7 AC-FT 72,680

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-18	0300	--	500	5-4	0300	3.28	315
12-19	1500	4.49	558	5-19	0400	5.28	754
1-12	1230	5.24	742	5-30	0700	4.46	552
4-28	0400	3.53	357				

10336625 FALLEN LEAF LAKE NEAR TAHOE VALLEY, CALIF.

LOCATION.--Lat 38°54'00", long 120°04'10", in NE¼SW¼ sec.11, T.12 N., R.17 E., El Dorado County, on west bank 1.5 miles from outlet, and 3.8 miles west-southwest of Tahoe Valley.

DRAINAGE AREA.--16.7 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,372.30 ft above mean sea level, supplementary adjustment of 1959.

EXTREMES.--Current year: Maximum gage height, 4.27 ft July 9-11; minimum, 2.38 ft Apr. 4, 5.
Period of record: Maximum gage height, 5.51 ft Jan. 22, 1970; minimum, 1.84 ft Nov. 10, 1972.

REMARKS.--Lake levels regulated by a concrete dam at the outlet constructed in 1934. Regulation is for maintenance of lake level and enhancement of fishery.

GAGE HEIGHT, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.88	2.81	2.65	2.72	2.63	2.53	2.42	3.24	3.84	4.22	3.98	3.23
2	2.88	2.80	2.61	2.68	2.61	2.52	2.40	3.23	3.86	4.23	3.98	3.21
3	2.88	2.84	2.69	2.67	2.60	2.55	2.39	3.25	3.85	4.24	3.97	3.19
4	2.87	2.78	2.76	2.64	2.58	2.53	2.38	3.26	3.84	4.24	3.96	3.18
5	2.86	2.80	2.75	2.62	2.56	2.51	2.38	3.20	3.86	4.25	3.94	3.16
6	2.85	2.79	2.84	2.59	2.56	2.51	2.41	3.15	3.89	4.24	3.93	3.14
7	2.85	2.81	2.89	2.55	2.55	2.50	2.44	3.15	3.90	4.25	3.91	3.12
8	2.83	2.80	2.87	2.62	2.54	2.49	2.47	3.19	3.90	4.26	3.87	3.09
9	2.82	2.78	2.86	2.65	2.53	2.47	2.51	3.26	3.91	4.27	3.84	3.07
10	2.80	2.78	2.84	2.64	2.65	2.51	2.55	3.35	3.89	4.27	3.83	3.05
11	2.78	2.78	2.81	2.89	2.70	2.50	2.60	3.46	3.89	4.27	3.81	3.04
12	2.77	2.75	2.79	3.11	2.69	2.49	2.65	3.56	3.89	4.25	3.78	3.02
13	2.76	2.80	2.78	3.09	2.68	2.47	2.72	3.62	3.85	4.25	3.75	3.00
14	2.75	2.83	2.76	3.03	2.65	2.46	2.75	3.64	3.82	4.25	3.73	2.98
15	2.75	2.83	2.73	2.94	2.63	2.44	2.75	3.69	3.76	4.25	3.71	2.96
16	2.77	2.83	2.73	3.07	2.61	2.42	2.75	3.75	3.71	4.25	3.66	2.94
17	2.80	2.83	3.29	3.04	2.59	2.42	2.77	3.81	3.67	4.25	3.61	2.92
18	2.82	2.81	3.42	3.07	2.57	2.40	2.77	3.86	3.65	4.24	3.55	2.91
19	2.82	2.80	3.52	3.02	2.55	2.40	2.76	3.83	3.67	4.23	3.52	2.88
20	2.83	2.78	3.40	2.96	2.53	2.40	2.75	3.74	3.73	4.21	3.49	2.86
21	2.83	2.78	3.31	2.92	2.51	2.42	2.75	3.64	3.79	4.21	3.46	2.85
22	2.83	2.77	3.27	2.87	2.50	2.40	2.76	3.57	3.84	4.19	3.42	2.82
23	2.83	2.75	3.18	2.84	2.47	2.40	2.81	3.55	3.89	4.15	3.36	2.80
24	2.80	2.74	3.11	2.79	2.48	2.39	2.88	3.56	3.93	4.13	3.34	2.77
25	2.80	2.73	3.03	2.76	2.46	2.39	2.97	3.52	3.99	4.11	3.31	2.75
26	2.78	2.72	2.97	2.73	2.51	2.39	3.07	3.42	4.05	4.09	3.35	2.73
27	2.77	2.72	2.92	2.70	2.55	2.41	3.17	3.39	4.11	4.08	3.34	2.72
28	2.72	2.70	2.87	2.67	2.55	2.40	3.26	3.40	4.14	4.05	3.32	2.71
29	2.68	2.68	2.83	2.69	------	2.40	3.29	3.51	4.18	4.01	3.31	2.70
30	2.65	2.67	2.79	2.68	------	2.40	3.27	3.66	4.20	4.00	3.28	2.67
31	2.63	------	2.75	2.65	------	2.42	------	3.68	------	3.99	3.25	------
MEAN	2.80	2.76	2.94	2.80	2.57	2.45	2.73	3.49	3.88	4.19	3.63	2.95
MAX	2.88	2.83	3.52	3.11	2.70	2.55	3.29	3.86	4.20	4.27	3.98	3.23
MIN	2.63	2.60	2.61	2.55	2.46	2.39	2.38	3.15	3.65	3.99	3.25	2.67

WTR YR 1973 MEAN 3.10 MAX 4.27 MIN 2.38

10336626 TAYLOR CREEK NEAR TAHOE VALLEY, CALIF.

LOCATION.--Lat 38°55'20", long 120°03'35", in NE¼NE¼ sec.2, T.12 N., R.17 E., El Dorado County, on left bank 0.1 mile downstream from Fallen Leaf Lake outlet, and 3.0 miles west of Tahoe Valley.

DRAINAGE AREA.--16.7 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,361.08 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 50.6 cfs (36,660 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 346 cfs May 18, 19 (gage height, 4.69 ft); minimum daily, 4.6 cfs Oct. 1.
Period of record: Maximum discharge, 1,070 cfs Jan. 22, 1970 (gage height, 5.63 ft); minimum daily, 0.20 cfs Oct. 4-7, 1969.

REMARKS.--Records good. Flow regulated by Fallen Leaf Lake Dam.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	14	20	36	28	25	19	111	159	11	7.2	5.2
2	4.8	14	20	34	27	23	18	107	167	11	7.1	5.2
3	7.2	14	20	33	26	24	18	112	166	11	7.1	5.3
4	9.2	14	20	30	27	24	17	120	156	11	7.1	5.3
5	9.1	14	20	29	25	24	17	108	148	11	7.0	5.5
6	9.1	14	22	29	24	23	17	94	153	11	6.9	5.5
7	9.1	14	24	28	24	23	18	87	156	10	7.0	5.7
8	9.1	14	26	29	23	22	19	91	156	10	6.9	5.5
9	9.1	14	24	32	22	22	20	106	158	10	6.8	5.5
10	9.1	14	23	32	25	22	22	125	158	10	6.9	5.5
11	9.4	14	23	36	28	24	24	163	136	10	6.9	5.5
12	9.4	14	22	79	29	23	26	210	114	9.9	6.9	5.6
13	9.4	14	22	87	28	23	29	240	113	10	7.1	5.7
14	9.4	14	21	77	27	22	30	256	108	10	7.1	5.8
15	9.4	14	27	76	26	21	32	271	89	9.7	7.0	5.5
16	11	14	36	74	27	21	33	293	68	9.7	6.8	5.3
17	12	14	49	73	26	21	35	318	65	9.7	6.8	5.5
18	12	14	115	77	25	19	34	335	52	9.8	6.8	5.5
19	12	14	203	71	24	19	33	338	30	10	6.9	5.5
20	12	14	192	61	23	19	32	323	17	10	7.0	5.5
21	12	14	150	55	22	19	31	286	14	9.8	7.1	5.5
22	11	14	143	48	22	19	32	252	13	9.9	7.0	5.5
23	12	14	117	43	21	18	35	237	13	10	6.9	5.5
24	12	14	92	39	22	18	41	239	13	10	6.9	5.2
25	12	14	78	37	21	18	50	238	12	9.7	6.6	4.8
26	12	14	68	33	21	17	62	210	12	9.7	6.7	4.8
27	13	15	61	31	23	18	81	180	12	9.7	6.4	4.7
28	14	15	54	30	24	18	109	172	11	13	6.4	4.9
29	14	17	49	29	------	18	123	161	11	23	5.9	5.1
30	14	20	44	29	------	18	122	136	11	7.5	5.7	5.2
31	14	------	39	28	------	18	------	143	------	7.3	5.3	------
TOTAL	326.4	431	1,824	1,425	690	643	1,179	6,062	2,491	324.4	210.2	160.8
MEAN	10.5	14.4	58.8	46.0	24.6	20.7	39.3	196	83.0	10.5	6.78	5.36
MAX	14	20	203	87	29	25	123	338	167	23	7.2	5.8
MIN	4.6	14	20	28	21	17	17	87	11	7.3	5.3	4.7
AC-FT	647	855	3,620	2,830	1,370	1,280	2,340	12,020	4,940	643	417	319

CAL YR 1972 TOTAL 13,342.2 MEAN 36.5 MAX 203 MIN 3.4 AC-FT 26,460
WTR YR 1973 TOTAL 15,766.8 MEAN 43.2 MAX 338 MIN 4.6 AC-FT 31,270

10336630 EAGLE CREEK NEAR CAMP RICHARDSON, CALIF.

LOCATION.--Lat 38°57'05", long 120°06'38", in SW¼SW¼ sec.21, T.13 N., R.17 E., El Dorado County, Eldorado National Forest, on right bank at downstream edge of culvert on State Highway 89, 0.7 mile northwest of Bay View Guard Station, and 4.0 miles northwest of Camp Richardson.

DRAINAGE AREA.--6.38 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,560 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 233 cfs May 18 (gage height, 3.44 ft); minimum daily, 0.27 cfs Sept. 23.
Period of record: Maximum discharge, 233 cfs May 18, 1973 (gage height, 3.44 ft); minimum daily, 0.23 cfs Sept. 25, 1972.

REMARKS.--Records good. Some minor natural regulation by Eagle Lake and other small lakes in the basin. Minor diversion above station for domestic use. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	1.1	5.6	6.7	5.4	5.8	5.8	44	115	26	4.0	1.4
2	4.0	1.1	5.4	6.4	5.2	5.6	5.4	52	99	20	4.0	1.3
3	4.6	1.2	5.6	6.2	5.0	5.4	5.4	62	85	18	4.0	1.0
4	4.8	18	5.4	6.2	5.4	5.6	5.2	55	82	18	3.8	.88
5	4.6	20	5.2	5.8	5.2	5.4	5.8	35	85	18	3.6	.88
6	4.2	14	5.1	5.6	5.2	5.4	10	30	90	18	3.0	.78
7	3.4	10	5.0	5.0	5.2	5.4	16	44	85	18	2.6	.68
8	2.8	8.9	4.9	5.2	5.2	5.2	15	62	84	15	2.4	.65
9	2.4	7.7	4.8	6.4	5.0	4.8	19	72	90	14	2.0	.56
10	2.2	6.7	4.7	7.1	4.9	5.0	21	92	84	14	2.4	.53
11	2.8	6.7	4.7	14	4.8	6.2	26	115	75	14	3.2	.50
12	3.4	6.4	4.8	52	4.7	5.6	30	132	68	14	2.4	.50
13	3.4	6.0	4.8	38	4.7	5.4	26	136	62	13	1.8	.50
14	3.0	7.5	4.9	20	4.8	5.2	18	139	50	12	1.4	.50
15	2.8	7.7	5.0	15	4.8	4.8	15	145	39	11	1.2	.47
16	2.6	7.7	5.0	16	4.8	4.8	13	162	34	9.6	.94	.39
17	3.6	7.3	84	15	5.0	5.2	13	164	29	9.4	.83	.39
18	6.9	6.7	95	15	5.0	5.2	13	170	26	8.9	.71	.37
19	9.6	6.4	118	15	5.0	5.0	13	164	27	8.2	.62	.35
20	9.9	5.8	64	14	4.8	5.0	12	130	31	7.3	.56	.44
21	9.2	5.6	39	11	4.8	5.0	12	108	36	6.7	.53	.50
22	7.5	5.8	35	8.9	5.0	5.4	15	105	39	5.8	.50	.39
23	6.4	5.4	24	7.7	4.8	5.0	30	105	41	5.0	.47	.27
24	5.6	5.0	19	6.9	4.8	5.0	43	118	33	4.4	.44	.41
25	4.6	5.0	15	6.7	5.0	5.4	49	113	31	4.2	.41	.41
26	3.6	5.6	12	5.8	5.0	6.4	61	79	34	4.0	.53	.39
27	3.2	6.4	11	5.8	5.8	7.3	75	76	40	3.8	.88	.39
28	2.2	6.2	9.9	5.4	6.0	6.9	79	94	38	3.6	1.4	.39
29	1.5	6.0	8.6	5.4	------	6.0	65	122	37	3.6	2.0	.39
30	1.3	5.8	8.4	5.8	------	5.4	60	136	33	3.8	2.2	.41
31	1.2	------	7.5	5.8	------	5.4	------	113	------	3.8	1.4	------
TOTAL	132.1	213.7	631.3	349.8	141.3	169.2	776.6	3,174	1,702	335.1	56.22	17.02
MEAN	4.26	7.12	20.4	11.3	5.05	5.46	25.9	102	56.7	10.8	1.81	.57
MAX	9.9	20	118	52	6.0	7.3	79	170	115	26	4.0	1.4
MIN	1.2	1.1	4.7	5.0	4.7	4.8	5.2	30	26	3.6	.41	.27
AC-FT	262	424	1,250	694	280	336	1,540	6,300	3,380	665	112	34

CAL YR 1972 TOTAL 6,797.20 MEAN 18.6 MAX 118 MIN .23 AC-FT 13,480
WTR YR 1973 TOTAL 7,698.34 MEAN 21.1 MAX 170 MIN .27 AC-FT 15,270

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	1730	3.13	156	5-3	2200	2.56	73
12-19	0700	3.03	137	5-18	2000	3.44	233
4-27	2100	2.76	97	5-29	2200	3.21	175

Peaks for water year 1972 not previously published

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-5	2200	2.64	76	5-31	2300	3.08	128
5-14	2200	2.92	108				

10336640 MEEKS CREEK AT MEEKS BAY, CALIF.

LOCATION.--Lat 39°02'09", long 120°07'23", in NE¼NW¼ sec.29, T.14 N., R.17 E., El Dorado County, Eldorado National Forest, on left bank on upstream side of State Highway 89 culvert, 0.1 mile north of Meeks Bay Fire Department.

DRAINAGE AREA.--8.08 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 194 cfs May 17 (gage height, 3.00 ft); minimum daily, 0.02 cfs Sept. 27-30.
Period of record: Maximum discharge, 194 cfs May 17, 1973 (gage height, 3.00 ft); minimum daily, 0.02 cfs Sept. 27-30, 1973.

REMARKS.--Records good except those for the winter periods, which are fair. No regulation or diversion above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.96	2.1	7.7	7.2	8.7	8.2	48	72	6.7	.43	.20
2	.88	.96	2.4	7.2	7.2	8.2	8.2	52	76	4.8	.30	.20
3	.50	1.3	2.4	7.2	7.2	8.2	8.2	61	53	3.8	.20	.20
4	.47	8.8	2.3	6.7	7.2	8.2	8.7	64	46	3.8	.30	.20
5	.51	6.7	2.2	6.2	7.2	7.7	11	46	44	3.4	.58	.20
6	.58	4.3	2.1	5.7	7.2	7.7	14	35	46	3.0	.58	.20
7	.73	3.4	2.1	5.2	7.2	7.7	19	40	44	2.7	.30	.10
8	1.2	3.4	2.0	5.2	7.2	7.7	18	56	40	2.4	.30	.05
9	.96	2.7	2.0	6.2	6.7	7.2	22	65	41	2.1	.30	.05
10	.96	2.4	2.0	6.7	6.6	7.7	25	75	38	2.1	.30	.05
11	1.2	2.4	2.0	9.2	6.6	8.2	29	95	32	1.8	.30	.05
12	.96	2.4	2.0	51	6.6	8.2	33	112	30	1.8	.20	.04
13	.96	2.4	2.0	62	6.6	7.7	32	130	27	1.5	.20	.04
14	.96	3.0	2.1	32	6.8	7.2	27	134	23	1.2	.20	.03
15	1.2	3.0	2.2	22	7.2	6.7	24	132	19	1.2	.10	.03
16	1.2	2.7	2.3	31	7.2	6.7	23	145	17	.96	.10	.03
17	1.5	2.4	11	30	7.2	7.2	25	149	15	.96	.10	.03
18	2.4	2.1	25	18	7.2	6.7	22	147	14	.96	.10	.03
19	2.4	2.1	55	18	7.2	7.2	22	138	13	.73	.10	.03
20	2.7	2.1	56	16	7.2	6.7	20	112	13	.73	.10	.03
21	2.7	2.1	33	14	7.2	6.7	21	86	13	.73	.10	.03
22	2.4	2.1	35	12	7.2	7.2	24	80	14	.73	.10	.03
23	2.1	1.8	24	11	7.2	6.7	33	82	12	.58	.20	.03
24	1.8	1.8	18	10	6.7	7.2	44	82	11	.43	.30	.03
25	1.5	1.8	15	9.7	7.2	7.7	48	70	9.7	.30	.43	.03
26	1.2	1.8	12	9.7	7.2	8.2	64	56	10	.30	.30	.03
27	1.2	1.8	11	9.2	8.2	9.2	77	50	11	.30	.20	.02
28	.96	2.1	10	8.7	9.2	9.2	82	59	10	.30	.20	.02
29	.96	2.1	9.2	8.7	------	7.7	71	75	9.2	.30	.30	.02
30	.96	2.1	9.2	9.2	------	7.7	57	86	7.7	.30	.30	.02
31	.96	------	8.2	8.2	------	8.2	------	70	------	.43	.20	------
TOTAL	39.51	79.02	365.8	463.6	200.8	237.2	920.3	2,632	810.6	51.34	7.72	2.05
MEAN	1.27	2.63	11.8	15.0	7.17	7.65	30.7	84.9	27.0	1.66	.25	.068
MAX	2.7	8.8	56	62	9.2	9.2	82	149	76	6.7	.58	.20
MIN	.47	.96	2.0	5.2	6.6	6.7	8.2	35	7.7	.30	.10	.02
AC-FT	78	157	726	920	398	470	1,830	5,220	1,610	102	15	4.1

CAL YR 1972 TOTAL 5,209.62 MEAN 14.2 MAX 84 MIN .18 AC-FT 10,330
WTR YR 1973 TOTAL 5,809.94 MEAN 15.9 MAX 149 MIN .02 AC-FT 11,520

PEAK DISCHARGE (BASE, 80 CFS, REVISED)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	2000	2.36	80	5-17	0200	3.00	194
4-28	0200	2.47	95	5-30	0500	2.56	109

10336650 QUAIL LAKE CREEK NEAR HOMEWOOD, CALIF.

LOCATION.--Lat 39°04'34", long 120°09'06", in SW¼NW¼ sec.7, T.14 N., R.17 E., Placer County, Tahoe National Forest, on left bank 93 ft upstream from Highway 89, and 0.5 mile southeast of Homewood.

DRAINAGE AREA.--0.95 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,330 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 24 cfs May 14 (gage height, 2.42 ft); minimum daily, 0.26 cfs Sept. 12-16.
Period of record: Maximum discharge, 24 cfs May 14, 1973 (gage height, 2.42 ft); minimum daily, 0.17 cfs Aug. 9-15, 23-28, 1972.

REMARKS.--Records good. Slight regulation at times from Quail Lake. No known diversions above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.29	.33	.76	.96	.64	.70	6.9	9.9	1.1	.37	.33
2	.33	.29	.33	.76	.96	.64	.70	7.5	8.7	1.4	.82	.33
3	.33	.40	.33	.76	.96	.64	.76	8.3	7.5	1.2	.47	.33
4	.33	1.7	.33	.70	.96	.64	.82	7.7	6.6	1.1	.37	.29
5	.29	.88	.33	.70	.96	.64	1.0	6.1	4.9	.96	.37	.29
6	.29	.70	.33	.70	.96	.64	1.2	5.2	2.1	.76	.37	.29
7	.29	.64	.33	.70	.96	.64	1.4	5.9	1.9	.76	.37	.29
8	.29	.58	.33	.70	.96	.64	1.4	7.5	1.6	.70	.37	.29
9	.29	.47	.37	.82	.96	.64	1.6	8.0	1.5	.64	.33	.29
10	.33	.47	.37	.96	.96	.64	2.1	9.9	2.0	.58	.33	.29
11	.33	.42	.37	3.0	.96	.70	2.7	12	3.1	.52	.37	.29
12	.33	.42	.37	14	.96	.70	3.0	14	3.2	.42	.37	.26
13	.33	.42	.37	5.6	.88	.64	3.2	17	3.1	.37	.37	.26
14	.29	.42	.37	3.6	.76	.64	3.0	22	2.8	.37	.37	.26
15	.29	.42	.37	2.8	.70	.64	2.7	22	3.1	.33	.37	.26
16	.29	.42	.42	4.1	.64	.58	2.7	22	3.0	.38	.37	.26
17	.37	.42	3.0	3.4	.64	.58	3.0	21	2.8	.37	.37	.29
18	.37	.42	3.8	3.1	.58	.58	2.7	20	2.6	.42	.37	.29
19	.33	.42	7.6	2.7	.58	.58	2.7	18	2.6	.42	.37	.29
20	.33	.42	4.9	2.1	.52	.58	2.6	15	2.4	.33	.37	.33
21	.33	.42	3.4	1.9	.52	.58	2.4	12	2.3	.29	.37	.33
22	.29	.42	4.0	1.6	.52	.58	3.0	11	2.4	.29	.37	.33
23	.29	.42	2.7	1.5	.52	.58	3.5	11	2.3	.29	.37	.37
24	.29	.42	2.1	1.4	.52	.58	4.4	11	2.2	.29	.42	.37
25	.29	.42	1.6	1.1	.58	.58	4.6	12	1.9	.33	.42	.37
26	.29	.37	1.5	1.0	.64	.64	6.4	9.5	2.0	.33	.47	.37
27	.29	.37	1.3	1.0	.64	.70	8.0	8.3	1.8	.33	.47	.33
28	.29	.37	1.1	1.0	.70	.70	9.1	8.3	1.6	.33	.42	.33
29	.29	.37	1.0	1.0	------	.70	8.3	9.1	1.5	.29	.37	.29
30	.29	.33	.96	1.0	------	.70	7.7	9.9	1.3	.29	.37	.29
31	.29	------	.88	1.0	------	.70	------	10	------	.29	.33	------
TOTAL	9.59	14.53	45.49	65.46	21.46	19.66	97.38	368.1	94.7	16.48	12.25	9.19
MEAN	.31	.48	1.47	2.11	.77	.63	3.25	11.9	3.16	.53	.40	.31
MAX	.37	1.7	7.6	14	.96	.70	9.1	22	9.9	1.4	.82	.37
MIN	.29	.29	.33	.70	.52	.58	.70	5.2	1.3	.29	.33	.26
AC-FT	19	29	90	130	43	39	193	730	188	33	24	18

CAL YR 1972 TOTAL 788.83 MEAN 2.16 MAX 15 MIN .17 AC-FT 1,560
WTR YR 1973 TOTAL 774.29 MEAN 2.12 MAX 22 MIN .26 AC-FT 1,540

PEAK DISCHARGE (BASE, 10 CFS).--Jan. 12 (0500) 19 cfs (2.32 ft); May 14 (2100) 24 cfs (2.42 ft).

Peaks for water year 1972 not previously published

PEAK DISCHARGE (BASE, 10 CFS)							
DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-17	1100	2.29	17	6-1	1200	2.32	17
5-29	0700	2.25	15				

10336655 MADDEN CREEK NEAR HOMEWOOD, CALIF.

LOCATION.--Lat 39°05'14", long 120°10'24", in NE¼SE¼ sec.2, T.14 N., R.16 E., Placer County, Tahoe National Forest, on right bank 1.0 mile northwest of Homewood Post Office.

DRAINAGE AREA.--1.40 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,780 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 43 cfs May 17 (gage height, 2.84 ft); maximum gage height, 4.02 ft Dec. 17 (backwater from ice); minimum daily discharge, 0.49 cfs Sept. 11-19.
Period of record: Maximum discharge, 43 cfs May 17, 1973 (gage height, 2.84 ft); maximum gage height, 4.02 ft Dec. 17, 1972 (backwater from ice); minimum daily discharge, 0.48 cfs Feb. 17-19, 1972.

REMARKS.--Records good. Slight regulation may occur from Lake Louise. No diversions above station. Records of water temperatures and suspended-sediment discharge are published in Part 2 of this report.

REVISIONS.--Revised figures of discharge, in cubic feet per second, for the water year 1972, superseding those published in WRD Calif., 1972, are given herewith:

Sept. 26, 1972..... 3.6
27..... 3.5

Month	Cfs-days	Mean	Max	Min	Ac-ft
September	35.90	1.20	3.6	0.90	71
WTR YR 1973	1,605.77	4.39	29	.48	3,190

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.74	.74	2.9	2.0	1.2	1.0	12	21	5.1	.95	.55
2	.76	.74	.70	2.8	2.0	1.1	1.0	13	20	4.7	.95	.55
3	.78	1.1	.66	2.8	1.8	1.1	1.0	14	20	4.3	.95	.55
4	.74	2.9	.60	2.8	1.7	1.2	1.0	14	20	3.9	.95	.52
5	.70	1.3	.58	2.4	1.6	1.2	1.3	11	20	3.7	.90	.52
6	.70	1.0	.57	2.4	1.6	1.2	1.7	11	20	3.5	.86	.52
7	.94	1.0	.57	2.3	1.6	1.2	2.0	12	20	3.1	.86	.52
8	.90	.95	.57	2.3	1.5	1.2	2.2	14	20	2.9	.86	.52
9	.90	.90	.58	2.4	1.5	1.1	2.6	15	20	2.8	.86	.52
10	1.4	.86	.60	2.2	1.6	1.2	3.1	16	19	2.6	1.2	.52
11	1.4	.86	.62	3.1	1.6	1.2	3.9	17	18	2.3	.95	.49
12	1.8	.82	.66	11	1.6	1.1	4.5	23	17	2.2	.82	.49
13	1.0	.86	.68	7.2	1.6	1.1	4.3	29	16	2.2	.82	.49
14	.86	.90	.70	5.3	1.5	1.1	3.9	32	13	2.2	.78	.49
15	.86	.86	.70	4.5	1.5	1.0	3.7	30	11	2.0	.74	.49
16	.90	.86	.94	4.7	1.5	1.0	3.5	32	9.8	1.8	.74	.49
17	.90	.82	19	3.7	1.5	1.1	3.5	33	8.6	1.7	.78	.49
18	1.1	.82	13	3.9	1.4	1.0	3.5	32	7.8	1.7	.90	.49
19	1.0	.82	19	3.3	1.4	1.0	3.5	29	6.5	1.5	.70	.49
20	1.0	.78	10	2.9	1.3	1.0	3.5	25	6.0	1.4	.66	.62
21	.90	.78	8.6	2.8	1.3	1.0	3.7	23	7.8	1.4	.66	.55
22	.86	.78	9.4	2.6	1.3	1.0	4.7	22	8.2	1.3	.62	.52
23	.82	.78	6.5	2.6	1.3	1.0	6.0	21	7.8	1.3	.62	.55
24	.82	.78	5.5	2.6	1.3	1.0	7.0	22	7.0	1.2	.62	.55
25	.78	.78	4.9	2.4	1.3	1.0	7.8	23	6.8	1.1	.62	.52
26	.78	.74	4.5	2.4	1.2	1.0	9.4	21	7.0	1.1	.74	.52
27	.78	.74	4.3	2.4	1.2	1.1	14	19	6.8	1.1	.70	.52
28	.78	.74	3.9	2.3	1.2	1.1	15	17	6.8	1.0	.62	.52
29	.70	.74	3.7	2.2	------	1.0	14	18	6.2	1.0	.62	.52
30	.70	.74	3.5	2.2	------	1.0	13	22	5.8	.95	.55	.52
31	.66	------	3.3	2.0	------	1.1	------	22	------	.95	.55	------
TOTAL	28.22	27.49	129.57	101.4	41.9	33.6	149.3	644	383.9	68.00	24.15	15.61
MEAN	.91	.92	4.18	3.27	1.50	1.08	4.98	20.8	12.8	2.19	.78	.52
MAX	1.8	2.9	19	11	2.0	1.2	15	33	21	5.1	1.2	.62
MIN	.66	.74	.57	2.0	1.2	1.0	1.0	11	5.8	.95	.55	.49
AC-FT	56	55	257	201	83	67	296	1,280	761	135	48	31

CAL YR 1972 TOTAL 1,710.71 MEAN 4.67 MAX 29 MIN .48 AC-FT 3,390
WTR YR 1973 TOTAL 1,647.14 MEAN 4.51 MAX 33 MIN .49 AC-FT 3,270

PEAK DISCHARGE (BASE, 15 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	0900	2.82	41	5-17	1600	2.84	43
12-19	0230	2.66	25	5-30	1500	2.72	25
4-27	1700	2.63	19				

10336658 MADDEN CREEK AT HOMEWOOD, CALIF.

LOCATION.--Lat 39°05'27", long 120°09'42", in SE¼NW¼ sec.1, T.14 N., R.16 E., Placer County, Tahoe National Forest, on left bank downstream from culvert on State Highway 89, 0.7 mile north of Homewood Post Office.

DRAINAGE AREA.--2.06 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 86 cfs May 17 (gage height, 1.97 ft); no flow Sept. 10, 14-18, 29.
Period of record: Maximum discharge, 86 cfs May 17, 1973 (gage height, 1.97 ft); no flow Sept. 10, 14-18, 29, 1973.
REVISIONS.--The maximum discharge for the water year 1972 has been revised to 52 cfs May 31, 1972 (gage height, 1.77 ft), superseding figure published in WRD Calif., 1972.

REMARKS.--Records good. A diversion of about 1 cfs occurs 1,500 ft upstream for domestic uses. Slight regulation may occur from Lake Louise at the upper end of the drainage basin. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.32	.52	2.5	1.8	.90	.83	14	34	4.9	.35	.09
2	.41	.32	.52	2.4	1.8	.90	.83	14	30	4.5	.30	.10
3	.35	.61	.48	2.4	1.6	.90	.83	16	28	4.1	.28	.08
4	.30	2.6	.43	2.4	1.6	.97	.97	16	26	3.9	.30	.08
5	.28	1.2	.40	2.0	1.4	.90	1.4	13	26	3.4	.30	.08
6	.26	.83	.37	1.9	1.4	.90	2.0	12	27	3.2	.26	.06
7	.38	.77	.36	1.8	1.3	.90	2.5	13	26	3.0	.24	.08
8	.32	.66	.37	1.9	1.2	.90	2.5	15	26	2.6	.22	.04
9	.30	.66	.37	2.0	1.2	.83	3.0	18	25	2.5	.20	.01
10	.59	.66	.38	1.9	1.2	.90	3.4	23	24	2.2	.56	0
11	.62	.66	.40	3.4	1.2	.90	4.1	31	21	1.9	.32	.06
12	1.2	.61	.42	17	1.0	.90	4.9	38	18	1.6	.24	.04
13	.56	.61	.44	7.8	.97	.90	4.9	48	16	1.6	.22	.01
14	.35	.71	.44	5.5	.97	.83	4.3	55	14	1.6	.16	0
15	.30	.71	.44	4.7	.97	.83	4.1	58	12	1.4	.15	0
16	.32	.66	.60	4.9	.90	.83	3.7	63	11	1.4	.13	0
17	.44	.56	14	3.9	.90	.90	3.7	65	9.3	1.2	.09	0
18	.56	.56	9.5	3.6	.90	.90	3.7	63	8.7	1.2	.35	0
19	.61	.56	16	3.3	.90	.90	3.7	57	6.8	.90	.15	.02
20	.61	.52	9.3	3.0	.90	.90	3.7	49	5.8	.90	.12	.14
21	.48	.48	9.0	3.1	.90	.90	4.1	41	7.8	.77	.13	.10
22	.44	.48	7.8	2.8	.90	.77	4.9	38	8.4	.71	.11	.09
23	.38	.48	6.0	2.8	.90	.77	6.0	38	8.1	.66	.11	.12
24	.35	.52	5.3	2.5	.90	.77	7.2	39	7.2	.56	.12	.10
25	.32	.52	4.5	2.5	.90	.83	8.4	40	7.0	.52	.13	.10
26	.32	.52	3.9	2.4	.90	.90	9.6	34	7.0	.52	.26	.09
27	.32	.52	3.7	2.2	.97	.90	14	30	6.8	.48	.26	.07
28	.30	.52	3.3	2.0	.90	.83	15	31	6.5	.44	.18	.05
29	.28	.52	2.8	1.9	------	.83	15	35	6.0	.44	.16	0
30	.27	.48	2.8	1.9	------	.83	14	37	5.5	.38	.14	.05
31	.28	------	2.8	1.8	------	.83	------	35	------	.35	.13	------
TOTAL	12.80	19.83	107.64	104.2	31.38	26.95	157.26	1,079	464.9	53.83	6.67	1.66
MEAN	.41	.66	3.47	3.36	1.12	.87	5.24	34.8	15.5	1.74	.22	.055
MAX	1.2	2.6	16	17	1.8	.97	15	65	34	4.9	.56	.14
MIN	.26	.32	.36	1.8	.90	.77	.83	12	5.5	.35	.09	0
AC-FT	25	39	214	207	62	53	312	2,140	922	107	13	3.3

CAL YR 1972 TOTAL 1,710.85 MEAN 4.67 MAX 35 MIN .04 AC-FT 3,390
WTR YR 1973 TOTAL 2,066.12 MEAN 5.66 MAX 65 MIN 0 AC-FT 4,100

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	1200	1.35	22	5-3	1900	1.37	21
1-12	0700	1.77	28	5-17	1700	1.97	86

10336660 BLACKWOOD CREEK NEAR TAHOE CITY, CALIF.

LOCATION.--Lat 39°06'26", long 120°09'40", in NE¼NW¼ sec.36, T.15 N., R.16 E., Placer County, on right bank 300 ft upstream from bridge on State Highway 89, 1,000 ft upstream from Lake Tahoe, and 4.6 miles south of Tahoe City.

DRAINAGE AREA.--11.2 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map). Oct. 1, 1964, to Aug. 27, 1970, at site 400 ft downstream at datum 12 ft lower. Prior to Oct. 1, 1964, at site 400 ft downstream at datum 10.25 ft lower.

AVERAGE DISCHARGE.--13 years, 38.0 cfs (27,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 393 cfs May 13 (gage height, 2.78 ft); minimum daily, 1.8 cfs Sept. 13-16.
Period of record: Maximum discharge, 2,100 cfs Dec. 22 or 24, 1964, from indirect measurement of peak flow; maximum gage height, 9.90 ft Dec. 22, 1964; minimum discharge, 0.30 cfs Sept. 19, 1968.

REMARKS.--Records good except those for winter months, which are fair. No known diversion or regulation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.4	6.4	15	15	12	13	113	147	19	4.2	2.2
2	3.4	4.4	6.4	15	15	11	13	126	132	19	4.0	2.2
3	3.7	4.9	6.2	15	15	11	13	141	118	15	3.9	2.2
4	3.4	23	5.2	16	15	11	14	122	116	15	3.8	2.1
5	3.4	14	4.8	16	14	10	18	87	116	14	3.7	2.1
6	3.4	10	4.5	16	14	11	26	83	111	13	3.5	2.1
7	3.9	9.4	4.3	17	14	11	31	105	104	11	3.4	2.0
8	4.5	8.4	4.4	18	14	11	32	132	106	10	3.3	2.0
9	4.4	7.2	4.5	19	13	11	40	147	106	9.7	3.3	2.0
10	5.9	7.2	4.6	20	13	11	48	175	88	9.4	3.2	2.0
11	7.6	7.3	4.8	21	13	11	59	206	90	8.6	3.1	2.0
12	6.1	6.5	5.0	102	13	11	66	251	81	8.2	3.0	2.0
13	5.5	6.7	5.4	70	13	11	60	284	73	7.8	3.0	1.8
14	5.4	6.9	5.4	44	13	10	48	295	67	7.8	2.9	1.8
15	5.2	6.7	5.5	36	12	11	46	270	58	7.1	3.0	1.8
16	5.2	6.5	6.5	38	12	11	44	274	52	7.1	2.9	1.8
17	5.6	6.4	70	32	12	12	48	272	48	6.7	2.8	1.9
18	6.9	6.4	82	31	12	11	44	264	46	6.7	2.8	1.9
19	7.6	6.4	155	28	12	11	42	235	44	6.2	2.7	1.9
20	8.0	6.0	76	26	12	11	41	204	44	6.2	2.6	2.3
21	6.9	6.0	60	23	12	11	45	177	44	6.2	2.5	2.1
22	6.4	6.0	77	21	12	11	56	173	42	6.4	2.5	2.1
23	5.9	5.9	49	20	12	11	75	177	37	6.2	2.4	2.2
24	5.4	5.9	40	20	12	11	90	175	34	5.7	2.5	2.1
25	5.1	5.9	34	17	11	12	100	171	29	5.4	2.6	2.1
26	5.1	6.1	31	16	11	13	122	134	36	5.4	3.0	2.0
27	5.1	6.2	27	15	12	14	155	134	34	5.1	3.0	1.9
28	4.9	6.3	20	15	12	13	158	161	31	5.1	2.6	1.9
29	4.7	6.4	17	14	------	13	138	169	29	4.9	2.5	1.9
30	4.4	6.4	16	14	------	13	117	163	23	4.6	2.4	1.9
31	4.4	------	15	14	------	13	------	147	------	4.4	2.3	------
TOTAL	160.8	219.8	852.9	784	360	355	1,802	5,567	2,086	266.9	93.4	60.3
MEAN	5.19	7.33	27.5	25.3	12.9	11.5	60.1	180	69.5	8.61	3.01	2.01
MAX	8.0	23	155	102	15	14	158	295	147	19	4.2	2.3
MIN	3.4	4.4	4.3	14	11	10	13	83	23	4.4	2.3	1.8
AC-FT	319	436	1,690	1,560	714	704	3,570	11,040	4,140	529	185	120

CAL YR 1972 TOTAL 12,001.6 MEAN 32.8 MAX 193 MIN 2.2 AC-FT 23,810
WTR YR 1973 TOTAL 12,608.1 MEAN 34.5 MAX 295 MIN 1.8 AC-FT 25,010

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	1945	2.10	218	5-28	1745	2.20	225
5-13	2330	2.78	393				

10336670 WARD CREEK NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'09", long 120°13'11", in SE¼NW¼ sec.21, T.15 N., R.16 E., Placer County, Tahoe National Forest, on right bank 0.5 mile upstream from confluence with tributary, 3.9 miles northwest of Tahoe Pines, and 4.8 miles southwest of Tahoe City.

DRAINAGE AREA.--2.00 sq mi.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,740 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 110 cfs May 18 (gage height, 2.67 ft); maximum gage height, 4.12 ft Jan. 12 (backwater from ice); minimum daily discharge, 0.34 cfs Sept. 7-19, 27-30.

REMARKS.--Records good except those for the winter period, which are fair. No regulation or diversion above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	.58	.84	2.6	2.4	1.6	1.2	13	52	8.1	1.0	.43
2	.87	.53	.80	2.4	2.4	1.6	1.2	15	46	6.9	.93	.43
3	.63	.99	.76	2.3	2.4	1.6	1.2	17	40	6.6	.93	.43
4	.58	3.1	.73	2.1	2.3	1.6	1.4	13	37	5.8	.93	.38
5	.58	1.5	.71	2.0	2.3	1.4	1.8	9.4	38	5.2	.87	.38
6	.53	1.2	.71	2.0	2.3	1.4	2.8	9.4	40	5.2	.81	.38
7	1.4	1.1	.70	2.4	2.3	1.4	3.2	14	38	4.6	.81	.34
8	.75	1.0	.69	2.0	2.1	1.4	3.5	19	38	4.3	.75	.34
9	.81	.95	.69	1.8	2.1	1.4	4.9	20	38	4.0	.75	.34
10	1.4	.93	.69	1.8	1.9	1.4	5.5	24	33	3.5	.75	.34
11	1.2	.87	.69	3.2	1.8	1.4	6.6	31	30	3.2	.75	.34
12	.81	.87	.69	26	1.8	1.4	6.9	40	27	3.0	.69	.34
13	.69	.88	.69	11	1.8	1.4	5.5	52	24	2.8	.69	.34
14	.69	1.0	.69	6.2	1.8	1.4	4.3	62	21	2.6	.69	.34
15	.63	1.2	.69	5.2	1.8	1.4	4.0	66	18	2.4	.63	.34
16	.75	1.1	.84	4.7	1.8	1.4	3.8	71	16	2.3	.63	.34
17	.81	.87	18	4.5	1.8	1.4	3.8	75	14	2.1	.58	.34
18	1.2	.87	13	4.1	1.8	1.4	3.5	77	13	2.1	.58	.34
19	.93	.85	27	3.9	1.7	1.4	3.5	71	13	2.0	.58	.34
20	1.1	.85	12	3.7	1.7	1.4	3.5	62	13	1.8	.58	.95
21	.81	.83	8.5	3.5	1.7	1.4	4.0	52	14	1.7	.58	.38
22	.75	.81	8.5	3.3	1.7	1.4	5.8	53	14	1.6	.58	.38
23	.63	.81	5.8	3.2	1.7	1.4	8.5	53	12	1.6	.58	.58
24	.63	.82	4.9	3.2	1.7	1.4	10	53	12	1.4	.58	.48
25	.58	.82	4.6	3.0	1.7	1.4	12	50	11	1.4	.63	.43
26	.58	.83	4.0	3.0	1.7	1.4	14	40	12	1.2	1.6	.38
27	.58	.87	3.8	3.0	1.7	1.4	17	40	13	1.2	.69	.34
28	.58	.93	3.5	2.8	1.6	1.4	17	52	12	1.2	.53	.34
29	.58	.93	3.2	2.7	------	1.4	14	64	11	1.2	.48	.34
30	.58	.90	3.0	2.4	------	1.4	13	64	9.0	1.1	.43	.34
31	.58	------	2.8	2.4	------	1.4	------	58	------	1.0	.43	------
TOTAL	23.87	29.79	134.21	126.4	53.8	44.2	187.4	1,339.8	709.0	93.1	22.04	11.79
MEAN	.77	.99	4.33	4.08	1.92	1.43	6.25	43.2	23.6	3.00	.71	.39
MAX	1.4	3.1	27	26	2.4	1.6	17	77	52	8.1	1.6	.95
MIN	.53	.53	.69	1.8	1.6	1.4	1.2	9.4	9.0	1.0	.43	.34
AC-FT	47	59	266	251	107	88	372	2,660	1,410	185	44	23

WTR YR 1973 TOTAL 2,775.40 MEAN 7.60 MAX 77 MIN .34 AC-FT 5,510

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	1600	2.26	33	4-28	1700	2.17	24
12-19	0400	2.28	36	5-18	1700	2.67	110
1-12	1200	4.08	38	5-29	1700	2.60	92

10336672 WARD CREEK TRIBUTARY NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°08'29", long 120°13'06", in SE¼SW¼ sec.16, T.15 N., R.16 E., Placer County, on left bank 0.3 mile upstream from confluence with Ward Creek, 4.0 miles northwest of Tahoe Pines, and 4.5 miles southwest of Tahoe City.

DRAINAGE AREA.--0.89 sq mi.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,710 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 51 cfs May 16 (gage height, 2.80 ft); maximum gage height, 3.19 ft Jan. 12 (backwater from ice); no flow many days in October, August, and September.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.15	.77	1.7	1.0	.84	.84	9.1	16	2.3	.11	
2	0	.19	.77	1.6	1.0	.84	.84	11	14	2.0	.11	
3	0	.45	.70	1.6	.98	.84	.84	12	14	1.8	.11	
4	0	1.3	.58	1.6	.98	.77	.98	10	12	1.6	.11	
5	0	.56	.56	1.6	.91	.77	1.4	7.0	13	1.5	.11	
6	0	.38	.56	1.5	.91	.70	2.0	6.3	13	1.3	.05	
7	0	.35	.56	1.4	.98	.70	2.3	9.1	13	1.1	.04	
8	0	.33	.56	1.4	.98	.70	2.3	13	13	.98	.01	
9	0	.28	.56	1.3	.98	.70	2.9	14	13	.91	0	
10	.19	.23	.56	1.3	.98	.70	3.6	16	11	.77	0	
11	.63	.23	.56	1.5	.94	.70	4.4	19	10	.70	0	
12	.23	.23	.56	7.3	.91	.70	5.1	24	9.4	.70	0	
13	.15	.28	.56	4.3	.91	.70	4.7	29	7.8	.70	0	
14	.08	.31	.50	2.7	.91	.70	3.6	33	6.6	.63	0	
15	.08	.38	.50	2.3	.91	.70	3.3	33	5.3	.50	0	
16	.11	.38	.55	2.3	.91	.70	2.9	36	4.7	.50	0	
17	.28	.33	6.7	1.9	.91	.77	2.9	35	4.4	.44	0	
18	.63	.28	9.4	1.8	.91	.70	2.7	30	4.4	.38	0	
19	.77	.33	17	1.7	.91	.70	2.6	27	4.4	.38	0	
20	.84	.38	7.7	1.6	.91	.70	2.6	22	4.5	.33	0	
21	.63	.33	6.8	1.6	.91	.70	2.7	20	4.7	.33	0	
22	.38	.33	6.1	1.5	.84	.70	3.6	20	4.5	.28	0	
23	.33	.33	4.2	1.4	.84	.70	5.3	20	3.8	.28	0	
24	.28	.33	3.4	1.4	.84	.77	7.0	22	3.6	.23	0	
25	.23	.44	3.0	1.3	.84	.77	8.3	20	3.6	.23	0	
26	.23	.50	2.7	1.3	.84	.84	10	15	4.0	.19	0	
27	.19	.56	2.6	1.2	.84	.84	13	14	4.0	.19	0	
28	.19	.56	2.5	1.2	.84	.77	13	18	3.8	.19	0	
29	.15	.56	2.2	1.1	------	.77	11	20	3.2	.19	0	
30	.15	.70	1.9	1.1	------	.77	9.1	20	2.6	.15	0	
31	.11	------	1.8	1.0	------	.77	------	18	------	.15	0	------
TOTAL	6.86	11.99	87.41	56.5	25.62	23.03	135.80	602.5	231.3	21.93	.65	0
MEAN	.22	.40	2.82	1.82	.92	.74	4.53	19.4	7.71	.71	.021	0
MAX	.84	1.3	17	7.3	1.0	.84	13	36	16	2.3	.11	0
MIN	0	.15	.50	1.0	.84	.70	.84	6.3	2.6	.15	0	0
AC-FT	14	24	173	112	51	46	269	1,200	459	43	1.3	0

WTR YR 1973 TOTAL 1,203.59 MEAN 3.30 MAX 36 MIN 0 AC-FT 2,390

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	--	2.65	11	5-3	1900	2.28	16
12-19	0500	2.40	22	5-16	1700	2.80	51
4-27	1700	2.35	19	5-29	1800	2.47	26

10336676 WARD CREEK AT HIGHWAY 89, NEAR TAHOE PINES, CALIF.

LOCATION.--Lat 39°07'56", long 120°09'24", in NW¼SE¼ sec.24, T.15 N., R.16 E., Placer County, Tahoe National Forest, on right bank 165 ft downstream from State Highway 89 bridge, 2.1 miles north of Tahoe Pines, and 2.6 miles southwest of Tahoe City.

DRAINAGE AREA.--9.70 sq mi.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,230 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 298 cfs May 16 (gage height, 5.85 ft); maximum gage height, 7.18 ft Dec. 17 (backwater from ice); minimum daily discharge, 1.0 cfs Aug. 19-21, Sept. 4-19.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	4.0	7.4	14	11	8.0	8.3	70	125	14	2.4	1.2
2	4.2	4.0	7.3	13	9.3	8.0	8.0	77	111	13	2.4	1.2
3	3.8	5.5	7.0	13	9.3	8.3	8.3	85	101	12	2.2	1.2
4	3.8	17	6.6	12	9.3	8.0	9.0	73	91	11	2.4	1.0
5	3.2	10	6.3	12	9.0	8.3	11	51	102	10	2.4	1.0
6	3.2	7.8	6.0	11	9.0	8.0	15	47	102	9.6	2.2	1.0
7	4.0	7.6	5.8	11	8.8	7.8	17	68	94	9.3	2.0	1.0
8	4.8	7.0	5.7	11	8.6	7.6	18	87	94	8.8	1.9	1.0
9	4.0	6.6	5.6	11	8.3	7.6	22	94	96	8.3	1.8	1.0
10	6.0	6.3	5.6	11	8.0	7.8	26	114	83	8.0	1.8	1.0
11	6.3	6.0	5.6	14	7.8	8.3	34	131	80	7.0	1.6	1.0
12	5.0	5.8	5.7	76	7.8	8.0	37	153	70	6.6	1.4	1.0
13	4.8	6.3	5.8	51	7.8	7.6	30	178	61	6.3	1.4	1.0
14	4.2	6.5	5.9	25	7.8	7.8	24	214	49	6.3	1.4	1.0
15	4.0	6.6	6.0	20	7.8	7.8	23	214	36	6.0	1.2	1.0
16	4.0	6.0	6.0	20	7.8	7.8	23	223	33	5.8	1.2	1.0
17	4.8	5.9	34	19	7.8	7.8	26	220	28	5.3	1.2	1.0
18	6.6	5.8	26	17	7.8	8.3	22	223	26	5.3	1.2	1.0
19	6.3	5.8	94	16	7.8	7.8	20	211	25	5.0	1.0	1.0
20	6.3	5.8	47	15	7.8	7.8	20	180	23	4.8	1.0	3.0
21	5.8	5.8	37	14	7.9	7.8	23	151	23	4.6	1.0	2.8
22	4.8	5.8	43	13	8.0	7.8	32	149	24	4.4	1.2	2.2
23	4.4	5.8	28	12	8.3	8.0	49	145	22	4.2	1.2	2.2
24	4.2	5.9	22	12	8.3	7.8	55	145	20	4.0	1.2	2.4
25	4.2	6.0	20	11	8.0	8.0	63	141	19	3.6	1.4	2.4
26	4.2	6.6	18	11	7.8	8.3	74	111	20	3.4	2.4	2.2
27	4.0	6.8	17	11	7.6	8.6	88	107	19	3.2	2.8	1.9
28	4.0	6.9	16	10	8.0	8.6	93	118	18	3.0	2.2	1.8
29	3.8	7.0	16	10	------	8.0	83	133	18	2.8	2.0	1.4
30	3.6	7.5	15	10	------	7.8	72	137	16	2.6	1.8	1.4
31	3.8	------	14	10	------	7.8	------	135	------	2.6	1.4	------
TOTAL	139.7	200.4	545.3	516	232.5	246.9	1,033.6	4,185	1,629	200.8	52.7	43.3
MEAN	4.51	6.68	17.6	16.6	8.30	7.96	34.5	135	54.3	6.48	1.70	1.44
MAX	6.6	17	94	76	11	8.6	93	223	125	14	2.8	3.0
MIN	3.2	4.0	5.6	10	7.6	7.6	8.0	47	16	2.6	1.0	1.0
AC-FT	277	397	1,080	1,020	461	490	2,050	8,300	3,230	398	105	86

WTR YR 1973 TOTAL 9,025.2 MEAN 24.7 MAX 223 MIN 1.0 AC-FT 17,900

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-19	0400	5.53	125	4-27	1800	5.17	120
1-12	1800	5.37	102	5-16	1800	5.85	298

10336684 DOLLAR CREEK NEAR TAHOE CITY, CALIF.

LOCATION.--Lat 39°11'55", long 120°05'50", in SE¼SW¼ sec.28, T.16 N., R.17 E., Placer County, on right bank 30 ft upstream from culvert on State Highway 28, 1,000 ft upstream from Lake Tahoe, and 2.8 miles northeast of Tahoe City.

DRAINAGE AREA.--1.07 sq mi.

PERIOD OF RECORD.--June 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,310 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 32 cfs Apr. 27 (gage height, 2.02 ft), from rating curve extended above 8 cfs; no flow Aug. 1, 2, 19-22.
Period of record: Maximum discharge, 32 cfs Apr. 27, 1973 (gage height, 2.02 ft), from rating curve extended above 8 cfs; no flow Aug. 1, 2, 19-22, 1973.

REMARKS.--Records good except those for the period Apr. 25-29, which are poor. Regulation and diversion for local water supply at Dollar Reservoir and return flow from a storage tank just upstream from the station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.17	.39	.39	.55	.71	.91	7.8	1.1	.19	0	.02
2	.30	.17	.39	.39	.55	.67	.87	8.5	1.0	.19	0	.02
3	.19	.21	.39	.43	.55	.67	.95	9.2	.99	.19	.01	.02
4	.17	.70	.43	.43	.55	.67	1.2	7.2	.91	.19	.02	.02
5	.17	.47	.36	.43	.55	.63	1.6	4.6	.91	.17	.02	.02
6	.15	.39	.39	.43	.55	.63	2.4	3.8	.83	.13	.01	.02
7	.17	.30	.43	.39	.55	.63	3.0	4.4	.75	.15	.01	.02
8	.21	.30	.39	.39	.55	.63	2.8	5.0	.36	.17	.01	.03
9	.21	.30	.39	.43	.55	.67	3.1	5.2	.19	.13	.02	.04
10	.21	.33	.39	.43	.59	.71	3.8	5.6	.19	.15	.02	.04
11	.21	.36	.39	.55	.55	.71	5.0	6.0	.21	.13	.01	.05
12	.21	.33	.39	.87	.51	.71	6.4	6.8	.30	.11	.01	.05
13	.19	.36	.39	.87	.51	.71	5.2	7.8	.43	.13	.01	.05
14	.21	.43	.39	.79	.51	.67	3.4	6.8	.43	.13	.01	.04
15	.24	.36	.39	.63	.47	.67	3.4	5.2	.39	.11	.01	.05
16	.24	.36	.43	.75	.51	.67	3.3	4.6	.43	.11	.01	.05
17	.24	.39	1.3	.69	.55	.71	3.6	3.8	.43	.11	.02	.06
18	.36	.36	1.2	.64	.59	.71	3.4	3.4	.39	.09	.01	.05
19	.33	.30	1.7	.59	.59	.71	3.0	2.8	.36	.05	0	.03
20	.36	.27	1.2	.59	.63	.75	3.0	2.2	.30	.06	0	.04
21	.27	.30	.99	.55	.63	.71	3.3	1.9	.27	.05	0	.05
22	.24	.30	1.1	.51	.63	.67	4.4	1.7	.27	.07	0	.09
23	.24	.30	.87	.51	.67	.67	6.8	1.4	.30	.05	.01	.15
24	.21	.30	.75	.51	.67	.71	9.2	1.4	.30	.03	.01	.17
25	.19	.36	.63	.51	.63	.83	11	1.2	.27	.02	.02	.15
26	.17	.39	.59	.51	.63	.99	14	1.2	.24	.02	.04	.11
27	.17	.43	.55	.51	.67	1.2	18	1.1	.27	.02	.04	.09
28	.21	.43	.55	.51	.71	1.1	20	.99	.30	.01	.02	.09
29	.24	.39	.47	.51	------	1.0	14	.95	.27	.01	.02	.07
30	.21	.39	.43	.51	------	.95	9.2	.83	.27	.01	.02	.09
31	.17	------	.39	.55	------	.95	------	1.1	------	.01	.02	------
TOTAL	6.88	10.45	19.05	16.80	16.20	23.42	170.23	124.47	13.66	2.99	.41	1.78
MEAN	.22	.35	.61	.54	.58	.76	5.67	4.02	.46	.097	.013	.059
MAX	.36	.70	1.7	.87	.71	1.2	20	9.2	1.1	.19	.04	.17
MIN	.15	.17	.36	.39	.47	.63	.87	.83	.19	.01	0	.02
AC-FT	14	21	38	33	32	46	338	247	27	5.9	.8	3.5

WTR YR 1973 TOTAL 406.34 MEAN 1.11 MAX 20 MIN 0 AC-FT 806

PEAK DISCHARGE (BASE, 5 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-11	2100	1.83	7.2	5-13	2400	1.85	8.5
4-27	1830	2.02	32				

10336698 THIRD CREEK NEAR CRYSTAL BAY, NEV.

LOCATION.--Lat 39°14'26", long 119°56'44", in SW¼NE¼ sec.22, T.16 N., R.18 E., Washoe County, on right bank 50 ft upstream from culvert on Lakeshore Boulevard, 600 ft upstream from mouth, and 3 miles east of Crystal Bay.

DRAINAGE AREA.--6.0 sq mi.

PERIOD OF RECORD.--October 1969 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 6,234.03 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 80 cfs May 16 (gage height, 2.99 ft); maximum gage height, 3.77 ft Jan. 23 (backwater from ice); minimum discharge, 1.0 cfs Sept. 13.
Period of record: Maximum discharge, 110 cfs June 26, 1971 (gage height, 3.17 ft); maximum gage height, 3.77 ft Jan. 23, 1973 (backwater from ice); minimum discharge, 0.65 cfs Sept. 18, 1972.

REMARKS.--Records good except those for periods of doubtful gage-height record, which are fair, and those for winter months, which are poor. One transmountain diversion to Washoe Valley.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.3	3.6	3.1	3.8	4.2	4.7	15	46	5.3	2.7	2.5
2	5.0	3.3	3.7	3.1	3.8	4.2	4.6	18	42	5.1	2.9	2.5
3	3.3	4.0	3.9	3.1	3.8	4.1	5.5	20	41	4.9	2.9	2.7
4	2.5	8.6	4.0	3.1	3.8	4.0	6.3	18	41	4.9	3.3	2.7
5	3.3	6.1	3.9	3.2	3.8	3.9	7.4	15	35	4.9	3.5	2.7
6	2.7	4.2	3.7	3.3	3.8	3.8	9.0	14	30	4.6	3.5	2.3
7	2.5	4.0	3.6	3.5	4.0	3.8	9.0	15	34	4.4	3.3	2.2
8	2.5	3.9	3.3	3.5	4.0	4.0	9.6	17	37	4.4	3.1	2.2
9	2.7	3.9	3.3	3.6	3.8	4.1	11	19	34	4.2	2.9	2.2
10	2.7	4.0	3.2	3.7	4.6	4.4	11	21	35	4.0	2.7	2.2
11	2.7	4.2	3.2	3.8	4.4	4.4	13	30	29	4.2	2.7	2.0
12	2.2	4.7	3.3	4.0	4.2	4.3	11	36	24	4.2	2.7	1.8
13	1.8	4.5	3.5	5.6	4.0	4.2	10	46	25	4.4	2.7	2.0
14	1.8	4.4	3.8	4.6	3.8	4.2	9.3	40	21	4.2	2.9	2.0
15	2.2	4.3	3.1	4.4	3.8	4.3	7.9	51	18	4.0	2.7	2.0
16	3.4	4.1	3.3	4.4	3.8	4.4	8.2	59	13	4.0	2.7	2.0
17	4.4	4.0	3.5	5.3	3.7	4.6	8.6	59	12	4.2	2.7	1.8
18	6.8	3.9	4.0	5.0	3.7	4.2	8.2	59	9.3	4.0	3.1	1.6
19	4.9	4.0	5.0	4.5	3.7	4.2	7.6	48	8.6	3.8	2.9	1.6
20	4.4	4.0	7.4	4.2	3.8	4.2	7.6	52	9.0	3.5	2.9	1.6
21	3.8	3.7	6.9	4.0	4.0	4.1	8.2	44	7.9	3.5	2.7	1.6
22	3.5	3.5	6.6	4.0	4.0	4.0	10	45	7.1	3.3	2.9	1.6
23	3.5	3.5	5.8	4.1	4.0	4.1	12	46	6.9	3.3	2.7	1.8
24	3.1	3.6	5.1	4.2	4.0	4.9	14	41	6.9	3.1	2.7	2.0
25	2.3	4.0	4.5	4.2	4.0	5.6	13	48	6.6	2.9	2.7	2.2
26	2.7	4.3	4.2	4.0	4.0	5.3	17	45	6.6	2.9	3.1	2.2
27	3.5	4.4	4.2	4.0	4.0	5.3	20	39	6.1	2.9	2.7	2.2
28	3.3	4.3	3.8	4.0	4.2	4.9	20	58	5.8	2.7	2.5	2.2
29	3.2	4.1	3.6	4.0	------	4.5	17	47	5.6	2.7	2.5	2.2
30	3.2	3.6	3.4	4.2	------	4.4	15	42	5.3	3.1	2.5	2.2
31	3.2	------	3.2	4.0	------	4.9	------	50	------	2.7	2.5	------
TOTAL	100.1	126.4	127.6	123.7	110.3	135.5	315.7	1,157	608.7	120.3	88.3	62.8
MEAN	3.23	4.21	4.12	3.99	3.94	4.37	10.5	37.3	20.3	3.88	2.85	2.09
MAX	6.8	8.6	7.4	5.6	4.6	5.6	20	59	46	5.3	3.5	2.7
MIN	1.8	3.3	3.1	3.1	3.7	3.8	4.6	14	5.3	2.7	2.5	1.6
AC-FT	199	251	253	245	219	269	626	2,290	1,210	239	175	125

CAL YR 1972 TOTAL 1,954.4 MEAN 5.34 MAX 26 MIN 1.0 AC-FT 3,880
WTR YR 1973 TOTAL 3,076.4 MEAN 8.43 MAX 59 MIN 1.6 AC-FT 6,100

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-16	2115	2.99	80	6-8	2000	2.81	48
5-31	1500	3.04	74				

NOTE.--Doubtful gage-height record May 15 to June 12.

10336700 INCLINE CREEK NEAR CRYSTAL BAY, NEV.

LOCATION.--Lat 39°14'25", long 119°56'38", in SW¼NE¼ sec.22, T.16 N., R.18 E., Washoe County, on right bank 500 ft upstream from culvert on Lakeshore Boulevard, 1,000 ft upstream from mouth just downstream from confluence with major tributary, and 3 miles east of Crystal Bay.

DRAINAGE AREA.--7.0 sq mi.

PERIOD OF RECORD.--October 1966 to September 1969 (operated as a low-flow partial-record station only). October 1969 to September 1973 (discontinued as a continuous-record station, continued as a low-flow partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 6,246.90 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 40 cfs May 31 (gage height, 2.25 ft); maximum gage height, 3.42 ft Dec. 7 (backwater from ice); minimum discharge, 1.7 cfs Sept. 20.
Period of record: Maximum discharge, 87 cfs Jan. 21, 1970 (gage height, 2.60 ft); maximum gage height, 3.42 ft Dec. 7, 1972 (backwater from ice); minimum discharge, 1.5 cfs Aug. 11-13, 1972.

REMARKS.--Records good except those for winter periods, which are poor. No diversion above station. Possibly some light pumping or manipulation of water for construction.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	3.7	3.7	5.2	3.7	4.3	3.9	18	20	6.6	4.3	3.7
2	6.1	3.7	4.0	5.0	4.3	4.0	4.1	18	19	6.2	4.3	3.5
3	3.5	4.1	4.3	5.4	4.0	4.0	4.3	20	18	6.6	4.9	3.5
4	4.6	8.4	4.0	4.5	4.3	4.0	5.6	18	17	6.6	4.9	3.0
5	4.0	4.6	4.0	3.5	4.3	3.5	8.0	16	16	6.2	4.9	3.2
6	3.5	4.3	3.7	3.7	4.3	3.7	11	16	16	6.6	4.3	3.5
7	3.5	4.3	3.7	4.0	4.6	3.5	9.8	18	16	5.9	4.3	3.5
8	3.5	4.0	3.5	4.2	4.3	3.2	11	18	16	6.2	4.0	3.5
9	3.5	4.0	3.1	4.9	4.3	3.5	12	18	14	5.6	4.3	3.5
10	3.7	4.3	3.0	4.6	4.6	3.7	14	20	14	5.2	4.3	3.5
11	3.5	4.6	2.8	5.2	4.3	3.7	16	21	14	5.2	4.3	3.5
12	3.5	5.2	2.8	7.0	4.0	3.7	15	23	12	5.2	4.0	3.2
13	3.2	4.6	2.8	6.6	4.0	3.0	13	24	11	5.6	3.7	3.2
14	3.2	4.6	3.0	5.6	4.0	3.0	12	25	11	5.9	3.7	3.0
15	3.5	4.6	3.2	5.6	4.0	2.9	9.8	25	11	5.9	3.5	3.5
16	4.3	4.3	3.2	6.2	4.3	3.7	9.8	26	10	5.9	3.5	3.5
17	4.3	4.3	7.3	5.2	4.3	3.5	10	26	9.8	5.6	3.7	3.2
18	7.6	4.0	12	5.0	4.3	3.0	9.8	25	9.0	5.2	3.7	3.5
19	5.2	4.3	14	4.5	3.7	3.5	9.8	25	9.0	4.9	4.0	3.5
20	4.9	4.0	9.0	3.7	3.9	3.2	9.8	23	8.7	5.2	4.0	2.7
21	4.3	3.7	8.7	3.9	4.3	3.2	11	23	9.0	5.6	3.5	3.5
22	4.0	3.7	8.7	4.2	4.0	3.2	13	22	8.7	5.6	3.7	3.5
23	3.7	3.5	6.6	4.3	4.6	3.5	16	22	8.0	4.6	3.7	3.7
24	3.5	3.7	6.2	4.6	4.6	4.3	16	21	8.0	4.6	3.7	3.7
25	3.7	4.3	5.9	4.6	4.3	4.9	18	20	7.6	4.6	4.0	3.5
26	3.7	4.6	5.6	4.3	3.7	5.6	20	18	7.6	4.6	4.9	3.5
27	3.7	4.6	5.9	4.0	4.3	5.2	21	18	7.6	4.9	4.3	3.7
28	3.7	4.6	5.8	4.6	6.2	4.3	22	18	7.3	5.2	3.7	3.7
29	3.5	4.3	5.2	4.3	------	3.9	19	18	7.0	5.2	3.7	3.7
30	3.2	3.7	5.4	4.3	------	4.0	18	18	6.6	4.9	3.5	3.7
31	3.2	------	6.6	4.3	------	4.3	------	21	------	4.6	3.7	------
TOTAL	124.9	130.6	167.7	147.0	119.5	117.0	372.7	642	348.9	170.7	125.0	103.4
MEAN	4.03	4.35	5.41	4.74	4.27	3.77	12.4	20.7	11.6	5.51	4.03	3.45
MAX	7.6	8.4	14	7.0	6.2	5.6	22	26	20	6.6	4.9	3.7
MIN	3.2	3.5	2.8	3.5	3.7	2.9	3.9	16	6.6	4.6	3.5	2.7
AC-FT	248	259	333	292	237	232	739	1,270	692	339	248	205

CAL YR 1972 TOTAL 1,896.8 MEAN 5.18 MAX 14 MIN 2.1 AC-FT 3,760
WTR YR 1973 TOTAL 2,569.4 MEAN 7.04 MAX 26 MIN 2.7 AC-FT 5,100

PEAK DISCHARGE (BASE, 30 CFS).--May 18 (0830) 33 cfs (2.20 ft); May 31 (1400) 40 cfs (2.25 ft).

10336730 GLENBROOK CREEK AT GLENBROOK, NEV.

LOCATION.--Lat 39°05'15", long 119°56'20", in SW¼NE¼SE¼ sec.10, T.14 N., R.18 E., Douglas County, on left bank 50 ft upstream from culvert at gas station, 100 ft upstream from mouth at Glenbrook.

DRAINAGE AREA.--4.07 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 6.7 cfs May 12 (gage height, 1.51 ft); minimum, 0.09 cfs Aug. 16, 17. Period of record: Maximum discharge, 6.7 cfs May 12, 1973 (gage height, 1.51 ft); minimum, 0.09 cfs July 18, 1972, Aug. 16, 17, 1973.

REMARKS.--Records good. Flow may be affected by pumping or diverting for irrigation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	1.7	.94	.94	1.4	1.5	1.5	4.4	2.5	.50	.24	.45
2	1.4	1.8	.94	1.1	1.4	1.5	1.7	4.5	1.8	.45	.24	.50
3	.80	2.0	1.1	1.1	1.4	1.5	1.8	4.9	1.7	.40	.18	.58
4	.80	2.3	.94	.94	1.4	1.5	2.3	4.5	1.7	.40	.20	.45
5	.94	1.2	.94	.94	1.4	1.4	2.8	3.8	1.5	.40	.24	.45
6	.68	.94	.94	.94	1.4	1.4	3.6	4.5	1.1	.50	.22	.50
7	.68	.94	.94	.94	1.4	1.4	3.6	4.2	1.2	.50	.22	.45
8	.80	.94	.94	.94	1.4	1.4	3.6	4.5	1.2	.50	.22	.45
9	.80	.80	.80	.94	1.4	1.4	3.8	4.5	1.4	.50	.22	.50
10	.80	.94	.80	.94	1.4	1.5	4.0	4.9	1.5	.68	.24	.45
11	.94	.94	.80	1.8	1.4	1.5	4.4	5.5	1.5	.68	.24	.45
12	.68	.94	.94	4.4	1.4	1.5	4.2	5.5	1.5	.68	.22	.40
13	.68	.94	.80	2.6	1.4	1.4	4.0	5.7	1.4	.45	.22	.35
14	.68	1.1	.80	2.0	1.4	1.4	3.6	5.5	1.2	.45	.22	.40
15	.68	.94	.80	1.8	1.4	1.2	3.3	5.5	1.1	.40	.22	.45
16	.76	.94	.94	2.5	1.4	1.5	3.3	5.3	1.1	.35	.18	.45
17	1.1	.94	2.8	1.8	1.4	1.5	3.5	5.1	1.1	.35	.12	.45
18	1.5	.94	2.3	1.5	1.4	1.4	3.3	5.1	1.1	.35	.15	.40
19	1.1	.94	3.5	1.4	1.5	1.5	3.1	4.5	1.1	.40	.18	.45
20	1.2	.80	2.3	1.4	1.5	1.5	2.8	4.2	.94	.35	.20	.40
21	1.1	.80	1.8	1.4	1.5	1.4	2.8	4.0	.94	.30	.22	.45
22	.94	.94	2.1	1.2	1.7	1.2	3.1	3.8	.94	.35	.24	.45
23	.80	.80	1.7	1.2	1.7	1.2	3.6	3.6	.94	.35	.24	.45
24	.94	.94	1.5	1.2	1.7	1.5	3.8	3.1	.94	.30	.35	.45
25	1.1	1.1	1.4	1.2	1.7	1.8	4.2	3.1	.94	.30	.45	.50
26	1.1	1.1	1.2	1.4	1.7	2.1	4.7	2.8	.80	.35	1.1	.50
27	1.2	1.1	1.2	1.4	1.7	2.3	4.9	2.5	.80	.35	.58	.58
28	1.4	1.1	.94	1.4	1.7	1.8	5.3	2.3	.80	.35	.45	.58
29	1.5	1.1	.80	1.4	------	1.5	4.9	2.1	.58	.27	.45	.50
30	1.7	1.1	1.1	1.4	------	1.5	4.4	1.8	.58	.27	.45	.50
31	1.7	------	.94	1.4	------	1.7	------	2.8	------	.27	.40	------
TOTAL	31.39	33.06	39.94	45.52	41.6	46.9	105.9	128.5	35.90	12.75	9.10	13.94
MEAN	1.01	1.10	1.29	1.47	1.49	1.51	3.53	4.15	1.20	.41	.29	.46
MAX	1.7	2.3	3.5	4.4	1.7	2.3	5.3	5.7	2.5	.68	1.1	.58
MIN	.68	.80	.80	.94	1.4	1.2	1.5	1.8	.58	.27	.12	.35
AC-FT	62	66	79	90	83	93	210	255	71	25	18	28

CAL YR 1972 TOTAL 425.41 MEAN 1.16 MAX 4.4 MIN .15 AC-FT 844
WTR YR 1973 TOTAL 544.50 MEAN 1.49 MAX 5.7 MIN .12 AC-FT 1,080

PEAK DISCHARGE (BASE, 5.0 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-18	2330	1.45	5.1	5-12	1830	1.51	6.7
1-12	0530	1.43	5.1	5-31	1500	1.50	6.1
4-27	2030	1.48	5.9				

10336780 TROUT CREEK NEAR TAHOE VALLEY, CALIF.

LOCATION.--Lat 38°55'12", long 119°58'17", in NW¼SE¼ sec.3, T.12 N., R.18 E., El Dorado County, on left bank 5 ft upstream from Martin Avenue Bridge, 500 ft upstream from Heavenly Valley Creek, and 1.8 miles east of Tahoe Valley.

DRAINAGE AREA.--36.7 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 37.4 cfs (27,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 176 cfs May 31 (gage height, 8.43 ft); minimum, 10 cfs Dec. 6-10. Period of record: Maximum discharge, 535 cfs Feb. 1, 1963 (gage height, 11.14 ft), from rating curve extended above 110 cfs on basis of computation of peak flow (weir formula) and logarithmic projection; no flow for part of Sept. 11, 1966.

REMARKS.--Records good except those for winter periods, which are fair. Minor diversion for local water supply.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	16	14	18	20	20	21	59	155	51	33	18
2	24	16	14	18	20	19	22	65	140	49	31	18
3	20	15	13	18	19	18	19	70	136	47	27	18
4	15	27	12	18	19	18	22	70	128	46	34	18
5	16	20	11	17	19	18	25	61	127	45	29	18
6	16	18	10	16	19	19	31	58	128	44	26	18
7	16	19	10	16	19	19	34	62	127	43	25	17
8	17	18	10	16	19	18	32	67	126	42	23	16
9	16	18	10	16	18	20	36	71	128	39	22	16
10	16	18	10	16	18	19	38	79	128	38	22	16
11	16	18	11	24	18	20	42	89	126	37	21	16
12	15	17	11	68	18	20	44	96	117	37	20	16
13	15	17	12	46	18	18	41	104	110	36	20	16
14	14	19	12	32	18	21	36	112	103	37	19	16
15	14	18	13	31	18	25	35	116	95	36	19	16
16	16	18	27	29	18	22	35	123	88	37	18	16
17	16	17	44	27	18	19	39	131	82	38	17	16
18	20	16	55	26	18	22	38	134	77	36	17	16
19	19	15	63	26	18	20	37	133	73	36	18	16
20	23	15	39	26	18	18	34	133	70	33	20	17
21	20	15	29	26	18	18	35	128	68	33	20	16
22	18	14	32	26	18	17	39	124	67	33	19	16
23	18	14	26	26	19	17	47	124	67	32	20	17
24	16	14	23	27	19	18	52	127	64	31	21	17
25	15	14	21	22	19	21	57	122	61	31	20	17
26	16	14	21	21	22	23	61	112	59	32	22	16
27	15	14	20	20	20	23	65	112	59	34	26	15
28	15	14	18	20	20	21	71	119	58	33	21	15
29	13	14	18	20	------	23	68	128	54	32	19	15
30	12	14	18	20	------	20	63	137	52	31	18	15
31	17	------	18	20	------	20	------	151	------	32	18	------
TOTAL	515	496	645	752	525	614	1,219	3,217	2,873	1,161	685	493
MEAN	16.6	16.5	20.8	24.3	18.8	19.8	40.6	104	95.8	37.5	22.1	16.4
MAX	24	27	63	68	22	25	71	151	155	51	34	18
MIN	12	14	10	16	18	17	19	58	52	31	17	15
AC-FT	1,020	984	1,280	1,490	1,040	1,220	2,420	6,380	5,700	2,300	1,360	978

CAL YR 1972 TOTAL 10,672 MEAN 29.2 MAX 94 MIN 10 AC-FT 21,170
WTR YR 1973 TOTAL 13,195 MEAN 36.2 MAX 155 MIN 10 AC-FT 26,170

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-20	0030	8.07	147	7-19	1300	7.74	123
5-31	2130	8.43	176				

10336790 TROUT CREEK AT SOUTH LAKE TAHOE, CALIF.

LOCATION.--Lat 38°55'56", long 119°58'40", in SE¼NW¼ sec.3, T.12 N., R.18 E., El Dorado County, on right bank on upstream side of U.S. Highway 50 bridge, 1.2 miles upstream from Lake Tahoe, and 1.9 miles northeast of South Lake Tahoe Post Office.

DRAINAGE AREA.--40.4 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,240 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 190 cfs May 31 (gage height, 4.08 ft); minimum daily, 11 cfs Dec. 6-10.
Period of record: Maximum discharge, 190 cfs May 31, 1973 (gage height, 4.08 ft); minimum daily, 11 cfs Dec. 6-10, 1972.

REMARKS.--Records good except those for the winter periods, which are poor. Minor diversion for local water supply. Records of suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	15	19	21	21	26	66	167	54	27	16
2	24	17	15	19	21	21	24	69	150	52	26	16
3	20	17	14	19	21	22	23	76	144	51	23	16
4	15	30	13	19	21	22	26	77	137	49	29	16
5	16	20	12	18	21	22	30	67	135	48	26	16
6	16	18	11	18	20	20	36	62	136	45	23	15
7	16	18	11	17	20	20	38	65	135	44	22	14
8	17	18	11	17	20	20	38	71	132	42	21	14
9	16	18	11	17	20	20	41	76	135	40	20	14
10	16	18	11	20	20	20	43	85	136	38	20	15
11	16	18	12	29	20	21	47	96	135	37	20	14
12	16	18	12	103	20	20	49	101	125	36	20	15
13	16	17	12	63	20	20	47	108	115	36	19	15
14	15	18	13	42	20	22	42	116	109	36	18	15
15	15	18	15	34	20	22	41	122	101	36	18	15
16	16	18	22	34	20	22	41	129	96	35	17	15
17	17	17	48	33	20	20	43	139	92	38	16	15
18	21	17	64	33	20	22	42	143	86	34	16	15
19	20	17	73	33	20	21	41	142	81	33	16	15
20	22	16	41	33	20	20	39	142	76	32	17	16
21	20	16	29	32	20	21	39	137	74	31	16	16
22	17	15	27	32	20	24	44	132	71	32	18	15
23	20	15	26	31	20	23	51	130	72	30	19	16
24	17	15	25	31	18	23	57	133	70	29	20	16
25	17	15	24	28	18	23	62	126	66	29	18	16
26	17	15	23	23	20	25	68	118	64	28	19	16
27	17	15	22	22	22	26	74	119	64	29	25	16
28	17	15	21	22	21	24	80	125	62	28	19	16
29	16	15	20	22	------	24	76	134	58	28	17	16
30	15	15	19	22	------	23	70	145	55	26	16	15
31	15	------	19	22	------	23	------	160	------	26	16	------
TOTAL	533	515	691	907	564	677	1,378	3,413	3,079	1,132	617	460
MEAN	17.2	17.2	22.3	29.3	20.1	21.8	45.9	110	103	36.5	19.9	15.3
MAX	24	30	73	103	22	26	80	160	167	54	29	16
MIN	15	15	11	17	18	20	23	62	55	26	16	14
AC-FT	1,060	1,020	1,370	1,800	1,120	1,340	2,730	6,770	6,110	2,250	1,220	912

CAL YR 1972 TOTAL 11,705 MEAN 32.0 MAX 109 MIN 11 AC-FT 23,220
WTR YR 1973 TOTAL 13,966 MEAN 38.3 MAX 167 MIN 11 AC-FT 27,700

PEAK DISCHARGE (BASE, 100 CFS).--Jan. 12 (1500) 135 cfs (3.57 ft); May 31 (2400) 190 cfs (4.08 ft).

10337000 LAKE TAHOE AT TAHOE CITY, CALIF.

LOCATION.--Lat 39°10'50", long 120°06'55", in NE¼SE¼NE¼ sec.5, T.15 N., R.17 E., Placer County, on U.S. Coast Guard pier at Lake Forest, and 1.8 miles northeast of Lake Tahoe outlet dam on Truckee River at Tahoe City.

DRAINAGE AREA.--505 sq mi at lake outlet.

PERIOD OF RECORD.--April 1900 to current year. Monthend elevations only for October 1943 to September 1957, published in WSP 1734. Prior to October 1961, published as "at Tahoe."

GAGE.--Water-stage recorder. Datum of gage is 6,220.00 ft above mean sea level, datum of Bureau of Reclamation (6,218.86 ft, supplementary adjustment of 1959). Prior to Oct. 1, 1957, nonrecording gages at several sites near outlet of lake at same datum. Oct. 1, 1957, to May 8, 1958, water-stage recorder on left wingwall of dam at outlet of lake at same datum. May 9, 1958, to Sept. 30, 1968, water-stage recorder on pier, 1,000 ft east of dam at lake outlet.

EXTREMES.--Current year: Maximum elevation, 6,228.65 ft June 12, 13; minimum, 6,226.55 ft Dec. 14-16.
Period of record: Maximum elevation, 6,231.26 ft July 14, 15, 17, 18, 1907; minimum, 6,221.74 ft Dec. 26, 1934.

REMARKS.--Lake levels regulated by a 17-gate concrete dam at outlet of lake; storage began about 1874. Figures given herein represent usable contents. Usable capacity, 744,600 acre-ft between elevations 6,223 (natural rim of lake) and 6,229.1 ft (maximum permissible elevation by Federal Court decree). Water is used for domestic and recreational purposes in Lake Tahoe area and for irrigation and power in downstream areas. Lake elevations are referred to Bureau of Reclamation datum because that datum is used as the official reference point by all local, State, and Federal agencies. One intermittent transmountain diversion from Echo Lake to South Fork American River for power and irrigation. Since October 1968, some sewage has been transported out of the basin into Carson River basin.

REVISIONS.--WRD 1967: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,226	364,800	6,228	609,300
6,227	486,800	6,229	732,300

ELEVATION, IN FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.00	6.67	6.59	6.73	7.25	7.50	7.43	7.64	8.49	8.57	8.25	7.65
2	7.00	6.66	6.59	6.73	7.25	7.50	7.44	7.65	8.50	8.56	8.24	7.63
3	6.98	6.69	6.63	6.72	7.25	7.52	7.43	7.65	8.54	8.57	8.22	7.61
4	6.98	6.76	6.61	6.70	7.25	7.52	7.42	7.69	8.54	8.56	8.23	7.59
5	6.98	6.74	6.61	6.70	7.26	7.50	7.42	7.70	8.55	8.55	8.19	7.57
6	6.95	6.72	6.64	6.69	7.28	7.50	7.43	7.71	8.56	8.54	8.18	7.55
7	6.96	6.74	6.65	6.68	7.30	7.50	7.42	7.72	8.58	8.52	8.15	7.54
8	6.94	6.70	6.62	6.73	7.30	7.50	7.43	7.74	8.60	8.51	8.14	7.51
9	6.92	6.67	6.61	6.75	7.29	7.49	7.43	7.75	8.60	8.52	8.11	7.47
10	6.91	6.70	6.60	6.76	7.41	7.52	7.44	7.78	8.60	8.50	8.10	7.45
11	6.90	6.70	6.57	6.87	7.46	7.53	7.44	7.80	8.61	8.51	8.10	7.44
12	6.87	6.67	6.57	6.95	7.47	7.52	7.41	7.85	8.61	8.49	8.07	7.43
13	6.87	6.74	6.56	6.97	7.47	7.51	7.46	7.88	8.61	8.48	8.06	7.40
14	6.86	6.73	6.55	6.98	7.47	7.49	7.48	7.92	8.61	8.48	8.05	7.39
15	6.86	6.73	6.56	6.95	7.46	7.50	7.49	7.95	8.60	8.47	8.03	7.36
16	6.86	6.72	6.57	7.10	7.45	7.46	7.45	8.00	8.60	8.46	8.01	7.36
17	6.88	6.71	6.61	7.14	7.45	7.48	7.47	8.05	8.60	8.45	7.95	7.32
18	6.89	6.69	6.66	7.24	7.44	7.48	7.48	8.09	8.60	8.43	7.95	7.32
19	6.89	6.69	6.70	7.24	7.45	7.44	7.48	8.12	8.59	8.40	7.89	7.31
20	6.88	6.67	6.71	7.24	7.43	7.45	7.49	8.16	8.60	8.39	7.88	7.30
21	6.88	6.67	6.77	7.24	7.43	7.47	7.49	8.19	8.60	8.37	7.86	7.25
22	6.88	6.66	6.76	7.24	7.43	7.46	7.49	8.22	8.60	8.35	7.83	7.24
23	6.87	6.64	6.78	7.24	7.40	7.45	7.49	8.23	8.58	8.33	7.81	7.20
24	6.85	6.63	6.78	7.21	7.39	7.45	7.51	8.27	8.59	8.34	7.73	7.20
25	6.83	6.63	6.78	7.24	7.42	7.45	7.53	8.28	8.59	8.33	7.75	7.16
26	6.82	6.62	6.79	7.23	7.45	7.44	7.55	8.30	8.60	8.32	7.74	7.15
27	6.78	6.62	6.78	7.24	7.52	7.44	7.58	8.33	8.60	8.30	7.75	7.12
28	6.75	6.61	6.78	7.23	7.50	7.43	7.58	8.35	8.60	8.30	7.72	7.12
29	6.77	6.60	6.76	7.23	------	7.44	7.61	8.36	8.57	8.28	7.72	7.10
30	6.70	6.59	6.75	7.25	------	7.43	7.63	8.40	8.56	8.28	7.69	7.07
31	6.70	------	6.75	7.24	------	7.44	------	8.45	------	8.26	7.69	------
MEAN	6.88	6.68	6.67	7.01	7.39	7.48	7.48	8.01	8.58	8.43	7.97	7.36
MAX	7.00	6.76	6.79	7.25	7.52	7.53	7.63	8.45	8.61	8.57	8.25	7.65
MIN	6.70	6.59	6.55	6.68	7.25	7.43	7.41	7.64	8.49	8.26	7.69	7.07
(a)	6,226.70	6,226.59	6,226.75	6,227.24	6,227.50	6,227.44	6,227.63	6,228.45	6,228.56	6,228.26	6,227.69	6,227.07
(b)	-31,700	-13,400	+19,500	+59,900	+31,800	-7,300	+23,300	+100,600	+13,600	-36,900	-69,900	-76,100

CAL YR 1972 b -77,100
WTR YR 1973 b +13,400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
NOTE.--Add 6,220 ft to obtain elevation above mean sea level, Bureau of Reclamation datum, at 2400 hours.

10337500 TRUCKEE RIVER AT TAHOE CITY, CALIF.

LOCATION.--Lat 39°10'00", long 120°08'40", in NE¼NW¼ sec.7, T.15 N., R.17 E., Placer County, on left bank 510 ft downstream from dam at outlet of Lake Tahoe at Tahoe City.

DRAINAGE AREA.--506 sq mi.

PERIOD OF RECORD.--July 1895 to February 1896, March 1900 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Prior to October 1961, published as "at Tahoe."

GAGE.--Water-stage recorder. Datum of gage is 6,216.75 ft above mean sea level. Prior to Nov. 12, 1912, nonrecording gage at site 370 ft upstream at different datum. Nov. 12, 1912, to Sept. 30, 1937, nonrecording gage, Oct. 1, 1937, to Aug. 21, 1957, water-stage recorder at datum 2.26 ft higher and Aug. 22, 1957, to July 10, 1960, at datum 2.42 ft higher; all at site 270 ft upstream.

AVERAGE DISCHARGE (unadjusted).--73 years (1900-73), 246 cfs (178,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 428 cfs Aug. 26 (gage height, 4.46 ft); minimum daily, 58 cfs Jan. 17 to Feb. 9.
Period of record: Maximum discharge, 2,630 cfs June 19, 1969 (gage height, 9.32 ft); no flow for parts of many years.

REMARKS.--Records excellent. Flow regulated by Lake Tahoe (operating capacity, 744,600 acre-ft).

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	262	230	61	58	215	182	70	72	69	407	394
2	75	270	230	61	58	215	169	70	71	129	407	394
3	73	290	230	102	58	215	133	70	71	186	409	391
4	76	307	228	128	58	215	98	70	70	204	409	394
5	76	303	228	177	58	228	75	70	70	206	407	391
6	75	286	215	217	58	238	76	70	69	206	407	391
7	76	274	204	215	58	264	75	70	74	204	407	391
8	76	274	204	215	58	282	75	70	77	202	407	389
9	76	274	208	228	58	282	75	70	78	239	407	389
10	76	274	210	242	59	282	76	71	77	262	404	386
11	92	274	208	244	59	282	77	71	78	262	402	386
12	105	274	206	166	59	264	77	71	80	262	402	386
13	105	272	206	105	59	246	76	71	80	262	399	389
14	105	274	206	103	59	248	76	71	77	262	396	391
15	105	264	206	76	59	248	76	71	77	264	396	391
16	105	254	206	59	68	250	75	71	75	286	396	391
17	105	254	210	58	77	250	76	72	71	330	409	391
18	90	254	211	58	77	250	75	72	71	350	420	391
19	73	252	135	58	94	250	74	73	72	350	422	389
20	73	252	62	58	125	248	73	73	72	350	422	389
21	73	252	62	58	144	248	73	73	70	350	422	389
22	73	252	63	59	155	248	74	73	70	350	422	389
23	80	252	61	58	156	248	75	72	70	350	420	386
24	111	254	61	58	156	248	75	72	71	348	420	386
25	171	254	61	58	155	248	76	72	71	383	420	384
26	233	252	61	58	170	248	75	72	71	407	420	384
27	252	242	61	58	180	248	74	71	73	407	404	389
28	250	236	61	58	200	238	73	71	70	407	396	362
29	250	232	61	58	------	215	72	71	70	407	396	340
30	250	230	61	58	------	193	71	71	70	407	394	340
31	250	------	61	58	------	182	------	71	------	407	394	------
TOTAL	3,724	7,894	4,717	3,270	2,633	7,536	2,527	2,206	2,188	9,108	12,643	11,553
MEAN	120	263	152	105	94.0	243	84.2	71.2	72.9	294	408	385
MAX	252	307	230	244	200	282	182	73	80	407	422	394
MIN	73	230	61	58	58	182	71	70	69	69	394	340
AC-FT	7,390	15,660	9,360	6,490	5,220	14,950	5,010	4,380	4,340	18,070	25,080	22,920

CAL YR 1972 TOTAL 72,669 MEAN 199 MAX 422 MIN 61 AC-FT 144,100
WTR YR 1973 TOTAL 69,999 MEAN 192 MAX 422 MIN 58 AC-FT 138,800

10338500 DONNER CREEK AT DONNER LAKE, NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'25", long 120°14'00", in SW¼NW¼ sec.17, T.17 N., R.16 E., Nevada County, on left bank 10 ft downstream from bridge on Donner Memorial State Park road, 0.2 mile downstream from outlet of Donner Lake, 0.7 mile upstream from Cold Creek, and 2.5 miles west of Truckee.

DRAINAGE AREA.--14.6 sq mi.

PERIOD OF RECORD.--November 1909 to August 1910, January 1929 to October 1935, January 1936 to March 1938, July to October 1938, January 1939 to February 1943, June 1943 to December 1953, May 1955 to December 1957, October 1958 to current year. Monthly discharge only prior to October 1958, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder. Altitude of gage is 5,930 ft (from topographic map). Nov. 1, 1909, to Aug. 31, 1910, nonrecording gage at different datum. January 1929 to December 1957, water-stage recorder at same site at unknown datum.

AVERAGE DISCHARGE (unadjusted).--36 years (1929-35, 1936-37, 1939-42, 1943-52, 1955-57, 1958-73), 33.4 cfs (24,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 207 cfs May 18, 19 (gage height, 3.40 ft); minimum daily, 0.30 cfs Aug. 27.
Period of record: Maximum daily discharge, 700 cfs (estimated) Nov. 21, 1950; maximum gage height observed, 4.55 ft Dec. 25, 1964; no flow at times in most years.

REMARKS.--Records excellent. Flow regulated by dam at outlet of Donner Lake (usable capacity, 9,500 acre-ft).

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	22	14	44	37	30	30	148	68	7.2	1.8	2.1
2	61	21	13	41	35	29	29	146	76	6.8	1.5	2.0
3	76	20	12	40	34	29	29	62	76	6.8	1.3	1.8
4	96	29	12	38	34	30	29	8.0	58	5.3	1.1	4.8
5	89	31	11	36	33	29	29	7.6	25	3.8	1.3	10
6	82	29	12	34	32	29	32	6.4	10	3.5	1.1	10
7	81	29	14	33	33	29	36	6.4	17	3.2	2.6	9.3
8	79	27	15	32	31	28	38	6.8	29	2.7	4.3	9.0
9	78	26	15	34	31	27	43	17	37	2.7	4.1	8.8
10	87	24	15	33	33	27	49	24	37	2.7	3.9	8.8
11	153	24	15	34	34	29	56	37	36	2.5	3.5	8.8
12	174	24	15	51	34	28	65	49	34	2.5	3.0	8.8
13	158	23	15	62	32	27	72	50	34	2.7	3.1	7.8
14	144	24	14	63	31	26	73	52	29	2.2	2.6	7.3
15	128	23	14	62	30	26	73	72	19	2.3	2.3	6.6
16	132	23	14	72	29	26	72	99	11	2.0	2.4	6.3
17	142	21	23	76	28	26	73	122	9.7	1.7	2.1	7.0
18	132	21	35	76	26	26	70	182	8.4	1.8	2.0	21
19	112	20	58	75	26	25	65	201	5.7	1.6	1.9	32
20	94	20	73	69	26	26	63	204	4.6	3.2	1.8	32
21	81	18	73	65	25	26	62	174	3.5	5.3	1.7	32
22	69	18	82	60	25	26	63	139	2.7	5.2	1.1	31
23	60	17	84	55	25	25	69	96	2.5	5.0	.85	31
24	52	16	81	51	26	25	78	61	2.2	4.4	.80	31
25	46	15	75	48	26	25	96	81	1.8	3.9	.71	52
26	40	15	70	46	27	26	110	94	2.5	3.7	.57	69
27	36	15	65	43	29	27	82	94	2.7	3.7	.30	67
28	32	14	60	40	30	29	148	94	3.0	3.8	.45	66
29	29	14	55	38	------	29	153	92	2.7	4.0	.50	63
30	26	14	51	40	------	29	151	73	5.7	3.9	1.2	61
31	24	------	47	38	------	29	------	56	------	2.9	2.0	------
TOTAL	2,656	637	1,152	1,529	842	848	2,038	2,554.2	653.7	113.0	57.88	707.2
MEAN	85.7	21.2	37.2	49.3	30.1	27.4	67.9	82.4	21.8	3.65	1.87	23.6
MAX	174	31	84	76	37	30	153	204	76	7.2	4.3	69
MIN	24	14	11	32	25	25	29	6.4	1.8	1.6	.30	1.8
AC-FT	5,270	1,260	2,280	3,030	1,670	1,680	4,040	5,070	1,300	224	115	1,400

CAL YR 1972 TOTAL 12,202.30 MEAN 33.3 MAX 174 MIN 1.0 AC-FT 24,200
WTR YR 1973 TOTAL 13,787.98 MEAN 37.8 MAX 204 MIN .30 AC-FT 27,350

10339380 MARTIS CREEK LAKE NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'38", long 120°06'48", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County, in control house at Martis Creek Dam, 2.0 miles upstream from mouth, and 3.5 miles east of Truckee.

DRAINAGE AREA.--40.0 sq mi.

PERIOD OF RECORD.--October 1971 to September 1972 (occasional readings only prior to June 15, 1972).

GAGE.--Water-stage recorder, two turbidity-recording meters, and a precipitation recorder. Datum of gage is at mean sea level (Corps of Engineers datum).

EXTREMES.--Current year: Maximum contents, 3,220 acre-ft Apr. 10 (elevation, 5,799.99 ft); minimum (after storage began), 827 acre-ft on several days in August and September (elevation, 5,780.15 ft).
Period of record: Maximum contents, 3,220 acre-ft Apr. 10, 1973 (elevation, 5,799.99 ft); minimum (after storage began), 823 acre-ft July 19, Aug. 1, 1972 (elevation, 5,780.09 ft).

REMARKS.--Lake is formed by rolled-earthfill dam. Storage began Oct. 7, 1971. Total capacity, 20,400 acre-ft between elevations 5,745 (streambed elevation at dam) and 5,838 ft (elevation of spillway crest). Figures given herein represent total contents, which include 817 acre-ft of inactive storage below elevation 5,780 ft (intake crest). Reservoir is used for flood control, enhancement of fishery, and recreation.

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	837	834	835	835	843	854	2,170	911	862	830	829	829
2	836	834	835	836	845	841	2,210	913	855	831	829	829
3	833	837	840	837	845	840	2,270	914	851	831	829	829
4	831	861	837	835	843	837	2,380	911	848	831	829	829
5	831	845	834	835	844	837	2,490	904	845	830	831	829
6	829	839	836	835	845	835	2,660	896	843	830	829	828
7	830	840	835	835	842	831	2,820	898	842	830	829	828
8	830	837	835	836	842	830	2,970	899	840	830	828	829
9	830	835	835	837	838	947	3,140	896	838	829	828	829
10	829	835	836	836	837	1,000	2,980	899	838	829	828	829
11	829	837	836	845	837	1,060	2,730	903	838	829	828	829
12	829	837	836	917	841	1,130	2,410	902	837	829	828	827
13	829	844	836	894	840	1,170	2,070	905	838	831	827	827
14	829	848	835	863	840	1,210	1,720	913	838	831	827	827
15	832	844	835	867	840	1,260	1,370	911	837	831	828	828
16	832	841	836	1,070	840	1,280	1,020	910	837	831	829	829
17	832	839	864	1,070	841	1,330	913	907	836	831	829	829
18	840	837	885	1,040	841	1,370	901	908	837	831	829	829
19	837	837	904	962	843	1,420	893	899	836	829	829	829
20	837	835	872	880	844	1,460	891	891	836	829	829	830
21	835	837	879	860	845	1,490	894	884	836	829	831	830
22	834	833	899	853	846	1,530	900	879	835	829	832	830
23	833	834	864	851	848	1,590	908	873	835	829	833	831
24	833	835	853	843	849	1,600	913	871	835	829	832	831
25	833	836	848	843	850	1,670	917	868	835	829	832	832
26	832	837	848	845	851	1,760	924	865	834	828	841	831
27	833	836	845	846	852	1,850	932	861	832	828	837	831
28	833	836	841	850	853	1,920	931	857	832	829	834	831
29	833	835	840	848	------	1,880	921	855	830	829	832	831
30	832	835	840	849	------	2,030	912	853	829	828	830	831
31	834	------	837	844	------	2,090	------	874	------	829	829	------
MAX	840	861	904	1,070	853	2,090	3,140	914	862	831	841	832
MIN	829	833	834	835	837	830	891	853	829	828	827	827
(a)	5,780.24	5,780.25	5,780.29	5,780.38	5,780.50	5,793.15	5,781.30	5,780.79	5,780.18	5,780.17	5,780.17	5,780.20
(b)	+2	+1	+2	+7	+9	+1,237	-1,178	-38	-45	0	0	+2

CAL YR 1972 b +837
WTR YR 1973 b -1

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10339400 MARTIS CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°19'10", long 120°07'00", in NE¼NW¼ sec.17, T.17 N., R.17 E., Nevada County, on left bank 0.2 mile downstream from Martis Creek Lake Dam, 1.8 miles upstream from mouth, and 3.5 miles northeast of Truckee.

DRAINAGE AREA.--40.0 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (from topographic map). Prior to June 10, 1972, at site 1.0 mile downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--15 years, 24.0 cfs (17,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 586 cfs Apr. 10 (gage height, 5.93 ft); minimum, 0.88 cfs Aug. 21 (regulation at Martis Creek Lake Dam).
Period of record: Maximum discharge, 1,880 cfs Feb. 1, 1963 (gage height, 6.16 ft); minimum, 0.46 cfs Oct. 21, 22, 1971, result of regulation at Martis Creek Lake Dam.

REMARKS.--Records good. Flow subject to regulation by Martis Creek Lake Dam since Oct. 7, 1971.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	10	10	11	16	28	7.5	94	40	9.6	7.8	8.4
2	11	10	11	12	17	28	7.1	94	30	9.6	7.6	9.0
3	9.7	11	12	13	17	26	7.5	99	26	10	7.6	9.0
4	9.4	29	13	12	17	25	7.5	100	23	9.6	7.6	9.0
5	9.0	22	11	11	16	23	7.8	91	21	9.6	8.7	8.7
6	9.0	14	11	12	16	23	7.5	78	20	9.6	8.7	8.4
7	8.6	13	11	11	17	12	7.8	74	18	9.6	8.1	8.1
8	9.0	12	10	11	16	3.0	7.8	78	18	9.3	7.8	8.1
9	9.0	11	10	12	16	3.2	9.7	78	16	9.3	7.6	8.1
10	8.6	11	10	12	18	3.4	166	75	16	9.3	7.3	8.4
11	8.6	12	10	14	18	3.2	232	82	15	9.0	7.6	8.4
12	8.6	12	10	50	16	3.8	266	88	15	9.0	7.8	8.1
13	8.6	13	10	63	16	4.1	279	98	15	9.3	7.8	8.1
14	8.6	20	10	42	15	4.1	273	99	14	9.3	7.6	7.8
15	9.4	16	10	32	15	4.1	262	95	14	9.3	7.6	7.8
16	9.4	15	11	57	15	4.1	252	92	13	9.3	7.3	8.1
17	10	14	20	66	16	4.5	143	87	13	9.3	7.0	8.4
18	14	12	35	65	16	4.5	87	84	12	9.3	7.0	8.4
19	13	12	62	65	16	4.5	75	79	12	8.7	7.6	8.7
20	12	11	49	63	16	4.8	67	68	12	8.4	7.8	8.4
21	12	11	35	37	16	5.1	66	58	11	8.4	7.4	8.4
22	11	11	62	27	16	5.7	71	51	11	8.4	8.1	8.4
23	10	10	40	23	16	5.7	83	46	11	8.4	7.6	8.4
24	10	10	25	23	18	5.7	94	41	10	8.1	7.6	8.7
25	10	11	18	23	18	6.1	102	40	10	8.1	8.1	8.7
26	9.7	12	17	21	18	6.4	111	35	10	7.6	11	8.4
27	9.7	12	17	18	22	6.7	126	32	10	7.6	13	8.4
28	10	12	16	19	27	7.1	133	30	11	7.6	11	8.7
29	9.7	11	13	18	------	7.1	125	28	10	7.8	9.6	8.4
30	9.4	11	13	20	------	7.1	106	26	11	7.8	9.0	8.4
31	9.4	------	13	19	------	7.5	------	33	------	7.6	8.7	------
TOTAL	305.4	391	605	882	476	286.5	3,189.2	2,153	468	273.8	255.0	252.3
MEAN	9.85	13.0	19.5	28.5	17.0	9.24	106	69.5	15.6	8.83	8.23	8.41
MAX	14	29	62	66	27	28	279	100	40	10	13	9.0
MIN	8.6	10	10	11	15	3.0	7.1	26	10	7.6	7.0	7.8
AC-FT	606	776	1,200	1,750	944	568	6,330	4,270	928	543	506	500

CAL YR 1972 TOTAL 6,383.3 MEAN 17.4 MAX 95 MIN 1.3 AC-FT 12,660
WTR YR 1973 TOTAL 9,537.2 MEAN 26.1 MAX 279 MIN 3.0 AC-FT 18,920

10339900 ALDER CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°22'07", long 120°10'54", in SE¼NE¼ sec.34, T.18 N., R.16 E., Nevada County, on right bank 0.6 mile upstream from Prosser Creek Reservoir, and 2.5 miles north of Truckee.

DRAINAGE AREA.--7.47 sq mi.

PERIOD OF RECORD.--October 1958 to September 1969, October 1970 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,800 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 9.20 cfs (6,670 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 99 cfs Apr. 26 (gage height, 2.41 ft); minimum, 0.24 cfs Sept. 15. Period of record: Maximum discharge, 730 cfs Jan. 31, 1963 (gage height, 5.86 ft), from rating curve extended above 36 cfs on basis of computation of peak flow through culvert; no flow for some periods in most years.

REMARKS.--Records good except those for winter months, which are fair. No upstream diversions or regulation.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.8	1.7	3.4	3.4	4.8	8.8	51	28	3.3	1.6	.96
2	1.8	1.7	2.2	3.1	3.1	4.8	8.3	53	24	2.8	1.6	.90
3	1.6	1.9	1.6	2.2	3.1	4.8	8.0	55	21	2.7	1.6	.90
4	1.6	7.4	1.9	2.1	3.0	5.0	9.6	49	18	2.8	1.6	.80
5	1.6	3.8	1.6	1.4	2.8	4.8	13	41	16	2.5	1.8	.78
6	1.6	2.7	1.5	1.3	2.8	4.8	21	41	14	2.4	1.6	.69
7	1.7	2.4	1.5	1.2	3.0	4.8	27	44	13	2.4	1.5	.71
8	1.7	2.1	1.5	1.1	2.6	4.8	29	46	12	2.4	1.6	.56
9	1.6	2.2	1.4	1.0	2.6	4.8	33	46	11	2.2	1.5	.54
10	2.0	2.1	1.3	1.4	3.2	5.0	36	47	11	2.0	1.5	.46
11	2.0	2.0	1.3	11	3.2	5.2	40	48	10	1.9	1.5	.36
12	1.7	1.9	1.3	64	2.8	5.2	43	48	9.0	1.9	1.5	.36
13	1.5	1.9	1.4	53	2.8	5.0	40	49	8.0	2.1	1.4	.32
14	1.5	2.0	1.5	16	2.8	5.0	36	49	7.2	2.1	1.4	.28
15	1.5	1.9	1.5	9.0	2.8	5.3	37	49	6.9	2.2	1.4	.27
16	1.5	1.9	2.3	11	3.2	4.9	37	48	6.7	2.0	1.3	.28
17	1.6	1.7	3.1	9.9	3.5	5.2	38	47	6.4	2.0	1.3	.30
18	2.3	2.0	19	7.9	3.7	5.4	35	46	5.9	1.9	1.3	.28
19	1.9	1.7	38	9.1	4.3	5.2	32	43	5.2	1.8	1.2	.32
20	1.7	2.1	13	9.0	4.0	5.1	30	40	5.0	1.8	1.2	.34
21	1.6	2.6	8.7	7.6	3.8	5.0	30	37	4.7	1.7	1.2	.41
22	1.6	2.0	18	8.0	3.5	4.7	35	35	4.5	2.0	1.2	.58
23	1.6	2.4	8.7	7.0	3.5	4.8	43	33	4.6	1.8	1.1	.62
24	1.6	1.9	5.6	6.0	4.0	5.1	46	32	4.5	1.6	1.1	.77
25	1.6	2.0	5.6	4.4	3.7	5.9	49	31	4.1	1.6	1.2	.85
26	1.6	1.9	8.0	4.2	3.8	7.6	59	28	3.9	1.6	1.5	.94
27	1.6	1.7	5.6	5.5	4.2	10	68	25	3.7	1.7	1.6	.94
28	1.7	1.7	3.7	4.4	4.6	10	65	23	3.6	1.7	1.2	.93
29	1.7	2.1	4.6	3.7	------	9.4	57	22	3.2	1.9	1.1	.94
30	1.7	1.7	3.0	4.4	------	9.0	53	22	3.1	1.7	.99	.94
31	1.8	------	3.7	3.5	------	9.1	------	26	------	1.6	.92	------
TOTAL	52.1	67.2	173.8	256.8	93.8	180.5	1,066.7	1,254	278.2	64.1	42.51	18.53
MEAN	1.68	2.24	5.61	8.28	3.35	5.82	35.6	40.5	9.27	2.07	1.37	.61
MAX	2.3	7.4	38	64	4.6	10	68	55	28	3.3	1.8	.96
MIN	1.5	1.7	1.3	1.0	2.6	4.7	8.0	22	3.1	1.6	.92	.27
AC-FT	103	133	345	509	186	358	2,120	2,490	552	127	84	36

CAL YR 1972 TOTAL 2,524.18 MEAN 6.90 MAX 38 MIN .43 AC-FT 5,010
WTR YR 1973 TOTAL 3,548.04 MEAN 9.72 MAX 68 MIN .27 AC-FT 7,040

PEAK DISCHARGE (BASE, 25 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-19	0200	1.98	55	4-11	1900	1.91	48
12-22	0600	1.56	25	4-26	1900	2.41	99
1-12	1600	2.24	84	5-31	1700	1.68	31

NOTE.--No gage-height record Dec. 9 to Jan. 15.

10340300 PROSSER CREEK RESERVOIR NEAR BOCA, CALIF.

LOCATION.--Lat 39°22'45", long 120°08'25", in NW¼SW¼ sec.30, T.18 N., R.17 E., Nevada County, in control house at Prosser Creek Dam on Prosser Creek, 1.5 miles upstream from mouth, and 3 miles west of Boca.

DRAINAGE AREA.--50.5 sq mi.

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder with surface follower and telemark. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents observed, 31,070 acre-ft June 1 (elevation, 5,744.33 ft); minimum observed, 7,190 acre-ft Dec. 27 (elevation, 5,699.18 ft).
Period of record: Maximum contents observed, 31,070 acre-ft June 1, 1973 (elevation, 5,744.33 ft); minimum observed, 1,350 acre-ft Apr. 9, 1969 (elevation, 5,672.30 ft).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Jan. 30, 1963. Usable capacity, 28,640 acre-ft between elevations, 5,660.6 (top of inactive storage) and 5,741.2 ft (spillway crest). Inactive storage, 1,200 acre-ft (includes 83 acre-ft dead storage) below elevation 5,660.6 ft. Elevation of streambed at dam axis, 5,622 ft. Figures given herein represent usable contents. Reservoir is used for flood control, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	5,713.91	12,580	--
Oct. 31.....	5,701.73	7,980	-4,600
Nov. 30.....	5,701.50	7,910	-70
Dec. 31.....	5,700.43	7,570	-340
CAL YR 1972.....	--	--	-560
Jan. 31.....	5,701.23	7,820	+250
Feb. 28.....	5,701.41	7,880	+60
Mar. 31.....	5,702.76	8,320	+440
Apr. 30.....	5,726.77	19,100	+10,780
May 31.....	5,744.20	30,960	+11,860
June 30.....	5,742.43	29,580	-1,380
July 31.....	5,741.45	28,830	-750
Aug. 31.....	5,739.61	27,460	-1,370
Sept. 30.....	5,709.07	10,580	-16,880
WTR YR 1973.....	--	--	-2,000

10340500 PROSSER CREEK NEAR BOCA, CALIF.

LOCATION.--Lat 39°22'10", long 120°07'10", in SW¼NW¼ sec.32, T.18 N., R.17 E., Nevada County, on left bank 0.2 mile upstream from mouth, 1.0 mile downstream from Prosser Creek Dam, and 2 miles southwest of Boca.

DRAINAGE AREA.--53.6 sq mi.

PERIOD OF RECORD.--October 1902 to June 1903 (gage heights only), October 1942 to December 1950, June 1951 to current year. Monthly discharge only for October 1942 to December 1950, published in WSP 1734. Records for April 1889 to November 1890, published in the 11th and 12th Annual Reports, Part 2, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 5,572.62 ft above mean sea level (levels by Bureau of Reclamation). April 1889 to November 1890 and October 1902 to June 1903, nonrecording gages at same site at different datums. October 1942 to December 1950, water-stage recorder at approximately same site at different datum. June 1951 to September 1956, water-stage recorder at present site at datum 2.00 ft higher.

AVERAGE DISCHARGE (adjusted for storage).--30 years (1942-50, 1951-73), 86.9 cfs (62,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 360 cfs Dec. 20 (gage height, 3.72 ft); minimum daily, 11 cfs Dec. 28, 31.

Period of record (1942 to current year): Maximum discharge, 4,560 cfs Dec. 23, 1955 (gage height, 10.13 ft, present datum), from rating curve extended above 910 cfs on basis of slope-area measurement of peak flow; maximum gage height, 11.0 ft, from floodmarks (present datum), Nov. 20, 1950 (discharge, 4,320 cfs by slope-area measurement); minimum discharge, 0.4 cfs July 18, 1961, result of work on dam upstream.

REMARKS.--Records good. Flow regulated by Prosser Creek Dam since Jan. 31, 1963.

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	37	32	29	60	63	68	186	299	80	19	162
2	153	37	32	30	43	63	68	151	288	75	18	235
3	151	23	32	40	34	63	69	110	270	69	17	273
4	151	14	32	46	34	63	70	129	253	66	16	281
5	151	12	31	37	51	63	71	141	239	61	16	312
6	149	40	32	31	61	63	136	141	228	58	19	330
7	149	65	31	31	61	63	176	64	218	54	20	314
8	147	65	31	37	60	62	176	16	207	51	19	301
9	147	64	31	40	60	62	81	16	203	48	18	299
10	147	64	31	40	61	63	22	16	201	45	17	299
11	113	64	31	41	61	64	120	75	193	44	16	297
12	95	64	31	76	44	64	178	115	184	41	15	297
13	60	64	31	95	33	63	180	115	174	39	14	297
14	38	65	31	94	33	63	180	203	162	37	13	312
15	38	64	31	136	33	63	178	260	147	36	16	321
16	55	64	31	170	33	64	79	224	135	34	17	321
17	66	34	32	164	33	64	17	201	121	33	40	319
18	67	12	87	162	33	64	17	149	112	33	55	319
19	66	12	123	99	50	64	17	118	106	31	55	314
20	85	23	263	61	61	64	17	141	101	30	55	314
21	97	32	346	61	61	64	17	109	100	28	55	312
22	97	32	264	82	61	65	17	110	98	26	64	310
23	95	32	211	94	61	63	17	153	95	25	69	308
24	95	32	210	73	61	64	17	190	92	23	69	277
25	77	32	208	60	61	64	17	224	88	22	69	256
26	67	32	130	60	45	36	17	235	88	22	69	256
27	48	32	43	60	35	17	17	230	89	20	36	253
28	37	32	11	60	52	16	17	230	89	20	14	220
29	37	32	17	60	------	16	17	239	88	19	14	201
30	37	32	12	60	------	46	93	253	85	19	14	166
31	37	------	11	60	------	68	------	288	------	18	69	------
TOTAL	2,905	1,207	2,469	2,189	1,576	1,782	2,166	4,852	4,753	1,207	1,017	8,476
MEAN	93.7	40.2	79.6	70.6	49.1	57.5	72.2	156	158	38.9	32.8	283
MAX	153	65	346	170	61	68	180	288	299	80	69	330
MIN	37	12	11	29	33	16	17	16	85	18	13	162
AC-FT	5,760	2,390	4,900	4,340	2,730	3,530	4,300	9,580	9,430	2,390	2,020	16,810
MEAN a	18.9	40.0	75.4	74.6	50.2	64.6	253	349	135	26.7	10.6	-1.18
AC-FT a	1,160	2,320	4,560	4,590	2,790	3,970	15,080	21,440	8,050	1,640	650	-70

CAL YR 1972 TOTAL 29,172 MEAN 79.7 MAX 346 MIN 10 AC-FT 57,860 MEAN a 78.9 AC-FT a 57,300
WTR YR 1973 TOTAL 34,379 MEAN 94.2 MAX 346 MIN 11 AC-FT 68,190 MEAN a 91.4 AC-FT a 66,190

a Adjusted for change in storage in Prosser Creek Reservoir.

10343000 INDEPENDENCE CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°27'20", long 120°17'15", in NW¼SW¼ sec.35, T.19 N., R.15 E., Sierra County, on left bank 0.3 mile downstream from Independence Lake outlet, 6.5 miles northwest of Hobart Mills, and 10 miles north-northwest of Truckee.

DRAINAGE AREA.--7.63 sq mi.

PERIOD OF RECORD.--November 1902 to September 1907, November 1909 to June 1910, August 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,940 ft (from topographic map). July 1, 1904, to June 30, 1910, water-stage recorder 75 ft downstream from Independence Lake outlet; prior to July 1, 1904, water-stage recorder 600 ft downstream at approximately same datum.

AVERAGE DISCHARGE (unadjusted).--10 years (1902-7, 1968-73), 33.6 cfs (24,340 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 184 cfs Sept. 10 (gage height, 5.01 ft); minimum daily, 0.02 cfs Sept. 26-30.
Period of record: Maximum discharge observed, 286 cfs June 23, 1907 (gage height, 3.9 ft, site and datum then in use); no flow Sept. 28 to Nov. 10, 1905, June 1, 1906.

REMARKS.--Records excellent. Flow regulated by Independence Lake (usable capacity, 17,500 acre-ft).

REVISIONS.--WSP 2127: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	31	5.9	6.4	7.3	8.1	8.4	15	64	28	21	158
2	34	30	5.9	6.4	7.3	8.1	8.4	20	62	28	21	175
3	34	20	6.2	6.4	7.8	8.1	8.1	31	60	28	21	178
4	34	9.2	5.9	6.2	8.1	8.1	8.1	43	58	28	22	178
5	34	9.2	5.9	6.2	8.1	8.1	8.1	50	57	26	22	174
6	33	7.8	5.1	6.2	8.1	8.1	8.4	52	56	24	21	175
7	33	7.0	5.6	6.2	8.1	8.1	8.4	54	56	24	21	174
8	33	7.0	5.6	6.2	8.1	8.1	8.4	59	51	24	21	174
9	33	7.0	5.6	6.2	8.1	8.1	8.7	64	48	24	21	175
10	33	7.0	5.6	6.2	8.1	8.1	8.7	68	46	24	21	179
11	32	7.0	5.6	6.2	8.1	8.1	9.0	77	46	24	20	178
12	32	6.7	5.9	6.4	8.1	8.1	9.2	87	45	24	20	173
13	32	6.2	5.9	6.7	8.1	8.1	9.2	100	42	24	20	172
14	32	5.9	5.9	7.0	8.1	8.1	9.2	116	41	22	20	172
15	32	5.6	5.9	6.7	8.1	8.1	9.2	130	41	22	20	172
16	32	5.6	5.9	6.7	8.1	8.1	9.2	133	40	22	20	172
17	32	5.6	5.9	9.2	8.1	8.1	9.5	139	40	22	20	170
18	32	5.6	6.2	6.7	8.1	8.1	9.5	147	40	22	20	165
19	32	5.6	6.7	7.0	8.1	8.4	9.5	147	39	22	20	158
20	32	5.6	7.0	6.4	8.1	8.4	9.5	138	39	22	20	152
21	32	5.4	7.0	6.4	8.1	8.4	9.2	127	39	21	20	149
22	32	5.4	7.3	6.4	8.1	8.4	10	118	38	20	19	142
23	32	5.4	7.0	6.4	8.1	8.4	10	113	32	20	19	132
24	32	5.4	6.7	6.4	8.1	8.4	11	108	29	20	19	121
25	31	5.4	6.7	6.7	7.8	8.4	11	103	29	20	19	7.3
26	31	5.4	6.2	6.7	8.1	8.4	12	108	29	20	19	.02
27	31	5.4	6.2	7.0	8.1	8.4	12	119	29	20	33	.02
28	31	5.9	6.2	7.0	8.1	8.4	13	110	29	21	45	.02
29	31	5.9	6.4	7.0	------	7.8	13	84	29	20	45	.02
30	31	5.9	6.4	7.0	------	7.8	13	63	29	21	56	.02
31	31	------	6.4	7.3	------	8.1	------	64	------	21	112	------
TOTAL	1,000	250.1	190.7	205.9	224.6	253.5	290.9	2,787	1,283	708	818	3,975.40
MEAN	32.3	8.34	6.15	6.64	8.02	8.18	9.70	89.9	42.8	22.8	26.4	133
MAX	34	31	7.3	9.2	8.1	8.4	13	147	64	28	112	179
MIN	31	5.4	5.1	6.2	7.3	7.8	8.1	15	29	20	19	.02
AC-FT	1,980	496	378	408	445	503	577	5,530	2,540	1,400	1,620	7,890

CAL YR 1972 TOTAL 6,443.30 MEAN 17.6 MAX 121 MIN 5.1 AC-FT 12,780
WTR YR 1973 TOTAL 11,987.10 MEAN 32.8 MAX 179 MIN .02 AC-FT 23,780

10343500 SAGEHEN CREEK NEAR TRUCKEE, CALIF.

LOCATION.--Lat 39°25'54", long 120°14'07", in NE¼NE¼ sec.7, T.18 N., R.16 E., Nevada County, on left bank 2.2 miles upstream from bridge on State Highway 89, and 7.5 miles north of Truckee.

DRAINAGE AREA.--10.8 sq mi.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,320 ft (from topographic map). Prior to Dec. 2, 1953, nonrecording gage at site 100 ft upstream at different datum.

AVERAGE DISCHARGE.--20 years, 12.5 cfs (9,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 106 cfs May 14 (gage height, 3.06 ft); minimum daily, 2.1 cfs Oct. 1.
Period of record: Maximum discharge, 765 cfs Feb. 1, 1963 (gage height, 4.64 ft, from floodmarks), from rating curve extended above 110 cfs on basis of slope-area measurement at gage height 4.28 ft; minimum, 0.6 cfs Aug. 8, 1960, Aug. 7, 1961, result of temporary regulation.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No storage or diversion above station. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	3.5	3.8	5.4	6.2	5.9	7.0	58	41	7.1	3.7	2.9
2	2.5	3.6	3.7	5.4	6.1	5.7	6.5	65	35	6.8	3.5	2.9
3	3.1	3.9	3.6	5.4	6.1	5.7	6.8	68	33	6.5	3.7	2.9
4	3.1	13	3.2	5.2	5.9	5.6	8.0	59	30	6.2	3.8	2.8
5	3.1	10	2.9	5.2	5.7	5.4	10	48	28	6.0	3.6	2.8
6	3.1	7.0	2.7	5.2	5.7	5.5	14	50	26	5.8	3.4	2.8
7	3.4	5.9	2.6	5.2	5.7	5.5	15	58	24	5.6	3.4	2.8
8	4.1	5.2	2.6	5.2	5.5	5.4	16	62	23	5.4	3.3	2.9
9	4.0	4.6	2.7	5.2	5.5	5.4	19	64	22	5.2	3.2	2.8
10	4.5	4.2	2.8	5.2	5.5	5.9	22	68	21	5.0	3.2	2.9
11	5.9	4.2	2.8	9.8	5.7	5.9	26	74	19	4.8	3.2	2.8
12	5.1	4.1	2.8	30	5.5	5.6	29	80	18	4.7	3.1	2.8
13	4.5	4.1	3.1	19	5.5	5.2	26	84	17	5.5	3.0	2.8
14	4.3	4.1	3.2	13	5.5	5.2	25	86	17	5.0	3.1	2.8
15	4.3	4.0	3.3	12	5.3	5.1	27	82	16	4.8	3.0	2.8
16	4.3	3.9	3.5	11	5.2	5.3	27	79	15	5.0	2.9	2.8
17	4.6	3.8	35	11	5.2	5.5	29	79	14	5.0	2.9	2.8
18	5.4	3.8	34	9.0	5.3	5.3	26	81	13	4.7	2.7	2.9
19	6.1	3.8	59	8.4	5.4	5.2	25	75	12	4.4	2.8	2.9
20	6.4	3.7	35	7.9	5.2	5.2	24	68	12	4.3	2.9	4.1
21	5.7	3.6	26	7.3	5.2	5.1	26	63	11	4.3	2.9	3.5
22	5.2	3.5	31	6.7	5.2	5.0	31	59	11	4.3	2.9	3.1
23	4.8	3.5	21	6.3	5.2	5.1	39	56	10	4.1	2.8	3.3
24	4.6	3.5	15	6.2	5.3	5.4	44	54	9.9	3.9	3.0	3.3
25	4.3	3.6	12	6.1	5.2	5.9	50	50	9.3	3.8	3.2	3.3
26	4.2	3.6	10	6.1	5.3	6.5	60	44	8.9	3.7	4.0	3.1
27	4.2	3.7	7.5	6.1	5.4	7.4	72	41	8.6	3.7	4.2	2.9
28	4.0	3.8	6.2	6.1	5.9	7.0	73	40	8.3	4.8	3.5	2.9
29	3.8	3.9	5.8	6.1	------	6.5	65	40	7.7	4.7	3.3	2.9
30	3.5	3.9	5.6	6.1	------	6.5	59	45	7.3	3.9	3.1	2.9
31	3.5	------	5.4	6.1	------	7.0	------	49	------	3.7	3.0	------
TOTAL	131.7	137.0	357.8	252.9	154.4	176.9	907.3	1,929	528.0	152.7	100.3	89.2
MEAN	4.25	4.57	11.5	8.16	5.51	5.71	30.2	62.2	17.6	4.93	3.24	2.97
MAX	6.4	13	59	30	6.2	7.4	73	86	41	7.1	4.2	4.1
MIN	2.1	3.5	2.6	5.2	5.2	5.0	6.5	40	7.3	3.7	2.7	2.8
AC-FT	261	272	710	502	306	351	1,800	3,830	1,050	303	199	177

CAL YR 1972 TOTAL 3,693.8 MEAN 10.1 MAX 59 MIN 2.1 AC-FT 7,330
WTR YR 1973 TOTAL 4,917.2 MEAN 13.5 MAX 86 MIN 2.1 AC-FT 9,750

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-19	unknown	--	unknown	5-14	1830	3.06	106
4-23	1700	2.66	54	5-30	1800	2.80	71
4-27	1630	3.01	98				

NOTE.--No gage-height record Oct. 3 to Dec. 27.

10344300 STAMPEDE RESERVOIR NEAR BOCA, CALIF.

LOCATION.--Lat 39°28'15", long 120°06'15", in SE¼NE¼ sec.29, T.19 N., R.17 E., Sierra County, in control house on Stampede Dam on Little Truckee River, just downstream from mouth of Davies Creek, and 6.2 miles north of Boca.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder with mercury-column manometer. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 205,400 acre-ft June 27-29 (elevation, 5,942.4 ft); minimum, 115,600 acre-ft Oct. 1, 2 (elevation, 5,909.9 ft).
Period of record: Maximum contents, 205,400 acre-ft June 27-29, 1973 (elevation, 5,942.4 ft); minimum (since July 1971), 115,400 acre-ft Sept. 20-27, 1972 (elevation, 5,909.8 ft).

REMARKS.--Reservoir is formed by rolled-earth and rockfill dam. Storage began Aug. 1, 1969. Total capacity, 226,500 acre-ft at elevation 5,948.7 ft (spillway crest). Inactive storage, 5,010 acre-ft (includes 660 acre-ft dead storage) below elevation 5,798.3 ft. Elevation of streambed at dam axis, 5,737.0 ft. Figures given herein represent total contents. Reservoir is used for flood control, municipal water supply, enhancement of fishery, and recreation.

COOPERATION.--Records furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	5,909.9	115,600	--
Oct. 31.....	5,910.1	116,000	+400
Nov. 30.....	5,910.9	118,000	+2,000
Dec. 31.....	5,913.0	122,800	+4,800
CAL YR 1972.....	--	--	+200
Jan. 31.....	5,914.5	126,400	+3,600
Feb. 28.....	5,914.6	126,600	+200
Mar. 31.....	5,915.8	129,700	+3,100
Apr. 30.....	5,922.9	147,800	+18,100
May 31.....	5,938.6	193,300	+45,500
June 30.....	5,942.3	205,300	+12,000
July 31.....	5,940.2	198,300	-7,000
Aug. 31.....	5,938.2	192,000	-6,300
Sept. 30.....	5,939.2	194,900	+2,900
WTR YR 1973.....	--	--	+79,300

10344400 LITTLE TRUCKEE RIVER ABOVE BOCA RESERVOIR, NEAR BOCA, CALIF.

LOCATION.--Lat 39°26'10", long 120°05'00", in SW¼SW¼ sec.3, T.18 N., R.17 E., Nevada County, on left bank 1 mile upstream from Boca Reservoir, 1.5 miles upstream from Dry Creek, 3.0 miles downstream from Stampede Dam on Little Truckee River, and 3.5 miles north of Boca.

DRAINAGE AREA.--146 sq mi.

PERIOD OF RECORD.--June 1903 to October 1910, September 1939 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734. Published as "at Pine Station" June 1903 to December 1907 and as "at Starr" January 1908 to October 1910.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,618.67 ft above mean sea level (Bureau of Reclamation bench mark). June 1903 to October 1910, nonrecording gages at different sites and datums.

AVERAGE DISCHARGE (adjusted for storage).--41 years (1903-10, 1939-73), 194 cfs (140,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 530 cfs Apr. 26 (gage height, 2.10 ft); minimum daily, 1.6 cfs Sept. 19-23.
Period of record: Maximum discharge, 13,300 cfs Feb. 1, 1963 (gage height, 9.00 ft), from rating curve extended above 1,600 cfs on basis of slope-area measurement of peak flow; minimum daily, 0.30 cfs Sept. 16-21, 1969.

REMARKS.--Records excellent. Flow regulated by Independence Lake (capacity, 17,500 acre-ft) and one transmountain diversion to Sierra Valley and Stampede Reservoir (capacity, 226,500 acre-ft).

REVISIONS (WATER YEARS).--WSP 1564: 1903-4, 1906-7, 1910, drainage area at site used 1903-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	32	34	51	118	57	56	52	30	150	88	38
2	38	32	34	51	118	56	56	50	30	150	96	37
3	37	34	34	51	119	56	59	46	30	150	103	30
4	37	39	34	51	120	56	62	46	29	150	103	12
5	37	35	34	51	120	54	62	45	29	178	103	12
6	36	33	34	51	120	54	62	44	34	199	83	12
7	36	33	34	51	120	54	61	44	41	196	47	12
8	36	33	34	51	102	46	59	42	41	196	45	12
9	29	32	34	51	81	37	61	41	41	196	41	12
10	20	32	34	51	83	38	62	41	41	196	37	12
11	20	33	34	63	82	40	64	41	41	196	37	12
12	31	32	34	84	81	38	64	42	41	196	37	11
13	67	33	34	84	81	38	64	42	41	196	37	5.3
14	90	34	34	82	81	37	59	42	41	196	37	4.8
15	90	34	35	82	81	44	56	41	41	196	36	4.9
16	90	35	35	92	81	51	54	40	41	196	79	4.7
17	75	35	36	86	81	53	54	69	41	196	101	2.4
18	77	34	38	85	81	52	52	96	41	196	142	1.8
19	75	34	42	83	81	52	92	98	41	110	182	1.6
20	75	34	38	81	81	52	318	96	41	42	182	1.6
21	75	34	38	81	81	52	510	96	62	41	182	1.6
22	75	34	44	81	81	64	517	96	86	29	182	1.6
23	75	34	38	81	81	86	517	84	86	16	192	1.6
24	73	34	36	81	83	88	523	36	86	15	199	67
25	73	34	36	91	83	92	523	35	86	15	199	192
26	53	34	36	101	83	96	442	34	86	15	144	193
27	34	34	36	102	86	101	343	34	96	42	103	335
28	33	34	38	103	76	96	343	32	115	44	101	470
29	33	34	51	103	------	92	338	31	134	44	101	474
30	32	34	51	104	------	90	219	30	144	44	71	482
31	32	------	51	108	------	75	------	30	------	44	40	------
TOTAL	1,621	1,013	1,155	2,368	2,566	1,897	5,752	1,596	1,737	3,830	3,130	2,456.9
MEAN	52.3	33.8	37.3	76.4	91.6	61.2	192	51.5	57.9	124	101	81.9
MAX	90	39	51	108	120	101	523	98	144	199	199	482
MIN	20	32	34	51	76	37	52	30	29	15	36	1.6
AC-FT	3,220	2,010	2,290	4,700	5,090	3,760	11,410	3,170	3,450	7,600	6,210	4,870
MEAN a	58.9	67.4	115	135	95.2	112	496	792	260	9.76	-1.46	130
AC-FT a	3,620	4,010	7,090	8,300	5,290	6,860	29,510	48,670	15,450	600	-90	7,770

CAL YR 1972 TOTAL 46,745.0 MEAN 128 MAX 688 MIN 20 AC-FT 92,720 MEAN a 128 AC-FT a 92,920
WTR YR 1973 TOTAL 29,121.9 MEAN 79.8 MAX 523 MIN 1.6 AC-FT 57,760 MEAN a 189 AC-FT a 137,100

a Adjusted for change in storage in Stampede Reservoir.
NOTE.--Negative values may occur occasionally (meaningless) because reservoir evaporation is not considered in the adjustment.

10344490 BOCA RESERVOIR AT BOCA, CALIF.

LOCATION.--Lat 39°23'20", long 120°05'40", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, in control house at Boca Dam on Little Truckee River 1,800 ft upstream from mouth, and 0.5 mile northwest of Boca.

DRAINAGE AREA.--172 sq mi.

PERIOD OF RECORD.--December 1938 to current year. Monthend contents only for December 1938 to September 1957, published in WSP 1734.

GAGE.--Pressure gage with mercury column read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 41,000 acre-ft May 1-5 (elevation, 5,605.1 ft); minimum, 60 acre-ft Sept. 14 (elevation, 5,522.0 ft).
Period of record: Maximum contents, 41,440 acre-ft Dec. 23, 1955 (elevation, 5,605.55 ft); minimum, 37 acre-ft Mar. 4-9, 1955 (elevation, 5,521.65 ft).

REMARKS.--Reservoir is formed by earthfill, rock-faced dam. Storage began Dec. 8, 1938. Usable capacity, 40,870 acre-ft between elevations 5,521 (outlet sill) and 5,605 ft (top of spillway gates). Elevation of spillway (gate open) is 5,589.01 ft. Dead storage, 241 acre-ft, below outlet sill. Figures given herein represent usable contents. Water is used for irrigation in the State of Nevada and for power development.

COOPERATION.--Daily elevations furnished by Washoe County Water Conservation District.

REVISIONS.--WSP 1634: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,521.9	56	5,560	8,780
5,523	131	5,570	13,770
5,525	290	5,580	20,000
5,530	787	5,590	27,510
5,535	1,470	5,600	36,150
5,540	2,360	5,605.1	41,000
5,550	4,970		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28,140	30,750	32,540	29,470	30,320	29,470	32,370	41,000	40,670	27,000	12,510	500
2	28,140	30,830	32,540	29,300	30,320	29,470	32,460	41,000	40,770	26,520	12,040	150
3	28,140	30,920	32,540	29,140	30,320	29,640	32,540	41,000	40,770	26,050	11,570	100
4	28,140	31,180	32,540	28,880	30,320	29,720	32,540	41,000	40,770	25,580	11,120	80
5	28,300	31,180	32,540	28,640	30,230	29,720	32,540	41,000	40,870	25,110	10,720	80
6	28,300	31,260	32,540	28,470	30,150	29,810	32,630	40,770	40,870	24,800	10,390	80
7	28,300	31,350	32,540	28,300	30,150	29,890	32,810	40,670	40,870	24,420	9,910	80
8	28,390	31,350	32,540	28,140	30,150	29,980	32,890	39,990	40,870	24,040	9,410	80
9	28,470	31,440	32,540	27,810	30,150	29,980	32,890	39,510	40,870	23,740	8,910	80
10	28,470	31,520	32,280	27,810	30,060	30,060	33,070	39,130	40,480	23,290	8,300	80
11	28,470	31,610	32,020	27,810	29,980	30,150	33,070	38,750	39,800	22,850	7,710	80
12	28,470	31,700	31,940	28,390	29,810	30,320	33,070	38,650	38,940	22,410	7,190	80
13	28,470	31,700	31,700	28,550	29,810	30,320	33,070	38,750	37,710	21,970	6,610	80
14	28,640	31,850	31,350	28,640	29,640	30,320	33,070	38,840	36,680	21,540	6,060	60
15	28,800	31,850	31,090	28,800	29,470	30,320	32,890	38,940	35,850	21,120	5,460	80
16	28,970	32,020	30,830	29,050	29,300	30,320	32,720	38,940	35,030	20,700	4,940	80
17	29,140	32,020	30,400	29,300	29,140	30,320	32,890	39,030	34,310	20,280	4,440	90
18	29,300	32,020	30,060	29,470	29,140	30,490	32,890	39,130	33,600	19,930	4,000	100
19	29,470	32,200	30,150	29,640	28,880	30,490	32,980	39,420	32,980	19,590	3,750	100
20	29,640	32,200	30,150	29,640	28,880	30,570	33,070	39,510	32,370	18,990	3,570	110
21	29,810	32,280	30,320	29,810	28,880	30,660	33,780	39,700	31,850	18,330	3,360	120
22	29,980	32,370	30,320	30,230	28,880	30,660	34,310	39,900	31,350	17,680	3,130	120
23	30,060	32,370	30,320	30,150	28,880	30,830	35,030	40,090	30,830	17,170	2,970	120
24	30,150	32,370	30,320	30,150	28,970	30,920	35,940	40,190	30,400	16,600	2,800	120
25	30,320	32,540	30,320	30,230	29,140	31,090	36,680	40,280	29,980	16,110	2,650	420
26	30,490	32,540	30,320	30,320	29,140	31,180	37,800	40,280	29,470	15,510	2,520	820
27	30,490	32,630	30,320	30,320	29,300	31,520	38,460	40,280	28,970	15,030	2,240	1,300
28	30,660	32,630	30,230	30,320	29,300	31,700	39,320	40,380	28,470	14,560	1,900	2,220
29	30,660	32,540	30,150	30,400	------	31,850	39,990	40,480	27,900	14,110	1,590	3,310
30	30,660	32,540	29,980	30,400	------	32,020	40,670	40,580	27,490	13,660	1,270	4,320
31	30,660	------	29,720	30,400	------	32,200	------	40,580	------	13,100	890	------
MAX	30,660	32,630	32,540	30,400	30,320	32,200	40,670	41,000	40,870	27,000	12,510	4,320
MIN	28,140	30,750	29,720	27,810	28,880	29,470	32,370	38,650	27,490	13,100	890	60
(a)	5,593.80	5,596.00	5,592.70	5,593.50	5,592.20	5,595.60	5,604.80	5,604.70	5,590.00	5,568.80	5,530.90	5,547.90
(b)	+2,520	+1,880	-2,820	+680	-1,100	+2,900	+8,470	-90	-13,090	-14,390	-12,210	+3,430

CAL YR 1972 b -2,820
WTR YR 1973 b -23,820

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

10344500 LITTLE TRUCKEE RIVER AT BOCA, CALIF.

LOCATION.--Lat 39°23'10", long 120°05'40", in NE¼NW¼ sec.28, T.18 N., R.17 E., Nevada County, on right bank 800 ft upstream from mouth, 1,000 ft downstream from Boca Dam, and 0.3 mile northwest of Boca.

DRAINAGE AREA.--172 sq mi.

PERIOD OF RECORD.--April to October 1890 (monthly discharge only), January 1911 to September 1915, January 1939 to current year. Monthly discharge only for January 1939 to September 1957, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is 5,500 ft (from topographic map). Jan. 1, 1911, to Sept. 30, 1915, nonrecording gage at site 650 ft downstream at different datum. January 1939 to September 1957, records computed from daily log of rated settings of needle valve in dam, and from computed flow over spillway.

AVERAGE DISCHARGE (unadjusted).--38 years (1911-15, 1939-73), 185 cfs (134,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 670 cfs June 12 (gage height, 3.81 ft); minimum daily, 0.04 cfs Sept. 18.
Period of record: Maximum discharge, 8,800 cfs Dec. 24, 1955, from records of Washoe County Water Conservation District; no flow many days in most years.

REMARKS.--Records good. Flow regulated by Boca Reservoir (capacity, 40,870 acre-ft), Independence Lake (capacity, 17,500 acre-ft), one transmountain diversion to Sierra Valley, and Stampede Reservoir (capacity, 226,500 acre-ft).

REVISIONS.--WSP 1564: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	.50	29	154	122	26	75	24	.77	373	338	215
2	.44	.48	29	154	145	27	85	42	.87	394	328	89
3	.43	.62	28	154	165	27	98	44	.87	385	313	38
4	.45	.78	55	154	154	27	106	101	.87	379	298	17
5	.47	.55	61	154	149	28	129	152	.87	382	298	13
6	.46	.53	53	132	149	28	129	152	13	382	295	12
7	.47	.54	53	103	140	35	129	245	28	382	300	12
8	.47	.53	52	98	132	49	129	343	71	388	300	11
9	.47	.54	93	82	140	46	130	300	165	415	318	11
10	.47	.60	122	61	154	28	147	253	323	434	323	11
11	22	.64	101	47	152	28	179	173	437	437	320	11
12	16	.60	154	36	152	28	220	.60	596	434	318	11
13	.41	.65	199	30	152	28	220	.53	576	434	325	7.5
14	.43	.70	188	33	152	39	220	.53	465	430	323	4.5
15	.49	.63	192	33	152	47	218	.60	437	427	315	.87
16	.55	.68	245	33	152	47	142	.60	409	427	310	.05
17	.53	.75	245	33	152	48	93	.60	361	403	308	.05
18	.68	.75	127	33	152	48	97	.60	352	391	303	.04
19	.63	.77	35	36	135	48	100	.60	328	388	300	.05
20	.60	.87	34	38	106	48	182	.68	315	376	298	.05
21	.53	.89	34	39	100	48	250	.68	320	340	295	.05
22	.53	.68	35	44	73	48	250	.68	320	325	293	.05
23	.53	.69	35	53	67	48	190	.68	308	313	290	.05
24	.53	.73	35	65	50	49	149	.68	303	298	288	.05
25	.56	.77	35	76	50	49	104	.77	325	295	288	.05
26	.60	.79	35	76	50	49	49	.87	346	280	283	.05
27	.60	31	52	94	49	49	21	.87	358	278	278	.05
28	.60	57	109	104	39	43	.87	.87	373	288	270	.06
29	.52	46	130	116	------	29	.98	.77	361	283	263	.06
30	.53	29	158	128	------	39	1.1	.87	346	295	253	.06
31	.53	------	154	128	------	64	------	.77	------	335	238	------
TOTAL	69.51	180.26	2,907	2,521	3,385	1,245	3,843.95	1,842.85	8,240.25	11,391	9,270	464.64
MEAN	2.24	6.01	93.8	81.3	121	40.2	128	59.4	275	367	299	15.5
MAX	22	57	245	154	165	64	250	343	596	437	338	215
MIN	.41	.48	28	30	39	26	.87	.53	.77	278	238	.04
AC-FT	138	358	5,770	5,000	6,710	2,470	7,620	3,660	16,340	22,590	18,390	922

CAL YR 1972 TOTAL 49,314.77 MEAN 135 MAX 647 MIN .41 AC-FT 97,820
WTR YR 1973 TOTAL 45,360.46 MEAN 124 MAX 596 MIN .04 AC-FT 89,970

10346000 TRUCKEE RIVER AT FARAD, CALIF.

LOCATION.--Lat 39°25'41", long 120°01'59", in NE¼ sec.12, T.18 N., R.17 E., Nevada County, on left bank 0.5 mile upstream from Mystic Canyon, 0.7 mile downstream from Farad powerplant, 2.5 miles north of Floriston, 3.4 miles downstream from Bronco Creek, and 3.5 miles upstream from California-Nevada State line.

DRAINAGE AREA.--932 sq mi.

PERIOD OF RECORD.--March to October 1890 (monthly discharge only), September 1899 to current year. Monthly discharge only for January 1944 to July 1957, published in WSP 1734. Published as "near Boca" March to October 1890, "at or near Nevada-California State line" September 1899 to August 1912, and as "at Iceland" August 1912 to December 1937.

GAGE.--Water-stage recorder. Datum of gage is 5,153.21 ft above mean sea level (Bureau of Reclamation bench mark). March to October 1890, nonrecording gage at site 7 miles upstream at different datum. Sept. 7, 1899, to May 31, 1909, nonrecording gage at approximately present location at different datum. June 1, 1909, to July 31, 1912, nonrecording gage at site 2.5 miles downstream at different datum. Aug. 1, 1912, to Dec. 31, 1937, water-stage recorder at site 4.1 miles upstream at different datum. Jan. 1, 1938, to Aug. 27, 1957, water-stage recorder at approximately present location at different datum.

AVERAGE DISCHARGE.--74 years (1899-1973), 795 cfs (576,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs May 18 (gage height, 4.97 ft); minimum, 227 cfs Dec. 12. Period of record (1899 to current year): Maximum discharge, 17,500 cfs Nov. 21, 1950 (gage height, 14.5 ft, present datum, from floodmarks), from slope-area measurement of peak flow; minimum, 28 cfs Dec. 18, 1930.

REMARKS.--Records excellent. Flow regulated by Lake Tahoe, Martis Creek Lake, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. Records of chemical analyses for this station and chemical analyses and water temperatures for Truckee River at Floriston (11345900) are published in Part 2 of this report. No appreciable inflow between sampling point and gaging station.

REVISIONS.--WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	419	387	397	390	412	501	535	1,120	1,290	690	814	790
2	390	404	396	398	412	507	530	1,160	1,160	707	801	770
3	357	398	401	409	417	503	512	1,130	1,070	754	786	747
4	386	586	427	455	414	502	525	1,090	1,010	769	770	739
5	382	512	426	456	408	494	540	1,010	934	758	768	760
6	380	479	425	504	423	512	650	934	910	748	767	784
7	379	473	405	479	423	506	767	970	904	738	767	771
8	381	466	401	486	401	541	756	1,140	922	736	766	755
9	378	455	400	475	405	538	746	1,160	1,020	756	775	752
10	382	455	400	456	439	528	835	1,180	1,140	809	782	751
11	428	459	450	467	442	542	1,090	1,330	1,210	804	777	748
12	472	450	500	794	422	526	1,300	1,340	1,320	801	772	746
13	412	452	520	709	400	497	1,330	1,460	1,290	794	772	742
14	373	478	530	582	398	503	1,230	1,620	1,110	792	768	752
15	364	460	537	551	395	509	1,200	1,730	1,000	788	763	761
16	371	443	551	677	393	513	1,040	1,760	934	790	757	759
17	399	416	716	652	408	523	852	1,740	852	809	768	757
18	423	384	785	623	412	516	769	1,760	818	824	799	761
19	375	384	980	554	416	516	726	1,670	785	817	799	779
20	365	385	813	472	424	519	753	1,530	753	807	796	783
21	360	394	781	447	447	515	813	1,350	753	779	794	779
22	345	397	851	423	441	512	858	1,230	747	760	796	774
23	334	389	676	433	442	510	910	1,230	726	747	801	773
24	339	393	603	421	433	517	964	1,190	695	730	799	746
25	345	393	560	408	434	535	988	1,230	711	731	799	730
26	395	394	490	401	432	537	1,020	1,140	731	759	809	756
27	417	412	393	397	450	537	1,110	1,070	741	756	788	752
28	399	432	398	407	481	532	1,200	1,100	748	765	726	726
29	391	424	382	413	------	484	1,140	1,180	728	764	714	670
30	385	398	413	431	------	486	1,090	1,260	691	768	697	640
31	386	------	398	424	------	515	------	1,300	------	809	721	------
TOTAL	11,912	12,952	16,405	15,194	11,824	15,976	26,779	40,114	27,703	23,859	24,011	22,553
MEAN	384	432	529	490	422	515	893	1,294	923	770	773	752
MAX	472	586	980	794	481	542	1,330	1,760	1,320	824	814	790
MIN	334	384	382	390	393	484	512	934	691	690	697	640
AC-FT	23,630	25,690	32,540	30,140	23,450	31,690	53,120	79,570	54,950	47,320	47,630	44,730

CAL YR 1972 TOTAL 226,944 MEAN 620 MAX 1,380 MIN 334 AC-FT 450,100
WTR YR 1973 TOTAL 249,282 MEAN 683 MAX 1,760 MIN 334 AC-FT 494,500

10348000 TRUCKEE RIVER AT RENO, NEV.

LOCATION.--Lat 39°31'55", long 119°47'05", in NW¼ sec.7, T.19 N., R.20 E., Washoe County, on left bank 400 ft downstream from Kietzke Lane bridge, 0.5 mile downstream from Scott Island, 1.5 miles east of Reno Post Office, and 5 miles upstream from Steamboat Creek.

DRAINAGE AREA.--1,067 sq mi.

PERIOD OF RECORD.--July 1906 to September 1921, June 1925 to September 1926, January 1930 to December 1935, January to December 1943, January 1946 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

GAGE.--Water-stage recorder. Datum of gage is 4,431.97 ft above mean sea level (levels by Corps of Engineers). July 1906 to September 1946, nonrecording gage at site 1 mile upstream at different datum.

AVERAGE DISCHARGE.--47 years (1906-21, 1925-26, 1930-34, 1946-73), 673 cfs (487,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,820 cfs May 19 (gage height, 4.86 ft); maximum gage height, 7.70 ft (backwater from ice jam); minimum discharge, 166 cfs Oct. 3.
Period of record: Maximum discharge, 20,800 cfs Dec. 23, 1955; maximum gage height, 13.83 ft Nov. 21, 1950; no flow Sept. 12, 14-24, 26-30, 1926.

REMARKS.--Records good except those for period Oct. 1 to Jan. 24, which are fair. Flow regulated by Lake Tahoe, Prosser Creek, Stampede and Boca Reservoirs, Donner and Independence Lakes, and by several powerplants. Many diversions above station.

REVISIONS.--WSP 1714: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	309	373	402	415	536	551	854	1,110	373	521	474
2	257	348	373	419	411	536	512	861	943	390	512	497
3	198	373	377	428	411	516	502	821	821	442	488	437
4	186	623	394	370	419	516	512	795	733	474	460	428
5	189	536	415	360	402	497	541	821	657	451	469	446
6	186	460	400	360	419	512	640	691	727	446	451	474
7	180	478	400	360	442	507	808	657	606	442	469	474
8	183	464	400	455	419	531	757	788	596	433	478	455
9	183	446	394	400	411	536	769	821	674	437	455	455
10	186	437	400	464	478	541	776	788	751	507	478	451
11	205	442	400	455	488	591	1,070	588	854	507	469	451
12	279	437	450	1,000	455	546	1,300	895	909	507	464	442
13	263	433	500	916	415	516	1,360	1,090	995	507	464	437
14	227	474	540	697	419	516	1,220	1,320	841	502	459	442
15	211	433	600	586	407	507	1,180	1,500	721	493	464	460
16	205	428	700	1,090	402	512	1,050	1,530	645	493	474	460
17	240	419	800	888	407	526	808	1,510	576	512	455	469
18	305	361	900	821	419	521	691	1,580	516	526	493	469
19	268	348	1,000	709	415	526	612	1,550	493	536	497	488
20	243	348	875	497	419	531	556	1,380	446	516	497	516
21	243	369	834	507	442	516	645	1,160	442	466	497	512
22	217	386	1,000	453	451	516	674	1,050	446	455	497	507
23	208	357	757	433	451	512	709	1,000	437	451	497	512
24	189	361	645	433	455	521	721	964	411	419	507	502
25	208	361	623	419	455	546	769	1,010	366	411	516	455
26	227	352	581	411	455	571	769	916	415	428	551	483
27	309	357	460	394	478	581	881	821	419	433	526	478
28	305	386	415	411	551	556	943	814	446	460	437	474
29	297	398	394	407	------	493	957	888	442	442	411	411
30	297	369	428	455	------	464	841	964	390	435	402	369
31	297	------	419	428	------	502	------	1,090	------	478	394	------
TOTAL	7,324	12,293	17,367	16,406	12,211	16,278	24,084	31,797	18,826	14,394	14,742	13,928
MEAN	236	410	560	529	436	525	803	1,026	628	464	476	464
MAX	313	623	1,000	1,090	551	591	1,360	1,580	1,110	536	551	516
MIN	180	309	373	360	402	464	502	657	386	373	394	369
AC-FT	14,530	24,380	34,450	32,540	24,220	32,290	47,770	63,070	37,340	28,550	29,240	27,630

CAL YR 1972 TOTAL 172,722 MEAN 472 MAX 1,180 MIN 123 AC-FT 342,600
WTR YR 1973 TOTAL 199,650 MEAN 547 MAX 1,580 MIN 180 AC-FT 396,000

10356500 SUSAN RIVER AT SUSANVILLE, CALIF.

LOCATION.--Lat 40°25'03", long 120°40'15", in SW¼NE¼ sec.31, T.30 N., R.12 E., Lassen County, on left bank 0.5 mile west of Susanville, and 1.1 miles upstream from Piute Creek.

DRAINAGE AREA.--184 sq mi.

PERIOD OF RECORD.--June 1900 to December 1905 (gage heights only August 1901 to January 1903), March to May 1913 (gage heights only), February 1917 to June 1921, October 1950 to current year. Published as "near Susanville" 1900-1905. Discharge records for August to December 1901 and January 1903, published in WSP 300, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 4,225.72 ft above mean sea level. Prior to Oct. 1, 1950, nonrecording gages at several sites in vicinity of old powerplant 0.9 mile upstream at various datums.

AVERAGE DISCHARGE.--29 years (1900-1901, 1903-5, 1917-20, 1950-73), 97.8 cfs (70,860 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 720 cfs Jan. 16 (gage height, 4.30 ft); minimum daily, 4.4 cfs Aug. 8, 9.
Period of record: Maximum discharge, 5,850 cfs Jan. 24, 1970 (gage height, 8.89 ft, 10.4 ft, from floodmarks), from rating curve extended above 1,000 cfs on basis of slope-area measurement at gage height 6.62 ft and contracted-opening measurement at gage height 8.89 ft; no flow Aug. 15, 1961.

REMARKS.--Records good except those for the winter period, which are fair. Flow regulated by McCoy Flat Reservoir and Hog Flat Reservoir (combined usable capacity, 25,300 acre-ft). Diversions for irrigation of 1,400 acres above station. Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	16	17	24	30	181	106	170	64	86	9.4	6.1
2	24	16	19	23	30	147	95	170	52	76	7.4	5.7
3	23	16	19	22	30	119	95	172	46	77	7.2	5.7
4	23	27	19	21	30	100	108	176	42	101	6.5	5.7
5	22	25	17	20	30	90	137	160	79	100	6.1	5.5
6	22	20	16	19	33	87	189	141	78	98	4.8	6.1
7	21	25	16	19	35	81	207	141	75	97	4.5	5.3
8	21	24	15	18	38	81	181	143	73	97	4.4	5.7
9	21	21	15	18	42	86	205	141	69	121	4.4	6.1
10	21	24	15	18	47	139	249	143	66	123	4.5	6.1
11	21	25	14	20	54	186	272	141	63	123	4.6	6.5
12	22	22	14	167	62	116	215	145	106	121	4.5	6.1
13	22	22	14	181	56	101	212	160	110	119	4.5	5.9
14	21	32	14	100	52	88	185	160	110	116	4.6	5.9
15	23	27	14	82	49	84	224	162	109	115	4.6	6.1
16	26	30	17	394	46	89	220	155	71	116	4.5	6.1
17	29	25	39	158	45	101	200	145	56	115	4.5	6.7
18	24	22	110	85	44	88	180	139	52	112	4.6	7.6
19	22	22	184	76	44	90	175	145	48	108	4.8	8.2
20	19	21	78	70	46	89	182	123	43	105	4.8	13
21	17	20	186	60	52	83	202	108	38	102	5.0	10
22	17	21	106	54	56	81	215	92	74	101	5.1	9.2
23	17	18	71	48	61	82	240	85	78	96	5.5	11
24	17	19	54	45	84	92	212	84	78	94	6.5	11
25	16	18	42	42	119	110	188	95	78	89	6.7	9.4
26	16	18	38	40	102	135	160	76	82	85	6.9	9.7
27	16	19	34	38	123	139	160	68	101	78	7.2	8.4
28	16	18	32	35	174	118	165	61	103	57	6.9	8.4
29	16	17	29	34	------	102	165	56	103	22	6.7	8.6
30	15	16	27	33	------	101	163	59	96	13	5.7	8.4
31	15	------	25	32	------	116	------	66	------	11	5.7	------
TOTAL	627	646	1,310	1,996	1,614	3,302	5,507	3,882	2,243	2,874	173.1	224.2
MEAN	20.2	21.5	42.3	64.4	57.6	107	184	125	74.8	92.7	5.58	7.47
MAX	29	32	186	394	174	186	272	176	110	123	9.4	13
MIN	15	16	14	18	30	81	95	56	38	11	4.4	5.3
AC-FT	1,240	1,280	2,600	3,960	3,200	6,550	10,920	7,700	4,450	5,700	343	445

CAL YR 1972 TOTAL 28,617.5 MEAN 78.2 MAX 483 MIN 4.3 AC-FT 56,760
WTR YR 1973 TOTAL 24,398.3 MEAN 66.8 MAX 394 MIN 4.4 AC-FT 48,390

10358500 WILLOW CREEK NEAR SUSANVILLE, CALIF.

LOCATION.--Lat 40°29'21", long 120°32'10", in SW¼NE¼ sec.5, T.30 N., R.13 E., Lassen County, on left bank 4 miles upstream from Peters Valley Creek, and 8 miles northeast of Susanville.

DRAINAGE AREA.--90.0 sq mi, excludes that of Eagle Lake basin.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,836.27 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--23 years, 34.6 cfs (25,070 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 241 cfs Jan. 16 (gage height, 3.97 ft); minimum daily, 10 cfs Aug. 16-21.
Period of record: Maximum discharge, 816 cfs Feb. 1, 1963 (gage height, 5.59 ft), from rating curve extended above 540 cfs; minimum, 8.1 cfs Nov. 16, 1951.

REMARKS.--Records good. Diversions for irrigation of 5,200 acres above station. Some flow at times enters Willow Creek from Eagle Lake through an abandoned tunnel.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	33	35	39	45	181	48	15	14	11	13	13
2	40	33	35	39	44	152	45	15	14	11	13	13
3	39	33	36	37	44	129	44	16	14	11	13	16
4	39	35	35	35	45	113	24	19	13	11	13	20
5	38	35	32	35	45	91	23	19	13	11	13	20
6	36	35	35	34	45	84	23	17	12	11	12	20
7	35	35	33	33	47	76	22	16	12	11	12	20
8	34	36	33	33	53	72	20	16	12	11	12	19
9	33	37	32	34	61	66	24	16	12	11	12	25
10	33	37	33	35	76	76	26	17	11	12	12	23
11	34	38	33	36	106	83	25	17	11	12	13	21
12	35	38	33	76	122	71	26	17	11	12	13	21
13	35	39	33	115	109	71	26	16	11	13	12	21
14	35	45	34	80	103	61	26	16	11	12	11	22
15	35	45	34	69	96	57	27	14	11	12	11	23
16	35	49	35	161	95	55	26	13	11	12	10	25
17	35	48	36	132	92	54	26	13	11	12	10	26
18	36	47	47	81	84	51	26	13	11	12	10	26
19	39	45	60	69	78	50	24	13	11	12	10	26
20	39	42	57	65	74	56	26	13	11	12	10	28
21	38	40	55	56	75	52	28	13	11	16	10	32
22	36	39	66	50	83	51	30	13	11	14	11	30
23	35	38	60	49	92	49	30	13	11	14	11	30
24	35	37	58	46	121	49	24	13	11	13	11	30
25	35	37	53	47	164	49	20	14	11	13	12	30
26	35	37	50	46	153	49	14	13	11	13	12	30
27	34	36	47	44	155	48	14	13	11	14	12	29
28	34	36	42	43	199	50	14	12	11	16	12	29
29	34	35	36	43	------	52	14	13	11	15	12	28
30	33	35	44	45	------	53	14	13	11	14	12	29
31	33	------	41	45	------	52	------	14	------	13	12	------
TOTAL	1,105	1,155	1,293	1,752	2,506	2,203	759	455	347	387	362	725
MEAN	35.6	38.5	41.7	56.5	89.5	71.1	25.3	14.7	11.6	12.5	11.7	24.2
MAX	40	49	66	161	199	181	48	19	14	16	13	32
MIN	33	33	32	33	44	48	14	12	11	11	10	13
AC-FT	2,190	2,290	2,560	3,480	4,970	4,370	1,510	902	688	768	718	1,440

CAL YR 1972 TOTAL 13,079 MEAN 35.7 MAX 259 MIN 12 AC-FT 25,940
WTR YR 1973 TOTAL 13,049 MEAN 35.8 MAX 199 MIN 10 AC-FT 25,880

PEAK DISCHARGE (BASE, 200 CFS).--Jan. 16 (1330) 241 cfs (3.97 ft); Feb. 27 (2230) 216 cfs (3.85 ft).

10359100 SHAFFER CREEK NEAR LITCHFIELD, CALIF.

LOCATION.--Lat 40°23'30", long 120°18'23", in SE¼NE¼ sec.8, T.29 N., R.15 E., Lassen County, at culvert on U.S. Highway 395, 4.3 miles east of Litchfield, and 5.0 miles northwest of Wendal.

DRAINAGE AREA.--5.63 sq mi.

PERIOD OF RECORD.--August 1963 to September 1969 (annual maximum), October 1969 to September 1973 (discontinued).

GAGE.--Water-stage recorder with recording rain-gage attachment, and crest-stage gages. Altitude of gage is 4,110 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 7.5 cfs Jan. 18 (gage height, 3.58 ft); no flow for several months. Period of record: Maximum discharge, 389 cfs Jan. 23, 1970 (gage height, 12.16 ft, from well floodmarks), from rating curve based on theoretical computations through culverts and a road overflow computation above 11.05 ft; no flow most of each year.

REMARKS.--Records good. No diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.01	.01						
2				0	.01	.01						
3				0	.01	0						
4				0	.01	0						
5				0	.01	0						
6				0	.01	0						
7				0	.46	0						
8				0	.70	0						
9				0	.40	0						
10				0	1.6	0						
11				0	1.2	0						
12				0	.54	0						
13				0	.12	0						
14				0	.09	0						
15				0	.10	0						
16				1.1	.04	0						
17				.06	.02	0						
18				2.0	.02	0						
19				.12	.02	0						
20				.02	.02	0						
21				.02	.02	0						
22				.02	.02	0						
23				.02	.02	0						
24				.02	.02	0						
25				.02	.02	0						
26				.02	.02	0						
27				.02	.02	0						
28				.02	.02	0						
29				.02	------	0						
30				.02	------	0						
31		------		.02	------	0	------		------			------
TOTAL	0	0	0	3.52	5.55	.02	0	0	0	0	0	0
MEAN	0	0	0	.11	.20	.0006	0	0	0	0	0	0
MAX	0	0	0	2.0	1.6	.01	0	0	0	0	0	0
MIN	0	0	0	0	.01	0	0	0	0	0	0	0
AC-FT	0	0	0	7.0	11	.04	0	0	0	0	0	0
(a)	1.06	1.45	.34	1.63	.60	.45	0	.45	0	0	.23	.06

CAL YR 1972 TOTAL 0 MEAN 0 MAX 0 MIN 0 AC-FT 0
WTR YR 1973 TOTAL 9.09 MEAN .025 MAX 2.0 MIN 0 AC-FT 18

a Precipitation, in inches (some precipitation falling as snow may not be included).

10359300 PINE CREEK NEAR SUSANVILLE, CALIF.

LOCATION.--Lat 40°39'54", long 120°47'25", in NE¼SE¼ sec.1, T.32 N., R.10 E., Lassen County, on right bank 0.3 mile upstream from Eagle Lake, and 18 miles northwest of Susanville.

DRAINAGE AREA.--226 sq mi.

PERIOD OF RECORD.--October 1960 to September 1966, October 1967 to September 1968, October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,120 ft (from topographic map). Prior to September 1968, at site 1.0 mile upstream at different datum.

AVERAGE DISCHARGE.--11 years (1960-66, 67-68, 69-73), 19.6 cfs (14,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 240 cfs Apr. 7 (gage height, 4.34 ft); no flow for several months. Period of record: Maximum discharge, 936 cfs Jan. 24, 1970 (gage height, 5.60 ft), from rating curve extended above 360 cfs on basis of computation of peak flow over weir; no flow for several months in each year. Flood of May 18, 1967, reached a stage of 5.29 ft (discharge, 826 cfs).

REMARKS.--No storage or diversion above station except for minor stock ponds.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0		0	28	45	.50			
2				0		0	27	35	0			
3				0		0	22	28	0			
4				0		0	45	25	0			
5				0		0	93	29	0			
6				0		0	153	36	0			
7				0		0	187	33	0			
8				0		0	139	26	0			
9				0		0	128	20	0			
10				0		0	135	18	0			
11				0		0	172	17	0			
12				0		0	190	16	0			
13				0		0	147	15	0			
14				0		0	122	15	0			
15				0		0	148	15	0			
16				5.6		0	137	14	0			
17				13		0	139	15	0			
18				0		0	142	15	0			
19				0		0	144	15	0			
20				0		0	111	14	0			
21				0		0	100	13	0			
22				0		0	105	10	0			
23				0		0	124	8.0	0			
24				0		0	126	6.2	0			
25				0		0	125	7.2	0			
26				0		6.3	131	5.6	0			
27				0		22	122	3.9	0			
28				0		20	103	3.1	0			
29				0	------	13	91	1.7	0			
30				0	------	16	66	.30	0			
31		------		0	------	22	------	1.4	------			------
TOTAL	0	0	0	18.6	0	99.3	3,502	506.40	.50	0	0	0
MEAN	0	0	0	.60	0	3.20	117	16.3	.017	0	0	0
MAX	0	0	0	13	0	22	190	45	.50	0	0	0
MIN	0	0	0	0	0	0	22	.30	0	0	0	0
AC-FT	0	0	0	37	0	197	6,950	1,000	1.0	0	0	0

CAL YR 1972 TOTAL 4,075.00 MEAN 11.1 MAX 358 MIN 0 AC-FT 8,080
WTR YR 1973 TOTAL 4,126.80 MEAN 11.3 MAX 190 MIN 0 AC-FT 8,190

10360900 BIDWELL CREEK BELOW MILL CREEK, NEAR FORT BIDWELL, CALIF.

LOCATION.--Lat 41°52'57", long 120°10'26", in NE¼SE¼ sec.6, T.46 N., R.16 E., Modoc County, on right bank 0.9 mile downstream from Mill Creek, and 2.0 miles northwest of Fort Bidwell.

DRAINAGE AREA.--25.6 sq mi.

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1961, published as Bidwell Creek near Fort Bidwell.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 19.7 cfs (16,370 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 157 cfs May 18, June 1 (gage height, 3.90 ft); minimum daily, 4.0 cfs Aug. 21, Sept. 5-8, 12-18.
Period of record: Maximum discharge, 682 cfs Dec. 24, 1964 (gage height, 5.64 ft), from rating curve extended above 105 cfs on basis of slope-area measurement of maximum flow; minimum, 1.4 cfs Nov. 5, 1960.

REMARKS.--Less than 2 cfs diverted upstream for irrigation. No storage above station.

COOPERATION.--Records furnished by the California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1971: 1969-70.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	8.0	9.0	14	8.3	11	13	72	57	12	5.2	4.2
2	6.8	7.9	9.0	15	8.0	11	12	71	51	12	5.1	4.2
3	6.8	9.9	7.1	12	7.7	11	12	74	47	11	5.0	4.2
4	6.7	14	6.1	14	7.7	11	14	75	41	11	4.9	4.1
5	6.7	9.4	5.0	25	7.4	10	17	68	37	11	4.8	4.0
6	6.7	8.5	6.1	14	7.1	10	22	64	35	10	4.8	4.0
7	6.8	8.5	7.1	15	6.8	9.9	24	65	33	10	4.7	4.0
8	6.7	8.4	5.0	18	7.1	9.9	23	70	32	9.8	4.7	4.0
9	7.1	7.8	5.0	18	7.4	10	27	75	30	9.5	4.7	4.1
10	9.0	8.5	5.0	14	7.4	13	32	74	28	9.2	4.5	4.2
11	9.0	8.2	5.0	13	7.7	13	39	73	26	8.9	4.5	4.1
12	8.8	7.6	6.1	16	8.0	12	45	78	25	8.7	4.4	4.0
13	9.1	8.1	6.1	19	8.3	12	45	102	24	8.5	4.3	4.0
14	8.8	8.4	5.0	17	8.3	11	38	134	23	8.4	4.3	4.0
15	8.8	8.1	6.1	16	8.6	11	34	141	22	8.2	4.2	4.0
16	8.3	8.4	8.0	18	9.0	11	34	143	21	7.7	4.1	4.0
17	8.2	7.6	10	16	9.0	11	38	143	20	7.6	4.2	4.0
18	7.9	7.9	14	15	9.4	11	34	145	19	7.4	4.2	4.0
19	7.9	8.1	14	13	10	11	31	134	18	7.5	4.1	4.2
20	7.6	7.9	20	16	9.6	11	29	115	17	7.5	4.1	5.4
21	7.4	8.8	25	12	9.8	11	28	98	17	7.4	4.0	5.1
22	7.4	9.6	29	17	10	11	32	89	17	7.1	4.1	4.8
23	7.3	9.6	21	21	10	11	40	86	16	6.9	4.1	5.3
24	7.1	9.6	19	13	11	11	48	107	15	6.5	4.2	6.8
25	7.1	9.3	17	10	11	13	57	98	15	6.2	4.3	6.8
26	7.1	12	16	11	11	14	69	86	14	6.0	4.3	5.6
27	7.1	12	15	15	11	14	82	74	14	5.9	4.2	5.2
28	7.4	10	15	9.3	11	14	88	67	13	5.9	4.2	5.0
29	7.0	9.0	19	9.0	------	13	79	63	13	5.7	4.1	4.8
30	6.9	9.0	19	9.0	------	13	74	61	13	5.5	4.1	4.7
31	8.2	------	12	8.6	------	13	------	61	------	5.4	4.2	------
TOTAL	234.5	270.1	365.7	452.9	247.6	358.8	1,160	2,806	753	254.4	136.6	136.8
MEAN	7.56	9.00	11.8	14.6	8.84	11.6	38.7	90.5	25.1	8.21	4.41	4.56
MAX	9.1	14	29	25	11	14	88	145	57	12	5.2	6.8
MIN	6.7	7.6	5.0	8.6	6.8	9.9	12	61	13	5.4	4.0	4.0
AC-FT	465	536	725	898	491	712	2,300	5,570	1,490	505	271	271

CAL YR 1972 TOTAL 11,598.1 MEAN 31.7 MAX 161 MIN 5.0 AC-FT 23,000
WTR YR 1973 TOTAL 7,176.4 MEAN 19.7 MAX 145 MIN 4.0 AC-FT 14,230

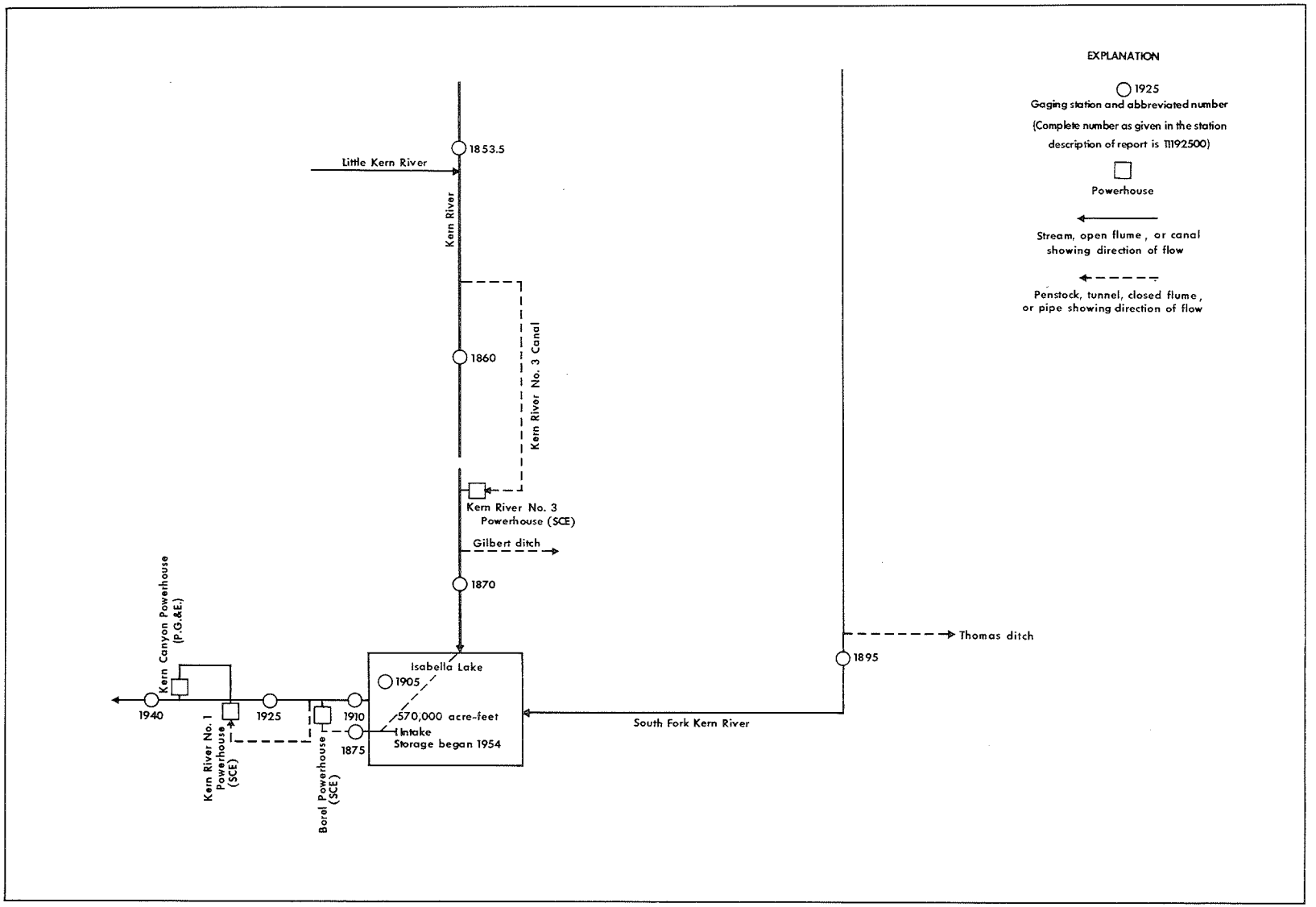

FIGURE 2.--Schematic diagram showing diversions and storage in Kern River basin.

11185350 KERN RIVER NEAR QUAKING ASPEN CAMP, CALIF.

LOCATION.--Lat 36°08'04", long 118°25'49", in SW¼SW¼ sec.32, T.20 S., R.33 E., Tulare County, Sequoia National Forest, on right bank 0.4 mile upstream from Little Kern River, and 6.8 miles east of Quaking Aspen Camp.

DRAINAGE AREA.--530 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,693 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--13 years, 547 cfs (396,300 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 4,000 cfs May 29; minimum daily, 110 cfs Oct. 31.
Period of record: Maximum discharge, 9,360 cfs Dec. 6, 1966 (gage height, 10.89 ft in gage well, 12.9 ft, outside from floodmarks), from rating curve extended above 6,600 cfs on basis of slope-area measurement of maximum flow; minimum, 61 cfs Jan. 20, 1962.

REMARKS.--Records good. No regulation or diversion above station. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	120	152	141	173	232	259	1,020	3,050	2,150	585	265
2	134	122	150	152	175	225	245	1,000	2,880	1,960	600	260
3	134	118	152	150	176	221	250	1,070	2,940	1,710	645	250
4	130	122	178	135	176	227	259	1,130	2,990	1,600	695	245
5	134	122	139	123	173	216	271	1,090	3,220	1,610	650	235
6	134	118	135	143	182	216	316	975	3,240	1,610	675	232
7	130	130	178	146	188	214	380	1,020	3,420	1,580	605	227
8	125	127	173	163	182	212	435	1,160	3,670	1,540	550	223
9	127	120	163	171	180	210	472	1,410	3,880	1,460	528	221
10	125	125	161	163	190	214	492	1,690	3,570	1,470	500	219
11	123	135	159	176	192	232	491	1,930	3,320	1,470	465	216
12	122	127	159	169	180	219	527	2,180	3,000	1,430	434	210
13	126	128	171	159	221	216	530	2,100	2,920	1,290	425	210
14	118	150	169	158	216	206	504	2,310	2,800	1,180	484	205
15	118	144	184	156	204	210	482	2,260	2,350	1,130	446	210
16	116	161	190	188	196	214	482	2,340	2,110	1,100	437	205
17	116	165	186	169	194	223	533	2,570	2,170	1,050	422	205
18	116	163	182	184	194	225	546	2,840	2,140	990	401	199
19	120	159	171	135	194	232	533	2,990	2,330	945	380	199
20	123	152	173	146	190	245	510	3,270	2,490	865	364	199
21	127	144	171	204	192	238	491	2,950	2,450	794	361	197
22	128	156	171	232	190	229	517	2,780	2,430	736	344	194
23	128	144	167	234	190	241	591	2,720	2,340	700	327	194
24	127	141	165	219	198	243	694	2,770	2,240	672	314	192
25	125	150	159	202	192	255	818	2,770	2,350	656	302	190
26	125	152	159	190	194	266	975	2,830	2,550	652	295	186
27	123	156	158	178	202	264	1,120	2,880	2,720	648	290	184
28	123	158	159	184	241	262	1,240	3,160	2,600	636	290	182
29	122	156	141	178	------	245	1,230	4,000	2,590	608	275	180
30	115	152	137	180	------	255	1,160	3,800	2,370	605	265	178
31	110	------	152	176	------	257	------	3,440	------	600	265	------
TOTAL	3,837	4,217	5,064	5,304	5,375	7,164	17,343	70,455	83,130	35,347	13,619	6,312
MEAN	124	141	163	171	192	231	578	2,273	2,771	1,140	439	210
MAX	134	165	190	234	241	266	1,240	4,000	3,880	2,150	695	265
MIN	110	118	135	123	173	206	245	975	2,110	600	265	178
AC-FT	7,610	8,360	10,040	10,520	10,660	14,210	34,400	139,700	164,900	70,110	27,010	12,520

CAL YR 1972 TOTAL 88,237 MEAN 241 MAX 848 MIN 100 AC-FT 175,000
WTR YR 1973 TOTAL 257,167 MEAN 705 MAX 4,000 MIN 110 AC-FT 510,100

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-29	0330	4.75	1,310	6-9	0600	7.88	4,300
5-20	unknown	--	unknown	6-27	0800	6.67	2,990
5-29	unknown	--	unknown				

NOTE.--No gage-height record May 20-30.

11186000 KERN RIVER NEAR KERNVILLE, CALIF.

LOCATION.--Lat 35°56'43", long 118°28'36", in SW¼ sec.12, T.23 S., R.32 E. (unsurveyed), Tulare County, on left bank at Packsaddle Canyon Creek, 30 ft upstream from sand trap sluice gates, 100 ft downstream from diversion dam, and 13.4 miles north of Kernville.
DRAINAGE AREA.--846 sq mi.
PERIOD OF RECORD.--January 1912 to current year. Records for water year 1912 incomplete, yearly estimates published in WSP 1315-A. Prior to October 1953, records for river and canal published separately; combined flow only, October 1953 to September 1960.
GAGE.--Water-stage recorder on river; water-stage recorder and rectangular concrete-lined flume for canal diversion. Altitude of gage is 3,620 ft (from topographic map). Prior to Apr. 1, 1913, at site 1.4 miles downstream at different datum. Apr. 1 to Sept. 14, 1913, nonrecording gage and Sept. 15, 1913, to Sept. 30, 1967, water-stage recorder, at site 1.2 miles downstream at different datum.
AVERAGE DISCHARGE (River only).--9 years (1911-20), 790 cfs (571,900 acre-ft per year); 52 years (1921-73), 344 cfs (249,200 acre-ft per year).
(Combined river and diversion).--62 years (1911-73), 721 cfs (522,400 acre-ft per year).
EXTREMES (River only).--Current year: Maximum discharge, 4,800 cfs June 9 (gage height, 8.70 ft); minimum daily, 22 cfs Jan. 22.
Period of record: Maximum discharge, 60,000 cfs Dec. 6, 1966 (gage height, 22.77 ft, site and datum then in use, from floodmarks), from rating curve extended above 6,000 cfs on basis of computed flow over dam at gage height 17.55 ft (basic data for computation furnished by Southern California Edison Co.) and slope-area measurement of maximum flow; no flow July 31 to Nov. 7, Nov. 12 to Dec. 7, 1924, Jan. 16 to Feb. 7, 1925.
(Combined flow).--Current year: Maximum discharge, 5,420 cfs June 9; minimum daily, 133 cfs Oct. 1.
Period of record: Maximum discharge, 60,000 cfs Dec. 6, 1966; minimum daily, 78 cfs Aug. 30, 31, Sept. 17, 19, 1924.
REMARKS.--Records good. Since 1921 Kern River No. 3 Canal diverts up to 630 cfs 100 ft upstream from station, from left bank of Kern River in sec.12, T.23 S., R.32 E. (unsurveyed), for power development; water is returned to river 15 miles downstream from station. See schematic diagram of Kern River basin. For records of combined discharge of river and canal, see following page.
COOPERATION.--Gage-height record and 23 discharge measurements for Kern River and gage-height record and 14 discharge measurements for canal furnished by Southern California Edison Co., in connection with a Federal Power Commission project.
REVISIONS (WATER YEARS).--WSP 1445: 1912, 1916(M). WSP 1930: 1914(M), 1918(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	28	26	28	29	60	83	1,430	3,720	1,880	87	89
2	28	27	27	28	31	62	80	1,410	3,500	1,510	107	83
3	27	27	27	27	29	62	84	1,480	3,520	1,320	136	83
4	27	28	30	27	29	62	75	1,620	3,480	1,200	192	82
5	27	27	27	27	29	62	77	1,580	3,700	1,210	137	76
6	27	27	27	31	30	62	121	1,280	3,730	1,280	166	76
7	27	27	28	31	31	62	323	1,400	3,880	1,150	104	76
8	27	27	27	33	31	62	472	1,640	4,110	1,100	96	76
9	27	27	27	33	31	62	528	2,160	4,330	1,010	99	76
10	27	27	28	29	32	61	508	2,540	4,030	1,010	98	76
11	27	27	29	27	37	61	556	2,940	3,720	980	96	76
12	27	28	31	28	32	62	660	3,280	3,360	938	95	76
13	27	27	32	27	35	62	640	3,220	3,230	812	94	76
14	27	28	32	27	36	62	588	3,450	3,080	700	96	76
15	27	28	33	27	32	60	496	3,280	2,560	640	96	76
16	27	28	31	162	30	61	456	3,290	2,110	596	96	76
17	27	28	30	102	30	60	576	3,530	2,200	548	96	76
18	27	28	30	77	30	61	645	3,730	2,120	496	96	76
19	28	27	30	29	29	61	620	3,880	2,290	436	99	76
20	28	27	29	26	30	62	476	3,880	2,440	372	101	76
21	28	27	29	26	30	63	480	3,810	2,400	310	102	76
22	28	27	29	22	30	64	540	3,670	2,330	253	102	76
23	28	26	29	27	29	64	725	3,490	2,210	206	102	76
24	28	26	29	175	30	64	1,010	3,570	2,060	176	101	76
25	28	26	29	310	30	64	1,260	3,620	2,140	148	101	76
26	28	26	29	29	31	65	1,430	3,570	2,350	134	100	76
27	28	27	28	31	32	65	1,680	3,480	2,540	125	101	76
28	28	27	29	32	59	65	1,980	3,970	2,410	117	105	76
29	28	26	29	31	------	66	1,990	4,480	2,390	93	102	76
30	29	26	29	28	------	74	1,840	4,390	2,140	94	101	76
31	28	------	28	29	------	85	------	4,080	------	85	101	------
TOTAL	871	812	898	1,566	894	1,968	20,999	93,150	88,080	20,929	3,305	2,313
MEAN	28.1	27.1	29.0	50.5	31.9	63.5	700	3,005	2,936	675	107	77.1
MAX	46	28	33	310	59	85	1,990	4,480	4,330	1,880	192	99
MIN	27	26	26	22	29	60	75	1,280	2,060	85	87	76
AC-FT	1,730	1,610	1,780	3,110	1,770	3,900	41,650	184,800	174,700	41,510	6,560	4,590

CAL YR 1972 TOTAL 26,148 MEAN 71.4 MAX 428 MIN 26 AC-FT 51,860
WTR YR 1973 TOTAL 235,785 MEAN 646 MAX 4,480 MIN 22 AC-FT 467,700

11186000 KERN RIVER NEAR KERNVILLE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF KERN RIVER AND KERN RIVER NO. 3 CANAL NEAR KERNVILLE, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	144	202	216	295	555	566	2,030	4,330	2,490	682	322
2	151	153	201	211	293	503	525	2,010	4,100	2,130	700	315
3	159	152	198	222	292	478	526	2,090	4,120	1,940	750	305
4	156	164	320	203	292	500	537	2,240	4,090	1,820	798	299
5	157	180	243	181	286	454	591	2,200	4,310	1,830	747	289
6	159	159	202	179	320	443	727	1,890	4,340	1,890	776	284
7	155	163	240	195	361	452	937	2,010	4,490	1,770	702	278
8	151	182	254	207	345	450	1,080	2,250	4,720	1,720	645	273
9	150	168	211	289	327	429	1,130	2,770	4,950	1,630	614	268
10	148	166	200	253	363	427	1,110	3,150	4,650	1,630	592	267
11	147	188	221	243	444	493	1,160	3,550	4,340	1,600	553	265
12	145	173	209	261	389	470	1,260	3,890	3,980	1,560	516	262
13	143	167	219	263	417	444	1,250	3,840	3,850	1,430	496	260
14	143	202	212	253	424	424	1,190	4,060	3,700	1,320	543	256
15	143	219	222	250	378	414	1,100	3,890	3,180	1,260	527	258
16	142	242	239	460	357	420	1,070	3,900	2,730	1,220	512	256
17	142	241	239	529	351	446	1,190	4,140	2,820	1,170	495	252
18	144	227	267	483	356	464	1,260	4,340	2,740	1,120	475	248
19	146	211	285	429	363	477	1,240	4,500	2,910	1,050	455	247
20	160	203	295	324	355	530	1,090	4,490	3,060	985	436	247
21	172	187	284	343	356	510	1,090	4,420	3,020	923	428	248
22	166	198	281	373	347	501	1,160	4,270	2,950	864	412	244
23	164	192	271	358	347	485	1,330	4,090	2,830	818	395	241
24	162	182	257	400	369	507	1,620	4,170	2,680	787	379	243
25	160	190	244	349	366	542	1,870	4,220	2,750	759	365	241
26	156	199	239	317	361	593	2,040	4,170	2,960	745	354	237
27	156	208	237	295	385	575	2,290	4,080	3,150	735	352	230
28	156	209	240	308	537	575	2,590	4,570	3,030	727	350	225
29	155	208	221	301	------	528	2,600	5,080	3,010	703	332	222
30	151	202	203	301	------	519	2,450	4,990	2,760	705	319	221
31	141	------	227	301	------	526	------	4,690	------	698	318	------
TOTAL	4,713	5,679	7,383	9,297	10,076	15,134	38,579	111,990	106,550	40,029	16,018	7,803
MEAN	152	189	238	300	360	488	1,286	3,613	3,552	1,291	517	260
MAX	172	242	320	529	537	593	2,600	5,080	4,950	2,490	798	322
MIN	133	144	198	179	286	414	525	1,890	2,680	698	318	221
AC-FT	9,350	11,260	14,640	18,440	19,990	30,020	76,520	222,100	211,300	79,400	31,770	15,480

CAL YR 1972 TOTAL 117,780 MEAN 322 MAX 1,010 MIN 119 AC-FT 233,600
WTR YR 1973 TOTAL 373,251 MEAN 1,023 MAX 5,080 MIN 133 AC-FT 740,300

11187000 KERN RIVER AT KERNVILLE, CALIF.

LOCATION.--Lat 35°45'34", long 118°25'12", in NE¼NW¼ sec.15, T.25 S., R.33 E., Kern County, on left bank 0.5 mile upstream from highway bridge at Kernville, 1.7 miles upstream from Caldwell Creek, 9.5 miles upstream from Isabella Dam, and 42 miles northeast of Bakersfield.

DRAINAGE AREA.--1,009 sq mi.

PERIOD OF RECORD.--January 1905 to December 1912, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2,634.57 ft above mean sea level. January 1905 to September 1912, nonrecording gage at two sites 3.5 miles downstream at different datums. October 1953 to Feb. 20, 1967, water-stage recorder 0.6 mile downstream at datum 2,621.57 ft above mean sea level.

AVERAGE DISCHARGE.--27 years, 865 cfs (626,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,090 cfs May 29 (gage height, 8.74 ft); minimum daily, 128 cfs Oct. 17.
Period of record: Maximum discharge, 74,000 cfs Dec. 6, 1966 (gage height, 19.32 ft, from floodmarks, present site), from rating curve extended above 11,000 cfs on basis of slope-area measurement of maximum flow; minimum, 74 cfs Oct. 27, 1954, Aug. 1, Oct. 4, 1961.
Maximum stage known from at least 1912 to December 1966, 18.4 ft, from floodmarks, Nov. 19, 1950, site and datum then in use (discharge, 38,700 cfs).

REMARKS.--Records good. Slight regulation at times by operation of Kern River No. 3 canal and powerplant. A few small diversions for irrigation above station. Gilbert irrigation ditch diverts up to 7 cfs around station during irrigation season. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Twelve discharge measurements furnished by the Southern California Edison Co.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	133	206	217	326	640	683	2,300	4,730	2,480	632	325
2	149	140	203	211	323	580	627	2,240	4,340	2,120	647	303
3	161	137	200	235	324	552	620	2,400	4,350	1,910	730	294
4	155	149	369	209	324	598	655	2,570	4,320	1,780	765	287
5	155	175	272	175	320	535	732	2,460	4,570	1,760	720	280
6	158	147	217	170	360	525	844	2,090	4,580	1,760	745	271
7	149	150	257	197	407	550	1,060	2,220	4,810	1,720	675	268
8	146	170	267	214	388	537	1,280	2,500	5,110	1,670	620	263
9	146	154	216	358	364	500	1,350	2,940	5,400	1,590	590	258
10	143	150	203	303	418	501	1,340	3,420	4,970	1,570	570	257
11	140	202	229	281	623	599	1,410	3,870	4,550	1,560	530	255
12	132	178	213	297	572	560	1,540	4,190	4,050	1,520	495	254
13	130	168	225	303	567	530	1,560	4,090	3,850	1,410	475	250
14	130	209	219	288	558	500	1,460	4,390	3,710	1,290	520	246
15	130	236	229	280	492	495	1,280	4,300	3,140	1,210	505	246
16	130	255	249	567	454	503	1,230	4,190	2,750	1,180	490	246
17	128	257	250	1,000	443	538	1,360	4,550	2,760	1,120	475	242
18	129	234	278	754	446	555	1,420	4,880	2,710	1,080	455	242
19	133	218	293	731	446	574	1,350	5,140	2,850	1,030	440	242
20	146	206	313	431	436	627	1,250	5,190	3,010	956	420	238
21	161	188	298	445	430	602	1,200	4,830	2,980	902	410	238
22	154	204	294	458	417	590	1,240	4,510	2,910	848	410	238
23	152	196	288	422	412	572	1,470	4,350	2,810	796	390	235
24	150	187	269	420	433	596	1,770	4,500	2,650	760	372	231
25	147	193	256	375	430	648	2,090	4,500	2,720	731	360	231
26	144	203	251	408	418	725	2,450	4,460	2,930	714	350	228
27	141	212	250	333	450	690	2,770	4,320	3,140	704	347	221
28	143	216	253	340	669	676	3,020	5,010	3,030	699	340	218
29	142	217	231	333	------	646	2,990	5,740	2,960	679	326	218
30	139	207	207	335	------	622	2,760	5,570	2,730	660	316	215
31	131	------	231	336	------	634	------	5,200	------	671	311	------
TOTAL	4,434	5,691	7,736	11,426	12,250	18,000	44,811	122,920	109,420	38,880	15,431	7,540
MEAN	143	190	250	369	438	581	1,494	3,965	3,647	1,254	498	251
MAX	161	257	369	1,000	669	725	3,020	5,740	5,400	2,480	765	325
MIN	128	133	200	170	320	495	620	2,090	2,650	660	311	215
AC-FT	8,790	11,290	15,340	22,660	24,300	35,700	88,880	243,800	217,000	77,120	30,610	14,960

CAL YR 1972 TOTAL 114,913 MEAN 314 MAX 991 MIN 103 AC-FT 227,900
WTR YR 1973 TOTAL 398,539 MEAN 1,092 MAX 5,740 MIN 128 AC-FT 790,500

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-29	0115	6.94	3,260	6-9	0915	8.64	5,910
5-20	0600	8.37	5,430	6-29	1230	7.21	3,630
5-29	1130	8.74	6,090				

11187500 BOREL CANAL BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'32", long 118°28'09", in SW¼NE¼ sec.30, T.26 S., R.33 E., Kern County, on right bank 500 ft downstream from Isabella Dam, and 3 miles upstream from point where canal crosses Erskine Creek.

PERIOD OF RECORD.--January 1910 to September 1914, October 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as Kern River Power Co.'s Canal at or near Kernville 1910-14. Published as "at Tillie Creek" 1925-51.

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (from topographic map). Prior to Apr. 29, 1952, at site 4 miles upstream at different datum.

AVERAGE DISCHARGE.--52 years, 369 cfs (267,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 634 cfs Mar. 13, 14, 1952; no flow at times each year.

REMARKS.--Records excellent. Canal diverts from right bank of Kern River 5.5 miles upstream from Isabella Dam, and above South Fork Kern River. When capacity of Isabella Reservoir is above 110,000 acre-ft, the diversion is at the dam. Canal is used to supply Borel powerplant of Southern California Edison Co., 6 miles downstream from station, at which point water is returned to the Kern River. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Water-stage recorder graph and nine discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	583	217	600	585	573
2							25	586	587	599	585	573
3							49	589	598	596	586	571
4							50	592	598	596	586	571
5							48	593	597	596	586	571
6							47	593	602	583	589	571
7							50	597	604	585	585	571
8							63	600	601	585	583	571
9							52	600	602	584	583	571
10							0	600	602	586	581	571
11							0	600	603	586	581	571
12							0	600	599	586	580	571
13							0	600	598	586	580	571
14							0	601	598	586	580	570
15							156	600	598	586	580	569
16							285	600	598	586	533	571
17							303	600	597	584	286	571
18							321	200	596	583	569	571
19							343	46	596	471	565	571
20							370	568	599	443	574	571
21							395	592	601	580	580	563
22							419	596	600	580	581	538
23							444	598	600	585	581	529
24							479	600	600	586	581	529
25							524	600	600	585	576	546
26							550	600	600	586	576	570
27							557	600	602	585	579	571
28							557	601	602	586	581	570
29					------		557	600	602	586	581	569
30					------		565	600	601	585	581	569
31		------			------		------	600	-----	586	578	------
TOTAL	0	0	0	0	0	0	7,209	17,535	17,598	17,937	17,652	16,975
MEAN	0	0	0	0	0	0	240	566	587	579	569	566
MAX	0	0	0	0	0	0	565	601	604	600	589	573
MIN	0	0	0	0	0	0	0	46	217	443	286	529
AC-FT	0	0	0	0	0	0	14,300	34,780	34,910	35,580	35,010	33,670

CAL YR 1972 TOTAL 85,197.00 MEAN 233 MAX 588 MIN 0 AC-FT 169,000
WTR YR 1973 TOTAL 94,906.00 MEAN 260 MAX 604 MIN 0 AC-FT 188,200

11189500 SOUTH FORK KERN RIVER NEAR ONYX, CALIF.

LOCATION.--Lat 35°44'22", long 118°10'33", (unsurveyed), T.25 S., R.35 E., Kern County, on left bank 0.8 mile north of State Highway 178, 1.6 miles upstream from Canebrake Creek, and 5 miles northeast of Onyx.

DRAINAGE AREA.--530 sq mi.

PERIOD OF RECORD.--September 1911 to August 1914, January 1919 to September 1942, October 1947 to current year. Yearly estimate for water year 1927 (incomplete) and monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 2,900 ft (from topographic map). Sept. 12, 1911, to Aug. 31, 1914, nonrecording gage and Jan. 23, 1919, to Apr. 17, 1936, water-stage recorder, at site 140 ft upstream at datum 2.88 ft lower. Apr. 18, 1936, to September 1942, and October 1947, to Feb. 8, 1967, at datum 6.88 ft higher. Feb. 9, 1967, to May 31, 1972, at datum 2.00 ft higher.

AVERAGE DISCHARGE.--49 years (1911-13, 1919-25, 1926-27, 1929-42, 1946-73), 114 cfs (82,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,690 cfs May 14 (gage height, 6.90 ft); minimum daily, 9.0 cfs Oct. 1, 2.
Period of record: Maximum discharge, 28,700 cfs Dec. 6, 1966 (gage height, 18.9 ft, from floodmarks, present datum), from rating curve extended above 3,300 cfs on basis of slope-area measurement of maximum flow; no flow for several days in 1929, 1934, 1960-61.

REMARKS.--Records good. Lowell and Thomas ditches divert above station for irrigation of 160 acres below station; combined capacity, 7 cfs.

REVISIONS (WATER YEARS).--WSP 1151: 1948(M). WSP 1445: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	20	28	29	42	113	90	810	710	94	33	15
2	9.0	18	28	29	42	102	86	754	644	88	34	16
3	9.8	21	28	35	45	92	83	824	590	80	38	16
4	11	23	47	28	44	94	88	936	555	76	39	16
5	12	25	42	21	42	88	96	960	510	72	40	15
6	12	25	31	23	56	82	121	734	470	69	42	15
7	12	24	34	26	63	83	163	796	430	67	40	16
8	12	23	30	28	61	84	190	969	398	65	37	15
9	13	23	18	43	56	79	196	1,150	365	63	33	14
10	13	23	19	42	63	78	205	1,270	344	60	30	14
11	13	27	24	34	131	87	218	1,340	330	58	26	14
12	13	28	23	37	106	88	250	1,360	308	58	21	14
13	13	25	24	37	97	81	260	1,330	288	57	20	14
14	13	28	24	36	87	76	255	1,450	270	56	22	14
15	13	33	25	35	77	72	248	1,520	248	55	24	14
16	15	34	27	95	74	74	252	1,340	240	53	23	14
17	15	40	30	148	71	76	290	1,190	225	50	21	14
18	16	34	34	100	74	80	311	1,070	214	44	21	14
19	17	30	35	95	74	82	320	1,000	194	40	18	15
20	18	28	38	58	69	95	314	944	180	46	18	15
21	20	28	38	61	69	97	290	845	167	45	18	14
22	21	29	38	51	65	100	299	796	155	40	18	14
23	20	30	38	48	64	101	344	740	145	38	18	14
24	21	28	35	52	67	97	426	686	135	40	17	14
25	21	28	36	54	69	104	535	662	122	39	17	14
26	20	30	36	47	66	108	668	626	113	36	18	14
27	20	30	36	42	69	103	810	650	107	32	18	14
28	20	29	38	45	115	95	987	638	108	30	17	13
29	20	29	29	44	------	85	1,210	620	104	29	17	13
30	21	28	25	48	------	82	1,010	632	98	29	16	13
31	21	------	29	44	------	86	------	716	------	30	15	------
TOTAL	483.8	821	967	1,515	1,958	2,764	10,615	29,358	8,767	1,639	769	431
MEAN	15.6	27.4	31.2	48.9	69.9	89.2	354	947	292	52.9	24.8	14.4
MAX	21	40	47	148	131	113	1,210	1,520	710	94	42	16
MIN	9.0	18	18	21	42	72	83	620	98	29	15	13
AC-FT	960	1,630	1,920	3,010	3,880	5,480	21,050	58,230	17,390	3,250	1,530	855

CAL YR 1972 TOTAL 11,597.9 MEAN 31.7 MAX 142 MIN 2.9 AC-FT 23,000
WTR YR 1973 TOTAL 60,087.8 MEAN 165 MAX 1,520 MIN 9.0 AC-FT 119,200

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	2300	4.89	288	5-14	2000	6.90	1,690
4-29	1000	6.73	1,490	5-31	2300	5.98	796
5-5	1330	6.37	1,060				

11190500 ISABELLA LAKE NEAR LAKE ISABELLA, CALIF.

LOCATION.--Lat 35°38'46", long 118°28'41", in SE¼SW¼ sec.19, T.26 S., R.33 E., Kern County, in main control tower near left abutment of main dam on Kern River, 1.5 miles north of town of Lake Isabella, and 2.8 miles upstream from Erskine Creek.
DRAINAGE AREA.--2,074 sq mi.
PERIOD OF RECORD.--October 1953 to current year. Prior to October 1968, published as Isabella Reservoir near Isabella. October 1968 to September 1970 published as "Isabella Reservoir."
GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).
EXTREMES.--Current year: Maximum contents, 399,448 acre-ft June 29 (elevation, 2,589.15 ft); minimum, 50,030 acre-ft Oct. 16 (elevation, 2,531.06 ft).
Period of record: Maximum contents, 578,100 acre-ft July 14, 1969 (elevation, 2,606.21 ft); minimum since reservoir first filled, 50,030 acre-ft Oct. 16, 1972 (elevation, 2,531.06 ft).
REMARKS.--Reservoir is formed by earthfill dam with sidehill spillway and auxiliary earthfill dam completed in 1954. Regulation began Apr. 15, 1954. Usable capacity, 569,679 acre-ft between elevations 2,470.0 ft (invert of main outlet) and 2,605.5 ft (spillway crest) above mean sea level. Dead storage, 326 acre-ft. Surcharge flood control storage, 271,800 acre-ft between ungated spillway crest and elevation 2,627.0 ft (maximum design spillway flood pool). Records, including extremes, represent total contents at 2400 hours. Water is released to Kern River through tunnel in left abutment of main dam and to Borel Canal (see sta 11187500) through concrete conduit in auxiliary dam.
COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.
REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

2,500	5,850	2,540	77,336
2,505	8,862	2,550	118,540
2,510	13,091	2,570	239,041
2,515	18,895	2,590	407,545
2,520	26,430	2,620	747,393
2,530	47,317		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50,265	50,397	52,070	55,645	67,495	77,830	90,863	136,563	328,716	398,974	319,837	252,915
2	50,239	50,370	51,989	55,617	67,431	78,504	91,378	139,625	333,635	397,933	317,214	252,170
3	50,213	50,344	51,989	55,645	67,367	79,040	91,577	143,002	338,502	396,516	314,686	251,128
4	50,187	50,528	52,636	55,674	67,335	79,614	91,497	146,817	343,316	395,195	312,336	250,164
5	50,213	50,581	52,799	55,617	67,463	79,866	91,378	150,863	348,961	393,783	309,912	248,980
6	50,344	50,633	52,935	55,533	67,752	80,372	91,378	153,957	354,561	392,091	307,497	247,799
7	50,344	50,686	53,125	55,449	68,170	80,698	91,975	157,089	360,025	390,685	305,341	246,474
8	50,318	50,818	53,289	55,702	68,428	81,171	92,935	160,665	365,621	388,907	302,863	245,373
9	50,239	50,818	53,316	56,409	68,558	81,537	94,064	165,291	371,535	386,946	300,314	244,128
10	50,239	50,871	53,316	56,693	68,914	81,830	95,079	171,073	376,851	385,084	298,021	242,814
11	50,187	51,082	53,344	56,922	69,926	82,345	96,226	177,890	380,910	383,133	295,981	241,577
12	50,161	51,215	53,371	57,122	70,980	82,677	97,589	185,295	384,340	380,910	293,869	240,271
13	50,161	51,295	53,398	57,380	71,712	82,899	98,923	192,670	386,760	378,417	291,602	239,186
14	50,135	51,614	53,426	57,610	72,415	82,899	100,185	200,396	389,094	375,840	289,185	237,959
15	50,056	51,855	53,480	57,812	73,022	82,862	101,159	208,084	390,029	373,181	286,618	236,880
16	50,030	52,123	53,562	58,654	73,394	82,862	101,841	214,837	390,497	370,166	284,303	235,731
17	50,056	52,258	53,645	60,930	73,768	82,825	102,526	221,984	391,060	367,163	283,268	234,729
18	50,082	52,258	53,810	62,743	74,109	82,936	103,386	229,683	391,622	364,173	280,651	233,729
19	50,108	52,339	54,030	64,529	74,417	83,159	104,381	237,599	392,561	362,908	277,970	232,732
20	50,239	52,366	54,334	65,247	74,726	83,680	105,383	245,299	393,971	360,385	275,537	231,666
21	50,318	52,339	54,528	65,907	74,932	84,428	106,391	252,021	394,913	357,064	272,805	230,956
22	50,397	52,285	54,722	66,476	75,139	84,993	107,317	258,241	395,855	353,936	270,397	230,107
23	50,449	52,258	54,945	66,889	75,381	85,371	108,337	264,471	396,516	350,645	267,540	229,471
24	50,475	52,177	55,113	67,016	75,658	85,787	109,813	270,397	396,799	347,369	265,159	228,554
25	50,475	52,150	55,280	67,080	75,832	86,244	111,893	276,399	397,082	344,195	263,172	228,061
26	50,475	52,123	55,308	67,399	76,075	86,894	114,834	282,633	397,555	340,774	261,193	227,358
27	50,475	52,123	55,364	67,463	76,354	87,585	118,778	289,024	398,501	337,195	259,374	226,516
28	50,449	52,123	55,533	67,527	77,124	88,436	123,451	296,959	399,164	333,721	258,014	225,675
29	50,475	52,123	55,589	67,431	------	89,019	128,103	305,838	399,448	329,835	256,659	224,488
30	50,475	52,097	55,589	67,367	------	89,605	132,877	314,014	399,353	326,228	255,232	223,442
31	50,397	------	55,589	67,431	------	90,114	------	320,261	------	322,896	253,885	------
MAX	50,475	52,366	55,589	67,527	77,124	90,114	132,877	320,261	399,448	398,974	319,837	252,915
MIN	50,030	50,344	51,989	55,449	67,335	77,830	90,863	136,563	328,716	322,896	253,885	223,442
(a)	2,531.20	2,531.84	2,533.11	2,537.05	2,539.94	2,543.43	2,552.90	2,580.33	2,589.14	2,580.64	2,572.02	2,567.80
(b)	0	+1,700	+3,492	+11,842	+9,693	+12,990	+42,763	+187,384	+79,092	-76,457	-69,011	-30,443
(c)	1,062	523	351	436	488	768	1,740	4,010	7,675	9,126	7,113	5,532

CAL YR 1972 b -66,451
WTR YR 1973 b +173,045

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11191000 KERN RIVER BELOW ISABELLA DAM, CALIF.

LOCATION.--Lat 35°38'21", long 118°29'02", in SW¼NW¼ sec.30, T.26 S., R.33 E., Kern County, on right bank 200 ft downstream from highway bridge, 0.6 mile downstream from Isabella Dam, and 1.6 miles southwest of town of Lake Isabella.

DRAINAGE AREA.--2,074 sq mi.

PERIOD OF RECORD.--April 1945 to current year. Prior to October 1952, published as "below Isabella damsite."

GAGE.--Water-stage recorder. Datum of gage is 2,435.07 ft above mean sea level (levels by Corps of Engineers). Prior to Mar. 12, 1952, water-stage recorder at site 0.6 mile upstream at different datum. Mar. 12, 1952, to July 26, 1953, nonrecording gage at present site and datum.

AVERAGE DISCHARGE (adjusted for diversion to Borel Canal since 1945 and for change in contents and evaporation in Isabella Lake since 1954).--28 years, 880 cfs (637,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,440 cfs July 20 (gage height, 11.10 ft); minimum daily, 7.0 cfs Sept. 24.
Period of record: Maximum discharge, 39,000 cfs Nov. 19, 1950 (gage height, 28.6 ft, from floodmarks, present site and datum), from rating curve extended above 1,100 cfs on basis of slope-area measurement of maximum flow; minimum, 2.1 cfs (regulated) Nov. 27, 1951. Maximum discharge since construction of Isabella Dam in 1954, 7,300 cfs May 3, 1969 (gage height, 17.67 ft); no flow Oct. 29, 1954, Mar. 22, 1960, Dec. 2-4, 1970.

REMARKS.--Records excellent. Flow regulated by Isabella Lake (see sta 11190500) beginning Apr. 15, 1954. Borel Canal (see sta 11187500) diverts above station. Diversion for irrigation of 3,500 acres between head of Isabella Lake and upstream stations. An additional 6,500 acres in lake can be irrigated when lake stage is low. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1515: 1956. WSP 1930: Drainage area. WRD Calif. 1967: 1958(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	159	252	248	390	413	413	694	597	2,160	1,700	233
2	179	159	252	241	390	413	422	713	1,550	2,100	1,560	179
3	134	147	252	240	390	447	556	756	1,420	2,070	1,530	151
4	165	159	253	240	390	538	708	723	1,470	2,030	1,440	184
5	170	159	252	240	349	570	745	651	1,330	1,990	1,370	237
6	105	159	252	240	308	537	789	660	1,210	1,980	1,370	287
7	166	159	252	240	308	510	812	682	1,310	1,980	1,280	304
8	166	150	252	218	353	465	812	681	1,700	2,020	1,190	304
9	166	169	252	230	382	431	845	682	1,750	2,080	1,150	317
10	166	169	252	250	411	467	939	651	1,770	2,080	1,090	344
11	166	169	252	250	413	467	945	635	1,800	2,090	1,010	334
12	166	169	252	250	413	495	976	657	1,810	2,110	996	304
13	166	169	252	250	413	564	1,010	658	1,850	2,130	1,060	266
14	166	169	252	250	413	612	982	659	1,920	2,120	1,100	223
15	166	169	252	250	413	612	832	682	1,940	2,080	1,250	181
16	151	208	252	250	413	612	754	954	1,890	2,110	1,160	151
17	141	252	252	250	413	612	798	1,020	1,870	2,150	608	162
18	141	252	252	251	413	581	812	1,500	1,900	2,160	1,200	128
19	141	252	252	254	413	539	766	1,690	1,880	1,440	1,180	104
20	130	252	252	276	413	492	633	1,250	1,860	1,310	1,120	69
21	141	252	252	320	413	458	511	1,240	1,870	2,030	1,080	35
22	141	252	251	320	413	490	526	1,230	1,900	2,060	1,030	7.4
23	144	252	250	349	413	554	642	1,230	1,900	1,960	1,020	7.3
24	153	252	250	408	413	554	779	1,200	1,920	1,940	937	7.0
25	153	252	250	410	413	554	801	1,110	1,970	1,950	764	15
26	153	252	250	410	413	554	780	1,020	2,020	2,000	645	46
27	153	252	250	410	416	470	772	833	2,040	2,040	575	60
28	153	252	250	412	413	434	764	620	2,060	2,070	506	107
29	153	252	249	413	------	449	752	802	2,170	2,100	458	144
30	157	252	248	413	------	419	735	1,180	2,170	2,080	427	174
31	157	------	248	398	------	413	------	1,300	------	1,880	339	------
TOTAL	4,794	6,170	7,789	9,181	11,108	15,726	22,611	28,363	52,847	62,300	32,145	5,064.7
MEAN	155	206	251	296	397	507	754	915	1,762	2,010	1,037	169
MAX	185	252	253	413	416	612	1,010	1,690	2,170	2,160	1,700	344
MIN	105	147	248	218	308	413	413	620	597	1,310	339	7.0
AC-FT	9,510	12,240	15,450	18,210	22,030	31,190	44,850	56,260	104,800	123,600	63,760	10,050
MEAN a	172	243	314	496	580	731	1,741	4,593	3,806	1,494	600	316
AC-FT a	10,570	14,460	19,290	30,490	32,210	44,950	103,600	282,400	226,500	91,850	36,870	18,810

CAL YR 1972 TOTAL 67,465.3 MEAN 184 MAX 885 MIN 3.6 AC-FT 133,800 MEAN a 357 AC-FT a 259,200
WTR YR 1973 TOTAL 258,098.7 MEAN 707 MAX 2,170 MIN 7.0 AC-FT 511,900 MEAN a 1,260 AC-FT a 912,000

a Adjusted for change in contents and evaporation in Isabella Lake and for diversion to Borel Canal.

11192500 KERN RIVER NEAR DEMOCRAT SPRINGS, CALIF.

LOCATION.--Lat 35°31'15", long 118°40'34", in NE¼SE¼ sec.6, T.28 S., R.31 E., Kern County, on left bank 1.0 mile southwest of Democrat Springs, and 2.1 miles upstream from Cow Creek.
DRAINAGE AREA.--2,258 sq mi.
PERIOD OF RECORD.--July 1950 to current year. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.
GAGE.--Water-stage recorder on river; water-stage recorder for conduit diversion. Datum of gage is 1,837.7 ft above mean sea level.
AVERAGE DISCHARGE (River only, unadjusted).--23 years, 581 cfs (420,900 acre-ft per year).
(Combined river and diversion, adjusted for storage).--23 years, 923 cfs (668,700 acre-ft per year).
EXTREMES (River only).--Current year: Maximum discharge, 2,680 cfs July 20 (gage height, 11.97 ft); minimum daily, 0.11 cfs Nov. 19-24.
Period of record (prior to regulation by Isabella Lake): Maximum discharge, 40,000 cfs Nov. 19, 1950 (gage height, 30.7 ft), from rating curve extended above 8,700 cfs on basis of computation of maximum flow over dam (basic data for computation furnished by Southern California Edison Co.); minimum daily, 0.7 cfs Nov. 17-19, 1951.
1954 to current year: Maximum discharge, 10,100 cfs Dec. 6, 1966 (gage height, 18.55 ft); minimum daily, 0.09 cfs Dec. 15, 1970, Feb. 12-14, 1972.
(Combined flow).--Current year: Maximum discharge, 3,080 cfs July 20; minimum daily, 117 cfs Oct. 7.
Period of record (prior to regulation by Isabella Lake): Maximum discharge, 40,000 cfs Nov. 19, 1950; minimum daily, 123 cfs Sept. 22, 1951.
1954 to current year: Maximum discharge, 10,100 cfs Dec. 6, 1966; minimum daily, 10 cfs Dec. 17, 1968.
REMARKS.--Records good. Kern River No. 1 conduit diverts up to about 420 cfs from left bank of Kern River 0.4 mile upstream from station in sec.13, T.28 S., R.30 E., for power development; water is returned to river 10 miles (revised) below station. Flow regulated by Isabella Lake 22 miles (revised) upstream beginning in 1954 (see sta 11190500). Many diversions above station for irrigation. See schematic diagram of Kern River basin. For records of combined discharge of river and conduit, see following page.
COOPERATION.--Gage-height record and 11 discharge measurements for river and gage-height record and 14 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.
REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	.83	.51	.51	25	68	103	920	580	2,290	1,910	400
2	2.5	.83	.67	.51	24	63	97	913	1,850	2,230	1,740	370
3	2.2	.83	.67	.51	23	67	217	976	1,620	2,180	1,730	324
4	1.8	.99	1.5	.51	23	210	423	972	1,670	2,140	1,660	344
5	1.6	.99	.83	.51	20	243	455	885	1,590	2,050	1,570	382
6	1.6	.83	.83	.51	1.5	243	500	871	1,410	2,040	1,590	431
7	1.5	.83	1.3	.51	.67	181	541	906	1,480	2,050	1,610	452
8	1.5	.99	.99	.67	2.0	214	552	906	1,870	2,080	1,390	452
9	1.3	.83	.67	1.3	18	103	566	909	1,930	2,170	1,360	454
10	1.2	.83	.51	2.0	52	146	634	892	1,930	2,170	1,310	493
11	.99	1.3	.51	1.5	257	175	638	854	1,960	2,170	1,270	490
12	.35	7.0	.51	1.2	212	172	648	878	1,970	2,200	1,230	463
13	.35	45	.51	.99	169	227	704	881	2,010	2,220	1,210	442
14	.35	.83	.51	.83	134	296	687	885	2,080	2,230	1,300	398
15	.35	.67	.51	.83	119	294	628	892	2,150	2,180	1,410	380
16	.51	.83	.35	.99	101	290	684	1,120	2,080	2,200	1,430	396
17	.67	8.0	.35	5.0	91	290	746	1,200	2,030	2,270	522	360
18	.83	.18	.51	58	85	282	782	1,310	2,070	2,270	1,379	318
19	.83	.11	.83	268	79	217	782	1,330	2,050	2,130	1,370	306
20	.83	.11	.83	34	73	226	687	1,360	2,030	791	1,310	269
21	.83	.11	.83	51	69	162	575	1,440	2,030	2,080	1,290	244
22	.67	.11	.67	36	67	181	558	1,440	2,060	2,160	1,210	189
23	.67	.11	.67	22	64	257	692	1,440	2,070	2,040	1,200	161
24	.67	.11	.67	113	66	268	864	1,430	2,080	2,010	1,140	159
25	.67	.18	.67	103	62	274	986	1,360	2,140	2,010	946	162
26	.67	.35	.67	74	61	272	990	1,240	2,200	2,070	799	215
27	.67	.35	.67	62	58	226	1,000	1,180	2,260	2,120	723	248
28	.67	.51	.83	54	77	139	1,000	830	2,260	2,150	669	267
29	.83	.51	.67	52	------	168	979	854	2,300	2,200	594	334
30	.83	.51	.51	51	------	116	979	1,340	2,290	2,220	591	338
31	.83	------	.51	44	------	105	------	1,510	------	2,090	530	------
TOTAL	37.27	75.66	21.27	1,040.88	2,033.17	6,175	19,695	33,924	58,050	65,221	37,874	10,171
MEAN	1.20	2.52	.69	33.6	72.6	199	657	1,094	1,935	2,104	1,222	339
MAX	8.0	45	1.5	268	257	296	1,000	1,510	2,300	2,290	1,910	493
MIN	.35	.11	.35	.51	.67	63	97	830	580	791	522	159
AC-FT	74	150	42	2,060	4,030	12,250	39,070	67,290	115,100	129,400	75,120	20,170

CAL YR 1972 TOTAL 38,507.93 MEAN 105 MAX 550 MIN .09 AC-FT 76,380
WTR YR 1973 TOTAL 234,318.25 MEAN 642 MAX 2,300 MIN .11 AC-FT 464,800

11192500 KERN RIVER NEAR DEMOCRAT SPRINGS, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF KERN RIVER AND KERN RIVER NO. 1 CONDUIT NEAR DEMOCRAT SPRINGS, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	155	236	234	408	459	493	1,330	838	2,690	2,310	808
2	183	155	236	234	404	454	487	1,320	2,200	2,630	2,140	776
3	183	151	236	235	403	458	608	1,390	2,030	2,580	2,130	726
4	155	159	299	234	403	606	809	1,380	2,080	2,540	2,060	746
5	162	158	261	233	370	636	842	1,300	2,000	2,450	1,970	784
6	147	157	246	234	302	634	885	1,280	1,820	2,440	1,990	833
7	117	158	273	234	331	571	927	1,320	1,890	2,450	1,910	853
8	160	157	250	233	332	606	938	1,320	2,280	2,460	1,780	852
9	159	156	243	283	368	491	953	1,320	2,340	2,570	1,760	855
10	159	165	242	302	432	537	1,020	1,300	2,340	2,570	1,710	892
11	159	187	242	275	647	566	1,020	1,260	2,370	2,570	1,670	892
12	158	154	242	265	592	563	1,040	1,290	2,380	2,600	1,630	864
13	159	194	242	262	549	620	1,090	1,290	2,420	2,620	1,610	838
14	158	176	241	259	514	688	1,080	1,290	2,490	2,630	1,700	795
15	158	171	239	259	509	684	1,020	1,300	2,550	2,580	1,810	776
16	157	171	235	275	491	680	1,070	1,530	2,480	2,600	1,830	723
17	137	247	236	336	481	680	1,140	1,610	2,430	2,670	802	759
18	139	242	241	365	475	670	1,170	1,720	2,470	2,670	1,770	717
19	143	236	243	595	469	605	1,180	1,740	2,450	2,530	1,770	708
20	139	241	247	363	463	613	1,090	1,770	2,420	1,150	1,710	674
21	133	235	244	380	460	548	977	1,850	2,440	2,490	1,680	649
22	137	235	243	365	458	568	964	1,850	2,470	2,590	1,610	591
23	137	235	243	351	454	644	1,100	1,850	2,470	2,450	1,610	561
24	146	234	241	444	456	655	1,270	1,840	2,480	2,420	1,550	560
25	149	234	239	451	453	661	1,400	1,770	2,540	2,420	1,360	562
26	149	234	238	448	452	659	1,400	1,650	2,600	2,480	1,210	618
27	149	234	237	442	448	610	1,410	1,590	2,660	2,520	1,130	650
28	149	235	244	437	469	523	1,410	1,240	2,660	2,560	1,080	664
29	149	235	239	437	------	556	1,390	1,260	2,700	2,610	1,000	729
30	150	235	236	436	------	507	1,390	1,740	2,690	2,630	998	734
31	155	------	236	428	------	495	------	1,910	------	2,490	938	------
TOTAL	4,724	5,936	7,570	10,329	12,593	18,247	31,573	46,610	69,988	77,660	50,228	22,189
MEAN	152	198	244	333	450	589	1,052	1,504	2,333	2,505	1,620	740
MAX	189	247	299	595	647	688	1,410	1,910	2,700	2,690	2,310	892
MIN	117	151	235	233	302	454	487	1,240	838	1,150	802	560
AC-FT	9,370	11,770	15,020	20,490	24,980	36,190	62,630	92,450	138,800	154,000	99,630	44,010

CAL YR 1972 TOTAL 149,699 MEAN 409 MAX 947 MIN 117 AC-FT 296,900
WTR YR 1973 TOTAL 357,647 MEAN 980 MAX 2,700 MIN 117 AC-FT 709,400

11194000 KERN RIVER NEAR BAKERSFIELD, CALIF.

LOCATION.--Lat 35°25'54", long 118°56'43", in NW¼SW¼ sec.2, T.29 S., R.28 E., Kern County, on left bank 0.8 mile northeast of Oil City, 1.9 miles upstream from Sacramento Gulch, and 5.8 miles northeast of Bakersfield Post Office.

DRAINAGE AREA.--2,407 sq mi.

PERIOD OF RECORD.--October 1893 to current year. Daily discharges for period October 1953 to September 1963 are in files of California district office of Geological Survey. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and prior to Jan. 24, 1969, a wooden control. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--80 years, 952 cfs (689,700 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 2,870 cfs June 29; minimum daily, 134 cfs Oct. 20.
Period of record: Maximum discharge, 36,000 cfs Nov. 19, 1950 (elevation, 461.37 ft); minimum daily, 74 cfs Sept. 19, 1948. Maximum discharge since construction of Isabella Dam in 1954, 9,290 cfs Dec. 6, 1966 (elevation, 454.94 ft); minimum daily, 26 cfs Dec. 11, 1970.

REMARKS.-- Flow regulated by Isabella Reservoir beginning in 1954 (see sta 11190500) and three powerplants; many diversions above station for irrigation. Daily discharge computed from 1200 to 1200 hours.

COOPERATION.--Records furnished by Kern County Canal and Water Co. and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	186	158	256	257	429	473	559	1,390	1,010	2,840	2,290	871
2	183	160	267	259	427	485	577	1,410	1,940	2,740	2,160	890
3	151	163	262	252	426	509	692	1,450	2,100	2,690	2,140	850
4	166	162	262	249	433	595	858	1,430	2,150	2,640	2,080	862
5	174	168	277	255	409	648	923	1,360	2,010	2,580	2,030	892
6	135	166	286	251	358	683	966	1,360	1,900	2,570	2,020	922
7	160	159	289	253	349	665	992	1,390	2,000	2,580	1,950	939
8	161	161	293	246	383	658	995	1,390	2,310	2,600	1,880	944
9	169	172	290	238	412	652	1,040	1,400	2,440	2,670	1,830	942
10	171	184	284	263	441	587	1,070	1,360	2,450	2,680	1,720	960
11	166	169	285	275	450	566	1,070	1,350	2,480	2,700	1,610	966
12	160	167	272	289	506	553	1,080	1,360	2,490	2,720	1,570	950
13	158	171	269	281	594	627	1,140	1,370	2,520	2,740	1,630	918
14	161	174	267	287	562	710	1,110	1,410	2,580	2,740	1,730	875
15	164	179	267	282	566	722	1,200	1,400	2,610	2,680	1,850	840
16	149	192	265	278	547	718	1,170	1,590	2,570	2,680	1,830	766
17	178	236	271	288	532	707	1,220	1,700	2,520	2,740	1,100	789
18	418	255	270	309	526	699	1,250	1,780	2,530	2,740	1,800	743
19	182	249	263	623	522	683	1,240	1,830	2,520	2,280	1,790	737
20	134	249	264	474	511	696	1,140	1,880	2,500	1,770	1,760	717
21	139	257	264	401	505	651	1,070	1,910	2,520	2,620	1,720	706
22	141	256	269	410	476	616	1,090	1,920	2,560	2,650	1,690	669
23	145	256	261	406	480	694	1,180	1,940	2,570	2,560	1,670	649
24	153	252	257	474	472	668	1,350	1,920	2,590	2,530	1,600	644
25	155	261	259	462	469	677	1,440	1,820	2,560	2,550	1,440	640
26	156	259	262	453	476	684	1,440	1,740	2,710	2,580	1,320	661
27	152	264	260	459	474	672	1,430	1,570	2,740	2,630	1,240	681
28	157	266	258	455	481	596	1,430	1,320	2,760	2,680	1,170	684
29	153	268	258	451	------	589	1,410	1,460	2,870	2,730	1,100	710
30	156	249	263	448	------	565	1,410	1,800	2,860	2,720	1,060	724
31	153	------	261	439	------	553	------	1,970	------	2,540	977	------
TOTAL	5,186	6,282	8,331	10,767	13,216	19,601	33,542	48,980	72,370	81,170	51,757	24,141
MEAN	167	209	269	347	472	632	1,118	1,580	2,412	2,618	1,670	805
MAX	418	268	293	623	594	722	1,440	1,970	2,870	2,840	2,290	966
MIN	134	158	256	238	349	473	559	1,320	1,010	1,770	977	640
AC-FT	10,290	12,460	16,520	21,360	26,210	38,880	66,530	97,150	143,500	161,000	102,700	47,880

CAL YR 1972 TOTAL 156,943 MEAN 429 MAX 977 MIN 134 AC-FT 311,300
WTR YR 1973 TOTAL 375,343 MEAN 1,028 MAX 2,870 MIN 134 AC-FT 744,500

11195500 SAN EMIGDIO CREEK AT SAN EMIGDIO RANCHHOUSE, CALIF.

LOCATION.--Lat 34°58'54", long 119°11'03", in San Emigdio Grant, Kern County, on left bank 50 ft downstream from unnamed tributary, 0.8 mile upstream from San Emigdio Ranchhouse, and 13 miles west of Wheeler Ridge.

DRAINAGE AREA.--48.8 sq mi.

PERIOD OF RECORD.--March 1959 to current year.

GAGE.--Water-stage recorder and sharp-crested weir with rectangular flume for flows below 7 cfs. Datum of gage is 1,617.57 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 1.56 cfs (1,130 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 171 cfs Feb. 11 (gage height, 11.07 ft, from floodmarks), from rating curve extended above 20 cfs as explained below; minimum daily, 0.91 cfs Oct. 7.
Period of record: Maximum discharge, 6,690 cfs Aug. 5, 1961 (gage height, 19.87 ft, from floodmarks), from rating curve extended above 20 cfs on basis of slope-area measurements at gage heights 10.94 and 19.87 ft; minimum daily, 0.30 cfs Apr. 23, 24, 1962 and many days in 1965-66.
Maximum stage known since at least 1938 (from information by local residents), that of Aug. 5, 1961.

REMARKS.--Records poor from Oct. 1 to Apr. 9 and good thereafter. Small diversions for stock and domestic use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.0	1.3	1.4	.96	1.3	1.9	2.0	1.9	2.5	2.2	1.8
2	.97	1.0	1.3	1.3	.96	1.2	1.9	2.0	1.8	2.5	2.4	1.7
3	.97	1.0	1.3	1.4	.99	1.2	1.6	1.9	1.8	2.5	2.8	1.7
4	.94	1.3	2.2	1.4	.99	1.2	1.6	2.0	1.7	2.5	3.3	1.7
5	.94	1.1	1.2	1.4	1.0	1.3	1.6	2.2	1.6	2.5	2.9	1.8
6	.94	1.0	1.2	1.4	1.6	1.2	1.8	2.0	1.6	2.5	2.2	1.8
7	.91	2.1	1.3	1.4	2.0	1.8	2.0	2.0	1.6	2.6	2.2	1.8
8	.97	1.5	1.3	1.4	1.3	2.4	2.2	2.0	1.7	2.5	2.0	1.8
9	1.0	1.1	1.3	1.8	1.3	2.3	2.4	2.0	1.6	2.4	2.0	1.7
10	.97	1.2	1.2	1.3	5.6	1.8	2.4	2.1	1.7	2.4	1.9	1.6
11	.97	2.2	1.2	1.3	9.3	14	2.3	2.3	1.8	2.4	1.8	1.6
12	.97	4.0	1.2	1.3	1.2	1.7	2.4	2.5	1.9	2.6	1.8	1.7
13	.97	2.5	1.2	1.3	1.2	1.2	2.5	2.6	2.0	2.7	1.9	1.7
14	.97	3.4	1.2	1.3	1.0	1.4	2.8	3.2	2.3	2.2	1.8	1.6
15	.97	1.4	1.2	1.3	2.0	1.4	2.2	2.3	2.4	2.5	1.8	1.6
16	.94	2.7	1.2	1.6	1.5	1.0	2.0	2.3	2.4	2.6	1.6	1.6
17	.94	2.0	1.2	2.0	1.4	.99	2.0	2.4	2.4	2.6	1.5	1.7
18	1.3	1.6	1.3	3.0	1.3	1.4	1.9	2.3	2.4	2.6	1.6	1.7
19	1.4	1.4	1.3	6.0	1.3	1.2	2.0	2.1	2.3	2.6	1.6	1.7
20	1.2	1.2	1.3	3.6	1.2	1.4	1.9	1.9	2.2	2.8	1.6	1.8
21	1.0	1.3	1.3	1.8	1.2	1.9	1.8	2.0	2.2	2.8	1.6	1.7
22	1.0	1.3	1.3	1.0	1.2	2.0	1.7	1.9	2.2	2.8	1.7	1.7
23	1.0	1.3	1.3	1.0	1.2	1.7	1.6	1.8	2.3	2.7	1.8	1.8
24	1.0	1.3	1.4	1.0	1.2	1.6	1.5	1.8	2.4	2.7	1.8	1.8
25	1.0	1.3	1.4	1.2	1.2	1.3	1.5	1.8	2.4	2.6	1.8	2.3
26	1.0	1.3	1.4	1.2	1.2	1.5	1.4	1.9	2.3	2.5	1.8	1.9
27	1.0	1.3	1.4	.99	1.2	2.0	1.6	1.9	2.3	2.5	1.8	1.8
28	1.0	1.3	1.4	.96	1.6	2.2	1.8	1.9	2.3	2.5	1.8	1.7
29	1.0	1.3	1.4	.96	------	2.3	2.0	1.7	2.3	2.4	1.8	1.7
30	1.0	1.3	1.4	.96	------	2.2	2.0	1.7	2.4	2.4	1.7	1.7
31	1.0	------	1.4	.96	------	1.9	------	1.7	------	2.3	1.7	------
TOTAL	31.21	47.7	41.0	48.93	48.10	61.99	58.3	64.2	62.2	78.7	60.2	52.2
MEAN	1.01	1.59	1.32	1.58	1.72	2.00	1.94	2.07	2.07	2.54	1.94	1.74
MAX	1.4	4.0	2.2	6.0	9.3	14	2.8	3.2	2.4	2.8	3.3	2.3
MIN	.91	1.0	1.2	.96	.96	.99	1.4	1.7	1.6	2.2	1.5	1.6
AC-FT	62	95	81	97	95	123	116	127	123	156	119	104

CAL YR 1972 TOTAL 438.99 MEAN 1.20 MAX 4.0 MIN .62 AC-FT 871
WTR YR 1973 TOTAL 654.73 MEAN 1.79 MAX 14 MIN .91 AC-FT 1,300

PEAK DISCHARGE (BASE, 25 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-19	unknown	10.60	97	3-11	unknown	10.20	55
2-11	do	11.07	171				

11196400 CALIENTE CREEK ABOVE TEHACHAPI CREEK, NEAR CALIENTE, CALIF.

LOCATION.--Lat 35°18'41", long 118°34'10", in SE¼SW¼ sec.17, T.30 S., R.32 E., Kern County, on right bank 0.5 mile upstream from Harper Canyon, 1.0 mile upstream from Oiler Canyon, and 3.6 miles northeast of Caliente.

DRAINAGE AREA.--165 sq mi.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,575 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 2.62 cfs (1,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 389 cfs May 14 (gage height, 3.97 ft, from floodmarks); no flow for several months.
Period of record: Maximum discharge, 1,410 cfs Aug. 8, 1963 (gage height, 7.48 ft, from floodmarks), from rating curve extended above 51 cfs on basis of slope-area measurement of maximum flow; no flow for several months in most years.

REMARKS.--Records good. Small diversions above station for stock and domestic use.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.21	1.2	2.6	5.9	12	5.4	1.8	.17		
2		0	.25	1.2	2.6	5.4	11	4.4	1.7	.10		
3		0	.30	1.3	2.6	5.1	9.5	4.2	1.5	.13		
4		0	10	1.2	2.5	10	8.9	4.2	1.1	.08		
5		0	3.6	1.2	2.5	9.5	7.9	4.4	1.0	.06		
6		0	2.4	1.1	3.1	8.9	7.5	4.4	.94	.04		
7		0	5.4	1.1	2.8	13	7.1	4.2	.87	.04		
8		0	4.4	1.4	2.6	15	6.7	3.8	.73	.04		
9		0	2.9	2.5	2.5	17	6.7	3.4	.67	.02		
10		0	2.1	2.2	2.8	15	6.3	3.4	.55	.02		
11		2.0	1.5	1.9	39	18	6.3	3.2	.55	.04		
12		.80	1.3	1.9	46	18	6.3	2.8	.50	.04		
13		.35	1.0	1.9	31	17	6.3	2.6	.45	.02		
14		.56	1.0	1.8	25	16	7.5	41	.50	.02		
15		.50	.94	1.8	21	14	6.7	20	.55	.02		
16		.40	.87	2.5	18	12	5.9	9.5	.50	.02		
17		.45	.80	3.8	17	12	5.9	5.9	.40	.02		
18		.25	.80	5.7	14	12	6.3	4.2	.40	.01		
19		.21	.94	35	12	11	6.3	3.8	.30	.01		
20		.17	1.0	18	10	17	5.9	3.4	.17	.01		
21		.25	1.0	12	8.9	24	5.6	3.1	.13	.01		
22		.25	.94	8.9	7.5	32	5.4	3.1	.10	.01		
23		.30	.94	6.7	7.1	31	5.1	2.9	.10	0		
24		.30	.94	5.4	6.7	32	5.4	2.8	.10	0		
25		.25	.94	4.8	5.9	32	5.4	2.8	.10	0		
26		.17	.94	4.8	5.6	28	4.8	2.8	.13	0		
27		.21	.94	4.0	5.6	31	4.6	2.5	.13	0		
28		.17	1.6	3.4	6.3	35	4.4	2.1	.13	0		
29		.13	1.4	3.2	------	29	4.8	1.7	.17	0		
30		.17	1.3	2.9	------	19	6.3	1.6	.17	0		
31		------	1.3	2.8	------	14	------	1.5	------	0		------
TOTAL	0	7.89	53.95	147.6	313.2	558.8	198.8	165.1	16.44	.93	0	0
MEAN	0	.26	1.74	4.76	11.2	18.0	6.63	5.33	.55	.030	0	0
MAX	0	2.0	10	35	46	35	12	41	1.8	.17	0	0
MIN	0	0	.21	1.1	2.5	5.1	4.4	1.5	.10	0	0	0
AC-FT	0	16	107	293	621	1,110	394	327	33	1.8	0	0

CAL YR 1972 TOTAL 153.01 MEAN .42 MAX 10 MIN 0 AC-FT 303
WTR YR 1973 TOTAL 1,462.71 MEAN 4.01 MAX 46 MIN 0 AC-FT 2,900

PEAK DISCHARGE (BASE, 50 CFS).--Feb. 11 (time unknown) 205 cfs (3.00 ft); May 14 (time unknown) 389 cfs (3.97 ft).

11196420 TEHACHAPI CREEK NEAR TEHACHAPI, CALIF.

LOCATION.--Lat 35°10'26", long 118°28'43", in NE¼SW¼ sec.6, T.32 S., R.33 E., Kern County, on right bank 1.3 miles downstream from Brite Creek, and 3.2 miles northwest of Tehachapi.

DRAINAGE AREA.--53.2 sq mi.

PERIOD OF RECORD.--September 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,534.48 ft above mean sea level. Prior to Aug. 5, 1964, at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--11 years, 0.37 cfs (268 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 71 cfs Dec. 4 (gage height, 1.03 ft); minimum daily, 0.01 cfs on many days.
Period of record: Maximum discharge, 1,700 cfs Aug. 8, 1963 (gage heights, 5.30 ft in gage well, 6.40 ft, from floodmarks, site and datum then in use), from slope-area measurement of maximum flow; no flow for parts of most years.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967(M). WRD Calif. 1972: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.03	.01	.68	.68	1.2	2.8	.68	.40	.04	.04	.02
2	.01	.03	.02	.68	.68	1.2	2.1	.68	.54	.04	.04	.02
3	.02	.03	.02	.68	.82	1.3	1.6	.68	.54	.04	.14	.02
4	.02	.04	17	.68	.96	11	1.4	.68	.54	.04	.14	.02
5	.01	.02	1.1	.68	.96	2.9	1.1	.96	.54	.04	.08	.02
6	.01	.01	.26	.68	.96	5.9	1.1	.68	.40	.02	.04	.02
7	.01	.08	.68	.82	.68	5.8	1.1	.68	.40	.04	.04	.02
8	.01	.05	.54	.96	.82	9.3	.96	.40	.26	.04	.04	.02
9	.01	.01	.14	2.2	.82	4.4	.96	.26	.14	.02	.08	.02
10	.01	.01	.08	1.7	.96	2.8	.96	.26	.14	.02	.08	.02
11	.01	.19	.40	.82	21	9.4	.96	.26	.14	.02	.08	.02
12	.01	.02	.96	.68	4.5	4.9	.68	.26	.14	.01	.08	.02
13	.01	.01	3.6	.68	7.1	4.4	1.8	.14	.08	.01	.08	.02
14	.01	.02	2.8	.68	5.1	2.8	4.1	3.1	.08	.01	.08	.02
15	.01	.01	1.6	.68	5.8	2.4	.96	1.1	.08	.01	.08	.02
16	.01	.06	.96	3.4	2.1	2.1	.96	1.7	.08	.01	.08	.02
17	.01	.01	.82	1.3	1.6	2.1	.96	2.0	.08	.03	.08	.02
18	.02	.01	.82	12	1.4	2.4	.96	2.5	.08	.04	.04	.02
19	.03	.01	.68	13	1.2	2.1	.96	.96	.08	.04	.04	.02
20	.04	.01	.54	4.7	1.1	10	.96	.68	.04	.04	.04	.02
21	.04	.01	.54	1.2	1.1	20	.68	.54	.02	.04	.03	.02
22	.03	.01	.54	1.4	1.1	20	.68	.54	.01	.04	.02	.02
23	.03	.01	.54	1.3	1.1	17	.68	.54	.04	.04	.02	.02
24	.03	.01	.54	.96	1.1	15	.54	.54	.04	.04	.02	.02
25	.03	.01	.40	.82	.96	9.6	.54	.54	.02	.04	.02	.02
26	.03	.01	.40	1.1	.96	8.0	.68	.40	.10	.04	.02	.02
27	.03	.01	.54	.68	1.1	7.3	.68	.26	.04	.04	.02	.02
28	.03	.01	.68	1.0	2.4	11	.68	.26	.08	.04	.02	.02
29	.03	.01	.40	.68	------	7.3	.68	.14	.04	.04	.02	.02
30	.03	.01	.40	.82	------	4.0	.96	.14	.04	.04	.02	.02
31	.03	------	.54	.82	------	3.6	------	.40	------	.04	.02	------
TOTAL	.62	.76	38.55	58.48	69.06	211.2	34.18	22.96	5.21	1.00	1.63	.60
MEAN	.020	.025	1.24	1.89	2.47	6.81	1.14	.74	.17	.032	.053	.020
MAX	.04	.19	17	13	21	20	4.1	3.1	.54	.04	.14	.02
MIN	.01	.01	.01	.68	.68	1.2	.54	.14	.01	.01	.02	.02
AC-FT	1.2	1.5	76	116	137	419	68	46	10	2.0	3.2	1.2

CAL YR 1972 TOTAL 71.77 MEAN .20 MAX 17 MIN 0 AC-FT 142
WTR YR 1973 TOTAL 444.25 MEAN 1.22 MAX 21 MIN .01 AC-FT 881

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-4	1030	1.03	71	3-11	1500	0.73	24
1-16	2100	.71	22	3-20	1600	.77	29
1-18	2000	.99	64	3-21	2300	.88	45
1-20	1700	.63	12	3-23	2300	.72	23
2-11	1500	.92	52	3-28	1500	.66	16
2-13	0100	.70	21	4-13	2400	.65	15
2-14	2200	.65	15	5-14	2030	.71	22
3-4	1300	.75	27	5-16	2300	.72	23
3-6	2130	.77	29	5-18	1830	.68	18
3-8	1700	.73	24				

11197000 TULARE LAKE IN KINGS COUNTY, CALIF.

LOCATION.--Lat 36°02'36", long 119°38'34", in SE¼NE¼ sec.1, T.22 S., R.21 E., Kings County, at El Rico Ranch, 6.0 miles southwest of Corcoran, and 14.2 miles southeast of Stratford.

PERIOD OF RECORD.--March 1906 to September 1920 (incomplete), February 1937 to September 1961 (elevations only), January 1969 to current year.

GAGE.--Nonrecording gage. Datum of gage is at mean sea level. March 1906 to September 1920 nonrecording gages at various sites at different datums. February 1937 to September 1958 water-stage recorder or nonrecording gage at various sites.

EXTREMES.--Current year: Lake dry all year.
Period of record: Maximum elevation 196.8 ft June 27, 28, 1941; lake dry or practically dry for parts of 1906, 1914-16, 1919, 1937, 1946, 1950-53, 1955-56, 1958, 1969, 1971; lake dry for entire years 1920-22, 1924-36, 1947-49, 1954, 1957, 1959-61, 1972-73. Lake elevation of June 27, 28, 1941, was highest known since about 1890. Historical accounts indicate that Tulare Lake under natural conditions reached an elevation of 216 ft above mean sea level in 1862 and 1868. This lake elevation was the highest since at least the early 1800's.

REMARKS.--Tulare Lake receives water from Kings, Kaweah, and Tule Rivers during high-water periods and occasionally from Kern River, Deer Creek, and several small intermittent streams. Its natural boundary has been greatly altered by construction of levees and other reclamation work. Elevation at lowest point of lakebed is now about 175 ft above mean sea level, lower than previously determined because of variable subsidence.

COOPERATION.--Records of elevation furnished by J. G. Boswell Co. Area-capacity curves furnished by J. B. Summers, civil engineer, Corcoran, based on surveys in 1966.

11197250 AVENAL CREEK NEAR AVENAL, CALIF.

LOCATION.--Lat 35°51'15", long 120°07'34", in SW¼NW¼ sec.10, T.24 S., R.17 E., Kings County, on right bank 550 ft downstream from road ford, 0.4 mile downstream from unnamed tributary, and 10 miles south of Avenal.

DRAINAGE AREA.--57.1 sq mi.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 825 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 3.14 cfs (2,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,110 cfs Feb. 11 (gage height, 5.00 ft); no flow most of year. Period of record: Maximum discharge, 2,600 cfs Feb. 24, 1969 (gage height, 7.89 ft), from rating curve extended above 510 cfs on basis of slope-area measurements at gage heights 5.72 and 7.54 ft; no flow for several months in each year.

REMARKS.--Records good. Minor diversions for stock above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0		0	0	21	1.4	.63				
2		0		0	0	12	1.3	.54				
3		0		0	0	7.0	1.3	.46				
4		0		0	0	5.4	1.2	.46				
5		0		0	0	4.4	1.2	.54				
6		0		0	1.4	21	1.1	.50				
7		0		0	52	30	1.2	.42				
8		0		0	21	26	1.2	.38				
9		0		0	8.6	21	1.4	.27				
10		0		0	129	17	1.4	.21				
11		0		0	255	23	1.4	.10				
12		0		0	62	17	1.4	0				
13		0		0	71	12	1.6	0				
14		.12		0	34	8.6	1.7	0				
15		0		0	27	4.4	1.7	0				
16		0		0	21	2.3	1.4	0				
17		0		4.2	12	2.0	1.4	0				
18		0		208	5.4	2.0	1.4	0				
19		0		36	2.3	1.7	1.4	0				
20		0		7.0	1.6	27	1.4	0				
21		0		1.3	1.4	24	1.1	0				
22		0		.58	1.2	22	1.0	0				
23		0		.04	1.0	8.6	.93	0				
24		0		0	1.0	4.4	.93	0				
25		0		0	.98	2.3	.83	0				
26		0		0	.93	4.4	.68	0				
27		0		0	1.9	2.0	.58	0				
28		0		0	42	2.0	.63	0				
29		0		0	------	1.4	.73	0				
30		0		0	------	1.4	.78	0				
31		------		0	------	1.4	------	0	------			------
TOTAL	0	.12	0	257.12	753.71	338.7	35.69	4.51	0	0	0	0
MEAN	0	.004	0	8.29	26.9	10.9	1.19	.15	0	0	0	0
MAX	0	.12	0	208	255	30	1.7	.63	0	0	0	0
MIN	0	0	0	0	0	1.4	.58	0	0	0	0	0
AC-FT	0	.2	0	510	1,490	672	71	8.9	0	0	0	0

CAL YR 1972 TOTAL 0.12 MEAN .00 MAX .12 MIN 0 AC-FT 0
WTR YR 1973 TOTAL 1,389.85 MEAN 3.81 MAX 255 MIN 0 AC-FT 2,760

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	1530	4.22	710	2-11	2300	3.08	204
2-7	0700	2.63	95	2-28	0530	2.47	70
2-10	1130	3.69	460	3-6	1830	2.48	72
2-11	0530	5.00	1,110	3-8	1400	2.16	33

11197800 POSO CREEK NEAR OILDALE, CALIF.

LOCATION.--Lat 35°30'50", long 118°54'17", in SW¼SW¼ sec.6, T.28 S., R.29 E., Kern County, on downstream side of highway bridge opposite mouth of Hillvale Canyon, 10 miles northeast of Oildale, and 12 miles northeast of Bakersfield.

DRAINAGE AREA.--230 sq mi.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 700 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 28.8 cfs (20,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,580 cfs Jan. 19 (gage height, 10.44 ft); minimum daily, 0.41 cfs Oct. 21.
Period of record: Maximum discharge, 6,700 cfs Feb. 25, 1969 (gage height, 12.85 ft), from rating curve extended above 820 cfs on basis of contracted-opening measurement at gage height 11.57 ft; minimum daily, 0.41 cfs Oct. 21, 1972.
Flood of Apr. 4, 1958, reached a stage of 8.6 ft, from floodmarks (discharge, 2,750 cfs, furnished by Kern County Land Co.).

REMARKS.--Records good. Oilfield waste comprises most of low flow.

REVISIONS.--WSP 1735: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.70	1.9	21	72	129	258	159	58	9.4	.81	.81
2	1.2	.70	1.7	20	67	111	238	139	60	9.4	.81	.71
3	.94	.82	1.9	21	62	102	215	131	53	9.4	.81	.63
4	1.1	5.8	6.7	19	61	149	202	129	45	9.0	.81	.71
5	1.1	1.2	52	19	61	195	198	131	39	9.0	.81	.71
6	2.2	1.2	25	16	62	166	195	127	38	8.6	.81	.81
7	2.7	1.1	35	16	68	241	208	119	35	8.5	1.4	1.0
8	3.5	1.1	33	19	67	232	208	117	32	8.0	1.0	1.0
9	3.5	.94	25	126	64	222	195	115	30	7.5	1.0	.81
10	2.4	.82	17	264	64	202	190	111	27	7.0	1.0	.81
11	1.1	6.2	16	148	121	240	190	113	24	6.5	1.0	.81
12	.82	4.5	13	106	267	272	190	109	25	6.0	.81	.71
13	.82	5.5	15	88	249	250	188	105	24	5.5	.81	.63
14	.82	5.0	15	82	200	252	200	109	24	5.0	1.0	.55
15	.94	10	14	80	202	230	190	119	25	4.5	.81	.63
16	1.1	15	16	86	176	218	172	119	26	4.6	.55	.55
17	1.2	24	17	249	152	210	168	109	27	5.0	.55	.55
18	12	13	20	245	140	208	161	102	27	5.4	.71	.71
19	9.5	6.0	29	875	127	205	151	98	25	5.4	.55	.55
20	.60	3.5	36	358	115	230	147	91	21	5.0	.55	.63
21	.41	3.5	45	225	104	260	135	84	21	5.4	.55	.63
22	.70	3.1	42	166	97	303	131	79	18	5.8	.63	1.0
23	.70	2.4	42	133	92	295	133	76	18	5.4	.71	1.2
24	.70	2.2	39	113	88	324	139	74	17	5.0	.63	2.2
25	.82	2.2	36	102	86	345	141	74	14	4.2	.71	2.6
26	1.1	2.2	29	104	83	345	145	73	16	4.2	.71	1.4
27	1.2	2.2	26	92	83	336	151	69	13	2.6	.63	.81
28	1.2	1.9	29	88	100	364	157	63	11	1.8	.63	.63
29	1.2	1.6	27	82	------	360	159	59	10	1.8	.55	.55
30	1.4	1.9	24	78	------	312	161	60	10	1.0	.55	.55
31	1.2	------	22	76	------	276	------	58	------	.81	.55	------
TOTAL	59.57	130.28	751.2	4,117	3,130	7,584	5,316	3,121	813	176.71	23.45	25.89
MEAN	1.92	4.34	24.2	133	112	245	177	101	27.1	5.70	.76	.86
MAX	12	24	52	875	267	364	258	159	60	9.4	1.4	2.6
MIN	.41	.70	1.7	16	61	102	131	58	10	.81	.55	.55
AC-FT	118	258	1,490	8,170	6,210	15,040	10,540	6,190	1,610	351	47	51

CAL YR 1972 TOTAL 3,142.03 MEAN 8.58 MAX 62 MIN .41 AC-FT 6,230
WTR YR 1973 TOTAL 25,248.10 MEAN 69.2 MAX 875 MIN .41 AC-FT 50,080

PEAK DISCHARGE (BASE, 70 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	2200	6.88	153	3-3	0400	8.15	228
1-9	2230	8.26	378	3-7	1300	8.47	282
1-19	0700	10.44	1,580	3-28	2330	8.88	392
2-12	0600	8.04	312				

11199500 WHITE RIVER NEAR DUCOR, CALIF.

LOCATION.--Lat 35°48'53", long 118°55'42", in SE¼NE¼ sec.27, T.24 S., R.28 E., Tulare County, on right bank 0.1 mile downstream from Tyler Gulch, and 8.3 miles southeast of Ducor.

DRAINAGE AREA.--92.9 sq mi.

PERIOD OF RECORD.--October 1942 to September 1953, February 1971 to current year. Monthly discharge only for October 1942 to September 1944, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 695 ft (from topographic map). October 1942 to September 1946, at site 200 ft upstream and October 1946 to September 1953, at site 300 ft downstream at different datum.

AVERAGE DISCHARGE.--13 years (1942-53, 1972-73), 10.5 cfs (7,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,330 cfs Jan. 19 (gage height, 6.12 ft); no flow for several months.
Period of record: Maximum discharge, 2,300 cfs (estimated by Bureau of Reclamation) Mar. 9, 1943; no flow for several months in each year.

REMARKS.--Records fair except those for flows above 300 cfs, which are poor. Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	3.2	12	24	58	25	15	1.3		
2			0	3.1	12	18	56	22	14	1.2		
3			0	3.2	11	16	52	22	13	1.1		
4			2.6	3.3	10	47	47	22	12	.98		
5			8.2	3.1	9.6	32	44	22	11	.92		
6			4.2	3.1	10	32	43	20	10	.75		
7			16	3.0	10	66	41	19	9.6	.70		
8			8.5	3.3	9.6	61	38	19	8.5	.70		
9			5.6	47	9.6	49	37	18	7.5	.55		
10			4.1	41	15	41	37	18	7.2	.40		
11			3.6	19	54	70	37	19	6.9	.25		
12			3.2	14	70	59	36	19	6.6	.07		
13			3.1	12	65	52	34	20	6.4	0		
14			3.1	11	54	47	37	21	6.1	0		
15			3.1	10	61	40	36	20	6.1	0		
16			3.1	14	38	36	34	20	6.1	0		
17			3.3	51	30	33	33	20	5.8	0		
18			3.8	98	25	33	33	19	5.4	0		
19			4.6	418	23	30	31	18	5.2	0		
20			4.8	80	22	81	30	18	4.2	0		
21			4.8	51	21	90	28	17	3.9	0		
22			4.6	37	19	132	26	16	3.3	0		
23			4.2	30	16	102	26	16	3.3	0		
24			3.9	26	16	92	26	15	3.2	0		
25			3.8	28	15	82	26	16	3.1	0		
26			3.6	36	14	86	26	17	2.6	0		
27			3.5	24	14	80	26	16	2.3	0		
28			4.1	16	27	84	28	15	2.0	0		
29			3.8	13	------	78	28	14	1.7	0		
30			3.3	12	------	69	29	14	1.5	0		
31		------	3.3	12	------	61	------	14	------	0		------
TOTAL	0	0	127.8	1,125.3	692.8	1,823	1,063	571	193.5	8.92	0	0
MEAN	0	0	4.12	36.3	24.7	58.8	35.4	18.4	6.45	.29	0	0
MAX	0	0	16	418	70	132	58	25	15	1.3	0	0
MIN	0	0	0	3.0	9.6	16	26	14	1.5	0	0	0
AC-FT	0	0	253	2,230	1,370	3,620	2,110	1,130	384	18	0	0

CAL YR 1972 TOTAL 507.14 MEAN 1.39 MAX 16 MIN 0 AC-FT 1,010
WTR YR 1973 TOTAL 5,605.32 MEAN 15.4 MAX 418 MIN 0 AC-FT 11,120

PEAK DISCHARGE (BASE, 30 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-7	1100	3.96	30	3-4	1000	4.20	65
1-9	1000	4.50	127	3-6	2400	4.43	107
1-17	0200	4.29	82	3-8	1600	4.28	78
1-19	0100	6.12	1,330	3-11	1200	4.38	96
2-11	2000	4.42	104	3-20	2300	4.48	118
2-28	1500	4.04	44	3-22	0200	4.87	233

11200800 DEER CREEK NEAR FOUNTAIN SPRINGS, CALIF.

LOCATION.--Lat 35°56'30", long 118°49'19", in SE¼NE¼ sec.10, T.23 S., R.29 E., Tulare County, on left bank 1.0 mile upstream from Pothole Creek, 6.3 miles northeast of Fountain Springs, and 12 miles east of Terra Bella.

DRAINAGE AREA.--83.3 sq mi.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 980 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 41.2 cfs (29,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,030 cfs Jan. 18 (gage height, 6.62 ft); no flow Oct. 1-6.
Period of record: Maximum discharge, 3,340 cfs Feb. 24, 1969 (gage height, 9.85 ft), from rating curve extended above 600 cfs on basis of slope-area measurements at gage heights 8.83 ft in gage well, 9.18 ft, from floodmarks, and 12.54 ft, from floodmarks; no flow Aug. 14-22, 1968, for several months in 1972, Oct. 1-6, 1972.
Flood of Dec. 6, 1966, reached a stage of 12.54 ft, from floodmarks (discharge, 5,330 cfs).

REMARKS.--Records excellent. No storage or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.3	8.3	14	40	76	143	86	52	14	4.3	2.8
2	0	4.3	8.3	14	38	54	134	80	52	14	4.8	2.8
3	0	4.6	8.3	14	37	51	125	83	48	13	4.6	2.8
4	0	6.9	80	13	35	118	124	83	47	12	4.8	2.8
5	0	12	48	12	34	87	122	83	43	12	4.6	2.8
6	0	7.3	28	12	38	98	122	76	42	11	5.6	3.2
7	.18	5.8	48	12	43	143	129	73	39	11	5.6	3.4
8	.42	6.1	31	13	38	126	125	73	38	11	4.8	3.2
9	.42	7.3	21	134	35	107	125	76	37	10	4.6	2.7
10	.71	7.0	18	85	57	99	124	77	35	9.4	4.3	2.7
11	1.1	15	16	51	178	159	124	78	34	8.6	4.1	2.5
12	1.3	19	15	42	184	136	125	80	34	8.3	3.9	2.8
13	1.8	11	14	40	154	125	122	81	33	8.3	3.7	2.8
14	1.8	12	13	38	150	116	133	80	33	8.0	3.9	2.8
15	1.8	36	14	38	145	107	113	78	33	8.0	3.5	3.0
16	1.8	26	14	98	118	104	106	77	31	8.0	3.4	3.2
17	1.9	23	16	187	102	102	104	77	30	8.0	3.5	3.2
18	2.3	17	20	331	91	99	99	77	30	8.0	3.2	3.2
19	5.3	13	23	404	83	91	92	76	27	8.0	3.2	3.5
20	7.8	12	28	145	77	154	88	73	25	8.0	3.0	3.7
21	12	10	26	102	70	156	82	69	23	8.3	3.4	4.1
22	6.1	9.7	25	80	65	194	81	65	21	8.6	3.4	5.0
23	4.8	9.0	24	69	61	165	83	64	21	8.0	3.4	5.8
24	4.3	8.6	22	60	59	176	86	64	20	7.3	3.5	6.1
25	4.1	8.3	20	54	57	179	89	63	20	6.4	3.9	6.4
26	3.9	8.3	17	60	56	198	94	61	19	5.6	3.9	5.8
27	3.9	8.6	17	51	57	185	99	57	18	5.0	4.3	5.0
28	3.9	9.0	21	49	95	206	100	54	17	5.0	4.6	3.9
29	4.1	9.0	18	46	------	178	99	53	15	5.0	3.9	3.7
30	4.3	8.6	16	44	------	160	97	52	15	4.8	3.0	3.4
31	4.3	------	15	43	------	151	------	53	------	4.3	2.8	------
TOTAL	84.33	338.7	692.9	2,355	2,197	4,120	3,289	2,222	932	266.9	123.5	109.1
MEAN	2.72	11.3	22.4	76.0	78.5	133	110	71.7	31.1	8.61	3.98	3.64
MAX	12	36	80	404	184	206	143	86	52	14	5.6	6.4
MIN	0	4.3	8.3	12	34	61	81	52	15	4.3	2.8	2.5
AC-FT	167	672	1,370	4,670	4,360	8,170	6,520	4,410	1,850	529	245	216

CAL YR 1972 TOTAL 2,844.65 MEAN 7.77 MAX 80 MIN 0 AC-FT 5,640
WTR YR 1973 TOTAL 16,730.43 MEAN 45.8 MAX 404 MIN 0 AC-FT 33,180

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-4	1500	4.23	198	2-28	1100	3.94	145
1-9	0800	4.62	278	3-4	0330	3.93	143
1-16	2300	4.82	322	3-6	2300	4.32	216
1-18	2400	6.62	1,030	3-11	0930	4.28	208
2-10	2100	3.77	115	3-20	2100	4.17	187
2-11	1700	4.93	347	3-22	0200	4.56	265
2-14	2100	4.32	216				

11201200 DEER CREEK DIVERSION NEAR TERRA BELLA, CALIF.

LOCATION.--Lat 35°50'40", long 118°59'06", in NE¼NE¼ sec.30, T.22 S., R.28 E., Tulare County, on right bank 1,000 ft downstream from diversion structure, 3.8 miles northeast of Terra Bella.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 510 ft (from topographic map).

EXTREMES.--Period of record: Maxium daily discharge, 9.5 cfs Feb. 23, 1973; no flow for several months in each year.

REMARKS.--Records good. Diversion receives water from Deer Creek 1,000 ft upstream. Water is used for ground-water recharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	4.4	3.8	4.9	0	.68	3.4	2.4		
2			0	4.5	4.1	5.2	0	.35	3.3	2.3		
3			0	5.2	.90	3.9	0	.29	2.8	1.6		
4			.54	5.2	.35	3.8	0	.43	2.7	.92		
5			1.5	3.9	2.8	4.2	0	.43	2.1	.54		
6			.03	2.5	4.4	3.7	0	.51	4.6	.14		
7			3.0	3.5	4.1	4.4	0	.16	5.3	0		
8			3.5	4.7	3.1	4.3	0	.05	4.5	0		
9			1.6	3.2	3.2	3.5	0	.12	4.1	0		
10			.53	3.6	3.9	.77	0	.46	3.8	0		
11			0	1.6	3.9	2.9	3.7	.46	3.4	0		
12			0	.58	1.8	4.2	6.6	.35	3.6	0		
13			0	.51	4.6	1.6	5.7	.37	3.2	0		
14			0	.64	6.1	.64	4.2	.40	2.9	0		
15			0	.34	5.6	3.3	4.8	.46	2.7	0		
16			0	.95	1.8	4.9	6.0	.23	2.3	0		
17			.30	4.6	.03	3.8	6.2	.11	2.2	0		
18			2.0	2.8	0	4.1	5.6	2.8	2.4	0		
19			3.8	1.5	0	3.9	4.9	6.2	1.7	0		
20			4.6	0	0	4.7	4.4	5.0	4.0	0		
21			5.1	0	0	4.8	4.0	3.3	5.0	0		
22			5.2	0	4.5	4.9	3.9	3.2	4.6	0		
23			5.2	0	9.5	4.4	2.9	4.5	4.4	0		
24			5.2	0	9.0	4.0	2.9	7.2	4.2	0		
25			5.2	0	5.7	2.0	2.4	6.4	4.2	0		
26			5.1	0	6.2	2.9	2.8	6.0	4.2	0		
27			5.0	0	7.5	2.7	2.7	4.8	4.0	0		
28			5.5	0	7.3	1.8	2.7	4.2	3.5	0		
29			5.5	0	------	.84	1.7	4.3	3.1	0		
30			4.7	1.0	------	0	1.9	3.6	2.5	0		
31		------	4.5	3.1	------	0	------	3.6	------	0		------
TOTAL	0	0	77.60	58.32	104.18	101.05	80.0	70.96	104.7	7.90	0	0
MEAN	0	0	2.50	1.88	3.72	3.26	2.67	2.29	3.49	.25	0	0
MAX	0	0	5.5	5.2	9.5	5.2	6.6	7.2	5.3	2.4	0	0
MIN	0	0	0	0	0	0	0	.05	1.7	0	0	0
AC-FT	0	0	154	116	207	200	159	141	208	16	0	0

CAL YR 1972 TOTAL 350.90 MEAN .96 MAX 6.3 MIN 0 AC-FT 696
WTR YR 1973 TOTAL 604.71 MEAN 1.66 MAX 9.5 MIN 0 AC-FT 1,200

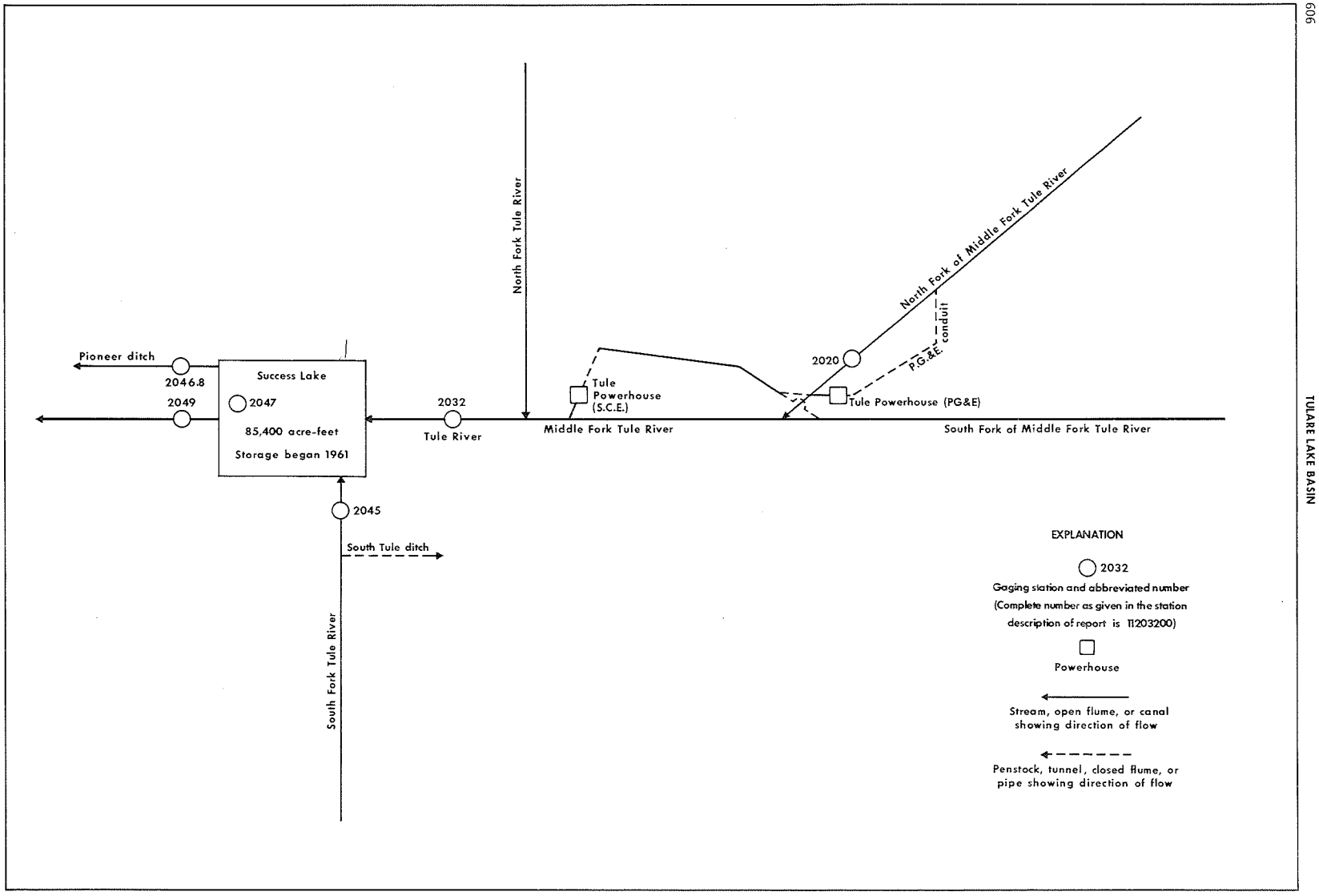

FIGURE 3.--Schematic diagram showing diversions and storage in Tule River basin.

11202000 NORTH FORK OF MIDDLE FORK TULE RIVER NEAR SPRINGVILLE, CALIF.

LOCATION.--Lat 36°10'29", long 118°41'41", in T.20 S., R.30 E. (unsurveyed), Tulare County, 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.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A. January 1909 to December 1912 at site 2 miles upstream, records not equivalent. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder. Concrete control on river since Aug. 6, 1958. Water-stage recorder and rectangular concrete channel for conduit diversion. Altitude of gage is 2,920 ft (from topographic map).

AVERAGE DISCHARGE (River only).--34 years, 26.7 cfs (19,340 acre-ft per year).
(Combined river and diversion).--34 years, 58.1 cfs (42,090 acre-ft per year).

EXTREMES (River only).--Current year: Maximum discharge, 340 cfs May 19 (gage height, 4.77 ft); minimum daily, 0.68 cfs Oct. 11.
Period of record: Maximum discharge, 16,900 cfs Dec. 6, 1966 (gage height, 13.83 ft, from floodmarks), from rating curve extended above 270 cfs on basis of critical-depth determinations at gage heights 9.67 and 12.47 ft; no flow Sept. 10, 11, 1955.
(Combined flow).--Current year: Maximum discharge, 407 cfs May 19; minimum daily, 11 cfs Oct. 3, 5.
Period of record: Maximum discharge, 16,900 cfs Dec. 6, 1966; minimum daily, 7.2 cfs Aug. 18, Oct. 17, 1961.

REMARKS.--Pacific Gas and Electric Co. conduit diverts 2.5 miles upstream from station; water is returned to North Fork of Middle Fork Tule River 1.1 miles downstream from station. See schematic diagram of Tule River basin. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1951.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.0	1.2	2.2	6.2	12	17	108	212	11	3.3	4.7
2	3.2	1.1	1.2	2.1	5.8	9.8	16	104	192	7.3	4.1	4.5
3	4.4	.97	1.2	2.1	5.7	9.7	15	124	180	5.1	4.0	4.2
4	4.4	2.1	11	1.9	5.5	15	14	134	173	4.7	4.0	4.1
5	4.4	1.4	3.3	1.8	5.4	12	14	117	175	4.6	4.1	4.0
6	3.6	1.1	2.7	1.7	7.1	13	15	93	174	4.4	4.2	4.0
7	.87	1.1	2.7	1.6	8.5	13	19	92	176	4.3	3.9	3.9
8	.77	1.6	2.3	3.3	7.9	12	29	119	179	4.3	3.7	3.8
9	.76	1.2	2.5	23	6.1	11	45	165	168	4.2	3.6	2.6
10	.75	1.1	3.2	9.2	13	11	51	211	156	4.1	3.4	2.8
11	.68	5.2	2.8	6.3	51	25	70	244	140	4.0	3.3	2.8
12	.70	3.9	3.3	5.6	32	17	79	247	126	4.0	3.1	2.8
13	.69	1.6	3.2	5.3	25	16	72	248	116	3.9	3.0	2.7
14	.77	6.0	3.3	4.9	21	15	59	289	105	4.0	3.0	2.8
15	.84	6.6	3.4	4.4	18	14	40	266	89	4.2	2.9	2.8
16	.91	3.9	3.6	100	15	14	32	258	81	4.6	2.9	2.8
17	.91	3.2	4.8	84	13	14	35	277	75	4.5	2.8	2.7
18	.94	2.9	5.4	105	12	14	30	285	70	4.4	2.8	2.7
19	.95	1.9	5.4	52	11	13	24	297	63	4.1	2.8	2.7
20	1.6	1.7	5.1	20	9.8	16	18	277	56	3.9	10	2.7
21	1.0	1.4	4.8	12	9.1	18	15	238	51	3.8	19	2.7
22	.87	1.3	4.5	9.6	8.2	18	18	219	46	3.8	17	2.6
23	.89	1.2	4.2	7.9	7.7	17	36	218	41	3.7	20	2.7
24	.92	1.5	3.6	7.9	7.8	20	65	216	36	3.6	21	2.7
25	.91	3.1	2.7	6.4	7.3	23	103	211	32	3.5	21	2.7
26	.93	3.1	2.5	6.1	7.1	25	147	204	27	3.2	21	2.5
27	.94	1.4	2.4	5.6	8.3	24	177	199	24	3.4	21	2.5
28	.92	1.3	3.1	5.5	17	27	188	223	21	3.9	21	2.5
29	1.0	1.3	2.6	5.5	------	22	172	244	18	3.6	18	2.5
30	1.0	1.2	2.5	5.5	------	19	145	238	14	3.3	17	2.7
31	1.0	------	2.5	6.2	------	18	------	235	------	3.2	15	------
TOTAL	43.49	66.37	107.0	514.6	351.5	507.5	1,760	6,400	3,016	134.6	285.9	92.2
MEAN	1.40	2.21	3.45	16.6	12.6	16.4	58.7	206	101	4.34	9.22	3.07
MAX	4.4	6.6	11	105	51	27	188	297	212	11	21	4.7
MIN	.68	.97	1.2	1.6	5.4	9.7	14	92	14	3.2	2.8	2.5
AC-FT	86	132	212	1,020	697	1,010	3,490	12,690	5,980	267	567	183

CAL YR 1972 TOTAL 753.76 MEAN 2.06 MAX 11 MIN .19 AC-FT 1,500
WTR YR 1973 TOTAL 13,279.16 MEAN 36.4 MAX 297 MIN .68 AC-FT 26,340

11202000 NORTH FORK OF MIDDLE FORK TULE RIVER NEAR SPRINGVILLE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF NORTH FORK OF MIDDLE FORK TULE RIVER AND PACIFIC GAS AND ELECTRIC CO. CONDUIT NEAR SPRINGVILLE, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	19	20	32	68	57	176	279	77	34	24
2	12	13	18	20	32	60	54	172	259	73	34	23
3	11	13	18	20	31	56	53	192	247	69	34	22
4	12	18	47	19	32	60	54	202	240	67	33	22
5	11	15	25	19	30	53	59	185	241	65	33	22
6	12	14	23	18	34	53	70	161	240	62	33	22
7	12	14	23	18	46	52	84	159	242	60	33	22
8	12	16	20	22	32	50	97	186	245	58	32	22
9	12	14	18	55	37	47	113	232	234	56	31	22
10	12	14	18	31	45	47	119	278	221	54	30	21
11	12	17	18	28	97	70	138	310	205	53	29	21
12	12	17	17	31	69	56	147	313	190	51	29	21
13	12	17	17	32	63	54	140	315	180	50	28	21
14	12	31	17	33	57	51	127	357	169	49	28	21
15	12	28	17	32	50	50	107	334	152	47	27	21
16	12	24	19	141	46	53	99	325	144	47	27	21
17	12	22	26	134	44	55	102	344	138	46	27	21
18	12	20	29	168	46	54	97	352	133	44	26	21
19	13	19	31	112	46	54	91	364	127	43	26	21
20	18	18	32	61	46	60	83	344	122	43	21	21
21	15	17	31	54	46	60	79	305	117	43	23	21
22	13	16	31	44	41	58	83	286	112	42	22	21
23	13	16	27	40	44	56	103	285	107	41	22	21
24	13	16	26	29	45	62	133	283	102	40	22	21
25	13	17	24	36	42	69	172	278	98	38	22	21
26	12	20	24	34	44	73	216	271	94	37	22	21
27	13	20	23	33	50	72	246	266	91	35	22	20
28	13	19	26	33	81	76	255	290	88	36	22	20
29	13	18	23	36	------	66	241	311	84	36	21	20
30	13	18	22	35	------	61	213	305	80	35	21	20
31	13	------	22	35	------	59	------	302	------	35	21	------
TOTAL	389	534	731	1,423	1,308	1,815	3,632	8,483	4,981	1,532	835	638
MEAN	12.5	17.8	23.6	45.9	46.7	58.5	121	274	166	49.4	26.9	21.3
MAX	18	31	47	168	97	76	255	364	279	77	34	24
MIN	11	13	17	18	30	47	53	159	80	35	21	20
AC-FT	772	1,060	1,450	2,820	2,590	3,600	7,200	16,830	9,880	3,040	1,660	1,270

CAL YR 1972 TOTAL 8,281.9 MEAN 22.6 MAX 47 MIN 9.2 AC-FT 16,430
WTR YR 1973 TOTAL 26,301.0 MEAN 72.1 MAX 364 MIN 11 AC-FT 52,170

11203200 TULE RIVER NEAR SPRINGVILLE, CALIF.

LOCATION.--Lat 36°06'02", long 118°52'07", in NE¼SW¼ sec.17, T.21 S., R.29 E., Tulare County, on left bank 10 ft downstream from highway bridge, 3.5 miles southwest of Springville, and 4.1 miles upstream from Success Dam.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (from topographic map). Prior to Mar. 20, 1968, at site 1.9 miles upstream at different datum.

AVERAGE DISCHARGE.--16 years, 143 cfs (103,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,410 cfs Jan. 18; minimum daily, 7.0 cfs Oct. 1.
Period of record: Maximum discharge, 49,600 cfs Dec. 6, 1966 (gage height, 17.18 ft in gage well, 19.7 ft, from floodmarks, site and datum then in use), from rating curve extended above 7,400 cfs on basis of slope-area measurement of maximum flow; no flow many days in 1961.
Flood in December 1955 reached a stage of 13.7 ft (previous site and datum), from floodmarks (discharge, 21,000 cfs).

REMARKS.--Records good. Many small diversions above station for irrigation. Power is developed on Middle Fork and tributaries. Diversion to Tule River diversion ditch starts 400 ft upstream most of which is returned to the river 0.5 mile downstream. Records since Mar. 20, 1968, include flow diverted to Tule River diversion ditch. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	18	34	55	137	335	335	507	585	117	38	25
2	7.6	18	33	53	133	287	310	431	532	112	37	24
3	9.0	17	33	53	127	262	289	470	494	110	37	22
4	11	24	167	53	125	436	270	538	453	102	38	20
5	13	41	129	50	123	304	273	495	452	100	37	20
6	12	30	83	45	125	338	297	404	446	95	44	22
7	13	22	144	45	194	416	350	383	434	91	40	21
8	10	26	102	49	172	334	370	414	434	85	37	21
9	11	28	75	369	151	285	427	538	423	81	34	21
10	11	24	66	256	270	257	438	684	397	78	34	21
11	12	49	60	140	1,500	626	480	789	362	70	33	20
12	13	54	57	114	823	448	529	798	333	63	31	21
13	11	36	54	117	664	387	504	765	307	65	28	22
14	11	76	52	120	504	359	480	847	290	61	25	22
15	11	140	52	120	408	313	395	798	264	59	25	22
16	11	106	52	613	311	300	354	750	241	59	25	22
17	11	106	55	1,510	274	300	354	790	230	59	25	22
18	12	72	79	2,220	253	299	339	855	223	59	24	23
19	16	54	86	1,780	236	274	321	896	208	60	24	24
20	21	46	98	575	224	614	296	831	198	59	23	23
21	29	34	95	389	212	557	270	707	186	60	19	26
22	23	35	89	291	199	601	260	643	179	59	25	28
23	19	36	88	237	189	445	295	620	170	57	22	30
24	18	34	81	207	183	434	363	635	162	57	24	31
25	18	30	75	188	180	455	448	592	154	49	24	31
26	17	33	67	195	177	547	593	565	149	48	25	32
27	17	34	64	166	192	489	722	533	140	45	26	27
28	19	35	70	157	494	496	784	572	136	39	27	24
29	18	35	70	151	------	434	752	641	130	38	25	23
30	18	34	62	146	------	379	650	634	123	34	24	22
31	18	------	59	144	------	353	------	634	------	36	23	------
TOTAL	447.6	1,327	2,331	10,608	8,580	12,364	12,548	19,759	8,835	2,107	903	712
MEAN	14.4	44.2	75.2	342	306	399	418	637	295	68.0	29.1	23.7
MAX	29	140	167	2,220	1,500	626	784	896	585	117	44	32
MIN	7.0	17	33	45	123	257	260	383	123	34	19	20
AC-FT	888	2,630	4,620	21,040	17,020	24,520	24,890	39,190	17,520	4,180	1,790	1,410

CAL YR 1972 TOTAL 14,621.60 MEAN 39.9 MAX 167 MIN .10 AC-FT 29,000
WTR YR 1973 TOTAL 80,521.60 MEAN 221 MAX 2,220 MIN 7.0 AC-FT 159,700

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	DISCHARGE	DATE	TIME	DISCHARGE
1-9	0900	665	3-6	2400	646
1-16	2400	3,080	3-11	0900	993
1-18	1900	6,410	3-20	1000	907
2-11	1500	3,190	4-28	0230	892
2-28	1000	717	5-20	0130	986
3-4	0600	546			

11204500 SOUTH FORK TULE RIVER NEAR SUCCESS, CALIF.

LOCATION.--Lat 36°02'33", long 118°51'24", in NW¼SW¼ sec.4, T.22 S., R.29 E., Tulare County, 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.

PERIOD OF RECORD.--June 1930 to December 1954, January 1956 to current year. Monthly and yearly discharge only for some periods, published in WSP 1735.

GAGE.--Water-stage recorder. Altitude of gage is 770 ft (from topographic map). Prior to June 26, 1951, at site 0.4 mile downstream at different datum.

AVERAGE DISCHARGE.--41 years, 41.6 cfs (30,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,980 cfs Jan. 18 (gage height, 6.28 ft); no flow for several days. Period of record: Maximum discharge, 14,300 cfs Dec. 6, 1966 (gage height, 12.50 ft in gage well, 13.3 ft, from floodmarks), from rating curve extended above 4,300 cfs on basis of slope-area measurement of maximum flow; no flow at times in most years.

REMARKS.--Records good. Diversions for irrigation of about 640 acres above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1931-32(M). WSP 1445: 1952-53(P), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.0	11	19	53	127	188	165	127	38	8.8	6.0
2	0	1.2	10	20	53	105	171	156	126	35	6.7	5.8
3	0	1.3	9.9	20	55	98	158	172	120	27	6.7	5.9
4	0	4.0	73	18	53	211	153	179	113	24	6.8	5.4
5	0	13	44	16	53	142	156	164	107	24	6.7	5.3
6	0	5.6	30	16	55	189	169	135	103	23	8.8	5.7
7	0	4.9	43	16	77	231	193	137	99	23	7.8	5.9
8	0	8.4	34	19	64	217	195	145	95	22	7.2	5.9
9	0	8.5	24	130	57	171	201	166	92	22	6.8	5.7
10	0	6.5	22	73	90	150	202	191	84	20	6.8	4.7
11	0	23	19	50	535	328	209	209	81	20	6.5	3.3
12	0	17	19	46	322	237	217	217	77	19	6.2	3.6
13	0	12	18	46	234	214	209	215	74	19	6.2	3.6
14	0	26	17	46	216	191	214	225	68	19	6.0	3.3
15	0	50	17	44	190	170	172	214	65	19	5.8	3.5
16	0	36	18	168	151	159	157	203	61	19	5.6	3.6
17	0	32	21	267	132	153	164	206	60	19	5.5	3.4
18	0	22	30	630	122	149	153	203	58	18	5.1	3.5
19	.57	16	33	519	113	131	137	207	54	17	4.7	3.8
20	5.7	14	38	174	105	287	128	199	51	17	5.0	3.9
21	14	13	35	126	97	256	126	177	48	17	5.3	3.9
22	3.5	12	34	97	89	309	126	162	46	16	5.1	4.3
23	1.9	11	32	84	85	258	137	152	45	14	5.2	4.0
24	1.3	11	28	75	85	266	152	147	44	14	5.5	5.2
25	1.1	10	26	68	81	278	166	140	44	12	5.9	4.8
26	1.3	11	22	76	80	294	200	133	44	11	6.0	4.7
27	.86	12	22	62	90	262	226	128	43	11	6.6	3.9
28	.79	12	27	59	179	285	236	127	40	10	6.6	3.4
29	1.3	11	22	58	------	240	226	127	40	10	6.0	3.2
30	1.3	11	22	57	------	216	206	127	38	10	5.6	2.9
31	1.1	------	20	57	------	199	------	128	------	8.8	5.9	------
TOTAL	34.72	416.4	820.9	3,156	3,016	6,523	5,347	5,256	2,147	577.8	193.4	132.1
MEAN	1.12	13.9	26.5	102	126	210	178	170	71.6	18.6	6.24	4.40
MAX	14	50	73	630	535	328	236	225	127	38	8.8	6.0
MIN	0	1.0	9.9	16	53	98	126	127	38	8.8	4.7	2.9
AC-FT	69	826	1,630	6,260	6,970	12,940	10,610	10,430	4,260	1,150	384	262

CAL YR 1972 TOTAL 3,623.14 MEAN 9.90 MAX 73 MIN 0 AC-FT 7,190
WTR YR 1973 TOTAL 28,120.32 MEAN 77.0 MAX 630 MIN 0 AC-FT 55,780

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	0800	3.90	292	3-11	0745	4.53	595
1-18	2230	6.28	1,980	3-20	0730	4.21	435
2-11	1545	5.46	1,210	4-14	0715	3.68	243
2-28	1015	3.79	267	4-27	2400	3.80	277
3-6	2030	4.29	475	5-14	2045	3.71	251

11204680 PIONEER DITCH BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'34", long 118°55'22", in SW¼NW¼ sec.35, T.21 S., R.28 E., Tulare County, on left bank 0.1 mile downstream from Success Dam, and 5.5 miles east of Porterville.

PERIOD OF RECORD.--April 1959 to current year. Prior to October 1960, monthly diversions only, published with Tule River near Porterville.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 549.00 ft above mean sea level (levels by Corps of Engineers). Prior to Feb. 1, 1961, at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--14 years, 7.19 cfs (5,210 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 29 cfs Apr. 15, 1961; no flow at times in most years.

REMARKS.--Records excellent. Ditch receives water from Success Lake (see sta 11204700).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2			0				0	11	11	10	9.1
2	8.1			0				0	11	12	9.8	9.1
3	8.1			0				0	11	13	11	9.1
4	8.0			0				0	11	13	12	9.1
5	8.0			0				2.5	11	12	12	10
6	8.7			0				4.0	11	11	12	11
7	8.7			0				4.0	11	11	12	11
8	8.5			.70				6.8	11	11	12	8.6
9	8.5			0				8.2	11	11	12	8.8
10	7.9			0				8.2	11	11	13	9.5
11	7.7			0				8.2	11	11	14	9.3
12	6.5			0				8.2	11	11	14	9.0
13	7.9			0				8.2	11	11	14	10
14	7.7			0				8.4	11	10	14	11
15	7.7			0				8.4	11	11	14	12
16	8.1			0				8.4	11	10	14	13
17	8.2			0				8.7	11	10	14	13
18	8.3			0				8.7	7.8	12	14	13
19	2.7			0				8.7	7.9	13	14	11
20	0			0				8.7	11	13	14	11
21	0			0				9.5	11	12	13	11
22	0			0				10	11	11	12	11
23	0			0				10	11	11	12	10
24	0			0				10	11	10	12	11
25	0			0				11	11	10	12	9.8
26	0			0				11	11	10	11	8.3
27	0			0				11	11	11	11	8.0
28	0			0				11	11	12	11	8.1
29	0			0	------			11	11	12	11	8.0
30	0			0	------			11	11	11	11	8.0
31	0	------		0	------		------	11	------	9.9	10	------
TOTAL	147.5	0	0	.70	0	0	0	234.8	323.7	347.9	381.8	300.8
MEAN	4.76	0	0	.023	0	0	0	7.57	10.8	11.2	12.3	10.0
MAX	8.7	0	0	.70	0	0	0	11	11	13	14	13
MIN	0	0	0	0	0	0	0	0	7.8	9.9	9.8	8.0
AC-FT	293	0	0	1.4	0	0	0	466	642	690	757	597

CAL YR 1972 TOTAL 2,426.50 MEAN 6.63 MAX 18 MIN 0 AC-FT 4,810
WTR YR 1973 TOTAL 1,737.20 MEAN 4.76 MAX 14 MIN 0 AC-FT 3,450

11204700 SUCCESS LAKE NEAR SUCCESS, CALIF.

LOCATION.--Lat 36°03'40", long 118°55'18", in SE¼NW¼ sec.35, T.21 S., R.28 E., Tulare County, in control tower near right abutment of Success Dam on Tule River, 5 miles east of Porterville.

DRAINAGE AREA.--391 sq mi.

PERIOD OF RECORD.--November 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 79,282 acre-ft June 24 (elevation, 651.42 ft); minimum, 3,406 acre-ft Oct. 17 (elevation, 579.52 ft).
Period of record: Maximum contents, 101,300 acre-ft Dec. 7, 1966 (elevation, 658.63 ft); minimum since reservoir first filled, 3,406 acre-ft Oct. 17, 1972 (elevation, 579.52 ft).

REMARKS.--Lake is formed by earthfill dam and dike. Storage began November 1961. Usable capacity, 81,854 acre-ft between elevations 559.0 (invert of outlet structure) and 652.5 ft (spillway crest). Surcharge flood control storage, 117,402 acre-ft between ungated spillway crest and elevation 686.8 ft (maximum spillway design flood pool). No dead storage. Siltation in the reservoir has eliminated dead storage. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

575	2,281	620	28,717
580	3,543	640	55,952
585	5,170	660	101,553
590	7,197	690	213,567
600	12,528		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,721	3,916	7,661	9,244	15,959	19,631	34,155	31,516	68,513	75,987	54,819	30,045
2	3,689	3,947	7,768	9,380	15,561	19,591	34,848	32,177	69,414	75,423	54,011	29,282
3	3,662	3,984	7,876	9,506	15,161	19,502	35,648	32,961	70,217	74,772	53,245	28,493
4	3,642	4,046	8,318	9,612	14,754	19,962	36,414	33,854	70,942	74,149	52,471	27,750
5	3,624	4,144	8,683	9,740	14,340	20,027	37,181	34,788	71,652	73,551	51,723	26,971
6	3,601	4,208	8,599	9,836	13,979	20,296	37,963	35,564	72,281	72,936	50,934	26,198
7	3,578	4,266	8,264	9,939	13,748	20,840	38,927	36,304	73,023	72,281	50,138	25,440
8	3,560	4,325	7,825	10,086	13,442	21,216	39,927	37,106	73,772	71,609	49,320	24,696
9	3,534	4,394	7,404	10,524	13,107	21,350	41,033	38,103	74,482	70,921	48,528	23,931
10	3,508	4,450	6,988	10,407	13,056	21,401	42,084	39,424	75,108	70,217	47,730	23,180
11	3,494	4,591	6,536	10,004	16,275	22,523	42,676	40,978	75,648	69,561	46,913	22,436
12	3,491	4,738	6,098	9,532	17,880	23,127	43,032	42,548	76,168	68,847	46,136	21,723
13	3,480	4,838	5,938	9,094	18,961	23,554	42,661	44,130	76,646	68,160	45,325	21,048
14	3,460	5,029	6,054	8,653	19,857	23,840	42,098	45,789	77,057	67,478	44,496	20,378
15	3,443	5,398	6,176	8,235	20,403	24,003	41,307	47,452	77,448	66,741	43,694	19,744
16	3,423	5,683	6,298	8,769	20,625	24,121	40,382	48,970	77,747	66,072	42,889	19,064
17	3,406	5,966	6,431	11,327	20,724	24,220	39,450	50,494	78,045	65,548	42,014	18,397
18	3,412	6,171	6,621	15,866	20,732	24,330	38,500	52,121	78,372	65,067	41,156	17,750
19	3,429	6,323	6,831	19,462	20,699	24,348	37,444	53,823	78,651	64,610	40,315	17,125
20	3,471	6,465	7,094	20,035	20,608	25,656	36,365	55,427	78,884	63,957	39,477	16,507
21	3,526	6,578	7,332	20,117	20,452	26,573	35,204	56,766	79,025	63,213	38,642	15,959
22	3,572	6,689	7,555	19,978	20,214	27,690	34,039	57,968	79,118	62,515	37,823	15,364
23	3,609	6,805	7,768	19,727	19,913	28,412	33,098	59,101	79,212	61,766	37,007	14,836
24	3,644	6,909	7,966	19,374	19,599	29,086	32,243	60,252	79,282	61,062	36,218	14,597
25	3,674	7,001	8,153	19,001	19,366	29,824	31,494	61,346	79,118	60,327	35,431	14,434
26	3,709	7,103	8,308	18,663	19,088	30,758	31,060	62,322	78,581	59,600	34,635	14,266
27	3,736	7,224	8,455	18,226	18,867	31,494	31,006	63,272	78,117	58,807	33,877	14,072
28	3,777	7,341	8,663	17,757	19,430	32,332	31,114	64,253	77,632	57,987	33,143	13,893
29	3,807	7,454	8,829	17,282	------	32,961	31,125	65,347	77,080	57,194	32,377	13,696
30	3,846	7,560	8,976	16,829	------	33,440	31,038	66,457	76,555	56,429	31,637	13,494
31	3,877	------	9,115	16,398	------	33,831	------	67,520	------	55,602	30,844	------
MAX	3,877	7,560	9,115	20,117	20,732	33,831	43,032	67,520	79,282	75,987	54,819	30,045
MIN	3,406	3,916	5,938	8,235	13,056	19,502	31,006	31,516	68,513	55,602	30,844	13,494
(a)	581.13	590.80	593.99	605.74	609.71	624.71	622.21	646.07	650.24	639.80	622.03	601.52
(b)	+123	+3,683	+1,555	+7,283	+3,032	+14,401	-2,793	+36,482	+9,035	-20,953	-24,758	-17,350
(c)	102	39	37	65	87	143	436	931	1,672	1,724	1,092	515

CAL YR 1972 b +531
WTR YR 1973 b +9,740

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11204900 TULE RIVER BELOW SUCCESS DAM, CALIF.

LOCATION.--Lat 36°03'23", long 118°55'22", in NW¼SW¼ sec.35, T.21 S., R.28 E., Tulare County, on right bank 1,000 ft downstream from Success Dam, and 5 miles east of Porterville.

DRAINAGE AREA.--393 sq mi.

PERIOD OF RECORD.--October 1953 to current year. Prior to October 1960, published as "at Worth Bridge, near Porterville."

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 536.00 ft above mean sea level (levels by Corps of Engineers). Prior to October 1960, at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE (adjusted for storage, diversion, and evaporation).--20 years, 178 cfs (129,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,080 cfs Apr. 14 (gage height, 7.16 ft); minimum daily, 0.10 cfs Nov. 5 to Dec. 5.

Period of record: Maximum discharge, 27,000 cfs Dec. 23, 1955 (gage height, 21.65 ft, site and datum then in use), from rating curve extended above 1,400 cfs on basis of studies of upstream peaks; no flow at times in 1954-57, 1959-61. Maximum discharge since construction of Success Dam in 1961, 9,050 cfs Dec. 6, 1966 (includes flow through spillway); no flow at times in 1962, 1965.

Flood of Nov. 19, 1950, reached a stage of 26 ft, from floodmarks, site and datum then in use (discharge, 32,000 cfs).

REMARKS.--Records good. Flow regulated by Success Lake beginning Nov. 23, 1961 (see sta 11204700). Discharge records during periods of high flow include flow over spillway that bypasses the gaging station. Pioneer ditch (see sta 11204680) diverts above station for irrigation. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	.20	.10	10	420	446	394	395	130	427	442	441
2	12	.20	.10	10	400	476	155	266	130	421	437	429
3	12	.20	.10	10	397	476	57	236	131	425	437	424
4	10	.20	.10	10	397	463	60	213	132	435	436	426
5	8.2	.10	.10	10	401	469	72	159	135	439	433	430
6	10	.10	141	10	400	451	77	147	136	439	440	428
7	10	.10	335	10	400	434	78	141	110	444	446	424
8	10	.10	363	10	400	437	78	136	92	448	446	424
9	11	.10	312	206	397	443	78	136	91	446	446	422
10	10	.10	310	379	399	451	87	138	91	438	446	423
11	10	.10	310	402	404	424	384	139	88	432	444	424
12	8.0	.10	303	396	411	409	560	139	86	430	443	407
13	10	.10	171	398	434	425	888	134	86	430	443	384
14	9.7	.10	9.3	400	406	447	990	132	86	429	443	374
15	9.8	.10	11	385	419	454	982	133	87	427	443	371
16	9.8	.10	11	373	430	454	1,000	133	87	427	452	368
17	9.8	.10	11	375	430	457	1,000	135	87	342	458	372
18	10	.10	11	442	430	457	1,010	135	87	285	460	363
19	5.5	.10	11	480	430	457	1,020	136	86	278	460	352
20	.50	.10	11	480	430	418	1,020	141	87	389	457	341
21	.40	.10	11	480	448	390	1,020	143	119	427	456	330
22	.40	.10	11	480	458	376	986	136	135	427	456	307
23	.40	.10	11	480	480	379	954	133	135	427	452	292
24	.40	.10	11	480	463	382	988	133	135	429	441	136
25	.40	.10	11	480	454	385	1,000	133	285	435	438	102
26	.40	.10	11	480	454	385	1,000	133	377	440	434	106
27	.40	.10	11	476	451	388	925	133	388	446	433	109
28	.40	.10	10	476	426	391	885	133	390	447	433	109
29	.40	.10	10	475	------	391	885	133	423	446	430	109
30	.30	.10	10	459	------	394	885	135	440	446	429	114
31	.30	------	10	448	------	394	------	132	------	446	437	------
TOTAL	192.50	3.40	2,437.80	10,010	11,869	13,203	19,518	4,801	4,872	13,047	13,751	9,741
MEAN	6.21	.11	78.6	323	424	426	651	155	162	421	444	325
MAX	12	.20	363	480	480	476	1,020	395	440	448	460	441
MIN	.30	.10	.10	10	397	376	57	132	86	278	429	102
AC-FT	382	6.7	4,840	19,850	23,540	26,190	38,710	9,520	9,660	25,880	27,280	19,320
MEAN a	14.6	62.7	105	442	480	662	611	771	353	119	71.1	51.8
AC-FT a	900	3,730	6,440	27,200	26,660	40,730	36,360	47,400	21,010	7,340	4,370	3,080

CAL YR 1972 TOTAL 13,704.70 MEAN 37.4 MAX 363 MIN .10 AC-FT 27,180 MEAN a 49.3 AC-FT a 35,800
WTR YR 1973 TOTAL 103,445.70 MEAN 283 MAX 1,020 MIN .10 AC-FT 205,200 MEAN a 311 AC-FT a 225,200

a Adjusted for change in contents and evaporation in Success Lake and for diversion to Pioneer ditch.

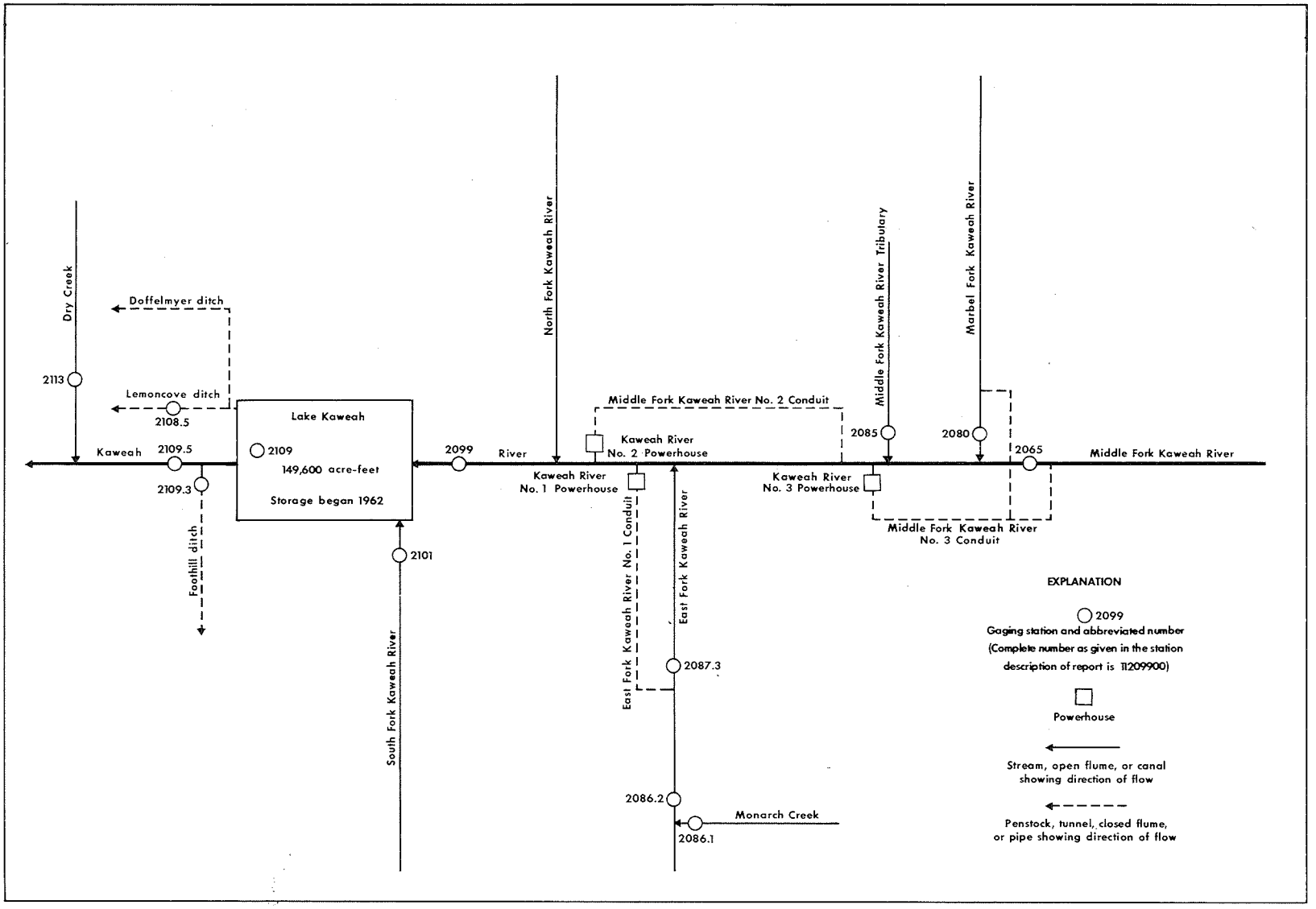

FIGURE 4.--Schematic diagram showing diversions and storage in Kaweah River basin.

11206500 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°30'46", long 118°47'25", in NW¼NW¼ sec.25, T.16 S., R.29 E., (unsurveyed), Tulare County, Sequoia National Park, 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.

PERIOD OF RECORD.--July 1949 to current year. Monthly discharge only for water years 1956-57, published in WSP 1735. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder and concrete control on river; water-stage recorder and concrete-lined channel for conduit diversion. Altitude of gage is 2,100 ft (from topographic map). Prior to October 1955, at datum 0.70 ft higher.

AVERAGE DISCHARGE (River only).--24 years, 134 cfs (97,080 acre-ft per year).
(Combined river and diversion).--24 years, 174 cfs (126,100 acre-ft per year).

EXTREMES (River only).--Current year: Maximum discharge, 1,550 cfs May 28 (gage height, 7.93 ft); minimum daily, 4.6 cfs Dec. 25.
Period of record: Maximum discharge, 46,800 cfs Dec. 23, 1955 (gage height, 29.0 ft, from floodmarks, datum then in use), by slope-area measurement of maximum flow; minimum daily, 0.1 cfs Nov. 12-15, 1949.
(Combined flow).--Current year: Maximum discharge, 1,610 cfs May 28; minimum daily, 14 cfs Oct. 13-18.
Period of record: Maximum discharge, 46,800 cfs Dec. 23, 1955; minimum daily, 8.8 cfs Sept. 23-25, 1949.

REMARKS.--Records good. Middle Fork No. 3 conduit diverts from left bank of Middle Fork Kaweah River, 0.5 mile upstream from station in NE¼ sec.26, T.16 S., R.29 E. Flow from this conduit joins with that of Marble Fork Kaweah River No. 3 conduit, and the combined flow passes through Kaweah River No. 3 powerhouse of Southern California Edison Co.; water is returned to Kaweah River 2.7 miles downstream from confluence of Marble and Middle Forks. See schematic diagram of Kaweah River basin. For records of combined discharge of river and conduit, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 16 discharge measurements for river and gage-height record and 13 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	12	15	20	87	101	363	1,010	373	37	14
2	18	10	12	15	19	73	89	370	920	318	37	12
3	16	11	12	15	20	69	85	448	870	289	39	11
4	16	12	44	14	24	87	89	463	875	274	50	11
5	17	12	13	15	17	72	101	388	910	282	37	11
6	16	12	11	16	36	79	134	320	965	272	42	11
7	15	11	11	15	46	77	168	375	1,050	260	33	10
8	15	11	11	23	32	73	199	510	1,140	244	26	10
9	15	10	30	64	27	65	220	718	1,090	228	24	10
10	15	10	24	18	73	65	228	870	970	226	20	21
11	15	11	15	17	162	114	254	1,010	834	222	16	28
12	15	11	14	27	120	83	266	1,040	766	209	16	27
13	14	11	12	26	101	83	252	970	750	181	19	26
14	14	36	11	23	90	81	222	1,110	642	161	18	17
15	14	14	9.1	20	73	82	181	1,070	494	152	17	11
16	14	13	6.9	263	61	89	168	1,080	506	147	16	11
17	14	12	48	178	58	95	185	1,160	514	140	16	11
18	14	12	39	481	59	93	175	1,250	562	131	16	11
19	15	12	34	239	59	86	161	1,130	598	117	15	11
20	24	11	30	146	59	108	143	1,010	614	110	15	11
21	26	11	28	110	56	93	132	920	598	93	15	11
22	25	11	24	83	50	95	150	885	586	83	16	11
23	23	11	13	61	49	92	195	860	542	71	15	11
24	23	11	7.4	55	53	105	282	865	510	65	16	11
25	22	12	4.6	43	46	122	385	838	550	56	16	11
26	21	13	8.6	36	48	147	498	842	590	54	16	11
27	20	13	10	30	72	131	602	905	566	53	26	11
28	20	13	10	30	125	135	626	1,160	498	50	21	11
29	19	12	13	30	------	120	570	1,270	487	43	20	11
30	19	12	15	29	------	107	490	1,110	436	41	19	11
31	18	------	15	24	------	101	------	1,290	------	37	18	------
TOTAL	547	374	547.6	2,161	1,655	2,909	7,351	26,600	21,443	4,982	707	395
MEAN	17.6	12.5	17.7	69.7	59.1	93.8	245	858	715	161	22.8	13.2
MAX	26	36	48	481	162	147	626	1,290	1,140	373	50	28
MIN	14	10	4.6	14	17	65	85	320	436	37	15	10
AC-FT	1,080	742	1,090	4,290	3,280	5,770	14,580	52,760	42,530	9,880	1,400	783

CAL YR 1972 TOTAL 16,331.6 MEAN 44.6 MAX 228 MIN 4.6 AC-FT 32,390
WTR YR 1973 TOTAL 69,671.6 MEAN 191 MAX 1,290 MIN 4.6 AC-FT 138,200

11206500 MIDDLE FORK KAWEAH RIVER NEAR POTWISHA CAMP, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MIDDLE FORK KAWEAH RIVER AND MIDDLE FORK KAWEAH RIVER NO. 3 CONDUIT NEAR POTWISHA CAMP, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	62	52	85	150	164	427	1,070	436	105	40
2	18	16	60	54	84	136	152	433	979	380	105	39
3	16	16	54	53	85	132	148	511	929	351	106	37
4	16	29	109	46	89	150	152	526	934	336	117	36
5	17	27	64	44	81	135	164	450	966	344	104	34
6	16	25	66	47	101	142	197	381	1,020	335	108	34
7	15	23	64	43	111	140	232	437	1,100	323	99	31
8	15	28	66	63	97	136	263	571	1,200	307	91	30
9	15	26	81	129	92	128	284	778	1,150	291	89	28
10	15	25	79	79	138	128	293	929	1,030	289	85	28
11	15	35	64	76	227	178	319	1,070	897	284	79	28
12	15	33	63	92	184	146	331	1,100	829	270	74	27
13	14	35	58	91	165	146	317	1,030	811	242	71	26
14	14	85	55	88	154	144	287	1,170	703	222	73	25
15	14	68	52	85	137	146	245	1,120	555	213	71	25
16	14	64	53	324	124	153	231	1,120	567	208	69	25
17	14	54	110	231	121	159	247	1,210	575	201	67	24
18	14	49	106	531	122	157	235	1,290	623	190	65	24
19	15	47	101	294	122	150	222	1,190	658	174	61	24
20	24	43	97	203	122	172	205	1,080	673	168	58	23
21	26	42	95	166	119	157	194	981	658	152	55	24
22	25	41	91	132	113	158	213	944	646	143	54	23
23	23	41	79	119	112	135	258	918	602	135	50	22
24	23	41	72	113	116	168	345	923	570	130	48	24
25	22	47	68	105	109	185	448	896	611	122	45	23
26	21	61	65	101	111	210	559	900	652	122	45	21
27	20	65	65	95	136	194	660	964	628	121	71	20
28	20	64	71	95	189	198	685	1,220	560	118	67	19
29	19	60	62	95	------	183	628	1,330	549	110	50	19
30	19	59	62	94	------	170	549	1,170	498	108	45	19
31	18	------	62	89	------	164	------	1,350	------	104	42	------
TOTAL	547	1,265	2,256	3,829	3,446	4,870	9,228	28,419	23,243	6,929	2,259	802
MEAN	17.6	42.2	72.8	124	123	157	308	917	775	224	72.9	26.7
MAX	26	85	110	531	227	210	685	1,350	1,200	436	117	40
MIN	14	16	52	43	81	128	148	381	498	104	42	19
AC-FT	1,080	2,510	4,470	7,590	6,840	9,660	18,300	56,370	46,100	13,740	4,480	1,590

CAL YR 1972 TOTAL 30,062 MEAN 82.1 MAX 294 MIN 11 AC-FT 59,630
WTR YR 1973 TOTAL 87,093 MEAN 239 MAX 1,350 MIN 14 AC-FT 172,700

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.

LOCATION.--Lat 36°31'08", long 118°48'03", in SE¼ sec.23, T.16 S., R.29 E., (unsurveyed), Tulare County, Sequoia National Park, on left bank 0.1 mile north of Potwisha Camp, 0.3 mile upstream from confluence with Middle Fork Kaweah River, and 7.9 miles northeast of Three Rivers.

DRAINAGE AREA.--51.4 sq mi.

PERIOD OF RECORD.--March 1950 to current year. Monthly discharge only for March 1950, published in WSP 1315-A. Prior to October 1954, records for river and conduit published separately; combined flow only, October 1954 to September 1960.

GAGE.--Water-stage recorder and concrete control on river; water-stage recorder and concrete control for conduit diversion. Altitude of gage is 2,150 ft (from topographic map).

AVERAGE DISCHARGE (River only).--23 years, 73.6 cfs (53,320 acre-ft per year).
(Combined river and diversion).--23 years, 98.9 cfs (71,650 acre-ft per year).

EXTREMES (River only).--Current year: Maximum discharge, 1,010 cfs May 28 (gage height, 6.61 ft); minimum daily, 1.1 cfs Nov. 21, 22, Dec. 25-27.
Period of record: Maximum discharge, 12,500 cfs Dec. 23, 1955 (gage height, 13.4 ft), from rating curve extended above 1,100 cfs on basis of slope-area measurement of maximum flow; no flow Sept. 5-15, Oct. 24-28, 1953, Oct. 26-31, 1957.
(Combined flow).--Current year: Maximum discharge, 1,050 cfs May 28; minimum daily, 4.9 cfs Oct. 1.
Period of record: Maximum discharge, 12,500 cfs Dec. 23, 1955; minimum daily, 1.6 cfs July 30, Sept. 14-16, 1961, Aug. 25, 1968.

REMARKS.--Records good. Marble Fork Kaweah River No. 3 conduit diverts from left bank of Marble Fork 0.3 mile above station; water is returned to Kaweah River 2.7 miles downstream from confluence of Marble and Middle Forks. See schematic diagram of Kaweah River basin. For records of combined discharge of river and conduit, see following page.

COOPERATION.--Gage-height record and 21 discharge measurements for river and gage-height record and 13 discharge measurements for conduit furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	2.3	1.5	6.4	4.5	23	21	223	602	176	6.0	3.2
2	6.1	1.3	1.4	7.6	4.5	16	19	245	566	147	6.0	1.4
3	6.7	1.3	1.4	6.0	4.5	14	19	313	534	132	10	1.3
4	6.4	6.7	11	6.0	4.8	17	21	315	554	124	35	2.5
5	7.1	7.3	1.2	7.6	4.8	11	29	255	562	132	23	2.9
6	6.4	3.7	1.8	11	5.7	13	49	213	570	121	55	2.5
7	6.1	2.3	1.4	10	7.6	10	72	263	614	117	17	2.5
8	6.1	2.6	1.4	8.6	6.0	10	95	371	650	104	7.0	2.7
9	6.1	2.3	1.9	11	4.5	8.0	106	479	590	97	6.7	2.5
10	6.4	2.5	1.6	4.8	8.6	8.3	113	562	534	93	7.0	19
11	6.4	4.5	2.2	4.5	30	28	119	634	503	89	6.7	28
12	5.4	1.6	1.6	5.1	30	16	132	638	458	73	6.7	29
13	5.1	1.9	1.4	7.3	19	15	124	614	437	62	11	28
14	4.8	13	1.2	7.6	13	12	102	710	362	52	10	22
15	4.8	3.9	1.2	7.0	7.6	10	80	654	300	49	7.6	21
16	4.8	8.0	1.2	104	6.4	14	75	674	313	46	7.0	21
17	4.8	2.2	7.3	72	6.0	18	98	742	318	32	7.3	19
18	5.1	1.2	18	107	5.7	16	102	758	341	21	9.5	8.0
19	6.7	1.2	7.0	56	6.0	17	84	738	353	21	8.6	4.5
20	10	1.2	7.6	32	6.4	28	69	686	347	17	13	3.2
21	11	1.1	7.0	16	6.4	22	67	618	332	15	18	3.9
22	9.5	1.1	6.4	5.7	5.4	21	86	614	318	14	17	3.9
23	8.6	1.2	1.6	16	5.1	19	126	622	298	14	16	3.7
24	8.0	1.2	1.2	22	6.0	23	195	582	278	13	16	5.1
25	8.0	1.2	1.1	4.5	5.1	31	258	546	300	10	14	5.7
26	7.6	2.7	1.1	4.5	5.4	35	313	570	305	8.0	14	4.8
27	7.3	7.6	1.1	4.5	10	32	359	606	290	8.6	18	3.4
28	7.3	5.1	1.3	4.5	32	31	368	734	263	5.4	14	4.8
29	7.3	2.3	5.7	4.5	------	27	347	770	238	4.2	8.6	8.0
30	7.3	1.8	9.5	4.5	------	23	293	674	213	4.2	6.7	6.7
31	7.0	------	8.6	4.5	------	21	------	778	------	5.1	6.7	------
TOTAL	208.7	96.3	117.9	572.7	261.0	589.3	3,941	17,201	12,343	1,806.5	409.1	274.2
MEAN	6.73	3.21	3.80	18.5	9.32	19.0	131	555	411	58.3	13.2	9.14
MAX	11	13	18	107	32	35	368	778	650	176	55	29
MIN	4.5	1.1	1.1	4.5	4.5	8.0	19	213	213	4.2	6.0	1.3
AC-FT	414	191	234	1,140	518	1,170	7,820	34,120	24,480	3,580	811	544

CAL YR 1972 TOTAL 10,184.50 MEAN 27.8 MAX 173 MIN .42 AC-FT 20,200
WTR YR 1973 TOTAL 37,820.70 MEAN 104 MAX 778 MIN 1.1 AC-FT 75,020

11208000 MARBLE FORK KAWEAH RIVER AT POTWISHA CAMP, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MARBLE FORK KAWEAH RIVER AND MARBLE FORK KAWEAH RIVER NO. 3 CONDUIT AT POTWISHA CAMP, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.3	23	16	30	57	54	255	642	216	29	11
2	6.5	5.2	22	19	29	50	52	277	605	187	29	11
3	7.2	5.0	21	18	30	48	52	345	573	173	31	10
4	6.9	12	35	14	31	51	54	347	593	164	56	11
5	7.6	12	19	12	30	45	62	287	601	173	44	11
6	7.0	9.4	23	15	33	48	82	245	609	163	78	11
7	6.7	8.5	21	14	37	45	105	297	654	161	41	10
8	6.7	10	21	16	34	45	128	403	691	149	29	9.9
9	6.7	10	20	26	32	42	139	514	632	142	26	9.5
10	7.0	10	20	23	38	43	146	597	575	138	24	21
11	7.0	14	24	22	60	63	152	670	544	134	22	28
12	6.1	10	19	23	60	51	165	674	499	117	20	29
13	5.6	13	16	26	50	50	157	650	477	104	20	28
14	5.2	27	16	27	45	47	134	747	401	93	19	23
15	5.5	19	16	27	39	45	112	691	339	88	16	23
16	5.6	24	16	127	37	49	107	711	352	84	16	23
17	5.6	19	25	99	37	53	130	777	358	72	16	21
18	5.9	16	42	137	37	52	134	794	382	63	17	11
19	7.6	16	33	92	37	52	116	773	394	62	15	8.8
20	11	14	36	69	38	62	100	721	388	56	18	8.0
21	12	15	35	52	38	56	98	656	374	50	21	8.7
22	10	15	34	41	37	55	117	657	360	46	20	8.7
23	9.5	14	29	35	37	53	158	666	338	44	19	8.5
24	8.8	14	26	38	38	57	228	625	318	41	19	9.9
25	8.8	15	24	36	37	65	291	587	341	35	17	11
26	8.3	20	23	34	37	69	346	610	346	34	17	9.6
27	7.9	26	25	32	43	66	392	646	331	30	22	7.7
28	7.9	25	27	32	66	65	401	774	304	30	20	8.7
29	7.8	23	20	32	------	60	380	811	279	29	15	11
30	7.8	22	20	32	------	56	325	714	254	28	13	10
31	7.4	------	19	30	------	54	------	819	------	28	13	------
TOTAL	228.5	448.4	750	1,216	1,097	1,654	4,917	18,340	13,554	2,934	762	412.0
MEAN	7.37	14.9	24.2	39.2	39.2	53.4	164	592	452	94.6	24.6	13.7
MAX	12	27	42	137	66	69	401	819	691	216	78	29
MIN	4.9	5.0	16	12	29	42	52	245	254	28	13	7.7
AC-FT	453	889	1,490	2,410	2,180	3,280	9,750	36,380	26,880	5,820	1,510	817

CAL YR 1972 TOTAL 16,733.6 MEAN 45.7 MAX 210 MIN 2.3 AC-FT 33,190
WTR YR 1973 TOTAL 46,312.9 MEAN 127 MAX 819 MIN 4.9 AC-FT 91,860

11208500 MIDDLE FORK KAWEAH RIVER TRIBUTARY NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°29'35", long 118°49'30", in NW¼SW¼ sec.34, T.16 S., R.29 E., Tulare County, Sequoia National Park, at culvert on State Highway 198, 2.7 miles northeast of Hammond.

DRAINAGE AREA.--1.90 sq mi.

PERIOD OF RECORD.--1960-67 (annual maximum only), May 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder, crest-stage gage, and tipping-bucket rain gage. Altitude of gage is 1,740 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 0.90 cfs (652 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 37 cfs Jan. 18 (gage height, 12.56 ft); no flow many days.
Period of record: Maximum discharge, 879 cfs Dec. 6, 1966 (gage height, 30.63 ft), from rating curve extended above 22 cfs on basis of computation of flow through culvert at gage heights 12.50, 14.80, 16.00, 18.41, 22.06 ft and computation of flow through culvert plus road overflow at gage height 30.63 ft; no flow many days in each year.

REMARKS.--Records good. Minor diversion above station for domestic use. Low flow record is affected at times by small releases from Ash Mountain water treatment plant.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.02	.68	1.9	4.8	1.5	.60	.04		0
2			0	.02	.68	2.0	4.5	1.4	.48	.03		0
3			0	.02	.64	1.5	4.1	1.4	.48	.03		0
4			0	.03	.64	3.1	3.8	1.3	.40	.02		0
5			0	.04	.60	2.6	3.5	1.4	.32	.02		0
6			0	.04	.60	3.3	3.3	1.3	.40	.03		0
7			0	.04	.56	3.2	3.1	1.2	.32	.03		0
8			0	.05	.56	2.7	3.0	1.2	.28	.02		0
9			0	.08	.56	2.4	2.9	1.1	.28	.02		0
10			0	.10	2.8	2.3	2.7	1.1	.28	.01		0
11			0	.08	13	4.4	2.6	.94	.32	0		0
12			.01	.08	6.9	3.5	2.6	.94	.28	0		0
13			.01	.10	4.7	3.9	2.5	.94	.22	.01		0
14			.02	.13	4.1	3.9	2.6	.94	.25	.01		0
15			.02	.13	3.3	3.5	2.4	.94	.25	.02		0
16			.02	2.8	2.7	3.1	2.2	.88	.22	.01		0
17			.02	2.9	2.3	3.0	2.2	.88	.22	0		0
18			.02	14	2.0	2.9	2.2	.78	.19	.01		0
19			.02	8.3	1.8	2.7	2.2	.78	.19	.01		.01
20			.02	2.9	1.7	4.0	2.1	.73	.13	.01		.01
21			.02	1.9	1.6	4.5	2.0	.73	.08	0		0
22			.01	1.4	1.5	5.3	1.8	.73	.08	.02		0
23			.02	1.1	1.4	5.0	1.7	.68	.08	0		0
24			.02	1.0	1.4	4.6	1.7	.64	.10	0		0
25			.02	.88	1.3	4.7	1.6	.44	.10	0		0
26			.02	.88	1.2	5.6	1.5	.56	.10	0		0
27			.02	.83	1.5	5.3	1.4	.52	.05	0		0
28			.02	.78	3.1	6.2	1.4	.44	.05	0		0
29			.02	.73	------	5.3	1.4	.44	.04	0		0
30			.03	.73	------	5.1	1.8	.44	.04	0		0
31		------	.02	.68	------	4.7	------	.60	------	0		------
TOTAL	0	0	.38	42.77	63.82	116.2	75.6	27.87	6.83	.35	0	.02
MEAN	0	0	.012	1.38	2.28	3.75	2.52	.90	.23	.011	0	.0007
MAX	0	0	.03	14	13	6.2	4.8	1.5	.60	.04	0	.01
MIN	0	0	0	.02	.56	1.5	1.4	.44	.04	0	0	0
AC-FT	0	0	.8	85	127	230	150	55	14	.7	0	.04
(a)	.7	5.0	3.7	9.4	6.6	6.8	.7	.1	0	0	0	0

CAL YR 1972 TOTAL 11.93 MEAN .033 MAX .32 MIN 0 AC-FT 24
WTR YR 1973 TOTAL 333.84 MEAN .91 MAX 14 MIN 0 AC-FT 662

a Precipitation, in inches.

PEAK DISCHARGE (BASE, 3.0 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1830	11.37	12	2-28	0630	10.96	6.4
1-18	2000	12.56	37	3-6	2000	10.98	6.7
2-10	1400	11.01	7.1	3-11	0600	10.90	5.6
2-11	1230	12.25	30	3-21	2000	11.08	8.1

11208610 MONARCH CREEK NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'09", long 118°35'37", in SE¼NW¼ sec.15, T.17 S., R.31 E., Tulare County, Sequoia National Forest, on right bank 0.2 mile upstream from mouth, 0.3 mile northeast of Mineral King, and 14.9 miles east of Hammond.

DRAINAGE AREA.--1.89 sq mi.

PERIOD OF RECORD.--August 1968 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,200 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 7.81 cfs (5,660 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 75 cfs June 8 (gage height, 2.66 ft); maximum gage height, 3.14 ft Feb. 11 (backwater from ice); minimum daily discharge, 1.2 cfs Oct. 16-19, Sept. 26-30.
Period of record: Maximum discharge, 81 cfs June 1, 1969 (gage height, 2.71 ft); maximum gage height, 4.31 ft Dec. 24, 1971 (backwater from ice and debris); minimum daily discharge, 0.69 cfs Oct. 12-14, 1971.

REMARKS.--Records good except those for the winter period, which are fair. Minor regulation by dams on two small lakes. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.4	2.5	2.2	1.7	2.0	2.2	17	45	27	6.1	2.2
2	1.5	1.3	2.5	2.3	1.6	2.0	2.1	16	44	26	5.9	2.1
3	1.5	1.3	2.5	2.3	1.6	2.0	2.1	21	41	24	6.8	2.2
4	1.5	1.4	2.5	2.3	1.6	2.1	2.1	23	43	23	6.1	2.1
5	1.5	1.7	2.5	2.3	1.5	2.1	2.2	20	46	23	5.9	2.0
6	1.5	1.7	2.4	2.0	1.5	2.0	2.8	17	50	22	5.9	2.0
7	1.7	1.5	2.4	1.9	1.5	2.0	3.7	20	54	20	5.4	1.9
8	2.3	1.6	2.4	1.9	1.5	2.0	4.8	28	59	18	5.2	1.9
9	4.5	1.7	2.3	3.5	1.4	1.9	6.1	38	53	18	5.0	1.8
10	2.6	1.5	2.2	2.8	1.7	1.9	5.4	43	48	18	5.0	1.8
11	2.0	1.6	2.1	2.3	4.5	2.0	5.4	46	45	16	4.8	1.8
12	1.7	1.9	2.0	2.4	2.4	2.0	5.6	46	44	15	4.4	1.7
13	1.5	2.2	1.9	2.2	2.2	2.0	5.9	45	44	14	4.8	1.7
14	1.4	2.4	1.8	2.2	2.1	2.0	5.4	48	38	13	4.4	1.7
15	1.3	3.0	1.8	2.2	2.0	2.0	4.8	45	35	12	4.2	1.6
16	1.2	2.2	1.7	2.4	2.0	2.1	4.4	45	34	12	4.2	1.6
17	1.2	2.0	2.1	3.8	2.0	2.2	4.4	49	36	11	4.0	1.5
18	1.2	1.9	2.0	6.0	2.0	2.1	4.2	51	38	10	3.7	1.5
19	1.2	1.9	2.2	4.5	2.0	2.2	3.8	47	38	10	3.7	1.4
20	1.3	2.0	2.2	2.5	2.0	2.4	3.7	45	38	9.4	3.5	1.4
21	1.7	1.9	2.3	2.2	2.0	2.5	3.5	43	38	8.8	3.4	1.4
22	1.8	1.8	2.3	2.1	2.0	2.5	3.7	41	37	8.4	3.2	1.4
23	1.8	1.8	2.2	2.1	2.0	2.5	4.8	41	36	8.2	3.0	1.3
24	1.8	1.8	2.1	2.0	2.0	2.5	9.4	41	36	7.8	2.9	1.3
25	1.7	2.0	2.0	2.0	2.0	2.5	16	43	36	7.6	2.9	1.3
26	1.6	2.2	2.1	1.9	1.9	2.5	20	43	38	7.4	2.9	1.2
27	1.5	2.3	2.1	1.8	2.0	2.4	24	48	34	7.4	2.8	1.2
28	1.4	2.4	2.1	1.8	2.0	2.5	26	60	34	6.8	2.6	1.2
29	1.3	2.4	2.2	1.8	------	2.4	26	55	33	6.6	2.5	1.2
30	1.6	2.5	2.2	1.7	------	2.4	22	49	31	6.1	2.4	1.2
31	1.6	------	2.2	1.7	------	2.2	------	51	------	5.9	2.4	------
TOTAL	51.9	57.3	67.8	75.1	54.7	67.9	236.5	1,225	1,226	422.4	130.0	48.6
MEAN	1.67	1.91	2.19	2.42	1.95	2.19	7.88	39.5	40.9	13.6	4.19	1.62
MAX	4.5	3.0	2.5	6.0	4.5	2.5	26	60	59	27	6.8	2.2
MIN	1.2	1.3	1.7	1.7	1.4	1.9	2.1	16	31	5.9	2.4	1.2
AC-FT	103	114	134	149	108	135	469	2,430	2,430	838	258	96

CAL YR 1972 TOTAL 1,565.52 MEAN 4.28 MAX 17 MIN .96 AC-FT 3,110
WTR YR 1973 TOTAL 3,663.20 MEAN 10.0 MAX 60 MIN 1.2 AC-FT 7,270

PEAK DISCHARGE (BASE, 10 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-28	2045	2.20	32	5-28	1915	2.65	74
5-17	2000	2.50	57	6-8	1900	2.66	75

11208620 EAST FORK KAWEAH RIVER BELOW MOSQUITO CREEK, NEAR HAMMOND, CALIF.

LOCATION.--Lat 36°27'05", long 118°37'04", in SW¼NW¼ sec.16, T.17 S., R.13 E., Tulare County, Sequoia National Forest, on right bank 300 ft downstream from Mosquito Creek, and 13.2 miles east of Hammond.

DRAINAGE AREA.--16.0 sq mi.

PERIOD OF RECORD.--August 1968 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,280 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 42.1 cfs (30,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 469 cfs June 8 (gage height, 4.13 ft); minimum daily, 2.8 cfs Sept. 30.
Period of record: Maximum discharge, 589 cfs May 31, 1969 (gage height, 4.39 ft); minimum daily, 2.8 cfs Sept. 30, 1973.

REMARKS.--Records good except those from Dec. 5 to Feb. 23, which are fair. Minor regulation by small dams on four headwater lakes. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	5.8	11	9.6	8.2	9.2	12	69	275	129	31	10
2	7.0	5.7	11	9.6	8.3	9.2	12	68	268	114	31	10
3	6.7	5.2	10	8.8	8.4	9.3	11	77	256	105	33	9.8
4	7.2	5.7	13	8.4	8.6	10	11	85	252	101	31	8.8
5	7.0	6.2	15	8.4	8.8	10	13	77	269	100	30	8.4
6	6.8	6.2	12	8.0	9.0	9.8	15	70	278	97	29	7.9
7	7.0	6.5	11	7.7	9.4	9.7	19	78	302	92	28	7.6
8	6.8	6.7	11	7.7	9.6	9.4	24	98	348	86	27	7.3
9	6.6	6.2	12	15	9.8	9.1	27	125	319	83	26	7.0
10	6.4	6.4	11	12	14	9.2	27	157	290	80	24	6.8
11	6.5	7.1	12	10	17	9.9	28	190	261	77	23	6.3
12	6.2	7.2	11	10	13	9.6	29	199	240	72	22	6.0
13	6.0	7.5	9.7	9.6	10	9.7	29	206	235	65	23	5.8
14	5.9	10	9.1	9.6	9.5	9.7	28	240	204	61	23	5.7
15	5.7	14	8.6	9.6	8.6	9.5	26	232	157	58	22	5.5
16	5.9	12	8.2	9.2	8.4	10	25	229	159	55	21	5.2
17	5.8	11	12	13	8.4	11	27	252	167	52	21	5.0
18	5.8	10	11	25	8.2	11	27	275	181	51	20	4.8
19	6.3	9.6	11	20	8.2	12	26	265	193	49	18	4.5
20	7.2	8.6	11	15	8.2	12	25	254	195	46	17	4.4
21	8.2	8.2	11	11	8.2	11	25	232	191	43	16	4.3
22	8.3	7.8	11	10	8.1	14	26	213	183	42	16	4.1
23	8.7	7.5	11	9.6	8.0	13	32	209	171	40	15	4.1
24	8.9	7.4	11	9.0	8.1	13	43	217	163	39	14	3.9
25	8.5	7.9	10	8.8	8.1	14	56	228	177	38	13	3.7
26	8.0	8.8	10	8.4	8.1	14	70	234	188	37	13	3.5
27	7.7	9.8	11	8.2	8.3	14	84	254	179	36	13	3.1
28	7.1	10	11	8.0	9.0	13	96	324	166	34	11	3.0
29	6.7	10	12	8.0	------	13	95	339	165	33	11	2.9
30	6.0	10	11	8.0	------	13	85	296	148	32	10	2.8
31	5.8	------	10	8.0	------	12	------	301	------	31	10	------
TOTAL	213.3	245.0	339.6	323.2	259.5	343.3	1,053	6,093	6,580	1,978	642	172.2
MEAN	6.88	8.17	11.0	10.4	9.27	11.1	35.1	197	219	63.8	20.7	5.74
MAX	8.9	14	15	25	17	14	96	339	348	129	33	10
MIN	5.7	5.2	8.2	7.7	8.0	9.1	11	68	148	31	10	2.8
AC-FT	423	486	674	641	515	681	2,090	12,090	13,050	3,920	1,270	342

CAL YR 1972 TOTAL 7,617.6 MEAN 20.8 MAX 110 MIN 3.6 AC-FT 15,110
WTR YR 1973 TOTAL 18,242.1 MEAN 50.0 MAX 348 MIN 2.8 AC-FT 36,180

PEAK DISCHARGE(BASE, 60 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-28	2015	2.98	110	5-28	2300	4.09	445
5-17	2015	3.83	291	6-8	1915	4.13	469

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.

LOCATION.--Lat 36°27'05", long 118°47'15", in NW¼NW¼ sec.14, T.17 S., R.29 E., Tulare County, on left bank just downstream from diversion dam, and 6.6 miles east of Three Rivers.

DRAINAGE AREA.--85.8 sq mi.

PERIOD OF RECORD.--May 1952 to September 1955, October 1957 to current year. Prior to October 1962, combined only.

GAGE.--Water-stage recorder and Parshall flume on river; water-stage recorder and Parshall flume for conduit diversion. Altitude of gage is 2,500 ft (from topographic map). May 15, 1952, to Sept. 30, 1955, at site 200 ft downstream at different datum.

AVERAGE DISCHARGE (River only).--19 years, 93.8 cfs (67,960 acre-ft per year).
(Combined river and conduit).--19 years, 119 cfs (86,220 acre-ft per year).

EXTREMES (River only).--Current year: Maximum discharge, 1,220 cfs May 28 (gage height, 6.94 ft); minimum daily, 0.50 cfs Oct. 10-12.
Period of record: Maximum discharge, 13,000 cfs Dec. 6, 1966 (gage height, 21 ft, from floodmarks), from rating curve extended as explained below; no flow Jan. 22, Oct. 18-20, 1962.
(Combined flow).--Current year: Maximum discharge, 1,240 cfs May 28; minimum daily, 13 cfs Oct. 14, 17.
Period of record: Maximum discharge, 13,000 cfs Dec. 6, 1966 (gage height, 21 ft, from floodmarks), from rating curve extended above 850 cfs on basis of critical-depth measurement over diversion dam of maximum flow; minimum daily, 3.5 cfs Sept. 28, 29, 1960.

REMARKS.--East Fork Kaweah River No. 1 conduit diverts up to 30 cfs from left bank of river near diversion dam. Flow from this conduit passes through Kaweah River No. 1 powerplant of Southern California Edison Co.; water is returned to Middle Fork Kaweah River in sec.8, T.17 S., R.29 E., 1.9 miles downstream from mouth of East Fork. For records of combined discharge of river and conduit, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by Southern California Edison Co. and reviewed by the Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.80	2.5	19	32	75	75	326	863	336	51	5.5
2	.80	.80	1.7	28	22	67	70	315	851	291	53	5.0
3	.60	1.1	1.8	28	23	62	67	352	826	276	55	4.2
4	.60	5.8	35	24	24	78	70	276	820	262	53	4.4
5	.60	1.5	7.5	23	20	70	78	347	826	253	51	5.1
6	.60	1.3	9.6	28	36	78	100	321	845	244	51	2.2
7	.60	1.1	11	26	39	75	126	342	876	222	45	2.3
8	.60	1.0	16	41	28	70	144	395	906	186	36	2.6
9	.60	1.0	30	89	24	67	165	498	882	213	33	2.3
10	.50	.90	29	27	62	64	202	607	832	176	30	1.9
11	.50	3.5	28	21	165	100	213	647	784	148	26	1.4
12	.50	.80	28	27	104	75	213	659	736	139	23	1.2
13	.70	1.8	26	25	81	72	213	694	718	126	23	1.1
14	.90	36	23	23	72	72	144	814	665	118	25	1.1
15	.90	20	22	20	60	70	126	742	577	111	22	1.2
16	.90	15	26	284	53	70	122	706	577	108	20	1.1
17	.90	7.6	49	182	49	70	135	851	572	104	18	1.0
18	.90	4.0	33	592	47	70	126	882	589	97	16	1.1
19	.90	3.2	28	218	45	75	111	876	595	93	14	1.1
20	1.0	2.1	24	135	43	90	100	851	589	90	13	1.2
21	.90	1.6	20	104	41	75	97	796	566	83	13	1.2
22	.90	1.2	18	75	38	78	108	736	560	78	12	1.1
23	.60	1.2	14	64	36	78	148	700	503	70	10	1.1
24	.60	1.1	12	59	39	83	231	778	455	70	10	1.1
25	.90	1.5	7.8	57	36	100	305	796	471	64	8.7	1.1
26	1.1	5.0	7.7	53	38	118	358	784	493	62	10	1.1
27	1.1	5.8	8.1	47	55	100	401	754	460	59	22	1.1
28	1.1	4.5	9.4	47	98	100	428	943	417	57	12	1.1
29	1.1	3.6	5.7	45	------	86	395	943	401	55	7.7	1.0
30	1.0	3.2	6.9	49	------	78	374	882	368	53	6.6	1.0
31	.80	------	6.4	49	------	75	------	937	------	53	5.9	------
TOTAL	24.70	138.00	547.1	2,509	1,410	2,441	5,445	20,550	19,623	4,297	775.9	57.9
MEAN	.80	4.60	17.6	80.9	50.4	78.7	182	663	654	139	25.0	1.93
MAX	1.1	36	49	592	165	118	428	943	906	336	55	5.5
MIN	.50	.80	1.7	19	20	62	67	276	368	53	5.9	1.0
AC-FT	49	274	1,090	4,980	2,800	4,840	10,800	40,760	38,920	8,520	1,540	115

CAL YR 1972 TOTAL 11,466.20 MEAN 31.3 MAX 206 MIN .30 AC-FT 22,740
WTR YR 1973 TOTAL 57,818.60 MEAN 158 MAX 943 MIN .50 AC-FT 114,700

11208730 EAST FORK KAWEAH RIVER NEAR THREE RIVERS, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF EAST FORK KAWEAH RIVER AND EAST FORK KAWEAH RIVER NO. 1 CONDUIT NEAR THREE RIVERS, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	28	23	44	94	102	350	889	363	77	32
2	16	16	26	28	45	85	97	339	877	317	79	30
3	16	15	26	28	47	82	94	376	852	302	81	29
4	17	27	60	24	49	98	95	300	846	288	79	29
5	16	20	32	23	45	89	102	371	852	279	77	30
6	15	18	34	28	61	96	124	345	871	270	77	27
7	15	18	35	26	64	93	150	367	902	248	71	26
8	15	20	32	41	53	88	168	419	933	212	62	26
9	15	18	30	103	49	84	189	524	909	239	59	25
10	14	18	29	50	86	82	225	634	859	202	56	24
11	14	28	28	44	189	118	236	673	811	174	52	24
12	14	23	28	50	128	92	235	685	763	165	49	24
13	14	23	26	48	105	90	235	720	745	152	49	23
14	13	61	23	46	96	90	166	840	692	144	51	23
15	14	46	22	44	84	88	148	760	602	137	48	24
16	14	41	26	300	77	90	144	732	603	134	46	23
17	13	34	60	185	73	92	156	878	598	130	44	23
18	14	29	57	592	71	92	149	909	615	123	42	22
19	16	27	52	218	69	91	137	902	622	119	40	22
20	21	25	48	135	67	109	126	877	616	116	39	22
21	20	25	44	104	65	97	123	822	593	109	39	22
22	19	24	42	75	63	100	134	762	587	104	38	22
23	19	22	38	64	61	101	174	726	530	96	36	22
24	19	23	36	59	64	107	257	804	482	96	36	23
25	18	24	33	57	61	124	331	822	498	90	35	22
26	17	28	34	53	63	144	382	810	520	88	35	21
27	17	30	34	47	80	128	427	780	487	85	47	20
28	17	28	35	47	123	128	454	968	444	83	38	20
29	17	28	31	45	------	113	421	966	428	81	34	19
30	16	27	31	49	------	105	399	908	395	79	33	19
31	15	------	30	50	------	102	------	963	------	79	32	------
TOTAL	495	782	1,090	2,686	2,082	3,092	6,180	21,332	20,421	5,104	1,581	718
MEAN	16.0	26.1	35.2	86.6	74.4	99.7	206	688	681	165	51.0	23.9
MAX	21	61	60	592	189	144	454	968	933	363	81	32
MIN	13	15	22	23	44	82	94	300	395	79	32	19
AC-FT	982	1,550	2,160	5,330	4,130	6,130	12,260	42,310	40,510	10,120	3,140	1,420

CAL YR 1972 TOTAL 18,770.0 MEAN 51.3 MAX 232 MIN 8.6 AC-FT 37,230
WTR YR 1973 TOTAL 65,563.0 MEAN 180 MAX 968 MIN 13 AC-FT 130,000

11209900 KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°26'38", long 118°54'09", in SW¼SW¼ sec.13, T.17 S., R.28 E., Tulare County, on right bank opposite schoolhouse in Three Rivers, 0.2 mile downstream from North Fork Kaweah River.

DRAINAGE AREA.--418 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 809.62 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 507 cfs (367,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,070 cfs Jan. 18 (gage height, 8.99 ft); minimum daily, 31 cfs Oct. 1.
Period of record: Maximum discharge, 73,000 cfs Dec. 5, 1966 (gage height, 16.69 ft in gage well, 19.0 ft, from floodmarks), from rating curve extended above 13,000 cfs on basis of slope-area measurements at gage heights 13.68 and 16.69 ft; minimum, 14 cfs Sept. 9, 10, 1959, Oct. 16, 1961.
Flood of Dec. 23, 1955, reached a stage of 17.9 ft, from floodmarks.

REMARKS.--Records good. Diversions for 200 acres above station. Power is developed on the Middle and East Fork Kaweah River. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	45	132	118	256	621	633	1,510	3,280	1,080	217	85
2	38	42	130	132	245	513	591	1,510	3,110	915	217	82
3	39	39	124	136	245	474	552	1,800	2,950	820	210	81
4	39	61	289	118	258	673	549	1,920	2,880	790	239	77
5	39	83	206	110	245	546	577	1,660	2,970	805	210	74
6	38	68	170	113	269	591	661	1,320	3,020	780	241	74
7	35	60	184	112	421	625	800	1,500	3,220	761	214	72
8	35	68	172	129	346	555	862	1,950	3,500	717	190	70
9	35	68	141	503	300	504	958	2,480	3,260	677	180	67
10	33	66	146	309	694	479	936	2,980	2,950	657	172	63
11	40	108	137	228	1,900	898	1,080	3,460	2,630	641	160	64
12	35	97	129	236	1,070	657	1,130	3,520	2,420	602	148	62
13	34	91	122	256	811	641	1,080	3,380	2,370	540	139	61
14	32	229	119	243	689	625	966	3,840	2,130	490	141	60
15	32	256	122	234	605	598	820	3,620	1,710	464	136	61
16	33	204	127	1,200	499	584	756	3,580	1,710	446	132	60
17	33	176	189	1,330	461	591	832	3,900	1,750	427	127	59
18	33	139	312	3,180	442	588	844	4,120	1,770	408	122	58
19	35	124	263	1,730	427	540	761	4,080	1,850	384	116	57
20	52	116	274	761	420	734	701	3,740	1,830	362	110	57
21	66	108	247	570	410	689	657	3,340	1,780	340	107	58
22	61	106	236	437	386	748	701	3,200	1,750	318	104	58
23	56	100	214	382	375	661	862	3,180	1,640	302	98	57
24	54	100	192	357	377	685	1,170	3,150	1,520	387	95	58
25	52	104	174	333	366	721	1,540	2,980	1,620	272	94	58
26	49	121	160	329	366	887	1,930	2,980	1,660	258	93	57
27	48	143	160	291	414	785	2,200	3,110	1,620	252	122	54
28	47	146	184	278	917	820	2,280	3,700	1,440	243	114	51
29	46	141	154	276	------	730	2,160	3,960	1,380	234	102	50
30	45	136	150	272	------	677	1,990	3,620	1,290	225	93	48
31	43	------	150	278	------	633	------	3,960	------	219	86	------
TOTAL	1,288	3,345	5,509	14,981	14,214	20,073	31,579	93,050	67,010	15,816	4,529	1,893
MEAN	41.5	112	178	483	508	648	1,053	3,002	2,234	510	146	63.1
MAX	66	256	312	3,180	1,900	898	2,280	4,120	3,500	1,080	241	85
MIN	31	39	119	110	245	474	549	1,320	1,290	219	86	48
AC-FT	2,550	6,630	10,930	29,710	28,190	39,810	62,640	184,600	132,900	31,370	8,980	3,750

CAL YR 1972 TOTAL 77,584 MEAN 212 MAX 780 MIN 23 AC-FT 153,900
WTR YR 1973 TOTAL 273,287 MEAN 749 MAX 4,120 MIN 31 AC-FT 542,100

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1930	7.62	4,050	4-27	2200	6.94	2,740
1-18	1730	8.99	8,070	5-28	2300	7.95	4,950
2-11	1400	7.49	3,780				

11210100 SOUTH FORK KAWEAH RIVER AT THREE RIVERS, CALIF.

LOCATION.--Lat 36°25'00", long 118°54'48", in SW¼SE¼ sec.26, T.17 S., R.28 E., Tulare County, 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.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Datum of gage is 807.22 ft above mean sea level.

AVERAGE DISCHARGE.--15 years, 67.1 cfs (48,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,820 cfs Jan. 18 (gage height, 5.04 ft); minimum daily, 1.0 cfs Oct. 1.
Period of record: Maximum discharge, 11,600 cfs Dec. 6, 1966 (gage height, 9.30 ft in gage well, 10.4 ft, from floodmarks), from rating curve extended above 2,600 cfs on basis of slope-area measurement of maximum flow; no flow at times in 1960-62.
Flood of December 23, 1955, reached a stage of 9.5 ft, from floodmarks (discharge, 10,000 cfs).

REMARKS.--Records good. Several small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	4.0	12	17	42	123	148	182	550	111	11	6.7
2	1.1	4.2	12	16	41	99	135	162	538	94	10	5.9
3	1.8	4.3	12	16	41	90	124	195	508	83	10	4.7
4	2.0	7.0	45	16	41	173	118	222	502	74	10	4.0
5	2.5	9.7	33	15	40	123	117	201	550	72	10	4.4
6	2.0	7.1	25	15	47	156	124	167	556	68	11	4.4
7	1.7	6.4	31	14	77	161	143	177	598	64	12	3.4
8	1.5	6.8	26	16	60	137	149	225	640	58	10	3.2
9	1.7	6.4	20	122	51	120	155	292	568	52	9.5	3.2
10	1.8	5.4	19	64	162	111	160	358	514	48	10	2.9
11	1.8	14	17	44	591	208	171	400	450	44	12	2.6
12	1.8	11	16	41	291	159	178	405	405	42	12	2.6
13	1.5	9.0	15	44	193	153	169	382	382	38	11	2.6
14	1.2	31	15	42	162	145	162	475	342	36	9.5	2.6
15	1.3	40	15	40	133	134	135	425	268	34	9.1	2.6
16	1.6	30	15	200	109	130	123	382	272	32	8.3	2.6
17	1.8	28	19	220	98	129	123	455	282	30	8.3	2.9
18	1.8	20	33	910	90	131	121	508	278	29	7.9	2.9
19	2.4	16	30	400	85	117	113	556	278	28	7.1	2.6
20	3.7	14	31	180	81	199	105	526	264	24	7.1	2.6
21	5.8	13	29	98	77	188	96	440	254	23	6.7	2.6
22	4.9	12	26	72	71	214	92	386	240	21	6.3	2.9
23	4.7	12	24	64	67	173	106	405	219	19	6.7	2.9
24	4.6	11	22	58	65	182	134	475	195	18	6.7	3.4
25	4.6	11	21	56	62	209	164	480	186	18	7.1	3.7
26	4.5	11	19	53	61	257	193	465	180	16	7.9	3.7
27	4.5	13	19	50	73	215	248	470	172	16	8.7	3.4
28	4.4	13	22	46	187	228	275	586	155	13	8.7	3.2
29	4.4	13	19	45	------	193	261	646	142	12	8.3	2.4
30	4.3	13	18	44	------	170	241	598	126	12	7.1	2.4
31	4.2	------	18	45	------	155	------	628	------	12	6.7	------
TOTAL	86.9	396.3	678	3,063	3,098	4,982	4,583	12,274	10,614	1,241	276.7	100.0
MEAN	2.80	13.2	21.9	98.8	111	161	153	396	354	40.0	8.93	3.33
MAX	5.8	40	45	910	591	257	275	646	640	111	12	6.7
MIN	1.0	4.0	12	14	40	90	92	162	126	12	6.3	2.4
AC-FT	172	786	1,340	6,080	6,140	9,880	9,090	24,350	21,050	2,460	549	198

CAL YR 1972 TOTAL 8,380.14 MEAN 22.9 MAX 118 MIN .13 AC-FT 16,620
WTR YR 1973 TOTAL 41,392.90 MEAN 113 MAX 910 MIN 1.0 AC-FT 82,100

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-18	unknown	5.04	1,820	5-28	2315	4.13	828
2-11	1400	4.47	1,150	6-8	2100	4.23	898
5-19	2330	3.88	664				

NOTE.--No gage-height record Jan. 15 to Feb. 2.

11210850 LEMONCOVE DITCH BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'55", long 119°00'22", in SW¼SW¼ sec.25, T.17 S., R.27 E., Tulare County, on left bank 250 ft downstream from outlet tunnel of Terminus Dam, and 2.4 miles northeast of Lemoncove.

PERIOD OF RECORD.--June 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 546.3 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--11 years, 5.03 cfs (3,640 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 8.8 cfs May 5, 1970; no flow many days in 1962, 1969.

REMARKS.--Records excellent. Ditch receives water from Lake Kaweah (see sta 11210900) which is used for irrigation. At times up to 3 cfs is diverted 200 ft upstream into Doffelmyer ditch for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	3.1	1.0	1.1	1.0	1.2	1.3	7.0	8.0	8.0	8.2	8.1
2	8.4	3.8	1.0	1.1	.90	1.2	1.3	7.0	8.0	8.0	8.2	8.1
3	8.4	4.7	1.0	1.1	.90	1.2	1.3	7.0	8.0	8.0	8.2	8.1
4	7.7	2.3	1.0	1.1	1.0	1.2	1.3	7.0	8.0	8.0	8.2	8.1
5	7.2	1.0	1.1	1.1	1.1	1.2	1.3	7.0	8.0	8.0	8.2	8.1
6	7.3	1.0	1.1	1.1	1.1	1.2	1.3	7.0	8.0	7.7	8.2	8.1
7	7.5	1.0	1.1	1.1	1.0	1.1	1.3	7.0	8.2	8.0	8.2	8.1
8	7.5	1.0	1.1	1.1	1.0	1.2	1.3	7.2	8.2	8.0	8.2	8.1
9	7.5	1.0	1.0	1.1	1.1	1.2	1.3	7.1	8.1	8.0	8.2	8.1
10	7.5	1.0	1.0	1.1	1.2	1.2	1.3	7.1	8.1	8.0	8.2	8.1
11	7.5	1.0	1.0	1.1	1.2	1.2	1.1	7.1	8.1	8.0	8.2	8.1
12	7.8	1.0	1.0	1.1	1.2	1.3	1.1	7.1	8.1	8.1	8.2	8.1
13	8.1	1.0	1.0	1.1	1.2	1.4	1.1	7.1	8.1	8.1	8.2	8.1
14	8.1	1.0	1.0	1.1	1.2	1.4	1.1	7.1	8.1	8.1	8.2	8.1
15	8.1	1.0	1.1	1.1	1.2	1.4	1.1	8.1	8.1	8.1	8.2	8.1
16	8.1	1.0	1.1	1.1	1.2	1.5	1.0	8.1	8.1	8.1	8.3	8.1
17	8.1	1.0	1.1	1.1	1.2	1.5	1.0	8.1	8.1	8.1	8.3	8.1
18	7.4	1.0	1.1	1.1	1.2	1.5	1.0	8.1	8.1	8.1	8.3	8.1
19	7.0	1.0	1.1	1.3	1.2	1.6	1.0	8.1	8.1	8.1	8.2	8.0
20	3.0	1.0	1.1	1.3	1.2	1.6	1.0	8.1	8.1	8.1	8.1	8.0
21	1.0	1.0	1.1	1.3	1.2	1.6	1.0	8.1	8.1	8.1	8.1	8.1
22	1.0	1.0	1.1	1.2	1.2	1.6	1.1	8.1	8.1	8.1	8.1	8.1
23	1.0	1.0	1.1	1.2	1.2	1.6	2.5	8.1	8.1	8.1	8.1	8.1
24	1.0	1.0	1.1	1.2	1.2	1.6	4.4	8.1	8.1	8.1	8.1	8.1
25	1.0	1.0	1.1	1.2	1.2	1.6	5.7	8.1	8.1	8.1	8.1	8.1
26	1.0	1.0	1.1	1.2	1.2	1.6	6.0	8.1	8.1	8.1	8.1	8.2
27	1.6	1.0	1.1	1.2	1.2	1.6	6.6	8.1	8.1	8.1	8.1	8.2
28	2.1	1.0	1.1	1.2	1.2	1.6	7.0	8.1	8.1	8.1	8.1	8.2
29	2.1	1.0	1.1	1.2	------	1.6	7.0	8.1	8.0	8.1	8.1	8.2
30	2.1	1.0	1.1	1.2	------	1.5	7.0	8.1	8.0	8.2	8.1	8.2
31	2.8	------	1.1	1.1	------	1.4	------	8.1	------	8.2	8.1	------
TOTAL	167.3	39.9	33.1	35.6	31.90	43.6	71.8	236.5	242.4	249.9	253.3	243.3
MEAN	5.40	1.33	1.07	1.15	1.14	1.41	2.39	7.63	8.08	8.06	8.17	8.11
MAX	8.4	4.7	1.1	1.3	1.2	1.6	7.0	8.1	8.2	8.2	8.3	8.2
MIN	1.0	1.0	1.0	1.1	.90	1.1	1.0	7.0	8.0	7.7	8.1	8.0
AC-FT	332	79	66	71	63	86	142	469	481	496	502	483

CAL YR 1972 TOTAL 1,965.80 MEAN 5.37 MAX 8.6 MIN .70 AC-FT 3,900
WTR YR 1973 TOTAL 1,648.60 MEAN 4.52 MAX 8.4 MIN .90 AC-FT 3,270

11210900 LAKE KAWEAH NEAR LEMONCOVE, CALIF.

LOCATION.--Lat 36°24'53", long 119°00'07", in SE¼SW¼ sec.25, T.17 S., R.27 E., Tulare County, in control tower near left abutment of Terminus Dam on Kaweah River, 2.1 miles northeast of Lemoncove.

DRAINAGE AREA.--560 sq mi.

PERIOD OF RECORD.--October 1961 to current year. Fragmentary prior to March 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to May 22, 1962, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 152,764 acre-ft June 10 (elevation, 695.62 ft); minimum, 7,648 acre-ft Dec. 10 (elevation, 568.65 ft).
Period of record: Maximum contents, 160,200 acre-ft July 3, 4, 1967 (elevation, 699.39 ft), storage increased by a temporary sandbag dam in the ungated spillway; minimum since reservoir first filled, 7,559 acre-ft Oct. 20, 1970 (elevation, 568.38 ft).

REMARKS.--Reservoir is formed by earthfill dam and earthfill auxiliary dam; completed and storage began in February 1962. Usable capacity, 149,433 acre-ft between elevations 520.0 ft (invert of outlet structure) and 694.0 ft (spillway crest). Dead storage, 166 acre-ft. Spillway design flood pool elevation, 745.1 ft (capacity, 266,000 acre-ft). Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

520	166	580	11,996
525	343	600	22,767
530	598	620	39,354
535	954	640	61,695
540	1,464	660	89,818
550	2,937	680	123,423
560	5,093	700	161,476
570	8,105	720	204,327

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9,084	9,990	8,150	8,735	8,219	9,916	23,590	49,869	145,405	145,021	63,889	13,751
2	9,088	10,045	8,132	8,749	8,191	9,412	24,209	50,522	146,193	143,548	60,540	13,540
3	9,084	10,095	8,105	8,832	8,208	8,912	24,736	51,896	146,636	141,947	57,735	13,321
4	9,080	10,214	8,446	8,872	8,274	9,254	24,996	53,554	146,887	140,203	55,236	13,100
5	9,077	10,380	8,327	8,883	8,288	9,069	25,152	54,684	147,350	138,581	52,779	12,872
6	9,077	10,509	7,900	8,879	8,351	9,206	25,308	55,106	148,066	136,928	50,319	12,637
7	9,069	10,613	7,846	8,890	8,767	9,460	25,745	55,790	149,346	135,284	47,796	12,396
8	9,058	10,735	7,859	8,952	8,535	9,280	26,344	57,290	151,060	133,479	45,292	12,144
9	9,047	10,862	7,748	9,935	8,184	8,886	27,060	59,789	152,254	131,445	42,714	11,870
10	9,036	10,990	7,648	10,210	9,970	8,362	27,695	63,393	152,764	129,332	40,275	11,620
11	9,029	11,239	7,655	10,111	15,500	9,536	28,575	67,911	152,705	127,234	38,026	11,386
12	9,029	11,454	7,795	10,002	17,683	9,982	29,712	72,688	152,195	124,970	35,697	11,152
13	9,029	11,629	7,958	9,947	18,023	10,285	30,719	77,170	151,510	122,437	33,368	10,936
14	9,029	12,096	7,958	9,866	17,589	10,505	31,501	82,636	150,690	119,942	31,276	10,719
15	9,025	12,356	7,988	9,754	16,788	10,468	31,892	87,294	149,365	117,396	29,358	10,497
16	9,025	11,926	8,063	11,616	15,756	10,170	32,147	91,399	148,977	114,732	27,403	10,289
17	9,025	11,277	8,215	13,685	14,630	9,769	32,651	96,071	149,093	111,991	25,522	10,056
18	9,033	10,521	8,641	20,504	13,423	9,333	33,143	101,408	149,327	109,247	23,678	9,823
19	9,036	9,823	8,847	23,915	12,114	8,677	33,431	106,469	149,521	106,469	21,776	9,589
20	9,058	9,673	9,011	23,122	10,618	9,796	33,558	111,010	149,327	103,675	19,903	9,355
21	9,132	9,650	8,981	21,700	9,555	10,903	33,549	114,715	148,841	100,865	18,068	9,117
22	9,206	9,460	8,948	19,738	8,749	12,918	33,595	117,978	148,356	98,041	16,377	9,047
23	9,277	9,217	8,926	17,645	8,341	14,155	34,023	121,258	148,027	95,221	15,571	9,073
24	9,363	8,963	8,836	15,597	8,341	15,181	35,116	124,628	147,602	92,123	15,266	9,110
25	9,449	8,713	8,692	13,718	8,386	16,245	36,739	127,343	147,486	88,714	15,035	9,150
26	9,536	8,492	8,706	12,123	8,407	18,130	38,951	129,644	147,544	85,246	14,807	9,187
27	9,620	8,372	8,810	10,509	8,524	19,432	41,713	131,943	147,505	81,696	14,679	9,221
28	9,700	8,299	8,981	8,778	10,021	20,730	44,649	135,395	146,984	78,178	14,592	9,251
29	9,788	8,212	9,003	8,195	------	21,706	47,196	138,769	146,540	74,536	14,381	9,284
30	9,862	8,163	8,934	8,202	------	22,455	49,165	141,188	146,039	71,005	14,170	9,310
31	9,931	------	8,865	8,250	------	23,043	------	144,025	------	67,358	13,959	------
MAX	9,931	12,356	9,011	23,915	18,023	23,043	49,165	144,025	152,764	145,021	63,889	13,751
MIN	9,025	8,163	7,648	8,195	8,184	8,362	23,590	49,869	145,405	67,358	13,959	9,047
(a)	574.99	570.17	572.15	570.42	575.22	600.42	629.37	691.11	692.16	644.42	584.31	573.36
(b)	+854	-1,768	+702	-615	+1,771	+13,022	+26,122	+94,860	+2,014	-78,681	-53,399	-4,649
(c)	152	60	30	42	49	63	302	935	1,492	1,501	673	277

CAL YR 1972 b +802
WTR YR 1973 b +233

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11210930 FOOTHILL DITCH BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'48", long 119°00'47", in NW¼NE¼ sec.35, T.17 S., R.27 E., Tulare County, on left bank 0.7 mile downstream from Terminus Dam, and 2.1 miles northeast of Lemoncove.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 492.8 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--12 years, 18.3 cfs (13,260 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 50 cfs Feb. 10, 1962; minimum daily, 1.0 cfs Feb. 1-2, 1962.

REMARKS.--Records good. Ditch receives water from Lake Kaweah (see sta 11210900) which is used for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	17	3.6	25	29	28	35	40	37	39	32
2	16	15	17	3.5	25	29	27	35	40	37	38	32
3	16	14	17	3.4	24	29	27	35	40	37	38	32
4	16	13	18	3.3	24	29	28	35	40	37	38	32
5	16	14	9.1	3.3	25	29	30	35	40	37	38	33
6	16	14	5.0	3.3	26	29	30	35	40	39	38	33
7	16	14	4.5	3.3	26	29	29	35	40	39	38	33
8	16	14	4.1	3.3	27	29	29	35	40	38	37	33
9	16	14	4.1	3.4	27	29	30	36	40	38	37	33
10	16	12	4.1	3.5	24	29	30	35	40	39	37	33
11	16	11	4.0	3.6	21	28	30	36	40	39	36	33
12	16	12	3.8	3.8	24	28	29	36	40	39	36	33
13	16	12	3.6	3.8	29	28	30	36	40	38	37	33
14	16	12	3.7	3.8	30	28	30	36	40	38	36	34
15	16	16	3.5	3.8	30	29	29	36	39	38	36	36
16	16	20	3.4	3.8	29	30	29	37	38	38	36	36
17	16	21	3.4	4.1	29	30	29	37	38	38	36	36
18	16	20	3.5	4.0	30	30	29	37	38	38	36	35
19	16	20	3.6	3.3	30	30	30	37	38	38	36	35
20	16	18	3.6	3.8	30	29	30	37	38	38	36	35
21	16	17	3.7	3.9	29	28	30	37	38	38	36	35
22	16	18	3.9	4.0	28	26	30	37	38	38	35	32
23	16	18	3.9	4.0	27	26	30	37	38	38	35	29
24	15	18	3.8	4.0	26	27	32	37	37	38	35	29
25	15	18	3.8	4.0	26	27	34	38	38	38	34	29
26	14	18	3.6	4.0	26	26	34	38	37	39	34	29
27	14	18	3.4	4.0	26	26	34	38	37	39	33	29
28	14	18	3.4	4.0	27	27	34	38	37	39	33	29
29	13	18	3.5	14	------	27	35	39	37	39	33	28
30	13	18	3.6	25	------	27	37	40	37	39	33	28
31	13	------	3.6	25	------	27	------	40	------	39	32	------
TOTAL	478	479	176.2	167.6	750	874	913	1,135	1,163	1,184	1,112	969
MEAN	15.4	16.0	5.68	5.41	26.8	28.2	30.4	36.6	38.8	38.2	35.9	32.3
MAX	16	21	18	25	30	30	37	40	40	39	39	36
MIN	13	11	3.4	3.3	21	26	27	35	37	37	32	28
AC-FT	948	950	349	332	1,490	1,730	1,810	2,250	2,310	2,350	2,210	1,920

CAL YR 1972 TOTAL 5,090.6 MEAN 13.9 MAX 23 MIN 3.0 AC-FT 10,100
WTR YR 1973 TOTAL 9,400.8 MEAN 25.8 MAX 40 MIN 3.3 AC-FT 18,650

11210950 KAWEAH RIVER BELOW TERMINUS DAM, CALIF.

LOCATION.--Lat 36°24'51", long 119°00'42", in SE¼SE¼ sec.26, T.17 S., R.27 E., Tulare County, on left bank 0.6 mile downstream from Terminus Dam, and 2.2 miles northeast of Lemoncove.

DRAINAGE AREA.--561 sq mi.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 495.90 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion).--12 years, 666 cfs (482,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,100 cfs June 6 (gage height, 7.07 ft); no flow Oct. 26-31; Nov. 3, 4, 8-14.
Period of record: Maximum discharge, 5,610 cfs June 3, 1969 (gage height, 8.77 ft); no flow at times in most years.

REMARKS.--Records excellent. Flow regulated by Lake Kaweah (see sta 11210900). Lemoncove ditch (see sta 11210850) diverts water from Lake Kaweah for irrigation. Foothill ditch (see sta 11210930) diverts water from the gage pool for irrigation. Doffelmyer ditch diverts up to 3 cfs above the station for irrigation. At times some of this water is returned to the river above the station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1967(M). WRD Calif. 1971: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	.20	119	185	291	788	543	1,220	2,880	1,620	1,910	149
2	8.4	1.2	117	138	277	837	457	1,180	2,970	1,680	1,850	149
3	11	0	117	105	256	766	430	1,150	3,020	1,680	1,610	149
4	12	0	139	106	249	757	545	1,160	3,020	1,660	1,440	148
5	13	1.4	274	106	258	761	614	1,170	3,050	1,650	1,430	147
6	14	.80	347	106	254	768	684	1,190	2,970	1,620	1,440	146
7	14	.20	248	106	312	804	720	1,200	2,900	1,600	1,440	144
8	13	0	189	107	462	820	725	1,200	2,920	1,590	1,420	145
9	13	0	194	160	472	816	765	1,320	2,980	1,670	1,420	144
10	12	0	193	258	212	815	798	1,360	2,990	1,710	1,360	140
11	9.9	0	147	305	132	713	802	1,300	2,910	1,680	1,270	128
12	6.9	0	89	305	418	699	757	1,290	2,870	1,720	1,270	124
13	6.9	0	68	305	919	703	760	1,290	2,860	1,760	1,240	117
14	6.6	0	109	305	1,120	707	775	1,290	2,720	1,740	1,160	113
15	7.3	134	112	304	1,170	776	771	1,450	2,440	1,720	1,070	110
16	7.1	394	95	306	1,140	859	753	1,620	1,980	1,750	1,030	109
17	6.7	476	95	677	1,110	893	707	1,670	1,770	1,770	1,020	109
18	6.7	468	151	756	1,110	903	723	1,670	1,760	1,760	1,020	108
19	10	412	196	749	1,110	915	736	1,680	1,840	1,750	1,040	108
20	20	195	219	1,350	1,150	760	725	1,690	2,030	1,730	1,030	108
21	20	100	271	1,380	950	578	738	1,680	2,110	1,700	1,020	108
22	13	162	264	1,480	772	315	743	1,680	2,040	1,680	935	57
23	12	191	241	1,460	598	341	728	1,680	1,870	1,660	506	11
24	6.2	187	241	1,400	433	422	734	1,710	1,780	1,800	217	9.9
25	.70	187	240	1,290	399	478	780	1,840	1,680	1,920	178	7.4
26	0	188	169	1,140	399	364	853	2,060	1,630	1,950	173	7.9
27	0	175	120	1,070	414	402	901	2,140	1,680	1,970	156	6.7
28	0	163	121	1,050	529	505	914	2,230	1,710	1,970	143	5.7
29	0	161	158	570	------	505	913	2,580	1,630	1,970	155	4.2
30	0	141	186	285	------	512	1,100	2,680	1,540	1,970	160	2.8
31	0	------	186	288	------	522	------	2,750	------	1,970	153	------
TOTAL	253.80	3,737.80	5,415	18,152	16,916	20,804	22,194	50,130	70,550	54,420	30,266	2,815.6
MEAN	8.19	125	175	586	604	671	740	1,617	2,352	1,755	976	93.9
MAX	20	476	347	1,480	1,170	915	1,100	2,750	3,050	1,970	1,910	149
MIN	0	0	68	105	132	315	430	1,150	1,540	1,590	143	2.8
AC-FT	503	7,410	10,740	36,000	33,550	41,260	44,020	99,430	139,900	107,900	60,030	5,580
MEAN a	45.4	113	193	583	665	913	1,217	3,219	2,457	546	163	60.7
AC-FT a	2,790	6,730	11,890	35,830	36,920	56,160	72,390	197,900	146,200	33,570	10,020	3,610

CAL YR 1972 TOTAL 75,649.70 MEAN 207 MAX 882 MIN 0 AC-FT 150,100 MEAN a 232 AC-FT a 168,600
WTR YR 1973 TOTAL 295,654.20 MEAN 810 MAX 3,050 MIN 0 AC-FT 586,400 MEAN a 848 AC-FT a 614,000

a Adjusted for diversion to Lemoncove ditch, Foothill ditch, and change in contents and evaporation in Lake Kaweah.

11211300 DRY CREEK NEAR LEMONCOVE, CALIF.

LOCATION.--Lat 36°26'51", long 119°01'38", in NE¼SE¼ sec.15, T.17 S., R.27 E., Tulare County, on right bank 0.5 mile downstream from Bequette Canyon, 2.9 miles upstream from mouth, and 4.4 miles north of Lemoncove.

DRAINAGE AREA.--75.6 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (from topographic map). Prior to Mar. 8, 1969, 1.6 miles downstream at different datum.

AVERAGE DISCHARGE.--14 years, 20.6 cfs (14,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,350 cfs Jan. 18 (gage height, 6.62 ft); no flow for several months. Period of record: Maximum discharge, 14,500 cfs Dec. 6, 1966 (gage height, 7.30 ft in gage well, 8.94 ft, from floodmarks, site and datum then in use); no flow for several months in each year. Flood of Dec. 23, 1955, reached a discharge of 6,070 cfs from slope-area measurement. Flood of 1867 is believed to have exceeded that of December 1955, from information by local residents.

REMARKS.--Records good. Small diversions above station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.04	3.0	18	91	113	34	11	.65		
2		0	.07	2.5	18	70	110	32	12	.90		
3		0	.10	2.5	17	67	97	31	11	.90		
4		0	6.4	3.0	17	121	92	30	9.5	.90		
5		0	12	2.8	17	89	89	30	8.6	.75		
6		0	5.6	2.8	18	102	86	29	7.8	.75		
7		0	7.9	2.5	35	114	82	27	6.2	.75		
8		0	9.7	3.0	31	95	78	27	5.4	.65		
9		0	7.0	44	24	85	74	26	5.1	.45		
10		0	4.3	39	201	78	71	26	4.4	.35		
11		0	3.4	18	628	243	67	25	3.8	.30		
12		0	2.5	12	355	170	65	24	3.5	.25		
13		0	2.0	9.5	214	146	63	23	3.5	.20		
14		0	1.4	8.2	171	142	64	24	3.5	.15		
15		2.6	1.2	7.0	140	118	60	23	3.5	.10		
16		5.8	1.2	119	108	103	60	21	3.5	.10		
17		8.3	2.0	256	94	97	57	20	3.5	.07		
18		2.5	7.0	817	84	91	53	20	3.5	.07		
19		.55	7.9	488	75	86	51	18	3.0	.02		
20		.15	7.0	145	68	199	48	17	2.8	0		
21		.07	6.6	85	63	187	45	16	2.3	0		
22		.04	5.6	57	58	228	43	15	1.9	0		
23		.02	4.8	44	53	172	43	14	1.7	0		
24		.02	4.3	38	50	154	39	14	1.5	0		
25		0	3.4	34	46	146	38	14	1.4	0		
26		0	3.0	33	45	192	37	14	1.4	0		
27		0	3.4	29	52	156	36	13	1.0	0		
28		.02	4.3	26	163	166	35	12	.90	0		
29		.02	5.6	25	------	142	34	12	.75	0		
30		.04	4.8	23	------	129	40	10	.65	0		
31		------	3.4	22	------	121	------	11	------	0		------
TOTAL	0	20.13	137.91	2,400.8	2,863	4,100	1,870	652	128.60	8.31	0	0
MEAN	0	.67	4.45	77.4	102	132	62.3	21.0	4.29	.27	0	0
MAX	0	8.3	12	817	628	243	113	34	12	.90	0	0
MIN	0	0	.04	2.5	17	67	34	10	.65	0	0	0
AC-FT	0	40	274	4,760	5,680	8,130	3,710	1,290	255	16	0	0

CAL YR 1972 TOTAL 683.49 MEAN 1.87 MAX 35 MIN 0 AC-FT 1,360
WTR YR 1973 TOTAL 12,180.75 MEAN 33.4 MAX 817 MIN 0 AC-FT 24,160

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1130	2.73	82	3-4	0800	3.15	150
1-16	2130	4.40	600	3-7	0200	3.15	150
1-18	1900	6.62	2,350	3-11	0930	4.20	480
2-10	1600	4.25	510	3-14	0030	3.30	180
2-11	1500	5.64	1,560	3-20	0900	3.78	304
2-28	1200	3.63	262	3-22	0300	3.71	283

11211790 COTTONWOOD CREEK NEAR ELDERWOOD, CALIF.

LOCATION.--Lat 36°31'47", long 119°07'33", in SE¼SE¼ sec.15, T.16 S., R.26 E., Tulare County, on left bank 25 ft upstream from State Highway 65 bridge, 4.0 miles north of Elderwood, and 8.0 miles north of Woodlake.

DRAINAGE AREA.--60.4 sq mi.

PERIOD OF RECORD.--February 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 575 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 1,420 cfs Jan. 18 (gage height, 5.29 ft); no flow for several months.
Period of record: Maximum discharge, 1,420 cfs Jan. 18, 1973 (gage height, 5.29 ft); no flow for several months in each year.
Flood of February 24, 1969, reached a stage of 10.4 ft, from floodmarks.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.36	7.4	42	75	17	4.1	0	0	0
2			0	1.2	7.4	32	69	16	4.5	.59	0	0
3			0	1.4	6.3	31	63	16	3.7	.82	0	0
4			0	1.4	6.3	59	58	15	4.1	.48	0	0
5			0	1.4	6.3	37	54	15	3.4	.20	0	0
6			0	1.4	8.6	59	49	15	3.4	.20	.07	.19
7			0	2.0	13	70	49	13	2.7	.40	.40	.40
8			0	3.1	9.2	49	43	13	1.1	.40	.60	.03
9			0	29	8.0	40	40	14	1.3	.40	.60	0
10			0	20	97	37	40	13	1.1	.40	.88	0
11			0	10	351	215	36	13	1.1	.40	0	0
12			0	6.8	236	109	36	12	1.5	.40	0	0
13			0	5.0	158	93	33	13	.20	.08	0	0
14			0	4.6	149	84	33	11	.20	0	0	0
15			0	3.5	126	69	33	11	.20	0	0	0
16			0	91	82	60	29	11	.20	0	0	0
17			0	136	65	56	29	11	.20	0	0	0
18			0	499	51	51	26	9.2	.40	0	.02	0
19			0	246	43	48	24	9.2	.40	0	.11	0
20			0	80	38	232	24	6.8	.20	.02	.01	0
21			0	43	36	159	22	6.8	.20	.25	.20	0
22			0	31	31	204	20	7.4	.20	0	.20	0
23			0	21	27	130	21	6.8	.20	0	.40	0
24			0	16	27	107	22	6.3	.20	0	.28	0
25			0	16	24	114	20	5.8	.20	0	0	0
26			0	15	25	215	18	6.3	.10	0	0	0
27			0	12	28	132	18	5.8	0	0	0	0
28			0	11	94	130	18	4.9	0	0	0	0
29			0	10	------	105	17	4.5	0	0	0	0
30			0	9.2	------	93	19	4.5	0	0	0	0
31		------		.02	8.0	------	82	------	4.5	------	0	0	------
TOTAL	0	0		.02	1,335.36	1,760.5	2,944	1,038	317.8	35.10	5.04	3.77	.62
MEAN	0	0		.0006	43.1	62.9	95.0	34.6	10.3	1.17	.16	.12	.021
MAX	0	0		.02	499	351	232	75	17	4.5	.82	.88	.40
MIN	0	0		0	.36	6.3	31	17	4.5	0	0	0	0
AC-FT	0	0		.04	2,650	3,490	5,840	2,060	630	70	10.0	7.5	1.2

CAL YR 1972 TOTAL 301.95 MEAN .83 MAX 10 MIN 0 AC-FT 599
WTR YR 1973 TOTAL 7,440.21 MEAN 20.4 MAX 499 MIN 0 AC-FT 14,760

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1200	2.38	46	3-4	0730	2.85	93
1-16	2100	3.97	515	3-6	2300	3.00	133
1-18	2200	5.29	1,420	3-11	0800	3.70	380
2-10	1600	3.43	276	3-20	0830	4.07	555
2-11	1500	4.56	852	3-22	0530	3.42	272
2-14	1700	3.31	234	3-26	0800	3.47	290
2-28	0900	3.12	169				

11212000 SAND CREEK NEAR ORANGE COVE, CALIF.

LOCATION.--Lat 36°37'36", long 119°14'48", in SW¼NW¼ sec.15, T.15 S., R.25 E., Tulare County, on right bank 3.8 miles east of Orange Cove.

DRAINAGE AREA.--31.6 sq mi.

PERIOD OF RECORD.--October 1944 to September 1954, annual maximum, water years 1956, 1967, 1969, February 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft (from topographic map).

AVERAGE DISCHARGE.--12 years (1944-54, 1971-73), 2.08 cfs (1,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 680 cfs Jan. 18 (gage height, 4.60 ft), from rating curve extended as explained below; no flow for several months.
Period of record: Maximum discharge, 680 cfs Jan. 18, 1973 (gage height, 4.60 ft), from rating curve extended above 56 cfs on basis of slope-area measurements at gage heights 4.00, 4.80, 8.75 ft; no flow for several months in each year.
Maximum discharge since 1944, 3,520 cfs Jan. 25, 1969 (gage height, 8.75 ft, from floodmarks).
Flood of Feb. 25, 1969, reached stage of 8.35 ft, from floodmarks (discharge, 2,900 cfs).

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	3.7	14	22	6.4	1.4			
2				0	3.7	11	20	5.9	1.9			
3				0	3.6	11	19	5.9	1.8			
4				0	3.7	17	17	5.7	1.8			
5				0	3.6	12	16	3.7	1.7			
6				0	4.4	19	15	4.4	1.7			
7				0	5.7	23	14	5.3	1.6			
8				0	4.6	17	14	5.0	1.4			
9				11	4.0	15	13	5.0	1.4			
10				7.2	18	13	13	4.6	1.3			
11				2.8	129	31	12	4.2	1.3			
12				2.1	87	19	12	3.7	1.3			
13				1.8	41	18	12	3.4	1.4			
14				1.6	62	17	12	4.0	1.5			
15				1.6	57	14	11	3.9	1.7			
16				46	26	13	11	3.1	1.6			
17				50	19	13	10	2.8	1.4			
18				152	16	12	10	2.7	1.4			
19				115	14	12	8.4	2.5	1.2			
20				27	12	109	7.7	2.4	.88			
21				14	12	62	7.7	2.4	.57			
22				9.6	10	68	7.4	2.1	.38			
23				6.7	9.6	39	7.4	2.0	.24			
24				5.9	9.2	30	7.4	2.0	.13			
25				5.3	8.8	33	7.0	2.0	.05			
26				5.0	9.2	92	6.7	1.9	0			
27				4.4	12	52	6.7	1.8	0			
28				4.4	43	44	6.4	1.7	0			
29				4.2	------	34	6.4	1.5	0			
30				4.2	------	27	7.7	1.4	0			
31		------		4.0	------	25	------	1.3	------			------
TOTAL	0	0	0	485.8	631.8	916	339.9	104.7	31.05	0	0	0
MEAN	0	0	0	15.7	22.6	29.5	11.3	3.38	1.04	0	0	0
MAX	0	0	0	152	129	109	22	6.4	1.9	0	0	0
MIN	0	0	0	0	3.6	11	6.4	1.3	0	0	0	0
AC-FT	0	0	0	964	1,250	1,820	674	208	62	0	0	0

CAL YR 1972 TOTAL 104.73 MEAN .29 MAX 5.6 MIN 0 AC-FT 208
WTR YR 1973 TOTAL 2,509.25 MEAN 6.87 MAX 152 MIN 0 AC-FT 4,980

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	0900	2.93	23	2-28	0500	3.37	154
1-16	1900	3.70	273	3-6	2100	2.95	48
1-18	1900	4.60	680	3-11	0700	2.98	52
2-10	1600	2.93	40	3-20	0730	3.65	265
2-11	1500	3.74	303	3-21	2400	3.17	100
2-12	1100	3.35	148	3-26	0730	3.32	140
2-14	2030	3.44	181				

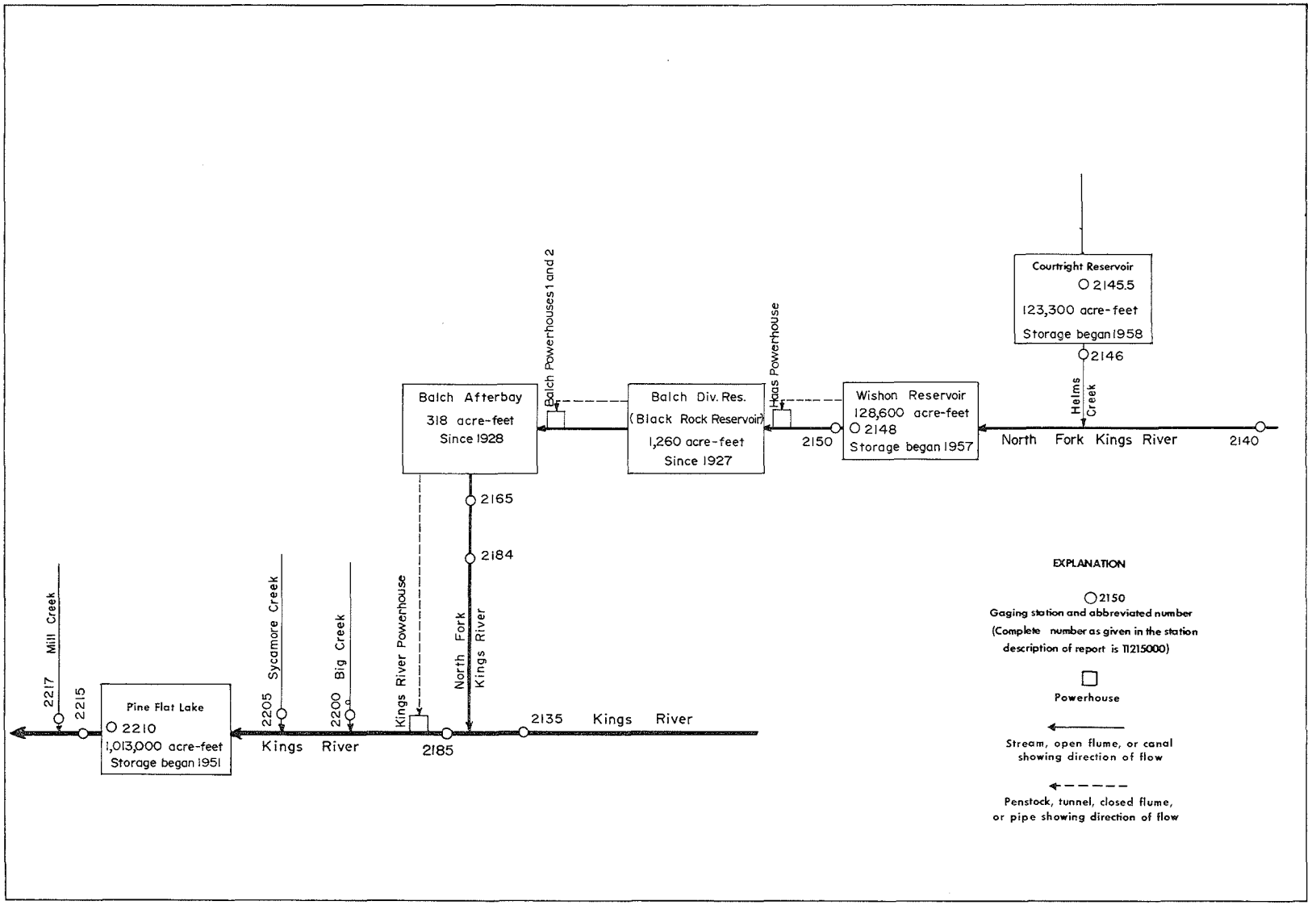

FIGURE 5.--Schematic diagram showing diversions and storage in Kings River basin.

11213500 KINGS RIVER ABOVE NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°51'48", long 119°07'24", in NW¼NE¼ sec.27, T.12 S., R.26 E., Fresno County, on right bank at Rogers Crossing, 0.9 mile upstream from North Fork, 2.9 miles south of Balch Camp, and 9.6 miles southeast of Trimmer.

DRAINAGE AREA.--952 sq mi.

PERIOD OF RECORD.--October 1926 to December 1928, October 1931 to current year. Monthly figures only for some periods, published in WSP 1315-A. Prior to September 1965, published as Kings River above North Fork.

GAGE.--Water-stage recorder. Datum of gage is 1,001.5 ft above mean sea level (river-profile survey). March 1927 to December 1928, at site 0.5 mile downstream at different datum. October 1931 to September 1965, on left bank at datum 2.00 ft higher.

AVERAGE DISCHARGE.--44 years, 1,429 cfs (1,035,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs May 29 (gage height, 9.37 ft); minimum daily, 172 cfs Oct. 1.
Period of record: Maximum discharge, 59,100 cfs Dec. 23, 1955 (gage height, 18.26 ft, present datum), from rating curve extended above 19,000 cfs on basis of slope-area measurement of maximum flow; minimum daily, 70 cfs Jan. 14, 1963.

REMARKS.--Records good. No diversion or regulation above station. See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1395: 1938(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	175	347	299	499	932	908	3,520	7,620	4,510	980	326
2	208	185	340	305	486	854	854	3,500	6,980	3,700	1,010	319
3	228	180	330	312	490	806	830	3,990	7,150	3,360	1,040	308
4	235	202	494	293	522	890	818	4,170	7,590	3,120	1,200	302
5	266	222	386	254	499	812	854	3,600	8,340	3,170	1,100	290
6	287	200	386	245	553	860	974	2,990	8,340	3,190	1,250	281
7	290	198	418	248	686	830	1,220	3,260	8,910	3,080	1,110	272
8	281	220	430	281	630	800	1,460	4,270	9,540	2,990	974	263
9	269	208	386	562	585	758	1,610	5,650	9,900	2,850	914	254
10	260	202	378	438	900	740	1,600	6,780	8,760	2,770	854	248
11	248	245	368	422	1,570	1,080	1,600	7,770	8,160	2,720	782	242
12	240	242	347	458	1,240	914	1,760	8,460	7,440	2,720	704	238
13	230	238	354	458	1,100	914	1,780	7,980	7,090	2,480	665	232
14	225	455	326	426	1,010	872	1,630	8,700	6,450	2,200	686	230
15	220	442	336	406	890	848	1,420	8,460	5,070	2,050	710	228
16	215	454	350	1,440	824	842	1,330	8,580	4,710	1,930	680	225
17	212	430	434	1,320	782	842	1,460	9,360	5,020	1,800	655	222
18	210	396	512	2,620	740	830	1,560	10,000	5,020	1,660	615	225
19	208	375	504	1,670	722	806	1,460	9,480	5,460	1,610	576	220
20	225	350	530	962	704	950	1,330	8,880	5,650	1,520	544	220
21	251	326	490	950	686	878	1,260	8,070	5,460	1,420	526	218
22	254	330	470	830	665	890	1,360	7,800	5,390	1,330	499	218
23	257	316	458	740	640	872	1,760	7,650	5,050	1,250	470	215
24	254	305	422	698	645	902	2,370	7,860	4,630	1,170	446	215
25	235	308	392	645	635	956	3,100	7,150	5,050	1,160	418	222
26	225	336	375	605	620	1,110	3,860	7,060	5,590	1,130	403	220
27	212	364	368	558	698	1,070	4,560	7,470	5,930	1,120	430	215
28	208	368	382	544	1,140	1,110	4,890	9,480	5,490	1,080	410	212
29	200	364	344	535	------	1,020	4,610	10,600	5,330	1,040	378	208
30	192	350	322	530	------	962	4,290	9,450	5,000	1,030	354	208
31	175	------	333	526	------	914	------	9,420	------	980	340	------
TOTAL	7,192	8,986	12,312	20,580	21,161	27,864	58,518	221,410	196,120	66,140	21,723	7,296
MEAN	232	300	397	664	756	899	1,951	7,142	6,537	2,134	701	243
MAX	290	455	530	2,620	1,570	1,110	4,890	10,600	9,900	4,510	1,250	326
MIN	172	175	322	245	486	740	818	2,990	4,630	980	340	208
AC-FT	14,270	17,820	24,420	40,820	41,970	55,270	116,100	439,200	389,000	131,200	43,090	14,470

CAL YR 1972 TOTAL 283,666 MEAN 775 MAX 3,640 MIN 134 AC-FT 562,700
WTR YR 1973 TOTAL 669,302 MEAN 1,834 MAX 10,600 MIN 172 AC-FT 1,328,000

PEAK DISCHARGE (BASE, 6,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-18	0630	8.98	10,800	6-9	0200	9.32	11,800
5-29	0200	9.37	12,000	6-27	0430	7.60	6,700

11214000 NORTH FORK KINGS RIVER BELOW MEADOW BROOK, CALIF.

LOCATION.--Lat 37°04'53", long 118°51'43", in NE¼NE¼ sec.12, T.10 S., R.28 E., Fresno County, Sierra National Forest, 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 Courtright Dam, and 23 miles southeast of town of Huntington Lake.

DRAINAGE AREA.--37.7 sq mi.

PERIOD OF RECORD.--October 1921 to September 1935, October 1956 to current year. Monthly discharge only for some periods and yearly estimates for some incomplete years, published in WSP 1315-A. Records for Jan. 1-23, 1922, and Dec. 1-21, 1934, published in WSP 551 and 766, respectively, have been found to be unreliable and should not be used.

GAGE.--Water-stage recorder. Datum of gage is 8,144.66 ft above mean sea level, unadjusted (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--31 years, 71.9 cfs (52,090 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,300 cfs June 8 (gage height, 5.11 ft); minimum daily, 2.0 cfs Sept. 27-30.
Period of record: Maximum discharge, 2,040 cfs June 2, 1969 (gage height, 5.65 ft), from rating curve extended above 800 cfs; minimum recorded, 0.3 cfs Sept. 12-14, 1924.
Flood of Dec. 23, 1955, reached a stage of 5.85 ft, from floodmarks (discharge, 2,000 cfs).

REMARKS.--No regulation or diversion above station. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1315-A: 1922(M). WSP 1515: Drainage area. See also PERIOD OF RECORD.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	7.0	20	16	16	19	19	185	550	201	39	6.3
2	4.6	6.2	19	14	15	17	17	204	490	162	30	5.6
3	4.3	5.9	17	13	15	17	16	228	479	143	34	5.3
4	6.9	5.3	16	12	16	18	16	214	538	134	44	4.8
5	9.6	8.1	16	12	17	18	19	166	616	133	64	4.3
6	7.4	10	15	11	17	17	33	157	671	127	77	4.0
7	6.8	9.9	15	11	19	16	47	218	691	117	57	3.7
8	6.7	9.0	15	12	20	16	56	300	770	110	38	3.5
9	6.3	10	12	17	19	15	64	396	738	99	28	3.3
10	6.1	10	14	22	19	15	49	479	621	92	23	3.1
11	5.8	9.5	13	21	26	17	52	557	579	88	19	2.9
12	5.2	12	12	17	30	18	61	557	585	83	16	2.9
13	4.6	14	12	16	30	18	54	526	527	73	14	2.8
14	4.3	17	12	15	28	18	43	512	405	63	13	2.7
15	4.0	29	14	14	24	17	38	559	325	57	17	2.5
16	3.9	40	16	14	20	18	34	604	348	52	14	2.5
17	3.7	35	18	16	18	18	40	684	369	47	13	2.5
18	3.8	26	19	23	16	17	44	718	374	43	11	2.3
19	4.4	22	19	29	16	18	45	603	403	37	10	2.3
20	8.4	19	19	40	16	17	45	551	412	33	9.3	2.3
21	11	18	20	41	17	18	47	501	392	30	8.7	2.2
22	12	17	20	36	16	18	71	525	373	27	8.1	2.2
23	11	17	18	25	15	18	113	539	326	26	7.1	2.2
24	9.8	17	16	21	15	18	156	502	286	23	6.3	2.2
25	8.6	18	15	19	15	21	182	462	318	22	5.6	2.2
26	8.1	23	15	19	16	22	214	476	344	20	5.5	2.2
27	7.9	26	16	18	16	21	239	606	350	21	11	2.0
28	7.3	24	15	17	17	20	245	819	293	22	9.4	2.0
29	5.9	21	16	17	------	19	224	782	258	25	7.6	2.0
30	5.3	20	15	17	------	19	200	620	236	27	6.7	2.0
31	6.7	------	16	17	------	19	------	691	------	28	7.8	------
TOTAL	204.6	505.9	495	592	524	557	2,483	14,941	13,667	2,165	654.1	90.8
MEAN	6.60	16.9	16.0	19.1	18.7	18.0	82.8	482	456	69.8	21.1	3.03
MAX	12	40	20	41	30	22	245	819	770	201	77	6.3
MIN	3.7	5.3	12	11	15	15	16	157	236	20	5.5	2.0
AC-FT	406	1,000	982	1,170	1,040	1,100	4,930	29,640	27,110	4,290	1,300	180

CAL YR 1972 TOTAL 22,417.7 MEAN 61.3 MAX 651 MIN 1.4 AC-FT 44,470
WTR YR 1973 TOTAL 36,879.4 MEAN 101 MAX 819 MIN 2.0 AC-FT 73,150

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-11	1845	4.51	724	6-8	2030	5.11	1,300
5-17	2045	4.79	961	6-19	2100	4.24	539
5-28	2015	5.08	1,260	6-26	2245	4.06	436

RESERVOIRS IN TULARE LAKE BASIN, CALIF.

11214550 COURTRIGHT RESERVOIR.--Lat 37°04'40", long 118°58'05", in NW¼ sec.7, T.10 S., R.28 E., Fresno County, Sierra National Forest, at left end of dam on Helms Creek 2.5 miles upstream from mouth, 4.6 miles east of Nelson Mountain, and 9.7 miles west of Blackcap Mountain. Drainage area, 39.7 sq mi. Period of record, October 1958 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 117,800 acre-ft July 6, 8 (elevation, 8,180.56 ft); minimum, 50,100 acre-ft Oct. 29-31 (elevation, 8,124.56 ft). Extremes for period of record: Maximum contents, 124,200 acre-ft July 13, 1967 (elevation, 8,184.55 ft); no contents in 1961-62, 1968, 1970.

Reservoir is formed by rockfill dam completed in 1958. Usable capacity, 123,300 acre-ft between elevations 7,902 (invert of tunnel) and 8,184 ft (elevation of spillway). Dead storage negligible. See schematic diagram of Kings River basin. Record of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

11214800 WISHON RESERVOIR.--Lat 37°00'20", long 118°58'00", in NW¼ sec.6, T.11 S., R.28 E., Fresno County, Sierra National Forest, on right end of dam on North Fork Kings River 1.2 miles north of Cliff Camp, 1.3 miles upstream from Cliff Camp gaging station, and 20 miles southeast of town of Big Creek. Drainage area, 177 sq mi. Period of record, December 1957 to current year. Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 128,500 acre-ft June 21 (elevation, 6,549.89 ft); minimum, 7,940 acre-ft Apr. 18 (elevation, 6,376.03 ft). Extremes for period of record: Maximum contents, 129,700 acre-ft July 29, 1958 (elevation, 6,551.1 ft); no contents in 1960.

Reservoir is formed by rockfill dam completed in 1957. Capacity, 128,600 acre-ft between elevations 6,317 (bottom of slide gates) and 6,550 ft (operating crest of spillway gates). Dead storage negligible. Water is diverted to Haas powerhouse for power. See schematic diagram of Kings River basin. Record of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Courtright Reservoir			Wishon Reservoir		
	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,124.6	50,100	--	6,498.9	81,400	--
Oct. 31	8,124.6	50,100	0	6,468.4	57,700	-23,700
Nov. 30	8,125.4	50,800	+700	6,440.4	39,700	-18,000
Dec. 31	8,126.5	51,700	+900	6,423.7	30,300	-9,400
CAL YR 1972	--	--	+4,500	--	--	-600
Jan. 31	8,126.9	52,100	+400	6,405.7	21,100	-9,200
Feb. 28	8,127.8	52,900	+800	6,384.0	11,200	-9,900
Mar. 31	8,130.8	55,700	+2,800	6,383.6	11,000	-200
Apr. 30	8,135.8	60,500	+4,800	6,404.1	20,300	+9,300
May 31	8,169.9	101,600	+41,100	6,536.5	115,200	+94,900
June 30	8,180.5	117,700	+16,100	6,547.3	125,800	+10,600
July 31	8,168.9	100,200	-17,500	6,541.3	119,900	-5,900
Aug. 31	8,151.6	77,700	-22,500	6,535.1	113,800	-6,100
Sept. 30	8,135.2	60,000	-17,700	6,548.1	126,600	+12,800
WTR YR 1973	--	--	+9,900	--	--	+45,200

11214600 HELMS CREEK BELOW COURTRIGHT DAM, CALIF.

LOCATION.--Lat 37°04'35", long 118°58'04", in SW¼NW¼ sec.7, T.10 S., R.28 E., Fresno County, Sierra National Forest, on left bank 500 ft downstream from Courtright Dam, 2.5 miles upstream from North Fork Kings River, and 17 miles southeast of town of Huntington Lake.

DRAINAGE AREA.--39.7 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder and broad-crested weir with V-notch. Altitude of gage is 7,840 ft (from Pacific Gas and Electric Co. survey).

AVERAGE DISCHARGE (adjusted for storage).--15 years, 75.7 cfs (54,840 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 532 cfs Aug. 15 (gage height, 6.34 ft); minimum daily, 2.2 cfs Oct. 1-4, Apr. 6.
Period of record: Maximum discharge, 1,340 cfs Aug. 29, 1969 (gage height, 5.81 ft); maximum gage height, 6.52 ft June 2, 1961, Sept. 16, 1971; no flow Nov. 21-24, Dec. 1, 3-6, 1970.

REMARKS.--Flow regulated by Courtright Reservoir 500 ft upstream since October 1958 (see sta 11214550). No diversion above station. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1715: 1959.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.3	2.5	2.3	2.3	2.3	2.3	3.3	9.1	9.1	6.4	500
2	2.2	2.3	2.5	2.3	2.3	2.3	2.3	3.4	9.3	8.9	6.4	500
3	2.2	2.3	2.5	2.3	2.3	2.3	2.3	3.5	9.3	9.1	6.4	499
4	2.2	2.3	2.5	2.3	2.3	2.3	2.3	3.3	9.3	9.1	6.4	497
5	2.3	2.4	2.5	2.3	2.3	2.3	2.3	3.2	9.5	9.1	6.4	391
6	2.3	2.4	2.5	2.3	2.3	2.3	2.2	3.3	9.7	9.1	6.5	256
7	2.3	2.4	2.5	2.3	2.3	2.3	2.3	3.7	9.7	9.3	6.5	255
8	2.3	2.4	2.5	2.3	2.3	2.3	2.3	3.8	9.7	9.5	6.4	255
9	2.3	2.4	2.5	2.3	2.3	2.3	176	3.9	9.7	102	6.4	256
10	2.3	2.4	2.5	2.3	2.3	2.3	342	4.0	9.7	431	216	256
11	2.3	2.4	2.5	2.3	2.3	2.3	144	4.0	9.7	431	478	256
12	2.3	2.4	2.5	2.3	2.3	2.3	2.9	4.1	9.7	431	475	256
13	2.3	2.4	2.5	2.3	2.3	2.3	2.8	4.1	9.5	411	500	256
14	2.3	2.5	2.5	2.3	2.3	2.3	2.8	4.2	9.3	495	522	256
15	2.3	2.5	2.5	2.3	2.3	2.3	2.6	4.3	9.3	494	521	256
16	2.3	2.5	2.5	2.3	2.3	2.3	2.6	4.6	9.1	495	521	257
17	2.3	2.5	2.5	2.3	2.3	2.3	2.7	5.3	9.1	495	520	257
18	2.3	2.5	2.4	2.3	2.3	2.3	2.8	5.5	9.1	493	515	256
19	2.3	2.5	2.4	2.3	2.3	2.3	2.7	5.6	9.1	491	515	256
20	2.3	2.5	2.4	2.3	2.3	2.3	2.6	5.7	9.1	489	515	257
21	2.3	2.5	2.4	2.3	2.3	2.3	2.7	5.9	9.3	487	514	256
22	2.3	2.5	2.5	2.3	2.3	2.3	2.8	6.1	9.5	486	514	256
23	2.3	2.5	2.4	2.3	2.3	2.3	3.2	6.2	9.1	486	514	256
24	2.3	2.5	2.4	2.3	2.3	2.3	3.4	6.4	9.1	483	511	256
25	2.3	2.5	2.4	2.3	2.3	2.3	3.4	6.7	9.1	481	508	256
26	2.3	2.5	2.4	2.3	2.3	2.3	3.5	6.8	9.3	480	508	256
27	2.3	2.5	2.4	2.3	2.3	2.3	3.5	7.0	9.3	174	507	256
28	2.3	2.5	2.4	2.3	2.3	2.3	3.4	7.4	9.1	6.9	506	135
29	2.3	2.5	2.3	2.3	------	2.3	3.4	8.1	9.1	6.9	505	3.6
30	2.3	2.5	2.3	2.3	------	2.3	3.2	8.5	9.1	6.7	504	3.6
31	2.3	------	2.3	2.3	------	2.3	------	8.9	------	6.6	504	------
TOTAL	70.9	73.3	75.9	71.3	64.4	71.3	737.3	160.8	280.0	8,435.3	10,950.8	8,162.2
MEAN	2.29	2.44	2.45	2.30	2.30	2.30	24.6	5.19	9.33	272	353	272
MAX	2.3	2.5	2.5	2.3	2.3	2.3	342	8.9	9.7	495	522	500
MIN	2.2	2.3	2.3	2.3	2.3	2.3	2.2	3.2	9.1	6.6	6.4	3.6
AC-FT	141	145	151	141	128	141	1,460	319	555	16,730	21,720	16,190

CAL YR 1972 TOTAL 12,971.2 MEAN 35.4 MAX 264 MIN 1.9 AC-FT 25,730
WTR YR 1973 TOTAL 29,153.5 MEAN 79.9 MAX 522 MIN 2.2 AC-FT 57,830

11215000 NORTH FORK KINGS RIVER NEAR CLIFF CAMP, CALIF.

LOCATION.--Lat 36°59'38", long 118°58'49", in NE¼NW¼ sec.12, T.11 S., R.27 E., Fresno County, Sierra National Forest, 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.

PERIOD OF RECORD.--August 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

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

AVERAGE DISCHARGE (adjusted for storage and diversion).--52 years, 361 cfs (261,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,510 cfs June 9 (gage height, 7.85 ft); minimum daily, 9.5 cfs Jan. 6, 7.
Period of record (prior to regulation by Wishon Reservoir): Maximum discharge, 14,000 cfs Dec. 11, 1937 (gage height, 18.0 ft, from floodmarks), from rating curve extended above 4,200 cfs on basis of velocity-area studies; minimum, 0.6 cfs Dec. 30, 1930.
1957 to current year: Maximum discharge, 4,880 cfs May 28, 1958 (gage height, 11.75 ft); minimum daily, 0.8 cfs Dec. 14, 1957.

REMARKS.--Flow regulated by Wishon Reservoir 1.2 miles upstream since Dec. 5, 1957 (see sta 11214800) and Courtright Reservoir since Oct. 17, 1958 (see sta 11214550). Water diverted for power from Wishon Reservoir by tunnel to Haas powerhouse since Dec. 10, 1958. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1715: 1951, drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	12	10	10	17	13	41	29	23	21	21
2	14	13	12	10	10	15	12	46	28	22	21	21
3	15	13	12	10	10	14	13	48	27	22	21	21
4	16	14	13	9.8	10	13	16	41	27	22	20	21
5	15	13	12	9.7	10	12	22	30	153	22	20	21
6	15	13	12	9.5	11	12	30	33	444	22	20	21
7	15	13	11	9.5	11	11	36	44	729	22	20	21
8	15	13	11	9.7	11	11	36	50	997	22	20	21
9	15	12	11	11	11	11	31	54	1,330	21	20	21
10	15	12	11	9.6	12	11	38	57	1,410	21	20	21
11	15	13	11	9.8	12	14	46	55	951	21	20	21
12	15	12	11	12	12	12	40	51	494	21	20	21
13	15	12	10	13	11	11	37	47	155	21	20	21
14	15	13	10	12	11	11	27	49	153	21	20	22
15	15	13	10	12	10	11	21	47	187	21	20	22
16	15	13	10	38	10	12	28	45	61	21	20	22
17	14	12	16	22	11	13	35	46	37	21	20	22
18	14	12	15	19	11	12	26	45	31	21	20	22
19	14	12	20	16	11	12	20	42	25	21	20	22
20	15	12	15	14	11	13	20	38	25	21	20	22
21	14	11	14	13	11	12	27	37	24	21	20	22
22	14	11	15	12	11	11	37	36	24	21	20	22
23	14	12	13	12	11	11	49	35	24	21	20	22
24	14	12	12	12	11	12	57	33	24	21	20	23
25	14	12	12	12	11	15	59	32	24	21	20	23
26	14	13	12	11	11	16	65	30	24	21	20	23
27	14	13	12	11	16	14	66	29	23	21	20	23
28	14	13	12	11	22	13	62	29	23	21	20	23
29	14	12	11	11	------	12	46	30	23	21	20	23
30	13	12	11	11	------	11	42	30	23	21	20	23
31	13	------	11	11	------	12	------	30	------	21	21	------
TOTAL	449	374	380	393.6	320	387	1,057	1,260	7,529	660	624	654
MEAN	14.5	12.5	12.3	12.7	11.4	12.5	35.2	40.6	251	21.3	20.1	21.8
MAX	16	14	20	38	22	17	66	57	1,410	23	21	23
MIN	13	11	10	9.5	10	11	12	29	23	21	20	21
AC-FT	891	742	754	781	635	768	2,100	2,500	14,930	1,310	1,240	1,300

CAL YR 1972 TOTAL 5,527.8 MEAN 15.1 MAX 26 MIN 7.8 AC-FT 10,960
WTR YR 1973 TOTAL 14,087.6 MEAN 38.6 MAX 1,410 MIN 9.5 AC-FT 27,940

11216500 NORTH FORK KINGS RIVER ABOVE DINKEY CREEK, AT BALCH CAMP, CALIF.

LOCATION.--Lat 36°54'12", long 119°07'14", in SE¼NE¼ sec.10, T.12 S., R.26 E., Fresno County, Sierra National Forest, on left bank 12 ft downstream from bridge at Balch Camp, 300 ft upstream from Dinkey Creek, and 9.3 miles east of Trimmer.

DRAINAGE AREA.--250 sq mi.

PERIOD OF RECORD.--October 1919 to September 1930 (published as "above Dinkey Creek"), March 1960 to current year. Records for water year 1920 incomplete, yearly estimate and monthly discharge only for some months, published in WSP 1315-A.

GAGE.--Water-stage recorder. Concrete control since Apr. 15, 1966. Altitude of gage is 1,240 ft (from river-profile map). October 1919 to Sept. 30, 1930, and Mar. 24, 1960, to Apr. 14, 1966, at site 100 ft downstream at different datum.

AVERAGE DISCHARGE (prior to storage and diversion).--11 years (1919-30), 387 cfs (280,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,590 cfs June 10 (gage height, 4.68 ft); minimum daily, 9.2 cfs Nov. 5.
Period of record (prior to regulation by Wishon and Courtright Reservoirs): Maximum discharge, 6,080 cfs June 4, 1922 (gage height, 12.18 ft, site and datum then in use); minimum, 4 cfs Aug. 29 to Sept. 1, 1924.
1960 to current year: Maximum discharge, 14,000 cfs Feb. 1, 1963 (gage height, 13.24 ft, site and datum then in use, backwater from Dinkey Creek), from rating curve extended above 890 cfs; minimum daily, 0.30 cfs Nov. 3, 1964.

REMARKS.--Flow regulated by Courtright Reservoir (see sta 11214550) and Wishon Reservoir (see sta 11214800), Black Rock Reservoir (capacity, 1,260 acre-ft, revised), Balch Afterbay (capacity, 318 acre-ft, revised), and Haas and Balch powerplants. Diversion from Balch Afterbay to Kings River powerhouse began Mar. 1, 1962. See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	9.9	10	10	11	16	17	15	516	19	18	17
2	9.3	9.9	10	10	11	14	16	15	484	19	19	17
3	9.8	9.6	10	10	11	15	15	15	465	20	19	17
4	9.7	10	12	10	11	20	20	14	455	19	19	17
5	9.8	9.2	11	11	11	17	18	14	476	19	19	16
6	9.9	9.6	11	10	12	22	18	14	671	19	19	16
7	9.8	10	11	9.9	13	20	18	14	909	19	19	15
8	9.5	9.9	11	11	12	18	17	14	1,220	19	19	16
9	9.8	9.8	11	19	11	17	17	14	1,550	19	19	16
10	9.7	9.9	11	14	19	16	17	15	1,640	19	19	16
11	9.7	11	11	13	56	30	17	15	1,240	19	19	16
12	9.8	9.4	11	12	49	20	17	15	690	19	19	16
13	9.8	9.6	11	12	36	69	17	14	451	19	18	17
14	9.6	14	11	11	33	98	18	14	277	17	18	16
15	9.7	13	11	11	25	91	17	15	386	18	17	16
16	9.7	12	11	48	20	172	17	15	236	18	17	16
17	9.8	11	11	36	17	142	17	15	187	18	17	16
18	9.9	10	11	91	16	106	16	16	174	18	17	16
19	10	9.9	11	55	15	267	16	15	160	18	38	16
20	11	10	11	29	15	117	16	14	141	18	35	16
21	9.9	10	11	17	14	111	15	123	107	18	16	16
22	9.3	9.9	11	15	14	177	15	533	125	18	17	16
23	9.7	9.8	11	14	13	55	15	535	116	18	17	16
24	9.8	9.8	11	13	13	18	15	509	82	18	17	16
25	9.8	9.8	11	13	13	19	15	488	24	17	17	16
26	9.8	9.8	11	15	13	24	15	359	20	18	17	16
27	9.8	9.8	10	12	15	20	15	14	29	17	17	18
28	9.7	9.8	11	12	27	22	15	22	19	17	17	18
29	9.6	9.8	10	12	------	20	15	552	19	17	17	18
30	9.7	10	10	12	------	18	15	547	19	18	17	18
31	9.8	------	10	12	------	17	------	562	------	18	17	------
TOTAL	302.6	306.2	335	579.9	526	1,788	491	4,536	12,888	567	590	492
MEAN	9.76	10.2	10.8	18.7	18.8	57.7	16.4	146	430	18.3	19.0	16.4
MAX	11	14	12	91	56	267	20	562	1,640	20	38	18
MIN	9.3	9.2	10	9.9	11	14	15	14	19	17	16	15
AC-FT	600	607	664	1,150	1,040	3,550	974	9,000	25,560	1,120	1,170	976

CAL YR 1972 TOTAL 4,027.7 MEAN 11.0 MAX 151 MIN 6.6 AC-FT 7,990
WTR YR 1973 TOTAL 23,401.7 MEAN 64.1 MAX 1,640 MIN 9.2 AC-FT 46,420

11218400 NORTH FORK KINGS RIVER BELOW DINKEY CREEK, NEAR BALCH CAMP, CALIF.

LOCATION.--Lat 36°52'47", long 119°07'40", in NW¼ sec.22, T.12 S., R.26 E., Fresno County, Sierra National Forest, on right bank 1.1 miles upstream from mouth, 1.7 miles south of Balch Camp, 2.1 miles downstream from Dinkey Creek, and 9 miles east of Trimmer.

DRAINAGE AREA.--387 sq mi.

PERIOD OF RECORD.--March 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,035 ft (from river-profile map).

EXTREMES.--Current year: Maximum discharge, 3,340 cfs June 10 (gage height, 8.13 ft); minimum daily, 18 cfs Oct. 1, 2.
Period of record: Maximum discharge, 27,400 cfs Feb. 1, 1963 (gage height, 19.20 ft), from rating curve extended above 4,900 cfs; minimum daily, 14 cfs Aug. 26-30, 1964, Sept. 1-4, 6-23, Sept. 26 to Oct. 6, 1968.

REMARKS.--Flow regulated by Courtright Reservoir (see sta 11214550), Wishon Reservoir (see sta 11214800), Black Rock Reservoir (capacity, 1,260 acre-ft, revised), Balch Afterbay (capacity, 318 acre-ft, revised), and Haas and Balch powerplants. Diversion from Balch Afterbay to Kings River powerhouse began Mar. 1, 1962. See schematic diagram of Kings River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	22	66	57	90	250	203	916	1,960	162	56	35
2	18	23	61	60	91	206	189	1,050	1,800	150	54	35
3	19	23	58	64	92	194	189	1,200	1,680	140	56	34
4	21	29	105	52	99	210	212	1,090	1,610	131	58	34
5	24	39	65	49	93	180	259	801	1,600	126	58	33
6	23	31	68	51	119	202	339	704	1,860	122	76	33
7	21	30	65	50	189	191	436	1,010	2,130	116	66	32
8	20	38	65	60	138	181	482	1,350	2,480	112	60	32
9	20	36	51	123	118	167	496	1,650	2,680	108	55	32
10	22	32	60	83	218	164	473	1,920	2,670	101	53	31
11	26	49	55	75	383	280	594	2,020	2,190	98	51	30
12	23	37	53	89	289	208	627	2,060	1,510	94	49	31
13	22	43	52	115	226	246	565	2,010	1,100	91	47	31
14	21	96	50	104	213	258	442	1,930	817	88	45	30
15	21	76	51	97	178	243	366	2,080	857	86	43	30
16	21	76	52	571	159	334	360	2,130	656	83	42	30
17	21	65	73	394	148	318	445	2,230	574	82	41	31
18	21	57	169	791	144	264	433	2,390	534	81	40	30
19	21	53	159	388	141	461	377	2,300	498	79	57	30
20	31	48	172	207	142	315	336	1,930	461	76	54	30
21	38	48	134	168	144	283	345	1,850	430	76	37	30
22	30	49	125	136	134	362	443	2,360	395	74	37	30
23	26	45	110	124	133	216	658	2,410	362	71	37	31
24	25	47	93	118	143	208	881	2,170	331	68	36	31
25	24	52	79	113	134	234	1,060	1,980	292	65	37	31
26	23	61	79	109	141	301	1,240	1,760	229	63	37	31
27	23	73	80	99	212	250	1,210	1,430	228	60	39	31
28	23	74	85	98	393	244	1,160	1,660	202	59	39	31
29	23	69	64	100	------	215	1,140	2,370	189	58	38	31
30	23	65	69	100	------	200	1,050	2,390	174	58	36	30
31	22	------	66	96	------	193	------	2,210	------	57	35	------
TOTAL	714	1,486	2,534	4,741	4,704	7,578	17,010	55,361	32,499	2,835	1,469	941
MEAN	23.0	49.5	81.7	153	168	244	567	1,786	1,083	91.5	47.4	31.4
MAX	38	96	172	791	393	461	1,240	2,410	2,680	162	76	35
MIN	18	22	50	49	90	164	189	704	174	57	35	30
AC-FT	1,420	2,950	5,030	9,400	9,330	15,030	33,740	109,800	64,460	5,620	2,910	1,870

CAL YR 1972 TOTAL 48,799 MEAN 133 MAX 505 MIN 17 AC-FT 96,790
WTR YR 1973 TOTAL 131,872 MEAN 361 MAX 2,680 MIN 18 AC-FT 261,600

11218500 KINGS RIVER BELOW NORTH FORK, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°52'29", long 119°08'27", in SW¼NE¼ sec.21, T.12 S., R.26 E., Fresno County, 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.

PERIOD OF RECORD.--October 1951 to current year. Prior to January 1952 monthly discharge only, published in WSP 1735. Published as Kings River below North Fork, October 1951 to September 1965.

GAGE.--Water-stage recorder. Datum of gage is 942.42 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE (adjusted for change in contents in Wishon and Courtright Reservoirs).--22 years, 2,156 cfs (1,562,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 16,000 cfs June 9; minimum daily, 187 cfs Oct. 1.
Period of record: Maximum discharge, 85,200 cfs Dec. 23, 1955 (gage height, 23.08 ft), from rating curve extended above 22,000 cfs on basis of slope-area measurement of maximum flow; minimum daily, 97 cfs Jan. 13, 1963.
Flood of Nov. 19, 1950, reached a stage of 21.6 ft, from floodmarks (discharge, 74,200 cfs).

REMARKS.--Records good. Flow regulated by Courtright and Wishon Reservoirs (see sta 11214550, 11214800). Records include flow diverted to Kings River powerplant since Mar. 1, 1962. This station measures inflow to Pine Flat Lake. See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records of diversion to Kings River powerplant and contents for Courtright and Wishon Reservoirs furnished by Pacific Gas and Electric Co.

REVISIONS.--WSP 1930: Drainage area. WRD Calif. 1972: Adjusted data for 1971.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	794	672	362	1,030	1,800	1,140	5,250	10,700	5,470	1,560	701
2	877	766	415	557	747	1,090	1,280	5,260	9,770	4,420	1,630	664
3	810	772	412	734	729	1,160	1,300	5,900	9,720	3,910	1,680	763
4	865	251	1,040	668	718	1,200	1,290	6,060	10,200	3,730	1,730	594
5	876	301	1,060	622	897	1,230	1,440	5,250	11,000	3,820	1,510	323
6	960	837	869	409	739	1,340	1,690	4,470	11,200	3,740	1,910	314
7	385	878	990	339	972	1,270	1,880	5,040	11,900	3,360	1,760	304
8	326	885	957	662	782	1,220	2,080	6,250	12,500	3,530	1,460	383
9	832	860	822	1,140	700	1,120	2,800	7,940	13,700	3,490	1,320	500
10	855	807	919	969	1,360	1,130	2,990	9,300	12,500	3,470	1,460	279
11	848	463	843	904	2,240	1,610	3,120	10,500	11,300	3,250	1,500	272
12	883	288	690	1,020	1,990	1,300	3,290	11,400	9,940	3,340	1,360	358
13	703	925	786	682	1,950	1,200	3,260	10,900	9,340	3,120	1,320	263
14	284	1,260	533	635	1,840	1,160	3,040	11,600	8,490	2,560	1,320	284
15	321	1,200	516	878	1,640	1,120	2,760	11,500	7,020	2,420	1,330	258
16	735	1,160	398	2,670	1,510	1,210	2,630	11,700	6,360	2,570	1,300	255
17	725	1,150	578	2,400	1,270	1,200	2,860	12,700	6,650	2,450	1,280	253
18	714	483	908	4,170	1,250	1,130	2,690	13,600	6,560	2,340	1,070	258
19	773	1,070	1,110	2,870	1,260	1,260	2,050	13,000	6,920	2,270	757	250
20	840	1,010	1,130	1,390	1,320	1,320	1,880	11,800	7,120	2,140	1,080	250
21	333	753	1,040	1,380	1,300	1,200	1,790	10,900	6,910	1,820	934	248
22	309	723	717	1,490	1,330	1,290	2,030	11,200	6,710	1,740	1,010	248
23	547	634	704	1,460	1,360	1,180	3,160	11,100	6,360	1,890	1,100	246
24	860	621	515	1,260	1,250	1,220	4,150	11,200	5,860	1,780	986	246
25	871	395	474	1,200	1,400	1,360	4,900	10,100	6,230	1,810	737	253
26	864	482	541	1,240	1,390	1,900	5,860	9,830	6,640	1,740	703	251
27	834	716	586	650	1,580	1,820	6,690	9,740	7,150	1,970	978	246
28	377	750	647	635	1,910	1,850	7,120	12,000	6,540	1,600	980	243
29	228	773	593	781	------	1,720	6,600	14,200	6,370	1,580	971	239
30	849	847	447	1,080	------	1,670	6,180	12,900	6,090	1,670	936	238
31	790	------	384	1,050	------	1,300	------	12,700	------	1,650	909	------
TOTAL	20,661	22,854	22,296	36,307	36,464	41,580	93,950	305,290	257,750	84,650	38,581	9,984
MEAN	666	762	719	1,171	1,302	1,341	3,132	9,848	8,592	2,731	1,245	333
MAX	960	1,260	1,130	4,170	2,240	1,900	7,120	14,200	13,700	5,470	1,910	763
MIN	187	251	384	339	700	1,090	1,140	4,470	5,860	1,580	703	238
AC-FT	40,980	45,330	44,220	72,010	72,330	82,470	186,300	605,500	511,200	167,900	76,530	19,800
MEAN a	279	473	582	1,027	1,139	1,384	3,368	12,060	9,040	2,350	781	250
AC-FT a	17,180	28,130	35,780	63,120	63,260	85,090	200,400	741,500	537,900	144,500	48,010	14,850

CAL YR 1972 TOTAL 442,266 MEAN 1,208 MAX 4,230 MIN 163 AC-FT 877,200 MEAN a 1,214 AC-FT a 881,200
WTR YR 1973 TOTAL 970,367 MEAN 2,659 MAX 14,200 MIN 187 AC-FT 1,925,000 MEAN a 2,735 AC-FT a 1,980,000

a Adjusted for change in contents in Wishon and Courtright Reservoirs.

11220000 BIG CREEK ABOVE PINE FLAT LAKE, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°54'59", long 119°14'37", in SE¼NE¼ sec.4, T.12 S., R.25 E., Fresno County, on right bank 2.4 miles upstream from mouth, and 2.7 miles northeast of Trimmer.

DRAINAGE AREA.--70.0 sq mi.

PERIOD OF RECORD.--October 1953 to September 1973 (discontinued as a continuous-record station; converted to a crest-stage partial-record station). Prior to September 1965, published as Big Creek above Pine Flat Reservoir. October 1965 to September 1971 published as "above Pine Flat Reservoir, near Trimmer."

GAGE.--Water-stage recorder. Datum of gage is 962.04 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--20 years, 50.3 cfs (36,440 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,370 cfs Jan. 16 (gage height, 6.12 ft); no flow Oct. 1-4.
Period of record: Maximum discharge, 16,400 cfs Jan. 25, 1969 (gage height, 10.43 ft), from rating curve extended above 4,400 cfs on basis of slope-area measurement at gage-height 9.21 ft; no flow at times in most years.

REMARKS.--Records excellent. This station measures inflow to Pine Flat Lake. No regulation or diversion above station. See schematic diagram of Kings River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.3	7.5	11	32	195	139	108	46	11	3.6	1.7
2	0	2.4	7.3	11	30	140	129	110	46	11	3.4	1.7
3	0	2.4	7.4	12	30	122	121	118	43	11	3.3	1.7
4	0	3.6	44	10	40	184	118	115	40	10	3.5	1.7
5	.97	5.4	28	9.3	38	141	121	99	38	10	3.2	1.5
6	2.2	4.6	18	9.7	46	167	126	88	35	9.4	3.3	1.5
7	2.3	3.8	18	10	173	169	135	95	33	9.1	3.7	1.6
8	2.1	4.7	18	12	95	145	133	104	31	8.9	3.5	1.6
9	2.1	4.9	13	118	62	124	131	118	30	8.8	3.1	1.5
10	2.1	4.1	12	79	365	114	126	126	28	8.3	2.9	1.4
11	2.4	9.4	10	45	752	247	138	127	27	7.7	2.8	1.3
12	2.6	9.5	9.5	42	381	166	142	124	26	7.3	2.6	1.3
13	2.4	6.3	9.1	40	268	164	135	122	26	7.2	2.5	1.3
14	2.3	65	9.5	32	240	151	131	113	26	6.8	2.3	1.2
15	2.2	63	9.8	28	183	134	111	114	27	6.8	2.1	1.2
16	2.3	48	10	697	139	122	105	113	25	7.0	2.0	1.3
17	2.3	30	21	374	120	118	114	106	24	6.8	1.9	1.3
18	2.3	17	51	737	107	111	113	103	23	6.8	1.7	1.4
19	2.3	13	38	342	97	102	101	96	22	6.8	1.6	1.4
20	3.3	11	43	130	90	219	95	87	20	6.6	1.6	1.4
21	4.7	9.1	29	93	84	178	90	75	18	6.7	1.5	1.5
22	3.5	8.1	24	71	76	180	95	71	17	6.8	1.4	1.5
23	2.7	7.5	23	59	71	158	110	68	16	6.4	1.4	1.6
24	2.5	7.3	19	51	73	168	124	65	16	5.9	1.6	1.6
25	2.3	7.1	17	46	71	179	130	61	16	5.6	1.8	1.7
26	2.3	7.2	15	45	76	350	138	57	15	5.2	1.9	1.7
27	2.2	8.1	14	40	190	243	143	54	14	4.6	2.3	1.6
28	2.2	8.1	16	37	483	208	141	52	13	4.3	2.3	1.4
29	2.3	7.9	16	36	------	175	135	49	12	4.1	2.2	1.2
30	2.3	7.6	13	36	------	156	121	50	12	4.0	2.0	1.2
31	2.2	------	12	35	------	146	------	48	------	3.8	1.7	------
TOTAL	65.37	388.4	582.1	3,298.0	4,412	5,176	3,691	2,836	765	224.7	74.7	44.0
MEAN	2.11	12.9	18.8	106	158	167	123	91.5	25.5	7.25	2.41	1.47
MAX	4.7	65	51	737	752	350	143	127	46	11	3.7	1.7
MIN	0	2.3	7.3	9.3	30	102	90	48	12	3.8	1.4	1.2
AC-FT	130	770	1,150	6,540	8,750	10,270	7,320	5,630	1,520	446	148	87

CAL YR 1972 TOTAL 5,246.54 MEAN 14.3 MAX 132 MIN 0 AC-FT 10,410
WTR YR 1973 TOTAL 21,557.27 MEAN 59.1 MAX 752 MIN 0 AC-FT 42,760

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1800	6.12	2,370	2-11	1315	5.62	1,720
1-18	1745	6.04	2,260	2-28	0645	4.49	784

11220500 SYCAMORE CREEK ABOVE PINE FLAT LAKE, NEAR TRIMMER, CALIF.

LOCATION.--Lat 36°55'13", long 119°18'32", in NW¼NW¼ sec.1, T.12 S., R.24 E., Fresno County, 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.

PERIOD OF RECORD.--April 1953 to September 1973 (discontinued). Prior to October 1965, published as Sycamore Creek above Pine Flat Reservoir. October 1965 to September 1971 published as "above Pine Flat Reservoir, near Trimmer."

GAGE.--Water-stage recorder. Datum of gage is 1,141.96 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--20 years, 21.9 cfs (15,870 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,650 cfs Feb. 11 (gage height, 6.35 ft); no flow for several months. Period of record: Maximum discharge, 16,800 cfs Jan. 25, 1969 (gage height, 13.83 ft in gage well, 15.32 ft, from floodmarks), from rating curve extended above 5,200 cfs on basis of slope-area measurements at gage heights 9.78 and 13.83 ft; no flow for several months in each year.

REMARKS.--Records good except those for period of no gage-height record, which are fair. This station measures inflow to Pine Flat Lake. No regulation or diversion above station. See schematic diagram of Kings River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.32	2.4	11	88	69	19	6.3	.25		
2		0	.32	2.3	10	60	62	18	7.2	.24		
3		0	.32	2.4	10	56	55	17	6.6	.27		
4		0	17	2.2	14	121	52	17	5.7	.24		
5		0	7.6	2.0	12	70	48	17	5.0	.20		
6		0	4.5	2.1	32	105	45	17	4.6	.15		
7		0	8.5	2.3	124	104	43	16	4.0	.13		
8		0	8.7	3.0	37	70	40	15	3.7	.13		
9		0	6.7	106	24	58	38	15	3.8	.13		
10		0	4.0	75	267	53	37	14	3.5	.18		
11		0	3.0	45	1,010	147	34	13	3.0	.14		
12		0	2.6	36	327	83	33	13	2.8	.12		
13		0	1.9	34	195	80	32	12	2.7	.09		
14		24	1.5	30	248	73	35	12	2.9	.08		
15		33	1.9	26	156	57	32	12	3.2	.08		
16		14	1.9	600	96	50	31	12	3.6	.09		
17		13	11	350	72	47	30	11	3.3	.10		
18		3.7	15	690	57	44	29	9.7	3.0	.06		
19		1.2	10	330	48	41	28	8.9	2.7	.05		
20		.64	8.9	160	41	233	27	8.4	2.5	.05		
21		.62	5.9	68	37	155	25	8.2	1.7	.04		
22		.50	4.9	43	33	160	23	8.0	1.2	.04		
23		.38	4.0	32	31	113	22	7.6	.88	.02		
24		.32	3.4	25	30	100	21	7.5	.86	0		
25		.32	2.8	20	28	102	21	8.2	.81	0		
26		.32	2.6	16	38	227	20	8.0	.82	0		
27		.34	2.2	15	120	148	19	7.1	.58	0		
28		.32	3.2	14	297	114	18	7.7	.44	0		
29		.32	3.3	13	------	93	19	6.8	.31	0		
30		.32	3.0	13	------	82	22	6.5	.26	0		
31		------	2.5	12	------	76	------	6.4	------	0		------
TOTAL	0	93.30	153.46	2,771.7	3,405	3,010	1,010	359.0	87.96	2.88	0	0
MEAN	0	3.11	4.95	89.4	122	97.1	33.7	11.6	2.93	.093	0	0
MAX	0	33	17	690	1,010	233	69	19	7.2	.27	0	0
MIN	0	0	.32	2.0	10	41	18	6.4	.26	0	0	0
AC-FT	0	185	304	5,500	6,750	5,970	2,000	712	174	5.7	0	0

CAL YR 1972 TOTAL 999.76 MEAN 2.73 MAX 64 MIN 0 AC-FT 1,980
WTR YR 1973 TOTAL 10,893.30 MEAN 29.8 MAX 1,010 MIN 0 AC-FT 21,610

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	unknown	5.21	1,640	2-14	1430	3.34	529
1-18	unknown	--	unknown	2-27	2315	3.77	724
2-11	1230	6.35	2,650	3-20	0500	3.42	558

NOTE.--No gage-height record Dec. 28 to Jan. 26.

11221000 PINE FLAT LAKE NEAR PIEDRA, CALIF.

LOCATION.--Lat 36°49'58", long 119°19'29", in SE¼NE¼ sec.2, T.13 S., R.24 E., Fresno County, near center of Pine Flat Dam on Kings River, 1.9 miles upstream from Mill Creek, 3.5 miles northeast of Piedra, and 16 miles northeast of Sanger.
DRAINAGE AREA.--1,545 sq mi.
PERIOD OF RECORD.--October 1951 to current year. Prior to October 1970, published as "Pine Flat Reservoir."
GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers). Prior to Apr. 8, 1952, nonrecording mercury gage on dam at same datum.
EXTREMES.--Current year: Maximum contents, 968,981 acre-ft June 17, 20 (elevation, 945.99 ft); minimum, 209,672 acre-ft Oct. 1 (elevation, 763.22 ft).
Period of record: Maximum contents, 1,009,000 acre-ft July 15, 1967 (elevation, 952.76 ft); minimum since gross pool elevation first obtained, 194,342 acre-ft Sept. 5, 1972 (elevation, 757.18 ft).
REMARKS.--Reservoir is formed by gravity-type concrete dam; regulation of discharge from reservoir began Dec. 4, 1951. Total capacity, 1,001,500 acre-ft between elevations 565.5 (bottom of lower tier of river outlets) and 951.5 ft (gross pool elevation). No dead storage. Reservoir is used for flood control and conservation storage. Water is released down Kings River for diversion by the Kings River Water Association. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Kings River basin.
COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.
REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

715	104,400	840	457,750
720	113,400	860	538,750
740	154,000	890	673,401
760	201,424	920	824,151
780	255,450	950	992,551
800	316,150	960	1,053,000
820	383,550		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209,672	244,807	286,708	326,119	394,785	488,331	586,436	556,461	849,743	942,933	679,018	487,368
2	210,605	246,128	287,500	326,607	396,116	489,696	589,179	555,045	857,501	937,088	670,270	484,847
3	211,827	247,424	288,415	327,324	397,269	490,982	592,062	555,645	865,351	930,580	661,532	482,492
4	213,313	248,130	290,434	327,911	398,351	492,875	594,419	557,578	874,064	923,758	652,665	479,864
5	214,882	248,696	292,152	328,302	399,942	494,892	596,914	558,611	883,987	917,022	643,441	477,045
6	216,484	250,141	293,752	327,911	401,535	498,535	599,773	558,309	894,030	910,146	635,483	474,631
7	217,168	251,676	295,605	327,389	404,113	501,784	602,280	559,127	905,428	902,739	627,391	472,341
8	217,616	253,217	297,278	327,715	405,934	504,799	603,581	562,578	918,492	895,645	619,081	470,292
9	219,043	254,590	298,489	329,740	407,467	507,537	605,468	569,775	932,119	889,028	610,604	468,681
10	220,236	256,052	299,982	330,919	411,789	510,201	606,367	579,872	942,933	882,771	602,549	466,562
11	221,566	257,318	301,480	331,739	421,285	514,766	606,322	592,462	951,741	875,934	594,908	464,488
12	222,900	257,895	302,730	332,592	427,441	517,821	605,738	606,772	958,105	869,236	587,320	462,496
13	223,890	259,367	304,140	332,790	432,814	520,844	604,704	619,855	962,923	862,075	579,477	460,509
14	224,238	262,327	305,522	332,921	438,069	523,793	602,819	633,501	966,765	853,373	573,959	458,798
15	224,560	264,660	306,812	333,250	442,328	526,417	600,310	646,648	968,631	844,180	567,992	457,052
16	225,553	267,062	307,569	341,194	446,033	529,089	596,914	659,227	968,689	835,311	561,628	455,348
17	226,521	269,238	308,769	347,082	449,217	531,684	593,751	673,068	968,981	826,280	555,559	453,570
18	227,978	270,242	310,575	358,195	452,065	534,160	590,021	688,497	968,631	817,252	549,314	451,834
19	229,548	271,898	312,704	365,199	455,038	536,937	584,493	702,353	968,806	808,018	542,640	450,178
20	231,097	273,948	314,584	368,416	458,099	541,243	578,336	714,048	968,981	798,323	536,558	448,372
21	231,887	275,198	316,438	371,438	460,976	544,676	571,778	723,868	968,631	788,645	531,014	446,340
22	232,460	276,422	317,720	374,508	463,823	548,248	565,217	734,561	967,348	778,676	525,375	444,160
23	233,499	277,529	318,908	377,521	466,523	551,363	560,161	745,146	964,959	769,087	520,595	442,023
24	235,062	278,608	319,841	379,948	469,152	554,573	556,848	756,023	961,645	759,366	516,045	439,664
25	236,658	279,418	320,647	382,383	471,828	558,094	554,787	765,057	958,743	749,516	511,268	437,273
26	238,204	280,320	321,485	384,896	474,710	563,486	554,016	774,001	956,714	739,593	506,596	435,116
27	239,672	281,465	322,390	386,316	478,473	567,992	555,088	783,005	955,556	729,649	502,679	432,663
28	240,228	282,763	323,652	387,668	484,487	572,562	556,891	796,132	953,070	719,146	498,940	430,029
29	240,756	284,155	324,560	389,236	------	576,671	557,836	812,707	950,299	708,724	495,337	427,778
30	241,081	285,613	325,242	391,272	------	580,575	558,008	826,547	947,130	698,476	491,908	425,683
31	243,378	------	325,729	393,027	------	583,700	------	839,820	------	688,497	489,776	------
MAX	243,378	285,613	325,729	393,027	484,487	583,700	606,367	839,820	968,981	942,933	679,018	487,368
MIN	209,672	244,807	286,708	326,119	394,785	488,331	554,016	555,045	849,743	688,497	489,776	425,683
(a)	775.74	790.21	802.97	822.66	846.79	870.42	864.52	922.93	942.22	893.16	848.11	831.58
(b)	+33,550	+42,235	+40,116	+67,298	+91,460	+99,213	-25,692	+281,812	+107,310	-258,633	-198,721	-64,093
(c)	835	286	154	193	254	435	1,214	2,318	3,852	3,971	2,949	2,187

CAL YR 1972 b -101,263
WTR YR 1973 b +215,855

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11221500 KINGS RIVER BELOW PINE FLAT DAM, CALIF.

LOCATION.--Lat 36°49'50", long 119°20'07", in SW¼NW¼ sec.2, T.13 S., R.24 E., Fresno County, on right bank 3,200 ft downstream from Pine Flat Dam, and 2.9 miles northeast of Piedra.

DRAINAGE AREA.--1,545 sq mi.

PERIOD OF RECORD.--October 1953 to current year. Monthly and yearly discharges only and adjusted flow for some periods published in WSP 1735.

GAGE.--Water-stage recorder and concrete control since Sept. 1, 1956. Datum of gage is 556.97 ft above mean sea level (levels by Corps of Engineers). Prior to Oct. 1, 1956, at site 0.2 mile downstream at datum 3.48 ft lower.

AVERAGE DISCHARGE (adjusted for change in storage and evaporation).--20 years, 2,219 cfs (1,608,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,040 cfs June 28 (gage height, 7.95 ft); minimum daily, 27 cfs Jan. 20, 22.
Period of record: Maximum discharge, 17,100 cfs June 3, 4, 8, 9, 1969 (gage height, 10.73 ft); minimum, 1.1 cfs Feb. 26, 27, 1962.

REMARKS.--Records excellent. Flow regulated by Pine Flat Lake 0.6 mile upstream (see sta 11221000) and Wishon and Courtright Reservoirs (see sta 11214550 and 11214800). See schematic diagram of Kings River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--One discharge measurement furnished by Kings River Water Association.

REVISIONS.--WSP 1930: Drainage area. WRD Calif. 1972: Adjusted discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	52	77	203	137	211	123	6,150	5,990	7,690	6,360	1,840
2	196	49	77	279	152	722	183	6,130	5,980	7,550	6,020	1,860
3	190	49	76	363	199	758	197	5,710	6,010	7,390	6,050	1,860
4	134	50	108	357	205	727	332	5,180	6,000	7,360	6,180	1,830
5	50	50	97	409	152	523	415	4,900	6,120	7,360	6,090	1,710
6	68	50	95	556	121	79	499	4,740	6,230	7,380	5,880	1,500
7	96	50	102	617	90	70	836	4,740	6,360	7,280	5,780	1,420
8	115	50	102	639	103	100	1,630	4,640	6,450	7,230	5,680	1,340
9	134	52	96	542	105	86	1,960	4,380	6,570	6,960	5,610	1,340
10	155	50	100	521	67	93	2,670	4,380	6,620	6,680	5,520	1,300
11	158	52	103	599	32	36	3,290	4,360	6,610	6,730	5,330	1,280
12	164	51	104	609	30	73	3,710	4,390	6,740	6,760	5,180	1,300
13	166	50	109	625	28	82	4,050	4,530	7,020	6,770	5,200	1,230
14	166	51	109	628	28	34	4,180	4,750	6,630	7,050	4,000	1,130
15	167	52	110	628	29	68	4,180	5,070	6,120	7,100	4,340	1,100
16	168	48	117	495	32	93	4,430	5,400	6,380	7,130	4,480	1,080
17	128	40	118	147	37	104	4,620	5,700	6,540	7,010	4,330	1,100
18	49	43	120	146	50	111	4,740	5,720	6,830	6,980	4,250	1,110
19	50	46	128	32	45	127	4,940	5,870	6,980	7,050	4,180	1,040
20	50	46	128	27	41	67	5,070	5,930	7,090	6,960	4,120	1,100
21	49	50	139	29	42	46	5,200	5,930	7,230	6,760	3,930	1,250
22	49	56	141	27	55	33	5,460	5,770	7,480	6,780	3,720	1,290
23	50	52	142	40	115	92	5,680	5,740	7,700	6,750	3,480	1,320
24	50	52	151	66	124	46	5,900	5,700	7,700	6,780	3,180	1,370
25	50	52	152	76	128	37	6,100	5,640	7,850	6,860	3,060	1,400
26	50	51	152	78	121	38	6,300	5,400	7,810	6,920	2,980	1,320
27	50	76	152	92	82	89	6,240	5,340	7,810	6,930	2,870	1,430
28	50	77	152	96	32	73	6,270	5,470	7,870	6,930	2,780	1,520
29	51	78	153	104	------	77	6,250	5,680	7,870	6,920	2,720	1,340
30	51	78	174	115	------	91	6,250	5,880	7,750	6,810	2,620	1,240
31	51	------	203	135	------	115	------	5,930	------	6,730	1,860	------
TOTAL	3,290	1,603	3,787	9,280	2,382	4,901	111,705	165,150	206,340	217,590	137,780	40,950
MEAN	106	53.4	122	299	85.1	158	3,724	5,327	6,878	7,019	4,445	1,365
MAX	335	78	203	639	205	758	6,300	6,150	7,870	7,690	6,360	1,860
MIN	49	40	76	27	28	33	123	4,360	5,980	6,680	1,860	1,040
AC-FT	6,530	3,180	7,510	18,410	4,720	9,720	221,600	327,600	409,300	431,600	273,300	81,220
MEAN a	278	479	640	1,253	1,573	1,821	3,550	12,160	9,195	2,497	797	242
AC-FT a	17,120	28,500	39,330	77,020	87,360	112,000	211,200	747,700	547,100	153,500	49,020	14,380

CAL YR 1972 TOTAL 474,182 MEAN 1,296 MAX 6,150 MIN 40 AC-FT 940,500 MEAN a 1,183 AC-FT a 858,700
WTR YR 1973 TOTAL 904,758 MEAN 2,479 MAX 7,870 MIN 27 AC-FT 1,795,000 MEAN a 2,879 AC-FT a 2,084,000

a Adjusted for change in contents in Wishon and Courtright Reservoirs and change in contents and evaporation in Pine Flat Lake.

11221700 MILL CREEK NEAR PIEDRA, CALIF.

LOCATION.--Lat 36°49'07", long 119°20'27", in NE¼NE¼ sec.10, T.13 S., R.24 E., Fresno County, on left bank 150 ft upstream from road bridge, 0.7 mile upstream from mouth, and 2.3 miles east of Piedra.

DRAINAGE AREA.--127 sq mi.

PERIOD OF RECORD.--October 1957 to current year in reports of Geological Survey. November 1938 to September 1957 in reports of Kings River Water Association.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 550 ft (from topographic map). Prior to July 14, 1958, at site 150 ft upstream at same datum.

AVERAGE DISCHARGE.--16 years, 40.7 cfs (29,490 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,050 cfs Jan. 18 (gage height, 6.19 ft); no flow for several months. Period of record: Maximum discharge, 11,000 cfs Dec. 6, 1966 (gage height, 9.53 ft in gage well, 10.2 ft, from floodmarks); maximum gage height, 9.65 ft in gage well Jan. 19, 1969 (backwater from debris); no flow for several months in most years.

REMARKS.--Records good. Some small diversions above station for irrigation. See schematic diagram of Kings River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.6	6.4	30	154	167	48	14	.04		
2		0	1.9	6.4	28	116	159	44	14	0		
3		0	1.9	5.9	27	102	137	41	14	0		
4		0	5.0	5.9	28	162	129	41	12	0		
5		0	14	5.9	27	126	119	43	10	0		
6		0	9.5	5.4	31	159	111	41	8.8	0		
7		0	9.5	5.0	70	219	106	38	7.6	0		
8		0	11	5.4	56	159	99	36	7.0	0		
9		0	10	102	43	142	94	36	5.9	0		
10		0	7.6	77	174	124	92	35	4.6	0		
11		0	7.0	38	1,050	505	90	35	4.6	0		
12		0	5.9	27	635	281	88	33	4.6	0		
13		0	5.4	22	329	242	83	33	4.6	0		
14		0	5.4	19	306	234	92	33	5.0	0		
15		8.2	8.8	16	262	192	83	31	5.4	0		
16		11	8.2	427	183	173	77	27	5.4	0		
17		9.5	7.0	441	153	164	72	26	5.4	0		
18		7.0	8.2	1,150	129	153	68	24	5.0	0		
19		4.2	12	711	114	142	66	22	4.6	0		
20		3.1	11	224	99	505	66	20	3.8	0		
21		2.5	10	142	90	327	62	20	3.4	0		
22		2.2	9.5	102	81	372	58	19	2.8	0		
23		1.9	8.2	81	72	262	58	19	2.2	0		
24		1.6	7.6	66	70	234	56	19	1.9	0		
25		1.6	7.0	58	66	231	54	19	1.9	0		
26		1.6	6.4	52	60	372	52	19	1.9	0		
27		1.6	6.4	46	81	270	50	17	1.4	0		
28		1.6	7.6	39	301	246	48	16	1.1	0		
29		1.6	8.2	38	------	224	48	14	.70	0		
30		1.6	7.6	36	------	196	50	13	.35	0		
31		------	7.0	33	------	183	------	12	------	0		------
TOTAL	0	60.8	236.4	3,993.3	4,595	6,971	2,534	874	163.95	.04	0	0
MEAN	0	2.03	7.63	129	164	225	84.5	28.2	5.47	.001	0	0
MAX	0	11	14	1,150	1,050	505	167	48	14	.04	0	0
MIN	0	0	1.6	5.0	27	102	48	12	.35	0	0	0
AC-FT	0	121	469	7,920	9,110	13,830	5,030	1,730	325	.08	0	0

CAL YR 1972 TOTAL 1,553.96 MEAN 4.25 MAX 72 MIN 0 AC-FT 3,080
WTR YR 1973 TOTAL 19,428.49 MEAN 53.2 MAX 1,150 MIN 0 AC-FT 38,540

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1930	5.25	2,050	3-6	2400	3.75	329
1-18	2000	6.19	4,050	3-11	0630	4.60	1,040
2-11	1500	5.46	2,470	3-20	0900	4.48	908
2-28	0700	4.11	553	3-26	1000	3.95	467

11224500 LOS GATOS CREEK ABOVE NUNEZ CANYON, NEAR COALINGA, CALIF.

LOCATION.--Lat 36°12'53", long 120°28'11", in NW¼SE¼ sec.5, T.20 S., R.14 E., Fresno County, on right bank 50 ft downstream from highway bridge, 1.1 miles upstream from Nunez Canyon, 3.0 miles downstream from White Creek, and 8.1 miles northwest of Coalinga.

DRAINAGE AREA.--95.8 sq mi.

PERIOD OF RECORD.--May 1945 to current year. Prior to October 1949 monthly discharge only, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,067.2 ft above mean sea level. Prior to Aug. 2, 1959, at site 100 ft downstream at same datum.

AVERAGE DISCHARGE.--28 years, 4.19 cfs (3,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 778 cfs Feb. 11 (gage height, 7.62 ft), from rating curve extended above 87 cfs on basis of slope-area measurement of peak flow; no flow for several months.
Period of record (1949 to current year): Maximum discharge, 4,360 cfs Feb. 24, 1969 (gage height, 10.34 ft in gage well, 11.30 ft, from floodmarks), from rating curve extended above 800 cfs on basis of slope-area measurement at gage height 10.34 ft; no flow for several months in each year.

REMARKS.--Records good. Minor diversion for irrigation and stock ponds.

REVISIONS (WATER YEARS).--WSP 1215: 1950. WSP 1735: 1952(M), 1956(M). WSP 1930: Drainage area. WRD Calif. 1972: 1970(P), 1971(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	1.2	49	10	3.0	.65	.02		
2		0	0	0	1.3	35	8.2	2.6	.65	.02		
3		0	0	0	1.4	31	7.4	2.6	.65	.02		
4		0	0	0	4.0	29	6.6	2.6	.55	.02		
5		0	0	0	3.6	24	5.9	3.0	.29	.02		
6		0	0	0	107	49	5.9	1.8	.21	.02		
7		0	0	0	74	34	4.5	2.1	.15	.01		
8		0	0	.37	31	34	4.5	2.1	.09	.01		
9		0	0	4.3	15	25	4.5	1.8	.09	.01		
10		0	0	4.5	109	24	4.5	1.8	.05	0		
11		7.0	0	1.2	255	25	5.4	1.6	.05	0		
12		1.0	0	.42	94	20	7.4	1.4	.05	0		
13		.49	0	.03	103	19	7.4	1.2	.05	0		
14		33	0	0	58	16	8.2	1.2	.05	0		
15		9.6	0	0	45	16	8.2	1.2	.05	0		
16		35	0	50	38	13	7.4	1.1	.05	0		
17		4.2	.03	17	30	13	6.6	1.1	.05	0		
18		1.9	0	147	26	11	5.9	1.1	.05	0		
19		1.1	0	32	23	13	5.9	.80	.05	0		
20		.86	0	8.8	20	76	5.2	.65	.02	0		
21		.55	0	4.2	18	40	4.5	.65	.02	0		
22		.30	0	2.8	16	36	3.9	.65	.02	0		
23		.01	0	1.8	15	24	3.4	.65	.02	0		
24		0	0	1.5	20	20	3.4	.65	.02	0		
25		0	0	1.8	18	19	3.0	.65	.02	0		
26		0	0	1.6	21	17	3.0	.65	.02	0		
27		0	0	1.3	101	16	3.0	.55	.02	0		
28		0	0	1.2	129	14	3.0	.55	.02	0		
29		0	0	1.3	------	11	3.0	.55	.02	0		
30		0	0	1.5	------	11	3.0	.55	.02	0		
31		------	0	1.3	------	11	------	.55	------	0		------
TOTAL	0	95.01	.03	285.92	1,377.5	775	162.8	41.40	4.05	.15	0	0
MEAN	0	3.17	.001	9.22	49.2	25.0	5.43	1.34	.14	.005	0	0
MAX	0	35	.03	147	255	76	10	3.0	.65	.02	0	0
MIN	0	0	0	0	1.2	11	3.0	.55	.02	0	0	0
AC-FT	0	188	.06	567	2,730	1,540	323	82	8.0	.3	0	0

CAL YR 1972 TOTAL 124.23 MEAN .34 MAX 35 MIN 0 AC-FT 246
WTR YR 1973 TOTAL 2,741.86 MEAN 7.51 MAX 255 MIN 0 AC-FT 5,440

PEAK DISCHARGE (BASE, 40 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-14	0830	4.28	77	2-11	0630	7.62	778
11-15	2400	4.57	129	2-12	2400	6.06	213
1-16	1800	5.35	352	2-28	0330	6.30	285
1-18	1430	5.32	456	3-6	1730	5.78	135
2-6	1800	5.22	392	3-20	0330	6.19	252
2-10	1000	4.90	255	3-21	2030	5.57	86

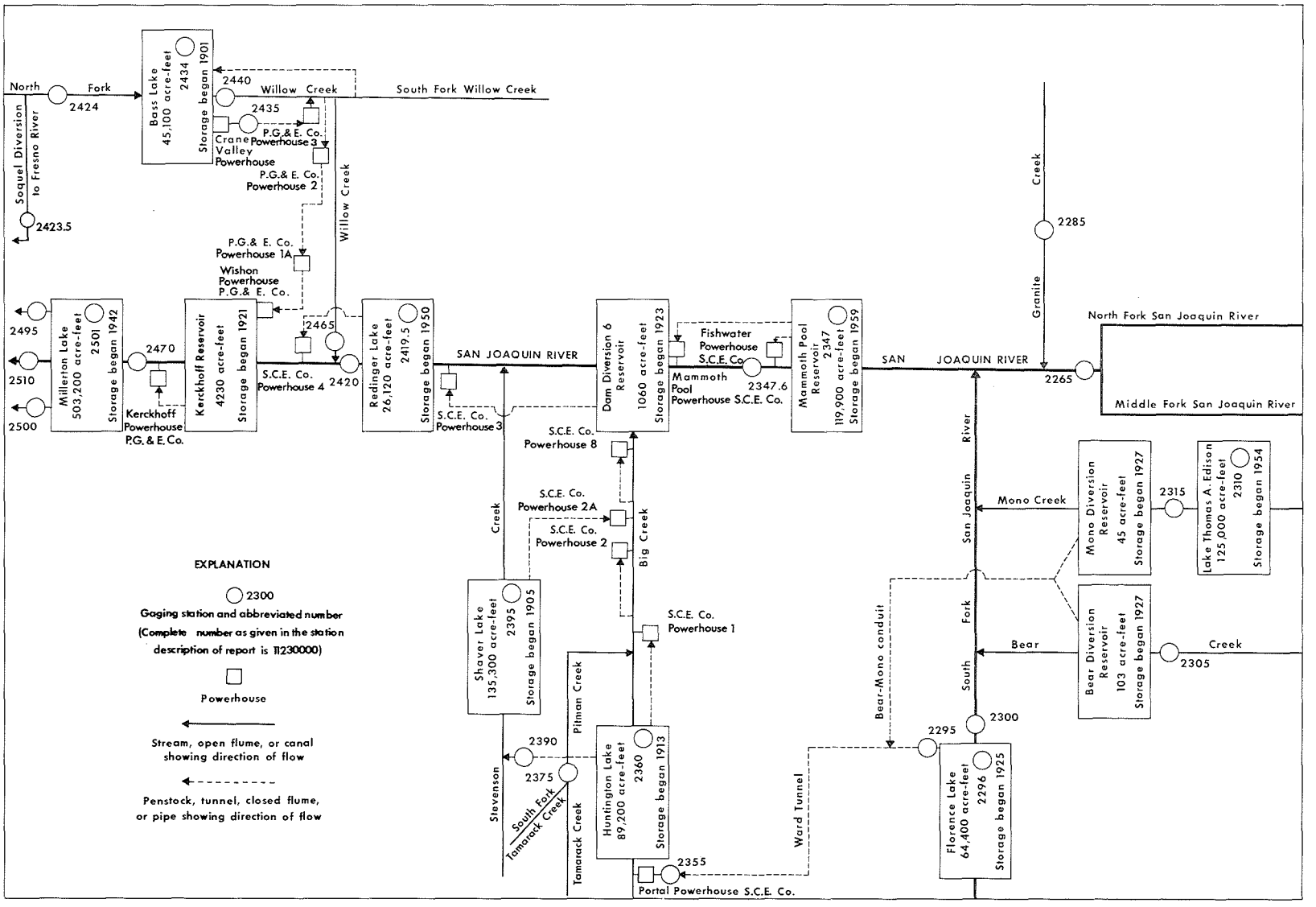

FIGURE 6.-- Schematic diagram showing diversions and storage in San Joaquin River basin.

11226500 SAN JOAQUIN RIVER AT MILLER CROSSING, CALIF.

LOCATION.--Lat 37°30'38", long 119°11'47", in SE¼NE¼ sec.11, T.5 S., R.25 E., Madera County, Sierra National Forest, on right bank at Miller Crossing, 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.--249 sq mi.

PERIOD OF RECORD.--October 1921 to September 1928, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as Middle Fork San Joaquin River at Miller Bridge.

GAGE.--Water-stage recorder. Altitude of gage is 4,570 ft (from topographic map). Prior to Mar. 24, 1922, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--29 years, 594 cfs (430,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,420 cfs May 17 (gage height, 16.85 ft); minimum daily, 55 cfs Sept. 29, 30.
Period of record: Maximum discharge, 16,600 cfs Dec. 23, 1955 (gage height, 21.28 ft), from rating curve extended above 5,200 cfs on basis of contracted-opening measurement of maximum flow; minimum, 19 cfs Nov. 17, 1961.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and eight discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	88	160	139	157	273	234	1,310	3,440	1,310	298	101
2	76	82	154	131	151	256	220	1,480	3,040	1,120	305	99
3	96	78	145	122	160	242	216	1,640	3,020	1,010	310	96
4	159	88	165	116	170	240	232	1,470	3,020	968	418	95
5	189	96	131	110	167	224	290	1,110	3,160	1,020	346	91
6	160	96	139	108	195	220	451	1,020	3,260	1,090	331	89
7	138	109	130	110	228	210	576	1,490	3,380	956	343	86
8	132	103	115	120	224	204	588	2,000	3,530	910	290	85
9	117	103	105	125	214	202	648	2,530	3,520	880	280	82
10	135	108	125	129	240	226	640	2,950	3,180	830	252	80
11	152	108	115	146	222	295	676	4,070	2,940	790	230	78
12	142	112	115	246	240	240	692	3,620	2,800	790	214	78
13	125	118	110	236	260	222	652	4,430	2,610	710	202	76
14	111	117	110	206	248	202	508	3,940	2,170	644	208	76
15	107	163	110	200	226	196	451	4,150	1,640	608	244	76
16	105	206	140	298	218	216	430	4,110	1,560	588	230	76
17	105	200	170	236	214	234	580	4,420	1,590	552	210	75
18	111	179	310	370	214	224	576	4,520	1,650	532	198	74
19	111	168	285	270	210	232	560	4,040	1,760	504	186	72
20	154	146	260	265	210	244	528	3,480	1,790	472	175	70
21	157	146	234	273	206	224	508	3,140	1,840	421	159	68
22	152	145	270	244	195	220	648	3,180	1,810	394	151	66
23	138	131	224	224	196	226	956	3,220	1,600	367	145	68
24	127	129	195	210	220	240	1,270	3,080	1,410	349	131	68
25	108	159	168	200	204	278	1,480	2,850	1,590	328	122	66
26	103	193	162	184	206	305	1,760	2,500	1,880	334	115	59
27	98	195	163	177	252	285	1,950	2,960	2,500	334	115	56
28	97	175	160	179	303	258	2,010	3,870	2,000	343	117	56
29	91	167	134	177	------	236	1,760	3,930	1,740	355	108	55
30	79	154	141	165	------	226	1,520	3,580	1,570	361	102	55
31	78	------	139	160	------	234	------	3,840	------	319	103	------
TOTAL	3,716	4,062	5,084	5,876	5,950	7,334	23,610	93,930	71,000	20,189	6,638	2,272
MEAN	120	135	164	190	213	237	787	3,030	2,367	651	214	75.7
MAX	189	206	310	370	303	305	2,010	4,520	3,530	1,310	418	101
MIN	63	78	105	108	151	196	216	1,020	1,410	319	102	55
AC-FT	7,370	8,060	10,080	11,660	11,800	14,550	46,830	186,300	140,800	40,040	13,170	4,510

CAL YR 1972 TOTAL 163,996 MEAN 448 MAX 2,390 MIN 62 AC-FT 325,300
WTR YR 1973 TOTAL 249,661 MEAN 684 MAX 4,520 MIN 55 AC-FT 495,200

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	2130	14.73	2,550	6-8	2100	16.29	4,540
5-17	2300	16.85	5,420	6-21	2230	14.26	2,090
5-28	2100	16.70	5,180	6-27	1930	14.85	2,690

11228500 GRANITE CREEK NEAR CATTLE MOUNTAIN, CALIF.

LOCATION.--Lat 37°31'36", long 119°15'28", in NE¼ sec.5, T.5 S., R.25 E., Madera County, Sierra National Forest, 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.

PERIOD OF RECORD.--October 1921 to September 1928, May 1952 to current year (no winter records). Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (from topographic map). Prior to May 14, 1922, nonrecording gage at same site at different datum.

AVERAGE DISCHARGE.--7 years (1921-28), 110 cfs (79,640 acre-ft per year).

EXTREMES.--Current year: Maximum discharge recorded, 2,180 cfs May 17 (gage height, 8.82 ft); minimum daily, 0.92 cfs Sept. 7-10.
Period of record: Maximum discharge recorded, 3,140 cfs Dec. 23, 1964 (gage height, 9.49 ft), from rating curve extended above 1,100 cfs; no flow at times in 1924, 1926.

REMARKS.--Records fair. Some regulation by manipulation of stoplogs in controls for fishwater purposes; no diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and four discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	6.4					20	411	983	121	19	1.4
2	1.4	5.8					19	484	875	95	14	1.4
3	1.2	5.5					18	520	790	86	11	1.2
4	2.1	6.4					25	428	857	79	39	1.2
5	3.9	8.6					35	293	884	79	18	1.1
6	6.4	9.0					50	293	929	80	26	1.1
7	7.5	10					80	472	911	67	48	.92
8	13	13					91	638	1,000	63	21	.92
9	9.8	17					112	848	782	57	13	.92
10	13	14					126	974	680	52	9.4	.92
11	25	12					144	1,070	592	45	7.1	1.9
12	26	13					154	1,080	638	41	5.8	1.9
13	21	15					158	1,000	524	36	4.8	1.9
14	15	17					150	1,130	411	34	3.9	1.9
15	14	20					119	1,250	315	33	3.3	1.9
16	13	25					95	1,330	351	32	3.0	1.9
17	13	22					144	1,550	345	30	3.6	1.9
18	15	20					161	1,580	360	27	3.3	1.9
19	13	19					163	1,420	411	23	3.0	1.6
20	16	17					156	1,000	417	20	3.0	1.9
21	25	17					163	893	390	17	2.7	1.9
22	23	16					238	902	351	15	2.4	1.9
23	19	15					339	920	270	13	2.1	2.1
24	17	16					414	743	225	11	1.9	2.1
25	13	18					504	687	265	9.8	1.9	2.4
26	11	21					540	758	318	8.6	1.9	1.9
27	9.8	25					564	983	424	7.8	2.1	1.9
28	9.4	23					556	1,250	253	8.6	1.9	1.6
29	8.6	21			------		512	1,260	203	12	1.9	1.6
30	6.4	20			------		464	1,170	163	37	1.4	1.6
31	6.7	------			------		------	1,250	------	30	1.4	------
TOTAL	379.4	467.7	--	--	--	--	6,314	28,587	15,917	1,269.8	280.8	48.78
MEAN	12.2	15.6	--	--	--	--	210	922	531	41.0	9.06	1.63
MAX	26	25	--	--	--	--	564	1,580	1,000	121	48	2.4
MIN	1.2	5.5	--	--	--	--	18	293	163	7.8	1.4	.92
AC-FT	753	928	--	--	--	--	12,520	56,700	31,570	2,520	557	97

11229500 WARD TUNNEL INTAKE AT FLORENCE LAKE, CALIF.

LOCATION.--Lat 37°16'27", long 118°58'23", in NW¼ sec.1, T.8 S., R.27 E., Fresno County, Sierra National Forest, in gatehouse at entrance to tunnel.

PERIOD OF RECORD.--April 1925 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as Florence Lake tunnel at intake 1925-36 and as Ward tunnel at intake 1937-60.

GAGE.--Water-stage recorder, concrete control, and Venturi meter. Datum of gage is 7,213.89 ft above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--48 years, 277 cfs (200,700 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,990 cfs Apr. 30, 1926; no flow at times.

REMARKS.--Records fair. Ward tunnel diverts from Florence Lake, a reservoir on South Fork San Joaquin River, to Huntington Lake for use in Big Creek powerplants. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and rating table for Venturi meter furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1515: 1931. WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	350	488	77	51	79	98	98	591	1,020	650	250	109
2	350	480	73	54	79	95	91	548	1,030	765	250	109
3	345	488	71	55	78	92	90	609	1,040	904	251	109
4	395	495	73	46	77	92	93	653	1,040	907	253	109
5	425	484	71	41	79	91	111	584	1,040	864	253	109
6	417	468	84	43	82	91	154	473	1,050	852	253	109
7	414	450	88	41	87	87	205	504	1,160	883	385	108
8	310	432	91	43	93	87	222	670	1,280	972	498	108
9	255	453	82	46	91	84	250	959	1,290	929	443	108
10	255	468	87	48	89	88	223	912	1,430	753	404	108
11	254	432	82	60	93	97	214	850	1,500	746	404	108
12	190	387	80	65	109	97	229	819	1,500	697	404	301
13	151	335	75	68	127	95	233	834	1,470	848	402	544
14	152	280	70	68	122	89	201	808	1,300	846	339	540
15	152	225	69	66	113	88	174	808	1,190	843	301	538
16	152	136	68	69	103	92	157	855	1,190	842	300	536
17	152	114	75	65	99	98	182	899	1,190	839	300	531
18	282	104	92	82	97	97	196	904	1,190	835	300	529
19	355	97	95	80	95	98	196	853	659	833	298	521
20	350	87	100	88	93	101	184	880	560	830	246	519
21	347	83	94	117	94	96	177	899	770	826	210	515
22	345	86	91	133	88	92	212	912	410	822	212	512
23	342	77	83	140	87	97	291	924	550	820	212	510
24	194	75	79	133	86	102	404	935	860	817	212	508
25	2.0	79	71	114	82	115	493	943	784	816	142	502
26	2.0	88	69	100	85	126	611	949	568	809	111	497
27	2.0	92	68	91	85	125	723	956	546	809	111	491
28	178	89	66	88	90	118	819	967	584	546	111	484
29	383	83	56	86	------	104	762	982	598	309	111	482
30	380	79	59	83	------	100	702	996	631	309	109	477
31	441	------	55	82	------	97	------	1,010	------	279	109	------
TOTAL	8,322.0	7,734	2,394	2,346	2,582	3,029	8,697	25,486	29,430	23,800	8,184	10,731
MEAN	268	258	77.2	75.7	92.2	97.7	290	822	981	768	264	358
MAX	441	495	100	140	127	126	819	1,010	1,500	972	498	544
MIN	2.0	75	55	41	77	84	90	473	410	279	109	108
AC-FT	16,510	15,340	4,750	4,650	5,120	6,010	17,250	50,550	58,370	47,210	16,230	21,280

CAL YR 1972 TOTAL 87,778.3 MEAN 240 MAX 763 MIN 2.0 AC-FT 174,100
WTR YR 1973 TOTAL 132,735.0 MEAN 364 MAX 1,500 MIN 2.0 AC-FT 263,300

11229600 FLORENCE LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°16'26", long 118°58'23", in NW¼ sec.1, T.8 S., R.27 E., Fresno County, Sierra National Forest, in gatehouse of Ward tunnel intake near dam on South Fork San Joaquin River, 16 miles northeast of town of Big Creek.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--November 1925 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 64,800 acre-ft June 26 (elevation, 7,327.93 ft); minimum, 306 acre-ft Jan. 6 (elevation, 7,225.25 ft).
Period of record: Maximum contents, 66,000 acre-ft July 3, 1932 (elevation, 7,329.14 ft); no available contents Oct. 2-4, 1926, Nov. 30 to Dec. 2, 1927.
NOTE.--Prior to 1960 maximum and minimum daily contents were published.

REMARKS.--Lake is formed by multiple-arch concrete dam; storage began in April 1925. Usable capacity, 64,400 acre-ft between elevations 7,220.9 (throat of Venturi tube in Ward tunnel intake) and 7,327.5 ft (top of spillway drum gates) above mean sea level. Additional storage of 168 acre-ft is not available for diversion. Water is diverted through Ward tunnel to Huntington Lake and used for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

7,220.9	0	7,235	1,770	7,260	11,600	7,290	32,000
7,222	63	7,240	2,980	7,265	14,600	7,300	39,900
7,224	201	7,245	4,670	7,270	17,800	7,310	48,300
7,227	495	7,250	6,650	7,275	21,100	7,320	57,300
7,230	887	7,255	8,950	7,280	24,600	7,330	66,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,824	10,872	331	317	371	363	359	924	49,266	64,214	50,869	45,591
2	24,212	9,991	327	317	371	363	359	952	50,415	64,233	50,904	45,489
3	23,612	9,091	326	317	371	363	358	1,057	51,745	64,329	51,029	45,386
4	22,987	8,211	326	307	371	363	362	1,045	53,569	64,329	51,217	45,267
5	22,311	7,354	333	306	369	362	393	874	55,667	64,484	51,494	45,139
6	21,640	6,484	343	306	369	362	456	812	57,899	64,599	51,834	45,003
7	20,968	5,689	344	306	368	361	486	963	60,252	64,512	51,762	44,867
8	20,478	4,874	343	306	368	361	523	1,341	62,233	64,291	51,324	44,714
9	20,080	3,962	341	306	368	360	512	1,795	63,389	64,098	50,931	44,562
10	19,683	3,042	343	314	368	360	482	2,776	63,436	64,185	50,558	44,410
11	19,275	2,271	337	323	368	362	494	4,487	63,446	64,272	50,086	44,257
12	18,968	1,623	337	326	368	363	509	6,518	63,379	64,233	49,627	43,651
13	18,742	1,098	333	326	369	364	478	7,952	63,714	63,877	49,151	42,713
14	18,503	691	330	325	369	362	441	9,459	63,686	63,408	48,845	41,708
15	18,266	429	330	324	370	362	412	11,247	63,456	62,881	48,591	40,701
16	18,024	375	329	328	370	362	416	13,512	63,417	62,271	48,319	39,697
17	17,781	367	335	328	370	363	455	16,192	63,590	61,672	48,032	38,700
18	17,282	361	342	344	370	363	450	19,221	63,772	60,829	47,710	37,703
19	16,645	350	355	340	369	364	444	22,027	64,252	60,016	47,388	36,716
20	16,039	342	349	353	369	364	427	24,411	64,512	59,123	47,112	35,735
21	15,452	342	345	380	368	364	444	26,204	64,272	58,159	46,922	34,755
22	14,865	335	346	385	367	363	529	27,919	64,320	57,118	46,697	33,782
23	14,293	332	340	386	366	364	682	29,438	64,214	56,063	46,456	32,796
24	14,007	333	336	386	365	365	813	31,093	64,224	54,968	46,190	31,829
25	14,098	339	327	383	363	369	961	32,387	64,570	53,897	46,019	30,866
26	14,196	348	328	373	362	371	1,153	33,410	64,512	52,779	45,967	29,902
27	14,293	346	326	373	362	371	1,321	35,139	64,474	51,798	45,959	28,902
28	14,049	341	322	372	362	370	1,319	38,232	64,175	51,155	45,916	28,037
29	13,344	335	319	372	------	365	1,204	41,741	64,272	51,029	45,856	27,106
30	12,619	333	322	372	------	362	1,056	44,587	64,214	50,904	45,770	26,110
31	11,792	------	317	371	------	362	------	47,588	------	50,842	45,693	------
MAX	24,824	10,872	355	386	371	371	1,321	47,588	64,570	64,599	51,834	45,591
MIN	11,792	332	317	306	362	360	358	812	49,266	50,842	45,693	26,110
(a)	7,260.32	7,225.53	7,225.36	7,225.91	7,225.82	7,225.82	7,231.08	7,309.20	7,327.30	7,312.90	7,307.00	7,282.12
(b)	-13,600	-11,500	-16	+54	-9	0	+694	+46,500	+16,600	-13,400	-5,150	-19,600

CAL YR 1972 b -8,800
WTR YR 1973 b +678

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11230000 SOUTH FORK SAN JOAQUIN RIVER NEAR FLORENCE LAKE, CALIF.

LOCATION.--Lat 37°16'24", long 118°57'54", in SE¼ sec.36, T.7 S., R.27 E., Fresno County, Sierra National Forest, on left bank 0.1 mile downstream from spillway of Florence Lake Dam, 6 miles upstream from Bear Creek, and 14.7 miles east of Big Creek.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1925, published as "near Lake Florence."

GAGE.--Water-stage recorder, Parshall flume, and concrete control. Altitude of gage is 7,200 ft (from topographic map).

AVERAGE DISCHARGE (combined flow of South Fork San Joaquin River and Ward tunnel at intake).--52 years, 316 cfs (228,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,680 cfs June 27 (gage height, 13.10 ft); minimum daily, 1.6 cfs May 18.
Period of record: Maximum discharge, 4,320 cfs June 6, 1940 (gage height, 15.38 ft); no flow at times.

REMARKS.--Records excellent. Flow regulated by Florence Lake 0.1 mile upstream beginning in 1925 (see sta 11229600) and by diversion into Ward tunnel (see sta 11229500). See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and two discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	5.1	4.0	4.0	3.9	4.0	4.2	4.6	6.7	700	9.2	9.0
2	5.3	5.7	4.0	4.0	4.0	4.0	4.1	4.6	7.0	306	9.2	9.0
3	5.3	5.6	4.0	4.0	4.0	4.0	4.1	4.6	7.2	27	9.3	9.0
4	5.5	5.6	4.0	4.0	4.0	3.9	4.2	4.6	7.5	11	9.3	9.0
5	5.3	5.5	4.0	4.0	4.0	3.9	4.3	4.5	8.2	29	9.4	9.0
6	5.2	5.4	4.0	4.0	4.0	3.9	4.5	4.4	8.2	85	9.6	8.8
7	5.2	5.2	4.0	4.0	4.0	4.0	4.4	4.4	8.3	91	9.4	8.8
8	5.2	5.1	4.0	4.0	4.0	4.0	4.5	4.6	322	38	9.4	8.8
9	5.2	5.0	4.0	4.0	4.0	3.9	4.4	4.7	700	9.9	9.3	8.8
10	5.1	4.9	4.0	4.0	3.9	3.9	4.5	4.7	885	9.8	9.2	8.8
11	5.1	4.8	3.9	4.0	3.9	4.0	4.6	4.2	875	13	9.2	8.8
12	5.1	4.6	3.8	4.0	4.0	4.0	4.5	3.9	665	85	9.2	7.7
13	5.1	4.4	3.6	4.0	4.0	4.0	4.3	4.7	322	9.9	9.1	6.8
14	5.1	4.3	3.7	4.0	4.0	4.0	4.3	4.8	302	10	9.1	7.2
15	5.1	4.2	3.8	4.0	4.0	4.0	4.3	5.1	123	11	9.0	7.2
16	5.1	4.1	3.9	4.0	3.9	4.0	4.4	5.1	8.4	11	9.0	7.2
17	5.0	4.1	4.2	4.0	4.0	4.0	4.6	3.4	8.4	11	9.1	7.1
18	5.0	4.1	4.1	3.9	4.0	4.0	4.5	1.6	8.4	10	9.1	7.0
19	5.0	4.1	4.2	4.0	4.0	4.0	4.4	1.7	447	10	9.0	7.0
20	5.0	4.0	4.1	4.0	4.0	4.0	4.3	1.8	992	10	9.0	7.0
21	4.9	4.0	4.1	4.0	4.0	4.0	4.5	1.8	720	10	9.0	6.8
22	4.9	4.0	4.1	4.0	4.0	4.0	4.7	1.9	950	10	9.0	6.8
23	4.9	4.0	4.1	4.0	4.0	4.0	4.9	4.5	900	10	9.0	6.8
24	4.9	4.0	4.1	4.0	4.0	4.0	4.9	6.2	492	10	8.8	6.8
25	4.9	4.0	4.1	4.0	4.0	4.1	5.0	6.4	546	9.9	8.8	6.8
26	4.9	4.0	4.1	4.0	4.0	4.2	5.1	5.9	1,120	9.7	9.1	6.8
27	4.9	4.0	4.1	3.9	4.0	4.3	5.1	6.2	1,450	9.6	9.0	6.7
28	4.9	4.0	4.1	4.0	4.0	4.2	5.1	6.0	1,390	9.4	9.0	6.7
29	4.9	4.0	4.1	4.0	------	4.1	4.8	6.1	1,020	9.2	9.0	6.7
30	4.8	4.0	4.1	4.0	------	4.1	4.7	6.2	962	9.2	9.0	6.6
31	4.7	------	4.1	4.0	------	4.1	------	6.6	------	9.3	9.0	------
TOTAL	156.9	135.8	124.4	123.8	111.6	124.6	136.2	139.8	15,261.3	1,593.9	282.8	229.5
MEAN	5.06	4.53	4.01	3.99	3.99	4.02	4.54	4.51	509	51.4	9.12	7.65
MAX	5.5	5.7	4.2	4.0	4.0	4.3	5.1	6.6	1,450	700	9.6	9.0
MIN	4.7	4.0	3.6	3.9	3.9	3.9	4.1	1.6	6.7	9.2	8.8	6.6
AC-FT	311	269	247	246	221	247	270	277	30,270	3,160	561	455

CAL YR 1972 TOTAL 1,722.7 MEAN 4.71 MAX 7.9 MIN 3.0 AC-FT 3,420
WTR YR 1973 TOTAL 18,420.6 MEAN 50.5 MAX 1,450 MIN 1.6 AC-FT 36,540

11230500 BEAR CREEK NEAR LAKE THOMAS A. EDISON, CALIF.

LOCATION.--Lat 37°20'18", long 118°58'23", in SW¼ sec.12, T.7 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, 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.--52.5 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

GAGE.--Water-stage recorder. Datum of gage is 7,366.94 ft above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--52 years, 89.4 cfs (64,770 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 812 cfs May 17 (gage height, 5.66 ft); minimum daily, 9.0 cfs Sept. 27-30.
Period of record: Maximum discharge, 1,800 cfs Sept. 5, 1972 (gage height, 6.98 ft); maximum gage height, 7.12 ft July 26, 1956; minimum discharge recorded, 1.2 cfs Sept. 29 to Oct. 5, 1924.

REMARKS.--Records good except those for winter periods, which are fair. No storage or diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and seven discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 611: 1922(M). WSP 1345: 1931-35. WSP 1515: 1922-30. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	26	24	20	27	25	142	415	354	83	25
2	12	13	25	23	20	25	23	163	354	290	88	24
3	15	12	25	23	19	25	23	185	375	262	94	23
4	18	12	24	22	21	25	24	160	406	262	128	22
5	29	16	23	22	22	25	29	115	447	283	128	20
6	34	15	23	21	22	23	46	105	492	290	126	19
7	31	16	21	21	32	23	61	147	546	273	109	18
8	29	16	20	21	34	22	67	231	585	266	92	18
9	27	19	19	21	29	22	68	318	610	255	81	17
10	25	17	18	25	29	22	59	379	565	243	71	16
11	23	15	18	30	35	25	70	438	541	228	64	16
12	21	20	18	50	38	27	71	474	532	222	56	15
13	19	21	18	45	37	24	59	469	492	202	50	15
14	17	17	18	34	36	24	47	402	402	182	50	15
15	16	31	18	28	34	23	42	433	310	171	53	15
16	14	45	18	25	30	23	40	519	298	158	49	15
17	14	38	22	25	28	25	46	580	322	137	47	14
18	13	29	27	25	26	25	45	630	330	135	44	13
19	13	26	30	24	25	25	44	537	375	137	41	12
20	19	22	30	23	26	24	41	456	397	121	38	12
21	25	20	31	23	24	25	46	379	402	109	36	11
22	27	28	28	22	23	26	65	375	384	101	34	11
23	27	19	25	22	22	26	101	338	338	95	30	11
24	23	23	23	22	21	27	131	342	310	90	29	10
25	18	25	22	22	22	30	158	322	362	86	27	9.9
26	20	32	22	22	22	32	202	318	451	86	28	9.5
27	19	34	23	21	22	30	222	438	615	88	35	9.0
28	17	31	22	21	25	28	225	570	496	86	31	9.0
29	13	28	25	21	------	28	196	610	424	81	28	9.0
30	12	26	26	20	------	25	174	555	411	76	27	9.0
31	16	------	27	20	------	25	------	595	------	81	26	------
TOTAL	619	682	715	768	744	786	2,450	11,725	12,987	5,450	1,823	442.4
MEAN	19.9	22.7	23.1	24.8	26.6	25.4	81.7	378	433	176	58.8	14.7
MAX	34	45	31	50	38	32	225	630	615	354	128	25
MIN	12	12	18	20	19	22	23	105	298	76	26	9.0
AC-FT	1,230	1,350	1,420	1,520	1,480	1,560	4,860	23,260	25,760	10,810	3,620	878

CAL YR 1972 TOTAL 24,139.9 MEAN 66.0 MAX 810 MIN 6.5 AC-FT 47,880
WTR YR 1973 TOTAL 39,190.4 MEAN 107 MAX 630 MIN 9.0 AC-FT 77,730

PEAK DISCHARGE (BASE, 440 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-12	2130	5.31	605	6-8	2200	5.45	680
5-17	2130	5.66	812	6-27	0700	5.40	650
5-28	1830	5.54	734				

11231000 LAKE THOMAS A. EDISON NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°22'13", long 118°59'13", in sec.26, T.6 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, in outlet works of dam on Mono Creek at lower end of Vermilion Valley, 18.1 miles northeast of town of Big Creek.

DRAINAGE AREA.--90.0 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 115,500 acre-ft July 30 (elevation, 7,637.28 ft); minimum, 9,250 acre-ft Apr. 9 (elevation, 7,559.64 ft).
Period of record: Maximum contents, 125,900 acre-ft Aug. 18, 1958 (elevation, 7,642.95 ft); minimum since appreciable storage was attained, 5,080 acre-ft Mar. 27, 1969 (elevation, 7,553.09 ft).
NOTE.--Prior to 1960, maximum and minimum daily contents were published.

REMARKS.--Lake is formed by earthfill dam; dam completed and storage began on Oct. 12, 1954. Usable capacity, 125,000 acre-ft between elevations 7,508.9 (invert of outlet works) and 7,642.5 ft (top of gates in service spillway) above mean sea level. Water is released for diversion to Ward tunnel via Mono Creek diversion works. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

7,508.9	0	7,535	513	7,560	9,520	7,610	68,600
7,515	18	7,540	928	7,570	18,100	7,620	85,000
7,520	64	7,545	1,830	7,580	28,500	7,630	102,400
7,525	156	7,550	3,570	7,590	40,500	7,640	120,400
7,530	297	7,555	6,150	7,600	53,800	7,643	126,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92,883	93,506	88,469	71,263	55,351	35,449	13,069	16,777	60,775	103,344	114,923	102,687
2	92,883	93,506	88,161	70,625	54,630	34,689	12,452	17,326	62,353	104,091	114,723	101,995
3	92,883	93,524	87,887	70,163	54,051	33,970	11,843	17,552	63,875	104,786	114,505	101,217
4	92,952	93,645	87,613	69,927	53,588	33,220	11,427	17,816	65,508	105,482	114,305	100,509
5	93,004	93,645	87,306	69,721	52,806	32,491	10,950	18,080	67,241	106,197	114,142	99,786
6	93,056	93,645	87,066	69,500	52,195	31,755	10,474	18,445	69,027	106,913	113,924	99,081
7	93,108	93,680	86,793	69,311	51,505	31,004	10,014	19,031	71,040	107,503	113,833	98,360
8	93,143	93,680	86,367	69,263	50,736	30,261	9,567	19,794	73,220	108,131	114,015	97,570
9	93,177	93,593	85,771	69,184	49,999	29,524	9,284	20,757	75,181	108,688	114,087	96,869
10	93,195	93,299	85,193	68,884	49,402	28,762	9,476	21,940	77,228	109,298	114,033	96,171
11	93,212	92,987	84,617	68,319	48,794	28,061	9,683	23,282	79,096	109,838	113,979	95,472
12	93,212	92,588	84,008	67,772	48,094	27,321	9,922	24,749	80,812	110,343	113,888	95,002
13	93,212	92,017	83,382	67,178	47,345	26,589	10,169	26,338	82,321	110,811	113,851	94,845
14	93,212	91,965	82,708	66,574	46,626	25,820	10,363	28,105	83,923	111,280	113,615	94,654
15	93,212	92,034	82,035	65,972	45,845	25,089	10,530	30,364	85,074	111,786	113,270	94,497
16	93,212	92,121	81,397	65,693	45,122	24,355	10,689	32,949	86,112	112,130	112,872	94,341
17	93,212	92,173	80,879	65,080	44,375	23,629	10,879	35,183	87,220	112,510	112,492	94,219
18	93,247	92,207	80,227	64,775	43,634	22,877	11,029	36,951	88,349	113,016	112,076	94,080
19	93,299	92,207	79,660	64,241	42,870	22,164	11,199	38,722	89,534	113,161	111,642	93,941
20	93,316	91,844	79,046	63,649	42,112	21,482	11,362	40,479	90,636	113,416	111,046	93,802
21	93,333	91,637	78,399	63,121	41,395	20,787	11,541	42,047	91,826	113,670	110,325	93,663
22	93,437	91,309	77,755	62,532	40,607	20,058	11,778	43,595	92,969	113,906	109,622	93,524
23	93,489	90,963	77,130	61,905	39,850	19,333	12,084	45,004	93,976	114,124	108,867	93,368
24	93,524	90,618	76,521	61,205	39,108	18,608	12,552	46,401	94,880	114,342	108,167	93,229
25	93,524	90,342	75,835	60,495	38,348	17,892	13,052	47,773	95,996	114,560	107,467	93,091
26	93,524	90,032	75,181	59,728	37,629	17,194	13,670	49,064	97,219	114,814	106,823	92,969
27	93,541	89,723	74,532	58,968	36,926	16,481	14,273	50,559	98,729	114,905	106,143	92,848
28	93,541	89,413	73,948	58,282	36,192	15,768	14,822	52,611	100,033	115,105	105,482	92,727
29	93,541	89,104	73,252	57,573	------	15,054	15,540	54,827	101,270	115,251	104,786	92,606
30	93,454	88,795	72,625	56,838	------	14,343	16,277	56,939	102,385	115,433	104,092	92,485
31	93,454	------	71,998	56,093	------	13,705	------	59,070	------	115,160	103,362	------
MAX	93,541	93,680	88,469	71,263	55,351	35,449	16,277	59,070	102,385	115,433	114,923	102,687
MIN	92,883	88,795	71,998	56,093	36,192	13,705	9,284	16,777	60,775	103,344	103,362	92,485
(a)	7,624.92	7,622.22	7,612.13	7,601.64	7,586.57	7,565.13	7,568.01	7,603.70	7,630.01	7,637.12	7,630.56	7,624.36
(b)	+623	-4,660	-16,800	-15,900	-19,900	-22,500	+2,570	+42,800	+43,300	+12,800	-11,800	-10,900

CAL YR 1972 b -22,000
WTR YR 1973 b -346

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11231500 MONO CREEK BELOW LAKE THOMAS A. EDISON, CALIF.

LOCATION.--Lat 37°21'40", long 118°59'26", in SW¼ sec.35, T.6 S., R.27 E. (unsurveyed), Fresno County, Sierra National Forest, on left bank 0.6 mile upstream from diversion dam, 1 mile downstream from Lake Thomas A. Edison Dam, and 1.9 miles northeast of Mono Hot Springs.

DRAINAGE AREA.--92.5 sq mi.

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1954, published as "near Vermilion Valley."

GAGE.--Water-stage recorder. Altitude of gage is 7,400 ft (from topographic map).

AVERAGE DISCHARGE (adjusted for storage).--52 years, 151 cfs (109,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 490 cfs Mar. 6 (gage height, 6.54 ft); minimum daily, 12 cfs May 5, 6.
Period of record: Maximum discharge, 1,760 cfs June 2, 1938 (gage height, 8.62 ft); minimum daily, 0.3 cfs Nov. 11, 12, 1954.

REMARKS.--Records good. Flow regulated by Lake Thomas A. Edison 1 mile upstream beginning Oct. 12, 1954 (see sta 11231000). No diversion above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and eight discharge measurements furnished by Southern California Edison Co., in connection with Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1011: 1943. WSP 1515: 1956.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	17	201	385	480	480	430	13	21	13	230	343
2	16	17	201	380	475	475	420	15	21	13	230	343
3	16	17	201	285	390	480	385	15	20	13	230	343
4	16	17	201	141	348	480	325	15	20	13	230	343
5	16	16	201	141	475	480	325	12	20	13	230	343
6	16	16	205	141	480	485	348	12	20	13	230	343
7	16	16	205	141	480	485	357	14	20	13	122	343
8	16	16	269	141	480	480	357	16	20	13	27	343
9	16	83	366	141	480	480	241	18	20	13	61	343
10	16	169	366	245	480	480	13	19	20	13	97	343
11	16	215	370	370	480	480	13	21	20	13	97	343
12	16	241	385	370	485	480	14	30	20	13	97	245
13	16	357	385	370	485	480	14	28	18	13	97	102
14	16	147	390	370	485	480	13	27	15	13	160	100
15	16	17	400	370	485	480	13	27	15	13	212	100
16	16	17	395	375	485	480	13	27	15	13	234	81
17	16	17	400	380	480	480	14	26	14	13	234	79
18	17	16	395	380	480	480	15	28	14	13	234	79
19	17	16	390	375	480	480	15	27	14	13	234	79
20	17	182	390	375	480	480	15	24	14	13	297	79
21	17	201	390	380	480	485	15	23	13	13	343	79
22	16	201	385	390	480	485	15	23	13	13	343	79
23	16	201	385	430	480	485	16	22	13	13	343	79
24	16	201	385	470	475	480	17	22	13	13	343	70
25	16	201	385	470	475	480	19	22	13	13	343	77
26	16	201	385	470	480	480	22	21	13	13	343	77
27	16	201	385	470	480	480	21	21	13	13	343	77
28	16	201	385	470	480	480	16	21	13	13	343	77
29	16	201	385	475	------	480	16	21	13	13	343	77
30	16	201	385	480	------	480	15	21	13	53	343	77
31	16	------	385	480	------	430	------	21	------	201	343	------
TOTAL	500	3,619	10,556	10,861	13,223	14,850	3,512	652	491	631	7,356	5,486
MEAN	16.1	121	341	350	472	479	117	21.0	16.4	20.4	237	183
MAX	17	357	400	480	485	485	430	30	21	201	343	343
MIN	16	16	201	141	348	430	13	12	13	13	27	70
AC-FT	992	7,180	20,940	21,540	26,230	29,450	6,970	1,290	974	1,250	14,590	10,880

CAL YR 1972 TOTAL 49,255 MEAN 135 MAX 475 MIN 13 AC-FT 97,700
WTR YR 1973 TOTAL 71,737 MEAN 197 MAX 485 MIN 12 AC-FT 142,300

11234700 MAMMOTH POOL RESERVOIR NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°19'45", long 119°19'40", in SW¼ sec.10, T.7 S., R.24 E., Madera County, Sierra National Forest, in gatehouse of power tunnel intake near dam on San Joaquin River, 10 miles northwest of town of Big Creek.

DRAINAGE AREA.--995 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 124,100 acre-ft May 19 (elevation, 3,333.75 ft); minimum, 4,580 acre-ft Apr. 5 (elevation, 3,139.87 ft).
Period of record: Maximum contents, 126,500 acre-ft June 2, 3, 1969; maximum elevation, 3,335.86 ft June 3, 1969; minimum contents since appreciable storage was attained, 4,580 acre-ft Apr. 5, 1973 (elevation, 3,139.87 ft).

REMARKS.--Reservoir is formed by an earthfill dam; storage began Oct. 8, 1959. Usable capacity, 119,900 acre-ft between elevations 3,100.00 (invert of power tunnel) and 3,330.00 ft (crest of spillway) above mean sea level. Additional storage of 2,780 acre-ft is not available for release. Water is diverted through tunnel for power development; water is returned to river 8.5 miles downstream from dam. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,100	0	3,130	3,110	3,180	14,100	3,260	56,400
3,105	417	3,140	4,600	3,190	17,400	3,280	72,100
3,110	861	3,150	6,400	3,200	21,400	3,300	89,800
3,115	1,360	3,160	8,620	3,220	31,100	3,320	109,300
3,120	1,900	3,170	11,200	3,240	42,800	3,335	125,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,779	4,852	10,248	13,488	14,927	10,998	4,940	40,720	122,596	120,383	99,516	56,669
2	33,662	4,794	10,189	13,043	14,337	10,621	4,712	43,927	122,294	119,831	99,290	55,399
3	32,643	4,762	10,135	12,619	13,829	10,119	4,732	47,963	122,227	119,394	98,686	53,941
4	31,689	4,707	10,076	11,942	13,434	9,653	4,697	51,481	122,361	119,645	97,553	52,808
5	30,755	4,707	9,967	10,217	13,004	8,907	4,603	53,168	122,294	119,569	96,479	52,076
6	29,858	4,681	9,779	10,414	12,946	8,201	4,820	54,148	122,451	119,612	95,582	51,488
7	29,694	4,699	9,642	10,892	13,814	7,424	4,625	58,287	122,428	119,470	94,508	50,673
8	29,663	4,655	9,303	11,201	13,585	6,511	4,651	63,460	122,820	119,285	93,741	50,017
9	29,641	4,651	9,562	11,127	13,087	5,572	4,881	70,752	122,797	119,110	93,268	49,467
10	28,702	4,683	10,145	10,941	13,875	5,179	4,952	79,878	122,786	118,979	92,326	49,005
11	27,960	5,186	9,840	10,981	14,509	5,320	5,439	90,545	122,540	118,697	90,620	48,556
12	27,091	5,517	9,774	11,349	14,515	4,891	6,102	101,812	122,361	118,059	88,596	48,144
13	26,195	5,478	9,779	11,611	14,123	4,967	6,581	112,875	122,216	117,446	86,758	47,725
14	26,021	5,876	9,939	11,900	13,646	5,030	6,133	122,160	121,626	116,697	84,484	47,229
15	25,893	6,480	9,847	11,832	12,743	4,876	5,172	123,413	120,881	115,793	82,358	46,751
16	25,027	7,129	10,349	13,395	11,759	4,861	4,683	123,694	120,660	114,786	80,098	46,314
17	24,203	7,908	11,266	15,215	10,778	5,200	4,836	123,918	120,516	113,781	78,837	45,793
18	23,364	8,604	11,553	18,031	10,233	5,398	4,864	123,997	120,516	112,643	77,746	45,350
19	22,562	8,946	11,787	19,259	9,832	5,068	4,622	123,480	120,792	111,406	76,989	44,866
20	21,129	8,686	11,973	19,918	9,535	5,426	4,605	122,775	121,314	110,373	75,823	44,376
21	19,821	9,149	12,058	19,525	9,149	4,802	4,692	122,797	121,036	108,904	74,644	43,888
22	18,555	9,648	12,335	19,033	9,370	4,982	4,768	122,663	121,303	107,478	73,254	43,422
23	17,109	10,109	13,037	19,009	9,698	5,032	6,263	123,177	121,047	105,964	72,101	42,958
24	15,854	10,207	13,482	18,645	10,148	4,998	9,293	122,440	120,560	104,312	69,637	43,060
25	14,426	10,543	13,909	18,304	10,106	5,068	13,217	122,249	120,460	102,899	67,618	43,225
26	13,139	10,522	13,835	17,863	10,007	4,952	17,833	122,071	121,225	101,255	65,638	43,314
27	11,739	10,621	13,240	17,389	10,117	4,964	23,554	122,596	121,904	100,235	63,515	43,333
28	10,153	10,516	12,470	17,012	10,995	4,797	29,547	123,256	121,403	99,782	62,302	43,346
29	8,495	10,383	11,742	16,591	------	4,719	34,320	123,043	120,958	100,265	60,932	43,371
30	6,501	10,305	12,366	16,083	------	4,807	38,179	122,931	120,815	100,019	59,548	43,390
31	4,876	------	12,961	15,596	------	4,960	------	122,931	------	99,832	58,085	------
MAX	34,779	10,621	13,909	19,918	14,927	10,998	38,179	123,997	122,820	120,383	99,516	56,669
MIN	4,876	4,651	9,303	10,217	9,149	4,719	4,603	40,720	120,460	99,782	58,085	42,958
(a)	3,141.63	3,166.76	3,176.35	3,184.75	3,169.37	3,142.13	3,232.49	3,332.69	3,330.79	3,310.56	3,262.30	3,240.95
(b)	-29,900	+5,430	+2,660	+2,640	-4,600	-6,040	+33,200	+84,800	-2,120	-21,000	-41,700	-14,700

CAL YR 1972 b -4,720
WTR YR 1973 b +8,630

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11234760 SAN JOAQUIN RIVER ABOVE SHAKEFLAT CREEK, NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°19'00", long 119°19'37", in NW¼SW¼ sec.14, T.7 S., R.24 E., Madera County, Sierra National Forest, on right bank 1,500 ft upstream from Shakeflat Creek, 4,900 ft downstream from Mammoth Pool Dam, and 10 miles northwest of town of Big Creek.

DRAINAGE AREA.--1,003 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,865.50 ft above mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum discharge, 9,490 cfs May 19 (gage height, 14.55 ft); minimum daily, 11 cfs Jan. 27 to Feb. 3, Feb. 5.
Period of record: Maximum discharge, 18,400 cfs June 3, 1969 (gage height, 18.38 ft); minimum daily, 0.3 cfs Oct. 14, Dec. 5, 1959.

REMARKS.--Records good. Flow regulated by Mammoth Pool Reservoir 4,900 ft upstream (see sta 11234700). Flow partly regulated by Florence Lake (see sta 11229600), Lake Thomas A. Edison (see sta 11231000) and diversions through Ward tunnel (see sta 11229500), and through Mono-Bear conduit to Ward tunnel. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and ten discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	12	12	11	16	14	28	4,810	577	25	28
2	13	12	12	12	11	16	14	29	3,960	591	25	28
3	13	12	12	12	11	17	14	29	3,490	32	27	28
4	13	13	13	12	12	16	14	29	3,320	30	30	27
5	13	12	12	12	11	16	14	29	3,570	30	29	27
6	13	12	12	12	12	17	14	29	3,670	30	29	27
7	13	12	12	12	14	16	14	29	4,020	30	29	27
8	13	12	12	12	13	16	14	30	4,750	30	29	27
9	13	12	12	13	12	15	14	31	5,400	30	29	27
10	13	12	12	13	23	16	14	31	5,040	30	29	27
11	13	13	12	13	27	17	17	31	4,320	30	29	27
12	13	12	13	14	23	15	19	32	3,290	30	29	27
13	13	12	13	13	20	15	23	31	3,380	30	29	27
14	13	17	13	13	18	15	25	1,140	2,390	30	29	27
15	13	15	13	13	17	15	25	6,290	1,130	30	29	27
16	13	14	13	34	16	14	24	6,680	598	30	29	27
17	13	12	16	19	16	14	24	7,510	420	30	29	27
18	12	12	13	31	15	14	25	7,980	398	30	29	27
19	13	12	13	16	15	14	25	7,690	553	30	29	27
20	13	12	13	13	15	18	25	6,020	1,440	30	29	27
21	12	12	13	13	15	16	25	4,560	1,590	30	28	26
22	12	12	13	12	15	15	23	4,680	1,760	30	27	23
23	12	12	13	12	14	15	21	4,500	1,480	30	24	23
24	12	12	13	12	15	15	25	4,780	704	30	26	23
25	12	12	13	12	15	15	26	3,690	415	29	28	23
26	13	12	13	12	17	15	27	3,290	1,040	29	28	23
27	13	12	12	11	20	15	27	3,460	2,670	31	28	23
28	13	12	13	11	21	15	28	4,860	2,730	33	28	26
29	13	12	12	11	------	14	28	5,800	1,610	33	28	31
30	13	12	12	11	------	14	29	5,260	1,110	30	28	31
31	12	------	12	11	------	14	------	5,460	------	25	28	------
TOTAL	396	372	392	429	444	475	631	94,038	75,058	2,040	872	795
MEAN	12.8	12.4	12.6	13.8	15.9	15.3	21.0	3,033	2,502	65.8	28.1	26.5
MAX	13	17	16	34	27	18	29	7,980	5,400	591	30	31
MIN	12	12	12	11	11	14	14	28	398	25	24	23
AC-FT	785	738	778	851	881	942	1,250	186,500	148,900	4,050	1,730	1,580

CAL YR 1972 TOTAL 4,873 MEAN 13.3 MAX 21 MIN 12 AC-FT 9,670
WTR YR 1973 TOTAL 175,942 MEAN 482 MAX 7,980 MIN 11 AC-FT 349,000

11235500 WARD TUNNEL OUTLET AT HUNTINGTON LAKE, CALIF.

LOCATION.--Lat 37°15'25", long 119°09'38", in SE¼SW¼ sec.5, T.8 S., R.26 E., Fresno County, Sierra National Forest, at tunnel outlet at east end of Huntington Lake, 0.9 mile east of Lakeshore Post Office, and 6 miles northeast of Big Creek.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1960, published as Ward tunnel at outlet.

GAGE.--Pressure-differential recorder to record discharge through penstock. November 1927 to May 23, 1956, water-stage recorder at datum 6,999.00 ft above mean sea level (levels by Southern California Edison Co.). May 24, 1956, to Sept. 30, 1968, no recorder, see REMARKS below.

AVERAGE DISCHARGE.--46 years, 478 cfs (346,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 2,080 cfs June 21, 1935; no flow at times in 1961, 1964-65, 1968, 1971-73.

REMARKS.--For the period May 24, 1956, to Sept. 30, 1968, daily discharge computed as the sum of Ward tunnel at intake, Mono-Bear conduit, Camp Creek conduit, and corrected for change in contents of Portal Forebay. Tunnel diverts from Florence Lake to Huntington Lake, receives diversions from Bear and Mono Creeks and at times from several other small tributaries of South Fork San Joaquin River. See record for sta 11229500 Ward tunnel intake at Florence Lake.

COOPERATION.--Records collected by Southern California Edison Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	519	296	422	524	559	522	771	1,480	1,110	605	524
2	253	504	276	430	524	555	500	772	1,460	1,120	606	518
3	365	518	415	442	566	551	482	866	1,470	1,230	608	528
4	441	522	282	192	277	548	427	875	1,480	1,250	654	523
5	449	511	276	193	531	547	441	758	1,500	1,210	650	518
6	434	496	314	200	565	546	525	650	1,500	1,210	662	512
7	441	484	335	188	542	544	642	710	1,500	1,220	661	519
8	442	463	307	188	555	538	641	1,000	1,300	1,300	632	522
9	257	574	446	198	564	533	562	1,330	1,450	1,240	580	505
10	275	707	446	222	569	539	311	1,340	1,470	1,090	583	518
11	276	684	446	389	539	558	309	1,310	1,600	1,030	579	517
12	110	621	448	438	601	556	337	1,320	1,560	975	566	602
13	183	675	457	438	570	552	328	1,340	1,520	1,090	560	662
14	186	512	462	438	595	542	282	1,330	1,530	1,080	570	670
15	194	298	462	438	542	540	352	1,330	1,610	1,060	595	671
16	162	210	462	445	559	545	246	1,380	1,550	1,040	618	642
17	187	167	461	414	551	557	192	1,430	1,670	1,010	615	634
18	225	143	495	453	549	554	334	1,460	1,610	1,010	610	629
19	444	161	482	455	548	555	267	1,390	1,050	1,000	607	621
20	376	281	507	469	546	558	260	1,400	755	982	628	623
21	424	306	506	507	549	559	251	1,390	1,070	953	644	622
22	385	301	495	532	542	546	317	1,390	923	958	643	617
23	392	297	474	570	555	555	419	1,410	947	932	641	613
24	227	297	474	581	550	563	600	1,420	1,100	932	639	604
25	40	283	446	567	550	580	686	1,420	1,180	921	597	607
26	0	323	452	549	540	601	886	1,410	1,090	916	516	601
27	0	328	457	537	540	594	1,020	1,440	1,040	914	535	592
28	206	315	448	530	543	585	1,110	1,480	1,090	627	535	585
29	378	305	432	533	------	621	1,050	1,470	1,080	396	530	582
30	400	285	429	531	------	507	944	1,470	1,110	433	528	576
31	465	------	447	526	------	523	------	1,530	------	590	530	------
TOTAL	8,949	12,090	13,135	13,015	15,186	17,211	15,243	38,592	39,695	30,829	18,527	17,457
MEAN	289	403	424	420	542	555	508	1,245	1,323	994	598	582
MAX	465	707	507	581	601	621	1,110	1,530	1,670	1,300	662	671
MIN	0	143	276	188	277	507	192	650	755	396	516	505
AC-FT	17,750	23,980	26,050	25,820	30,120	34,140	30,230	76,550	78,740	61,150	36,750	34,630

CAL YR 1972 TOTAL 163,941.00 MEAN 448 MAX 1,040 MIN 0 AC-FT 325,200
WTR YR 1973 TOTAL 239,929.00 MEAN 657 MAX 1,670 MIN 0 AC-FT 475,900

11236000 HUNTINGTON LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°14'03", long 119°12'41", in SW¼ sec.14, T.8 S., R.25 E., Fresno County, Sierra National Forest, in gate tower of dam 1 on Big Creek, 2 miles northeast of town of Big Creek.

DRAINAGE AREA.--80.5 sq mi.

PERIOD OF RECORD.--April 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.). Prior to June 19, 1920, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 89,400 acre-ft July 8 (elevation, 6,950.15 ft); minimum contents, 19,800 acre-ft Apr. 21 (elevation, 6,885.50 ft).
Period of record: Maximum contents, 90,500 acre-ft May 31, 1926 (elevation, 6,950.92 ft); minimum, 2,100 acre-ft Nov. 6, 1937 (elevation, 6,838.53 ft).
NOTE.--Prior to 1960, maximum and minimum daily contents were published.

REMARKS.--Lake is formed by four dams; storage began Apr. 11, 1913. Dams were raised in 1914 and again in 1917. Usable capacity, 89,200 acre-ft between elevations 6,819.9 (invert of outlet tunnel No. 1) and 6,950 ft (spillway crest at dam 1) above mean sea level. Additional storage of 600 acre-ft is not available for release. Huntington-Shaver conduit has diverted water from Huntington Lake to Shaver Lake since Apr. 21, 1928 (see sta 11239000). Water is used for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,819.9	0	6,835	1,550	6,870	11,300	6,920	50,800
6,820	8	6,840	2,350	6,880	16,400	6,930	62,600
6,822	142	6,845	3,320	6,890	22,900	6,940	75,300
6,825	382	6,850	4,480	6,900	30,900	6,950	89,200
6,830	899	6,860	7,430	6,910	40,200	6,951	90,610

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86,558	82,014	79,627	77,352	78,676	56,994	28,903	27,548	78,350	89,137	85,106	87,765
2	86,416	82,193	79,218	77,244	78,920	56,090	28,114	27,696	79,900	89,009	85,134	87,836
3	86,303	82,332	78,920	77,164	78,947	55,331	27,282	28,089	81,380	89,152	85,177	87,893
4	86,388	82,651	78,906	76,639	77,689	54,393	26,433	28,361	82,762	89,296	85,303	87,750
5	86,431	82,804	78,513	76,065	76,800	53,496	25,755	28,204	83,986	89,267	85,571	87,594
6	86,445	82,970	78,323	75,478	76,145	52,663	25,367	27,843	85,233	89,310	85,754	87,438
7	86,643	83,095	78,133	74,880	75,424	51,779	25,336	27,860	86,374	89,339	85,923	87,282
8	86,956	83,178	77,756	74,509	74,589	50,891	25,281	28,694	87,140	89,339	85,993	87,126
9	86,842	83,483	77,702	74,032	73,795	50,000	25,050	30,284	87,779	89,339	85,979	86,927
10	86,672	84,028	77,662	73,414	73,230	49,150	24,455	31,949	88,265	89,195	85,993	86,743
11	86,544	84,671	77,608	73,125	72,639	48,414	23,953	33,601	88,794	89,137	85,993	86,572
12	86,261	85,219	77,500	73,085	72,012	47,619	23,557	35,440	89,137	89,066	85,951	86,572
13	85,796	85,754	77,473	73,099	71,270	46,842	23,205	37,244	89,252	88,909	85,923	86,686
14	85,655	86,233	77,433	73,072	70,661	46,027	22,695	38,849	89,252	88,980	85,895	86,828
15	85,402	86,049	77,406	73,046	69,900	45,229	22,372	40,488	89,252	89,009	85,923	86,956
16	85,036	85,683	77,392	73,638	69,181	44,135	21,853	42,467	89,095	88,994	85,993	87,027
17	84,657	85,162	77,514	73,690	68,413	42,868	21,383	44,892	89,166	88,937	86,049	87,083
18	84,350	84,504	77,567	74,205	67,572	41,609	21,191	47,891	88,980	88,966	86,092	87,140
19	84,462	83,805	77,635	74,350	66,537	40,478	20,833	50,701	88,894	88,794	86,120	87,158
20	84,713	83,372	77,715	74,403	65,520	39,490	20,441	52,868	88,909	88,680	86,190	87,211
21	84,825	83,026	77,756	75,119	64,521	38,486	20,078	54,590	89,137	88,523	86,303	87,254
22	84,853	82,637	77,823	75,411	63,504	37,418	19,920	56,359	89,066	88,365	86,487	87,254
23	84,895	82,263	77,810	75,798	62,469	36,403	20,098	58,322	88,937	88,165	86,771	87,268
24	84,587	81,931	77,850	76,198	61,503	35,440	20,799	59,975	89,066	87,951	87,055	87,268
25	83,791	81,573	77,783	76,572	60,483	34,574	21,804	61,723	89,296	87,693	87,211	87,254
26	82,942	81,312	77,783	76,908	59,578	33,757	23,205	64,049	89,296	87,438	87,296	87,239
27	82,290	80,926	77,729	77,217	58,762	32,941	24,669	66,663	89,195	87,310	87,410	87,211
28	81,835	80,610	77,715	77,527	57,893	32,172	26,124	69,758	89,195	86,558	87,495	87,154
29	81,794	80,365	77,648	77,837	------	31,456	27,000	72,104	89,166	85,571	87,580	87,097
30	81,738	79,996	77,554	78,133	------	30,542	27,475	74,523	89,166	85,036	87,651	87,027
31	81,849	------	77,473	78,432	------	29,704	------	76,599	------	85,050	87,708	------
MAX	86,956	86,233	79,627	78,432	78,947	56,994	28,903	76,599	89,296	89,339	87,708	87,893
MIN	81,738	79,996	77,392	73,046	57,893	29,704	19,920	27,548	78,350	85,036	85,106	86,572
(a)	6,944.80	6,943.45	6,941.59	6,942.30	6,926.14	6,898.65	6,895.97	6,940.94	6,950.00	6,947.10	6,948.98	6,948.50
(b)	-4,570	-1,850	-2,520	+959	-20,500	-28,200	-2,230	+49,100	+12,600	-4,120	+2,660	-681

CAL YR 1972 b +44,400
WTR YR 1973 b +611

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11237500 PITMAN CREEK BELOW TAMARACK CREEK, CALIF.

LOCATION.--Lat 37°11'54", long 119°12'48", in NW¼NW¼ sec.35, T.8 S., R.25 E., Fresno County, Sierra National Forest, on right bank 250 ft upstream from Huntington-Shaver conduit tunnel, 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.

PERIOD OF RECORD.--October 1927 to current year. Records for water year 1928 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder, Parshall flume, and concrete control. Altitude of gage is 7,005 ft (from Southern California Edison Co. contour map). Prior to Sept. 29, 1940, at site 10 ft downstream at same datum.

AVERAGE DISCHARGE.--46 years, 39.4 cfs (28,550 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs May 18 (gage height, 8.15 ft); minimum daily, 0.70 cfs Sept. 29, 30.
Period of record: Maximum discharge, 3,670 cfs Dec. 23, 1955 (gage height, 11.20 ft), from rating curve extended above 1,100 cfs on basis of slope-area measurement at gage height 10.77 ft; no flow Oct. 15-18, 1931.

REMARKS.--Records fair except those for winter periods, which are poor. No diversion above station; practically all flow diverted below station to Huntington-Shaver conduit. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and two discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1940. WSP 1315-A: 1944. WSP 1395: 1928-29, 1938. WSP 1515: 1929.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.9	4.8	7.0	8.4	9.2	12	167	310	25	5.0	1.4
2	1.1	2.0	5.0	6.8	8.3	9.2	12	203	276	23	4.7	1.4
3	1.1	2.0	4.7	6.5	8.3	9.2	12	224	254	21	4.8	1.4
4	1.6	2.3	5.0	6.0	8.3	9.2	13	195	242	20	7.8	1.3
5	2.0	3.2	4.8	5.4	8.2	9.2	15	146	236	19	7.1	1.2
6	1.6	2.7	4.5	5.0	8.5	9.0	21	140	232	18	8.6	1.1
7	1.4	2.9	4.0	5.0	9.1	8.8	27	204	216	17	7.3	1.1
8	1.4	2.8	4.0	5.0	9.4	8.3	33	276	210	15	6.4	1.1
9	1.4	2.7	3.7	6.0	8.9	8.3	39	345	182	15	5.0	1.0
10	2.1	2.8	3.7	6.0	9.4	8.5	39	453	161	13	4.3	.94
11	1.9	2.0	3.7	7.0	10	9.0	48	440	145	13	3.8	.94
12	1.6	3.3	3.7	9.0	11	9.0	54	463	132	12	3.4	.94
13	1.5	3.3	3.5	9.0	11	9.0	51	418	122	11	3.1	.87
14	1.4	3.0	3.5	9.0	10	8.2	45	390	109	11	2.9	.84
15	1.5	3.5	3.5	8.6	9.4	8.2	43	405	92	9.9	2.7	.90
16	1.5	4.0	3.6	8.6	9.4	8.5	43	455	85	9.4	2.5	.94
17	1.5	4.4	4.4	8.7	9.4	9.0	49	529	79	8.9	2.4	.87
18	1.6	4.1	6.6	9.5	9.4	9.2	51	696	72	8.9	2.2	.84
19	2.2	3.9	9.0	10	9.1	9.2	51	680	70	8.6	2.1	.78
20	4.8	3.1	11	10	9.0	9.2	54	496	65	8.4	2.0	.81
21	4.4	3.1	9.7	9.6	9.0	9.2	52	465	60	8.4	1.9	.90
22	3.2	3.8	9.8	9.0	8.5	9.2	61	455	54	8.1	1.8	.90
23	2.7	3.2	10	9.0	8.2	9.2	89	438	48	7.6	1.8	.90
24	2.4	3.1	10	9.0	8.0	9.5	129	343	45	7.3	1.7	.90
25	2.1	3.8	10	9.0	8.0	10	162	318	42	6.8	1.8	.94
26	2.0	5.2	9.5	9.0	8.0	11	186	295	39	6.4	2.0	.94
27	2.0	5.8	9.0	8.5	8.5	12	216	323	36	6.2	2.2	.84
28	1.9	6.0	8.5	8.3	9.2	13	230	398	33	6.2	2.0	.76
29	1.9	5.6	7.0	8.3	------	13	214	435	31	6.2	1.7	.70
30	1.8	4.8	7.0	8.8	------	13	182	445	27	6.0	1.6	.70
31	1.8	------	7.0	8.6	------	12	------	358	------	5.8	1.5	------
TOTAL	60.5	104.3	194.2	245.2	251.9	298.5	2,233	11,598	3,705	362.1	108.1	29.15
MEAN	1.95	3.48	6.26	7.91	9.00	9.63	74.4	374	124	11.7	3.49	.97
MAX	4.8	6.0	11	10	11	13	230	696	310	25	8.6	1.4
MIN	1.1	1.9	3.5	5.0	8.0	8.2	12	140	27	5.8	1.5	.70
AC-FT	120	207	385	486	500	592	4,430	23,000	7,350	718	214	58

CAL YR 1972 TOTAL 9,100.01 MEAN 24.9 MAX 144 MIN .35 AC-FT 18,050
WTR YR 1973 TOTAL 19,189.95 MEAN 52.6 MAX 696 MIN .70 AC-FT 38,060

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-28	2100	5.69	288	5-18	2100	8.15	1,130
5-3	2000	5.71	292	5-30	1800	7.40	800
5-12	1900	7.17	708				

11239000 HUNTINGTON-SHAVER CONDUIT OUTLET NEAR SHAVER LAKE, CALIF.

LOCATION.--Lat 37°09'18", long 119°13'53", in NW¼NW¼ sec.15, T.9 S., R.25 E., Fresno County, Sierra National Forest, on left bank at tunnel outlet, 2.3 miles northeast of Shaver Lake, and 3.5 miles south of town of Big Creek.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for October 1928, published in WSP 1315-A. Prior to October 1960, published as Huntington-Shaver conduit at outlet.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,680 ft (from topographic map).

AVERAGE DISCHARGE.--45 years, 220 cfs (159,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,780 cfs June 3, 4, 1938; minimum daily, 0.90 cfs Sept. 8-11, 1955, Nov. 15, 19, 26, 27, 1966.

REMARKS.--Records good. Conduit diverts from Huntington Lake to Shaver Lake with additions from Pitman Creek and seepage en route. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and three discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1.5	3.5	6.6	9.6	490	396	878	1,620	633	36	2.1
2	2.3	1.5	3.5	6.2	18	486	374	922	1,610	678	35	2.1
3	2.3	1.3	3.5	6.2	208	481	349	970	1,600	639	36	2.1
4	2.5	1.6	3.2	6.2	572	477	325	981	1,610	624	39	2.1
5	2.7	2.1	3.5	5.9	567	471	293	939	1,610	685	37	2.1
6	2.3	2.1	3.2	5.9	562	466	266	893	1,600	640	40	2.1
7	1.9	1.9	3.5	5.9	559	462	262	948	1,600	639	38	2.1
8	1.9	1.9	3.5	5.9	556	456	265	1,060	1,600	682	37	2.1
9	1.9	1.9	3.5	6.2	553	450	266	1,230	1,590	675	29	1.9
10	2.5	1.6	3.5	6.6	548	445	235	1,380	1,580	537	4.4	1.9
11	2.5	1.2	3.5	6.6	548	441	210	1,540	1,570	508	4.1	1.9
12	2.3	1.6	3.5	8.9	546	436	191	1,570	1,570	510	3.8	1.9
13	2.1	1.9	3.5	11	545	430	171	1,560	1,560	653	3.5	1.9
14	1.3	1.6	3.5	9.6	542	426	143	1,560	1,560	508	3.2	2.1
15	1.2	1.9	3.2	9.2	538	418	114	1,570	1,550	508	3.0	1.5
16	1.3	2.1	3.2	8.9	535	504	71	1,590	1,550	508	2.7	1.5
17	1.3	2.5	4.1	8.9	532	667	56	1,610	1,540	508	2.5	1.3
18	1.3	2.5	6.6	9.6	529	649	56	1,630	1,540	508	2.5	1.5
19	1.6	2.3	10	10	524	617	55	1,640	935	508	2.5	1.5
20	3.8	2.3	11	10	521	579	60	1,610	649	508	2.5	1.5
21	3.8	2.3	10	10	518	562	58	1,610	667	507	2.5	1.5
22	2.5	2.3	10	9.6	514	548	67	1,620	630	505	2.3	1.5
23	2.1	2.3	11	9.2	510	532	95	1,630	660	504	2.3	1.5
24	1.8	2.3	9.6	9.2	507	516	145	1,600	658	504	2.3	1.5
25	1.6	2.3	8.5	9.2	504	505	216	1,440	651	502	2.3	1.5
26	1.6	2.7	8.1	9.2	498	493	350	1,100	644	501	2.5	1.5
27	1.6	3.2	7.7	8.5	495	478	511	1,150	642	499	2.5	1.3
28	1.6	3.5	7.7	8.5	493	465	694	1,280	640	441	2.5	1.3
29	1.6	3.5	7.0	8.5	------	447	836	1,640	637	370	2.3	1.3
30	1.5	3.2	7.0	8.9	------	432	880	1,650	635	171	2.1	1.3
31	1.5	------	7.0	8.5	------	414	------	1,640	------	36	2.1	------
TOTAL	62.5	64.9	180.1	253.6	13,551.6	15,243	8,010	42,441	36,508	16,199	387.4	51.4
MEAN	2.02	2.16	5.81	8.18	484	492	267	1,369	1,217	523	12.5	1.71
MAX	3.8	3.5	11	11	572	667	880	1,650	1,620	685	40	2.1
MIN	1.2	1.2	3.2	5.9	9.6	414	55	878	630	36	2.1	1.3
AC-FT	124	129	357	503	26,880	30,230	15,890	84,180	72,410	32,130	768	102

CAL YR 1972 TOTAL 16,711.3 MEAN 45.7 MAX 944 MIN 1.2 AC-FT 33,150
WTR YR 1973 TOTAL 132,952.5 MEAN 364 MAX 1,650 MIN 1.2 AC-FT 263,700

11239500 SHAVER LAKE NEAR BIG CREEK, CALIF.

LOCATION.--Lat 37°08'40", long 119°18'08", in SE¼ sec.13, T.9 S., R.24 E., Fresno County, Sierra National Forest, near center of dam on Stevenson Creek, 6 miles southwest of town of Big Creek.

DRAINAGE AREA.--29.1 sq mi.

PERIOD OF RECORD.--November 1909 to current year. Prior to January 1927, monthly contents only, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.). Prior to Jan. 11, 1927, gage on rockfilled dam a short distance upstream at different datum.

EXTREMES.--Current year: Maximum contents, 135,800 acre-ft July 9 (elevation, 5,370.24 ft); minimum, 13,400 acre-ft Apr. 25 (elevation, 5,286.92 ft).
Period of record: Maximum contents, 135,900 acre-ft July 5, 1946 (elevation, 5,370.25 ft); minimum, 652 acre-ft Mar. 7, 1942 (elevation, 5,249.38 ft).
NOTE.--Prior to 1960, maximum and minimum daily contents were published.

REMARKS.--Storage began prior to 1905. Original lake formed by rockfilled dam (usable capacity, 5,500 acre-ft). Water diverted by Fresno flume and Lumber Co.'s flumes Nos. 1 and 2 beginning prior to 1907 and discontinued July 7, 1920. Present lake formed by concrete-arch dam; dam completed Nov. 18, 1927. Usable capacity of present lake, 135,300 acre-ft between elevations 5,225 (trash-rack foundation) and 5,370 ft (crest of spillway) above mean sea level. Water is received from Pitman Creek (since Feb. 22, 1928) and Huntington Lake (since Apr. 21, 1928) through Huntington-Shaver conduit and released for power development in Big Creek plants. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS.--WSP 1565: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,225	0	5,250	700	5,280	9,190	5,330	60,900
5,230	42	5,255	1,250	5,290	15,600	5,340	76,700
5,235	97	5,260	2,070	5,300	24,000	5,350	94,600
5,240	191	5,265	3,210	5,310	34,500	5,360	114,200
5,245	379	5,270	4,750	5,320	46,800	5,371	137,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54,531	50,588	37,469	28,755	23,072	22,789	23,435	19,858	101,805	135,634	132,375	112,961
2	54,545	50,111	37,493	28,786	21,953	22,825	23,137	21,265	104,030	135,656	131,556	112,941
3	54,217	49,431	37,600	28,817	21,239	22,871	22,816	23,221	106,159	135,678	130,781	112,860
4	53,790	49,499	37,052	28,837	21,283	22,880	22,479	25,562	108,308	135,612	130,802	111,686
5	53,353	49,458	36,368	28,703	21,283	22,807	22,159	27,735	110,496	135,700	130,845	110,576
6	52,849	48,767	35,747	28,692	21,453	22,798	21,837	29,773	112,495	135,678	130,096	109,431
7	52,849	48,077	35,088	28,703	21,623	22,707	21,909	31,968	114,465	135,656	129,305	108,389
8	52,849	47,444	34,559	28,796	21,676	22,606	21,685	34,501	116,386	135,656	128,218	107,611
9	52,275	46,731	34,513	28,889	21,730	22,469	21,417	37,374	118,466	135,744	127,134	106,796
10	52,289	46,075	34,319	28,868	21,918	22,369	21,152	40,676	120,351	135,546	125,970	106,100
11	52,261	46,246	33,629	28,682	22,259	22,415	20,881	44,304	122,206	135,437	125,041	105,429
12	52,261	46,127	32,934	28,703	22,305	22,296	20,541	47,848	122,960	135,174	124,072	104,778
13	52,261	45,550	32,254	28,765	22,278	22,177	20,198	51,395	126,033	135,349	122,939	104,128
14	52,275	45,445	31,584	28,817	22,259	22,007	19,671	54,916	127,772	135,196	121,789	103,483
15	52,109	44,926	30,908	28,879	22,168	21,819	19,039	58,491	129,583	135,044	120,642	102,857
16	52,109	44,369	30,929	29,678	22,087	21,909	18,392	61,768	131,319	134,870	119,522	102,193
17	52,000	43,675	31,123	29,910	21,980	22,241	17,765	64,552	133,065	134,718	118,342	101,631
18	52,000	43,534	30,542	30,563	22,061	22,552	17,093	67,372	134,892	134,565	117,251	101,088
19	51,917	43,406	29,983	30,768	22,079	22,844	16,361	70,972	135,568	134,391	116,100	100,467
20	51,986	42,629	29,383	30,908	22,061	23,147	15,635	74,380	135,568	134,239	114,955	99,927
21	52,000	41,973	28,827	31,015	22,061	23,342	14,914	77,129	135,678	134,065	113,834	99,350
22	52,013	41,310	28,341	30,746	22,034	23,613	14,350	79,688	135,634	133,913	113,164	98,734
23	52,013	41,322	28,320	30,068	21,989	23,668	13,915	82,344	135,656	133,739	113,124	98,196
24	52,013	40,664	28,382	29,404	22,007	23,734	13,602	84,875	135,700	133,543	113,104	98,157
25	52,013	40,689	28,444	28,755	21,971	23,836	13,443	87,109	135,722	133,391	113,083	98,157
26	51,725	40,726	28,496	28,113	21,998	23,920	13,859	88,652	135,722	133,217	113,063	98,157
27	51,492	40,097	28,537	27,420	22,387	23,929	14,756	90,247	135,744	133,065	113,063	98,138
28	51,478	39,448	28,620	26,732	22,698	23,911	15,875	92,121	135,744	133,804	113,022	98,119
29	51,368	38,791	28,661	26,043	------	23,799	17,211	94,759	135,722	134,478	113,022	98,119
30	51,244	38,127	28,692	25,318	------	23,659	18,522	97,219	135,678	134,065	113,002	98,100
31	51,080	------	28,703	24,195	------	23,473	------	99,542	------	133,195	112,982	------
MAX	54,545	50,588	37,600	31,015	23,072	23,929	23,435	99,542	135,744	135,744	132,375	112,961
MIN	51,080	38,127	28,320	24,195	21,239	21,819	13,443	19,858	101,805	133,065	112,982	98,100
(a)	5,323.16	5,313.13	5,304.73	5,300.20	5,298.59	5,299.43	5,293.76	5,352.60	5,370.18	5,369.04	5,359.39	5,351.85
(b)	-3,450	-13,000	-9,420	-4,510	-1,500	+775	-4,950	+81,000	+36,100	-2,480	-20,200	-14,900

CAL YR 1972 b -18,600
WTR YR 1973 b +43,600

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11241950 REDINGER LAKE NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°08'42", long 119°26'58", in SW¼ sec.15, T.9 S., R.23 E., Madera County, Sierra National Forest, on upstream face of dam No. 7 on San Joaquin River, 4.2 miles northeast of Auberry.

DRAINAGE AREA.--1,295 sq mi.

PERIOD OF RECORD.--November 1950 to current year. Prior to October 1965, monthend contents only, published in WSP 1930.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Southern California Edison Co.).

EXTREMES.--Current year: Maximum contents, 26,000 acre-ft Sept. 8, 9; maximum elevation, 1,402.74 ft Sept. 9; minimum contents, 12,600 acre-ft Sept. 28 (elevation, 1,369.11 ft).
Period of record: Maximum contents, 26,100 acre-ft June 15, 1963, Oct. 29, 1964, Oct. 27, 1967; maximum elevation, 1,402.98 ft Oct. 27, 1967; minimum contents since appreciable storage was attained, 6,280 acre-ft Mar. 3, 1956 (elevation, 1,347.98 ft).

REMARKS.--Lake is formed by a concrete dam; storage began Nov. 19, 1950. Usable capacity, 26,120 acre-ft (revised) between elevations 1,320.0 (invert of tunnel) and 1,403.0 ft (top of radial gates). Additional storage of 8,914 acre-ft is not available for release. Water is used for power development in Big Creek powerhouse No. 4. See schematic diagram of San Joaquin River basin. Figures given herein represent usable contents.

COOPERATION.--Records of contents furnished by Southern California Edison Co. in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,320	0	1,330	2,010	1,355	8,200	1,380	16,500
1,322	384	1,335	3,120	1,360	9,650	1,385	18,400
1,324	778	1,340	4,280	1,365	11,200	1,390	20,400
1,326	1,180	1,345	5,520	1,370	12,900	1,400	24,700
1,328	1,590	1,350	6,810	1,375	14,600	1,403	26,119

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24,654	24,640	24,560	23,874	24,582	24,775	17,927	21,971	23,552	24,924	25,703	25,460
2	24,623	24,703	24,591	24,354	24,654	24,992	17,299	22,396	24,242	25,310	25,745	25,497
3	24,730	24,681	24,358	24,162	24,694	25,168	15,966	22,542	25,205	25,114	25,773	25,699
4	25,141	23,812	24,296	24,318	24,766	25,259	14,924	22,172	25,001	25,392	25,561	25,639
5	25,607	23,856	24,511	25,055	24,753	25,205	14,574	21,736	25,424	25,355	25,442	25,561
6	25,828	24,034	24,300	25,087	25,064	25,241	13,497	21,252	24,546	24,748	25,470	25,657
7	25,726	24,096	23,860	25,155	24,291	25,037	13,379	20,806	25,042	24,875	25,552	25,777
8	25,620	24,167	23,689	24,569	24,470	24,739	13,679	20,448	25,182	25,351	25,015	25,851
9	25,429	24,358	24,082	24,025	24,096	24,605	14,157	20,167	24,034	25,611	25,369	25,897
10	25,556	24,309	23,592	24,247	23,985	24,703	14,628	19,891	24,238	25,657	25,643	25,177
11	25,593	23,834	23,852	24,416	24,082	24,762	15,168	19,413	24,475	25,566	25,675	24,632
12	25,575	23,451	23,936	24,470	23,887	24,829	15,765	19,073	24,430	25,529	25,634	23,794
13	25,736	23,513	24,016	24,105	23,976	24,816	16,391	18,671	25,278	25,579	25,602	23,163
14	25,310	23,896	24,216	24,202	24,511	24,834	16,975	18,888	24,947	25,639	25,616	22,473
15	25,015	23,856	24,457	24,376	24,924	24,798	17,454	24,087	25,570	25,699	25,556	21,932
16	24,875	23,914	24,003	24,870	24,748	24,906	17,233	24,884	25,301	25,675	25,625	21,490
17	24,852	23,715	23,504	24,198	24,775	24,992	17,244	24,906	25,218	25,680	25,415	20,903
18	24,933	23,031	23,667	24,399	24,861	24,983	17,699	24,149	25,492	25,639	25,552	19,969
19	25,019	22,862	23,976	25,164	24,861	24,825	18,033	23,610	25,328	25,634	25,598	19,198
20	25,182	23,623	24,220	24,699	24,820	23,940	17,887	23,720	25,218	25,634	25,607	18,218
21	25,209	23,940	24,202	24,488	24,834	24,242	17,469	24,167	25,087	25,625	25,337	17,102
22	24,897	24,185	24,105	24,694	24,614	24,122	17,625	23,980	25,342	25,648	25,051	16,071
23	24,564	24,056	23,693	24,376	24,888	24,153	18,021	24,287	25,137	25,639	24,875	14,866
24	24,211	24,158	23,451	24,524	24,997	24,282	18,568	24,051	25,037	25,680	24,793	13,006
25	23,976	24,003	23,403	24,600	25,010	24,452	19,198	24,078	24,838	25,666	25,342	12,794
26	23,799	24,300	23,482	24,627	24,969	23,742	19,633	24,171	25,355	25,680	25,492	12,766
27	23,715	24,340	23,825	24,654	24,367	22,650	20,076	24,712	25,694	25,543	25,634	12,766
28	24,466	24,654	24,069	24,578	24,452	21,681	20,565	24,390	25,232	25,374	25,529	12,651
29	24,591	24,726	24,331	24,578	------	19,940	21,055	23,963	25,209	24,974	25,566	12,844
30	24,820	24,569	24,167	24,537	------	18,131	21,596	24,127	25,101	25,470	25,593	12,763
31	24,762	------	24,020	24,546	------	17,946	------	24,051	------	25,529	25,483	------
MAX	25,828	24,726	24,591	25,164	25,064	25,259	21,596	24,906	25,694	25,699	25,773	25,897
MIN	23,715	22,862	23,403	23,874	23,887	17,946	13,379	18,671	23,552	24,748	24,793	12,651
(a)	1,400.03	1,399.60	1,398.37	1,399.55	1,399.34	1,383.86	1,392.78	1,398.44	1,400.78	1,401.72	1,401.62	1,369.72
(b)	+139	-193	-549	+526	-94	-6,510	+3,650	+2,460	+1,050	+428	-46	-12,700

CAL YR 1972 b -1,520
WTR YR 1973 b -11,900

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11242000 SAN JOAQUIN RIVER ABOVE WILLOW CREEK, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°08'40", long 119°27'13", in SW¼SW¼ sec.15, T.9 S., R.23 E., Madera County, Sierra National Forest, 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.

PERIOD OF RECORD.--March 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,175.54 ft above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--22 years, 423 cfs (306,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,450 cfs May 18 (gage height, 18.65 ft); minimum daily, 4.6 cfs Mar. 14-19, Mar. 30 to Apr. 5.
Period of record: Maximum discharge, 73,200 cfs Dec. 23, 1955 (gage height, 54.2 ft, from floodmarks), from rating curve extended above 7,000 cfs on basis of computed flow over dam; no flow Sept. 25, 1951.

REMARKS.--Records good. Flow regulated by nine powerplants and six reservoirs with combined capacity of about 559,900 acre-ft. Conduit to powerhouse No. 4 diverts 1,000 ft above station. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and 13 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	19	18	7.5	4.8	4.6	23	5,450	1,050	20	22
2	21	20	19	18	8.0	4.8	4.6	23	3,900	211	21	22
3	21	20	19	18	8.0	4.8	4.6	23	3,190	19	21	22
4	21	19	13	19	6.8	4.7	4.6	23	3,600	14	21	22
5	22	17	14	19	6.6	4.7	4.6	23	3,640	15	21	22
6	22	19	17	19	6.6	4.7	4.7	23	4,300	15	21	22
7	22	19	16	19	7.8	4.7	4.7	23	4,060	16	22	22
8	22	19	16	19	6.3	4.7	4.7	23	4,460	16	21	22
9	22	19	18	6.6	5.2	4.7	4.7	23	6,040	17	21	22
10	22	19	19	5.7	5.6	4.7	4.7	23	5,140	17	23	22
11	22	17	19	7.5	6.0	4.7	14	24	4,530	17	22	22
12	22	19	19	9.2	5.3	4.7	21	23	3,910	17	20	22
13	22	19	19	9.4	4.9	4.7	21	20	3,280	18	20	22
14	22	14	19	11	5.0	4.6	21	21	2,980	18	20	22
15	22	9.4	19	13	5.2	4.6	21	3,200	1,170	18	20	22
16	22	14	19	9.4	5.2	4.6	21	6,210	1,120	19	21	22
17	22	13	15	5.9	5.2	4.6	21	7,780	720	19	22	22
18	22	16	7.7	5.9	5.2	4.6	21	8,620	530	19	22	22
19	22	17	7.3	5.7	5.0	4.6	21	7,850	900	19	21	22
20	19	18	7.3	5.7	4.9	5.2	22	5,950	1,700	19	22	21
21	18	19	10	5.6	4.8	4.8	22	4,530	1,950	19	22	21
22	19	19	11	5.6	4.8	4.8	22	5,050	1,960	19	22	20
23	19	19	10	5.5	4.8	4.7	22	4,550	1,960	19	22	20
24	19	19	12	5.3	4.8	4.7	22	5,160	1,430	20	23	21
25	19	19	14	5.3	4.7	4.9	22	3,740	880	20	22	22
26	19	19	14	5.3	4.8	4.9	22	3,290	875	20	22	21
27	20	19	15	5.7	4.9	4.8	22	3,170	2,550	20	22	21
28	20	19	14	7.2	4.9	4.7	22	5,310	3,220	20	22	21
29	20	19	16	7.2	------	4.8	22	6,440	2,010	20	22	22
30	20	19	16	6.6	------	4.6	23	5,590	1,560	21	22	22
31	20	------	17	6.6	------	4.6	------	5,800	------	21	22	------
TOTAL	646	537.4	470.3	309.9	158.8	146.5	471.5	92,558	83,015	1,792	665	650
MEAN	20.8	17.9	15.2	10.0	5.67	4.73	15.7	2,986	2,767	57.8	21.5	21.7
MAX	22	20	19	19	8.0	5.2	23	8,620	6,040	1,050	23	22
MIN	18	9.4	7.3	5.3	4.7	4.6	4.6	20	530	14	20	20
AC-FT	1,280	1,070	933	615	315	291	935	183,600	164,700	3,550	1,320	1,290

CAL YR 1972 TOTAL 5,803.4 MEAN 15.9 MAX 25 MIN 4.3 AC-FT 11,510
WTR YR 1973 TOTAL 181,420.4 MEAN 497 MAX 8,620 MIN 4.6 AC-FT 359,800

11242350 SOQUEL DIVERSION NEAR SUGAR PINE, CALIF.

LOCATION.--Lat 37°25'32", long 119°32'53", in SW¼NE¼ sec.10, T.6 S., R.22 E., Madera County, Sierra National Forest, on left bank 100 ft downstream from headgate on North Fork Willow Creek, and 4.8 miles east of Sugar Pine.

PERIOD OF RECORD.--October 1965 to current year. Monthly discharge only for October 1965 to September 1969, published with records for North Fork Willow Creek near Sugar Pine.

GAGE.--Water-stage recorder. Altitude of gage is 5,400 ft (from topographic map).

EXTREMES.--Period of record: Maximum daily discharge, 50 cfs May 14, 16, 25, 1971; no flow for several days in 1971-73.

REMARKS.--Records good. Ditch diverts water from right bank of North Fork Willow Creek 100 ft upstream for irrigation in Madera Irrigation District.

COOPERATION.--One discharge measurement furnished by Pacific Gas and Electric Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	1.8	3.6	4.6	7.2	18	11	32	39	20	6.0	3.4
2	.13	1.8	3.4	4.6	7.2	16	10	33	39	19	5.8	3.4
3	0	1.8	3.6	4.6	7.4	14	11	34	38	18	5.8	3.4
4	1.8	3.9	5.5	4.0	7.7	13	13	33	38	18	5.5	3.2
5	2.2	2.6	4.0	4.0	7.2	12	16	32	38	17	5.8	3.2
6	1.5	2.4	3.4	4.0	9.2	12	19	32	38	16	6.5	3.2
7	1.5	2.8	3.3	4.0	10	12	23	32	38	15	6.5	3.2
8	1.5	2.8	3.2	4.4	9.8	11	27	33	38	15	6.0	3.2
9	1.6	2.4	3.1	4.4	9.2	11	27	32	37	14	6.0	3.2
10	3.6	2.6	3.4	4.2	9.5	11	29	31	36	13	5.5	3.2
11	3.0	2.8	3.3	4.8	12	12	31	28	35	13	5.5	3.2
12	1.8	3.0	3.4	8.6	20	11	32	30	35	12	5.3	3.0
13	1.6	3.0	3.3	7.2	18	11	31	30	35	12	5.3	3.0
14	1.5	3.4	3.2	6.5	16	11	28	36	34	12	5.1	3.0
15	1.8	4.6	3.5	6.0	9.8	11	25	41	33	9.8	4.8	3.0
16	2.0	4.2	4.0	25	8.6	11	26	40	33	9.2	4.6	3.0
17	2.4	4.0	6.0	22	8.6	11	28	40	33	8.9	4.6	3.0
18	2.4	3.6	8.6	20	8.6	10	28	39	32	8.6	4.4	2.8
19	2.2	3.4	11	17	8.6	10	25	39	32	8.0	4.4	2.8
20	4.5	3.2	10	13	9.2	14	24	39	32	8.0	4.2	2.8
21	2.8	3.2	9.0	11	9.2	12	26	40	31	8.0	4.0	2.8
22	2.2	3.2	11	10	8.6	15	30	40	30	7.7	3.8	3.0
23	2.2	3.2	10	9.8	9.2	11	33	40	29	7.7	3.6	3.2
24	2.0	3.4	7.6	9.5	9.5	12	35	39	27	7.4	3.8	3.2
25	1.8	4.0	6.6	9.2	9.5	12	35	38	26	7.2	4.0	3.2
26	1.6	4.4	6.3	9.2	11	12	35	38	25	6.9	4.0	2.8
27	.84	4.2	6.1	8.3	21	12	35	38	25	6.7	4.2	2.6
28	0	4.0	6.0	8.0	22	11	34	39	22	6.7	3.8	2.6
29	0	4.0	5.8	8.0	------	11	33	40	22	6.7	3.8	1.8
30	1.0	3.6	5.5	7.7	------	10	32	40	20	6.5	3.6	1.4
31	1.8	------	5.3	7.4	------	10	------	39	------	6.2	3.4	------
TOTAL	53.32	97.3	172.0	271.0	303.8	370	792	1,117	970	344.2	149.6	88.8
MEAN	1.72	3.24	5.55	8.74	10.9	11.9	26.4	36.0	32.3	11.1	4.83	2.96
MAX	4.5	4.6	11	25	22	18	35	41	39	20	6.5	3.4
MIN	0	1.8	3.1	4.0	7.2	10	10	28	20	6.2	3.4	1.4
AC-FT	106	193	341	538	603	734	1,570	2,220	1,920	683	297	176

CAL YR 1972 TOTAL 3,764.44 MEAN 10.3 MAX 32 MIN 0 AC-FT 7,470
WTR YR 1973 TOTAL 4,729.02 MEAN 13.0 MAX 41 MIN 0 AC-FT 9,380

11242400 NORTH FORK WILLOW CREEK NEAR SUGAR PINE, CALIF.

LOCATION.--Lat 37°23'52", long 119°33'55", in SW¼NE¼ sec.21, T.6 S., R.22 E., Madera County, on right bank at road bridge 0.6 mile downstream from Soquel Campground, 3.0 miles upstream from Chilkoot Creek, and 4.7 miles southeast of Sugar Pine.

DRAINAGE AREA.--16.9 sq mi.

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,200 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 20.9 cfs (15,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 273 cfs May 18 (gage height, 4.32 ft); minimum daily, 1.4 cfs Sept. 9-11, 13.
Period of record: Maximum discharge, 1,600 cfs Dec. 6, 1966 (gage height, 5.90 ft), from rating curve extended above 250 cfs on basis of a step-backwater survey; minimum daily, 1.0 cfs Sept. 18, 19, 26-28, 1968.

REMARKS.--Records good. No storage above station. Madera Irrigation District diverts up to 50 cfs through Soquel ditch (see sta 11242350) to the Fresno River basin 2.2 miles upstream.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966(M), WRD Calif. 1972: 1970-71.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.1	2.4	3.4	3.4	19	7.4	59	100	4.0	2.8	1.7
2	2.6	2.1	2.6	3.4	3.4	16	7.4	66	92	4.0	2.6	1.7
3	2.8	2.0	2.6	3.4	3.7	13	7.9	75	85	4.0	2.4	1.6
4	2.8	4.3	2.7	2.9	4.0	11	10	71	84	4.0	2.4	1.6
5	1.7	2.9	2.3	2.9	4.2	8.9	12	58	84	4.0	2.6	1.6
6	1.6	2.4	2.4	2.9	7.2	7.4	14	52	82	4.0	3.4	1.6
7	1.7	4.2	2.3	2.9	8.4	7.4	17	59	82	4.0	3.4	1.6
8	1.7	3.2	2.3	3.2	7.8	7.2	20	72	78	3.9	2.8	1.6
9	2.0	2.4	2.2	3.2	7.3	6.6	19	91	71	4.0	2.8	1.4
10	2.6	2.4	2.4	3.1	9.1	7.6	21	107	61	4.0	2.8	1.4
11	2.1	3.4	2.3	4.7	13	13	29	123	54	4.0	3.1	1.4
12	2.0	2.6	2.4	5.4	17	8.9	31	134	48	4.2	2.8	1.6
13	1.8	2.8	2.3	5.1	8.9	7.4	25	144	40	4.2	2.4	1.4
14	1.8	6.0	2.3	4.8	7.4	7.2	16	138	34	4.0	2.3	1.6
15	2.0	5.4	2.5	4.5	6.9	6.9	15	136	27	4.2	2.3	1.6
16	2.0	5.0	2.8	18	6.9	7.2	17	144	22	4.9	2.3	1.6
17	2.6	4.0	4.7	16	6.4	7.2	18	169	18	4.9	2.1	1.6
18	2.6	3.6	6.1	14	6.2	6.4	17	184	15	5.0	2.0	1.7
19	2.3	3.2	7.4	12	5.9	6.6	14	179	12	5.4	1.8	1.7
20	3.2	2.9	6.9	10	5.4	8.2	14	136	9.2	5.2	1.8	1.7
21	2.4	2.9	6.2	6.9	5.4	6.2	15	123	7.6	5.0	1.8	1.7
22	2.1	2.9	7.6	5.0	5.0	6.4	21	128	6.4	4.9	2.3	1.8
23	2.1	2.6	6.9	5.0	5.0	7.2	30	132	5.4	4.7	2.1	2.1
24	2.0	2.6	5.2	4.9	6.6	7.2	44	116	4.9	4.2	2.0	2.1
25	2.0	2.6	4.5	4.5	6.6	7.6	59	104	4.9	3.9	2.0	2.0
26	2.0	2.8	4.4	4.2	8.9	8.5	75	97	4.9	3.6	2.0	1.8
27	2.4	2.8	4.2	4.0	21	8.5	84	103	4.9	3.4	2.0	1.7
28	3.9	2.8	4.2	3.9	27	8.2	85	118	4.5	3.2	2.0	1.6
29	4.0	2.6	3.6	3.7	------	7.4	76	123	4.4	3.2	2.0	1.6
30	3.4	2.4	3.7	3.5	------	7.2	65	125	4.2	2.8	1.7	4.0
31	2.1	------	3.4	3.4	------	7.4	------	108	------	2.8	1.7	------
TOTAL	73.1	93.9	117.8	174.8	228.0	264.9	885.7	3,474	1,150.3	127.6	72.5	52.1
MEAN	2.36	3.13	3.80	5.64	8.14	8.55	29.5	112	38.3	4.12	2.34	1.74
MAX	4.0	6.0	7.6	18	27	19	85	184	100	5.4	3.4	4.0
MIN	1.6	2.0	2.2	2.9	3.4	6.2	7.4	52	4.2	2.8	1.7	1.4
AC-FT	145	186	234	347	452	525	1,760	6,890	2,280	253	144	103

CAL YR 1972 TOTAL 2,340.9 MEAN 6.40 MAX 39 MIN 1.2 AC-FT 4,640
WTR YR 1973 TOTAL 6,714.7 MEAN 18.4 MAX 184 MIN 1.4 AC-FT 13,320

PEAK DISCHARGE (BASE, 100 CFS).--Apr. 27 (1900) 104 cfs (3.65 ft); May 18 (2000) 273 cfs (4.32 ft).

11243400 BASS LAKE NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'36", long 119°31'40", in NE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, at outlet tower at dam on North Fork Willow Creek, 2.2 miles southeast of town of Bass Lake, and 5 miles north of town of North Fork.

DRAINAGE AREA.--50.4 sq mi.

PERIOD OF RECORD.--January 1911 to current year. Bass Lake was formerly called Crane Valley Reservoir.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.).

EXTREMES.--Current year: Maximum contents, 45,300 acre-ft June 18, 19 (elevation, 3,376.30 ft); minimum, 18,190 acre-ft Jan. 12 (elevation, 3,347.72 ft).
Period of record: Maximum contents, 45,960 acre-ft June 17, 1923 (elevation, 3,376.8 ft); minimum, 35 acre-ft Nov. 19, 1953 (elevation, 3,270.2 ft).

REMARKS.--Reservoir formed by earth- and rockfill dam; completed in 1901 and raised in 1910. Since 1910 usable contents 45,100 acre-ft between elevations, 3,280.22 (invert of outlet conduit No. 3) and 3,376.40 ft (top of spillway gates) above mean sea level. Additional storage of 300 acre-ft not available for release. Water is released through Crane Valley powerhouse below dam for use in three small powerhouses before being discharged into Kerckhoff Reservoir at Wishon powerhouse. Water diverted from South Fork Willow Creek via Browns Creek ditch into Bass Lake near left end of dam. Madera Irrigation District has water rights to divert up to 50 cfs from North Fork Willow Creek through Soquel ditch (see sta 11242350) into Nelder Creek (Fresno River basin) during October and March to July each year. Chilkoot ditch can divert up to 7 cfs from Chilkoot Creek into North Fork Willow Creek just upstream from diversion dam from Oct. 1 to Aug. 1 each water year if available. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records of contents furnished by Pacific Gas and Electric Co., in connection with a Federal Power Commission project.

MONTHEND CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Contents
Sept. 30	26,430
Oct. 31	22,800
Nov. 30	21,200
Dec. 31	18,790
Jan. 31	20,280
Feb. 28	23,720
Mar. 31	24,050
Apr. 30	28,260
May 31	42,000
June 30	44,570
July 31	38,650
Aug. 31	35,880
Sept. 30	29,010

11243500 PACIFIC GAS AND ELECTRIC CO. CONDUIT NO. 3 NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'21", long 119°31'44", in SE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, on left bank 1,000 ft downstream from Crane Valley powerhouse and dam, and 2.5 miles southeast of town of Bass Lake.

PERIOD OF RECORD.--October 1940 to current year. Prior to October 1954, published as "near Crane Valley Reservoir."

GAGE.--Water-stage recorder and concrete flume. Altitude of gage is 3,300 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 67.9 cfs (49,190 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 167 cfs June 23, 24, 1965; no flow at times.

REMARKS.--Conduit diverts from Bass Lake in sec.26, T.7 S., R.22 E. Water passed through Crane Valley powerhouse, then to powerhouse No. 3, and is stored temporarily at Manzanita Lake on North Fork Willow Creek; flow then diverted to powerhouses No. 2 and 1A before it enters San Joaquin River at Kerckhoff Reservoir through Wishon powerhouse No. 1. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	120	51	.78	120	99	149	93	.85	82	139	117
2	.09	119	.67	77	120	120	149	94	.22	117	139	117
3	6.5	51	7.1	119	120	120	149	95	.21	140	114	117
4	.09	.67	73	119	119	120	149	93	.19	140	36	116
5	6.5	7.7	120	39	118	120	149	92	.18	140	.03	117
6	.15	73	119	4.5	102	119	149	92	.22	111	.03	116
7	6.4	120	119	.78	84	132	149	95	.22	81	.03	116
8	2.7	120	119	78	103	147	149	100	63	81	0	115
9	76	119	118	118	118	147	136	102	119	111	0	115
10	119	52	117	118	86	148	121	95	134	140	0	114
11	119	.68	117	119	72	140	120	91	134	140	0	114
12	119	.67	117	40	71	149	120	93	120	140	0	113
13	118	8.6	117	.75	94	149	48	92	119	114	0	113
14	118	4.4	118	7.3	99	149	1.1	89	98	84	0	113
15	118	.89	118	76	107	149	6.2	89	78	85	0	114
16	118	5.8	119	89	120	149	73	89	78	118	0	114
17	118	3.8	120	89	120	149	119	89	78	139	0	115
18	119	.78	120	79	119	149	120	38	78	139	0	115
19	119	6.3	120	70	119	149	120	8.1	78	140	0	115
20	46	72	120	26	119	146	119	7.9	79	112	20	114
21	.67	120	119	.89	119	149	118	9.3	79	82	0	113
22	7.8	120	43	78	119	149	119	.41	79	83	0	112
23	3.8	120	.67	118	119	149	119	.09	79	115	.11	112
24	79	50	8.1	118	119	149	119	.09	79	139	61	112
25	120	.89	.67	119	120	149	112	.09	79	139	118	112
26	120	6.8	73	120	120	149	95	.09	80	139	118	111
27	46	74	119	120	115	149	90	.09	88	112	118	111
28	.67	121	119	119	72	149	91	.09	82	81	118	110
29	8.2	121	45	119	------	149	91	1.3	83	82	118	109
30	74	121	.89	119	------	149	92	1.8	82	117	118	109
31	121	------	8.0	119	------	149	------	1.6	------	140	117	------
TOTAL	1,916.97	1,740.98	2,566.10	2,420.00	3,033	4,389	3,341.3	1,651.95	2,068.09	3,583	1,334.20	3,411
MEAN	61.8	58.0	82.8	78.1	108	142	111	53.3	68.9	116	43.0	114
MAX	121	121	120	120	120	149	149	102	134	140	139	117
MIN	.09	.67	.67	.75	71	99	1.1	.09	.18	81	0	109
AC-FT	3,800	3,450	5,090	4,800	6,020	8,710	6,630	3,280	4,100	7,110	2,650	6,770

CAL YR 1972 TOTAL 14,628.67 MEAN 40.0 MAX 121 MIN 0 AC-FT 29,020
WTR YR 1973 TOTAL 31,455.59 MEAN 86.2 MAX 149 MIN 0 AC-FT 62,390

11244000 NORTH FORK WILLOW CREEK NEAR BASS LAKE, CALIF.

LOCATION.--Lat 37°17'20", long 119°31'45", in SE¼ sec.26, T.7 S., R.22 E., Madera County, Sierra National Forest, 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.

PERIOD OF RECORD.--May 1940 to current year. Prior to October 1944, published as Willow Creek below Crane Valley Reservoir. October 1944 to September 1954, published as "below Crane Valley Reservoir."

GAGE.--Water-stage recorder. Broad-crested weir with V-notch Dec. 21, 1961, to Jan. 16, 1969, and since Mar. 26, 1971. Altitude of gage is 3,200 ft (from topographic map).

AVERAGE DISCHARGE.--33 years, 13.7 cfs (9,930 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 177 cfs May 29 (gage height, 3.00 ft); minimum daily, 0.22 cfs Jan. 7.
Period of record: Maximum discharge, 1,300 cfs Jan. 26, 1969 (gage height, unknown); minimum daily, 0.1 cfs Nov. 13-16, 1940.

REMARKS.--Flow regulated by Bass Lake (see sta 11243400) 1,500 ft upstream and by diversion into Pacific Gas and Electric Co. conduit No. 3 near Bass Lake (see sta 11243500). Record for Soquel diversion (see sta 11242350) shows flow diverted from North Fork Willow Creek into Nelder Creek in Fresno River basin. Brown's Creek ditch diverted 23,710 acre-ft from South Fork Willow Creek into Bass Lake during the current year. See schematic diagram of San Joaquin River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.30	.30	.25	.30	1.0	.57	.30	60	1.1	.67	.49
2	.26	.31	.29	.24	.29	.73	.50	.29	2.1	1.1	.66	.48
3	.26	.31	.29	.25	.30	.69	.47	.29	2.3	1.1	.66	.47
4	.27	.40	.59	.25	.46	.72	.45	.32	2.5	1.1	.63	.46
5	.26	.32	.36	.24	.33	.58	.44	.35	2.5	1.1	.63	.47
6	.26	.30	.35	.23	1.1	1.3	.43	.36	2.5	1.0	.61	.49
7	.27	.33	.36	.22	4.0	.97	.41	.39	2.4	1.0	.61	.50
8	.27	.34	.36	.60	1.1	.76	.40	.41	2.2	1.0	.61	.49
9	.29	.33	.33	1.8	.73	.61	.39	.42	2.1	1.0	.61	.48
10	.30	.31	.31	.72	5.7	.63	.38	.45	1.9	.99	.61	.47
11	.30	.77	.30	.47	6.2	2.2	.37	.48	1.8	.97	.61	.46
12	.31	.38	.30	.41	4.4	.87	.36	.50	1.7	.94	.60	.45
13	.30	.39	.28	.35	2.9	.77	.39	.54	1.6	.90	.74	.44
14	.31	2.2	.28	.32	2.8	.63	.38	.61	1.6	.87	1.1	.40
15	.31	.97	.28	.31	1.6	.55	.38	.66	1.5	.85	1.2	.36
16	.31	1.1	.30	4.6	1.0	.50	.37	.68	1.5	.89	.89	.35
17	.31	.56	1.8	2.2	.79	.49	.37	.77	1.5	.87	.75	.34
18	.31	.44	.69	2.7	.67	.47	.36	.87	1.5	.85	.60	.33
19	.35	.43	.79	1.7	.57	.45	.33	1.0	1.5	.84	.60	.32
20	.43	.39	.52	.77	.52	1.4	.32	1.4	1.4	.82	19	.32
21	.31	.37	.46	.60	.48	1.0	.32	1.7	1.4	.80	1.1	.31
22	.30	.35	.46	.50	.44	1.1	.31	2.0	1.4	.78	1.0	.30
23	.30	.34	.36	.44	.41	1.1	.31	2.7	1.4	.76	.89	.30
24	.30	.33	.32	.40	.55	1.1	.30	3.1	1.3	.78	.61	.28
25	.32	.31	.30	.37	.43	1.1	.30	3.3	1.2	.76	.61	.29
26	.33	.31	.30	.35	.88	1.3	.29	3.6	1.2	.74	.60	.29
27	.32	.30	.30	.33	1.8	.98	.29	3.7	1.2	.72	.58	.29
28	.30	.31	.33	.31	2.9	.87	.29	3.8	1.1	.70	.55	.28
29	.30	.30	.29	.32	------	.74	.30	100	1.1	.69	.54	.28
30	.33	.30	.26	.34	------	.66	.31	157	1.1	.67	.52	.27
31	.34	------	.25	.31	------	.66	------	157	------	.66	.50	------
TOTAL	9.39	14.10	12.71	22.90	43.65	26.93	11.09	448.99	108.5	27.35	39.89	11.46
MEAN	.30	.47	.41	.74	1.56	.87	.37	14.5	3.62	.88	1.29	.38
MAX	.43	2.2	1.8	4.6	6.2	2.2	.57	157	60	1.1	19	.50
MIN	.26	.30	.25	.22	.29	.45	.29	.29	1.1	.66	.50	.27
AC-FT	19	28	25	45	87	53	22	891	215	54	79	23

CAL YR 1972 TOTAL 194.09 MEAN .53 MAX 2.6 MIN .22 AC-FT 385
WTR YR 1973 TOTAL 776.96 MEAN 2.13 MAX 157 MIN .22 AC-FT 1,540

11246500 WILLOW CREEK AT MOUTH, NEAR AUBERRY, CALIF.

LOCATION.--Lat 37°09'03", long 119°27'34", in SE¼NE¼ sec.16, T.9 S., R.23 E., Madera County, Sierra National Forest, 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.

PERIOD OF RECORD.--January 1952 to current year.

GAGE.--Water-stage recorder. Concrete control since Oct. 22, 1964. Datum of gage is 1,174.69 ft above mean sea level (levels by Southern California Edison Co.).

AVERAGE DISCHARGE.--21 years, 56.5 cfs (40,930 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,730 cfs Feb. 11 (gage height, 10.80 ft); minimum daily, 0.14 cfs Oct. 2.
Period of record: Maximum discharge, 15,700 cfs Dec. 23, 1955 (gage height, 28.5 ft, from floodmarks), from rating curve extended above 4,700 cfs; no flow at times in 1955, 1959-62, 1964-66, 1968, 1972.

REMARKS.--Records good. Flow regulated by Bass Lake 10 miles upstream (see sta 11243400) and diversion into Pacific Gas and Electric Co. conduit No. 1. See schematic diagram of San Joaquin River basin.

COOPERATION.--Gage-height record and nine discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

REVISIONS(WATER YEARS).--WRD Calif. 1963: 1956-58(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	1.8	3.9	6.8	16	112	67	131	52	11	3.5	1.1
2	.14	1.8	3.9	6.5	15	73	61	145	47	10	3.4	1.1
3	.16	1.9	4.0	7.0	15	64	54	178	42	9.5	3.1	1.0
4	.25	2.9	13	5.6	18	79	54	168	39	9.3	2.9	1.0
5	.34	5.1	8.2	5.8	16	68	57	108	36	9.0	2.9	1.0
6	.58	3.2	7.1	5.9	24	76	78	82	35	8.5	2.9	1.0
7	.39	2.7	7.3	5.6	169	115	102	87	33	8.3	3.2	1.0
8	.25	3.6	6.4	8.0	75	77	112	120	29	8.0	4.4	1.0
9	.34	3.2	4.5	53	44	69	114	181	27	10	3.2	.97
10	.49	3.0	5.0	30	455	60	91	227	26	8.3	3.1	.90
11	1.5	6.5	4.4	15	718	154	132	267	25	7.1	3.0	.63
12	1.3	4.7	4.4	14	355	108	147	277	24	7.0	2.9	.68
13	.90	3.8	4.1	14	147	83	119	285	22	6.4	2.7	.75
14	.68	17	4.1	12	126	78	78	269	22	6.3	2.6	.68
15	.63	15	4.2	11	93	66	64	279	22	6.2	2.3	.68
16	.68	14	4.4	491	66	60	64	253	21	6.0	1.9	.82
17	.90	9.8	15	263	57	57	80	265	20	5.8	2.3	.90
18	.90	6.7	59	223	50	52	78	259	19	5.8	1.8	.90
19	.97	5.5	20	172	45	49	62	229	18	5.6	1.6	1.0
20	4.1	5.3	19	57	41	149	58	172	17	5.5	1.4	1.1
21	4.7	4.7	13	43	39	112	59	115	16	5.6	1.1	1.2
22	2.8	4.4	12	34	36	119	66	104	15	5.6	1.0	1.3
23	2.5	4.2	13	28	34	97	107	97	14	5.3	.97	1.5
24	2.3	4.1	11	25	35	93	178	85	14	4.9	.97	1.7
25	2.2	4.0	9.2	23	35	94	212	72	13	4.7	1.1	1.7
26	2.1	4.0	8.6	21	42	149	251	66	13	4.4	1.5	1.8
27	2.1	4.2	8.5	18	102	119	275	61	23	4.3	1.7	1.7
28	2.2	4.2	9.7	18	350	107	279	58	13	4.1	1.8	1.3
29	2.2	4.1	7.7	18	------	91	241	55	11	4.0	1.7	1.2
30	2.0	4.0	7.6	18	------	77	175	60	11	3.8	1.4	1.0
31	1.8	------	7.1	17	------	74	------	62	------	3.6	1.3	------
TOTAL	42.56	159.4	309.3	1,669.2	3,218	2,781	3,515	4,817	719	203.9	69.64	32.61
MEAN	1.37	5.31	9.98	53.8	115	89.7	117	155	24.0	6.58	2.25	1.09
MAX	4.7	17	59	491	718	154	279	285	52	11	4.4	1.8
MIN	.14	1.8	3.9	5.6	15	49	54	55	11	3.6	.97	.63
AC-FT	84	316	613	3,310	6,380	5,520	6,970	9,550	1,430	404	138	65

CAL YR 1972 TOTAL 3,457.33 MEAN 9.45 MAX 59 MIN 0 AC-FT 6,860
WTR YR 1973 TOTAL 17,536.61 MEAN 48.0 MAX 718 MIN .14 AC-FT 34,780

11247000 SAN JOAQUIN RIVER BELOW KERCKHOFF POWERHOUSE, NEAR PRATHER, CALIF.

LOCATION.--Lat 37°04'45", long 119°33'36", in NE¼NW¼ sec.10, T.10 S., R.22 E., Fresno County, on left bank 1.1 miles downstream from Kerckhoff powerhouse, 1.4 miles upstream from Big Sandy Creek, and 3.8 miles southeast of Prather.

DRAINAGE AREA.--1,480 sq mi.

PERIOD OF RECORD.--April 1910 to September 1914, December 1936 to December 1937, December 1942 to current year. Published as "near North Fork" 1910-14 and as "below Kerckhoff powerhouse" 1915-60.

GAGE.--Water-stage recorder. Datum of gage is 563.4 ft above mean sea level (levels by Bureau of Reclamation). Prior to Oct. 1, 1914, at site 11 miles upstream at different datum.

AVERAGE DISCHARGE.--34 years (1910-14, 1943-73), 2,354 cfs (1,705,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,400 cfs May 18 (gage height, 23.48 ft); minimum daily, 288 cfs Nov. 19.
Period of record: Maximum discharge, 92,200 cfs Dec. 23, 1955 (gage height, 51.0 ft, from floodmarks), from rating curve extended above 20,000 cfs on basis of records for San Joaquin River above Willow Creek, near Auberry and Willow Creek at mouth, near Auberry; minimum daily, 24 cfs Sept. 26, 1966.

REMARKS.--Records excellent. Flow regulated by 12 powerplants and eight reservoirs with total usable capacity of 609,300 acre-ft. Earliest storage began in 1901 at Bass Lake (see sta 11243400). See records for Florence Lake, Lake Thomas A. Edison, Mammoth Pool Reservoir, Huntington, Shaver, and Redinger Lakes given elsewhere in this report. Backwater from Millerton Lake has affected record at times since November 1947, when spillway gates were installed at Friant Dam. See schematic diagram of San Joaquin River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record, telemark readings, and 12 discharge measurements furnished by Southern California Edison Co., in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	1,090	1,200	690	1,890	2,950	2,640	3,690	8,330	4,410	1,660	1,560
2	1,150	960	1,050	996	1,980	2,850	2,880	3,690	6,970	3,800	1,660	1,560
3	1,160	1,080	843	1,070	1,970	2,830	3,090	3,730	6,140	3,530	1,780	1,430
4	1,170	1,220	1,670	1,460	2,070	2,940	3,080	3,730	6,540	2,610	1,750	1,680
5	1,170	720	1,510	1,390	2,090	2,980	2,920	3,670	6,400	2,180	1,730	1,690
6	1,170	670	1,400	963	2,050	2,990	3,500	3,620	6,980	3,150	1,870	1,780
7	930	1,220	1,680	582	3,170	3,170	3,520	3,600	6,630	2,730	1,920	1,720
8	644	1,070	1,720	748	2,410	3,150	3,540	3,620	7,000	2,500	2,270	1,740
9	800	1,080	768	1,700	2,670	3,010	3,560	3,690	7,970	2,490	1,910	1,690
10	1,130	1,160	783	1,290	3,990	2,670	3,540	3,730	7,730	2,550	1,700	1,710
11	1,170	1,050	1,430	1,280	5,020	3,180	3,580	3,750	7,250	2,610	2,330	1,690
12	1,170	1,160	1,740	1,310	3,970	3,030	3,630	3,710	6,970	2,580	2,450	1,690
13	1,170	1,090	1,050	1,110	3,220	2,620	3,580	3,750	6,270	2,510	2,450	1,690
14	1,150	1,110	1,250	939	3,020	2,490	3,480	3,740	6,080	2,470	2,430	1,910
15	687	993	1,210	1,070	2,870	2,370	3,430	5,890	4,850	2,460	2,520	2,080
16	1,160	1,110	783	2,010	3,030	2,480	3,470	9,080	4,540	2,540	2,370	1,930
17	1,170	1,110	1,200	2,830	2,850	2,200	3,570	10,400	4,160	2,560	2,450	1,680
18	1,170	785	1,750	2,060	2,510	2,310	3,570	11,500	3,910	2,580	2,060	1,750
19	1,170	288	1,750	2,280	2,440	2,680	3,550	10,900	4,070	2,560	1,830	1,890
20	1,220	1,090	1,750	1,720	2,430	3,400	3,530	8,960	4,670	2,540	2,020	1,710
21	1,700	1,160	1,740	1,710	2,430	2,980	3,520	7,510	5,010	2,510	2,180	1,940
22	1,460	1,080	1,760	1,690	2,190	2,730	3,530	7,850	5,030	2,500	1,920	1,880
23	1,470	819	1,510	1,690	1,910	2,630	3,580	7,410	5,020	2,530	1,830	1,930
24	1,680	965	834	1,700	1,960	2,630	3,650	7,890	4,560	2,540	1,690	1,880
25	1,680	890	788	1,820	2,200	2,720	3,710	6,950	4,150	2,560	1,680	1,090
26	1,680	745	1,120	1,700	2,460	3,760	3,740	6,400	4,160	2,550	1,680	932
27	1,480	840	1,170	1,730	3,430	3,620	3,770	6,200	5,220	2,630	1,680	782
28	1,040	1,200	1,210	1,750	4,000	3,630	3,800	7,730	6,360	1,650	1,680	879
29	1,440	1,490	1,440	1,760	------	3,690	3,780	9,140	5,290	885	1,490	835
30	1,310	1,390	762	1,760	------	3,660	3,730	8,420	4,690	1,270	1,530	815
31	1,690	------	681	1,950	------	2,600	------	8,520	------	1,660	1,490	------
TOTAL	37,591	30,635	39,552	46,758	76,230	90,950	104,470	192,470	172,950	78,645	60,010	47,543
MEAN	1,213	1,021	1,276	1,508	2,723	2,934	3,482	6,209	5,765	2,537	1,936	1,585
MAX	1,700	1,490	1,760	2,830	5,020	3,760	3,800	11,500	8,330	4,410	2,520	2,080
MIN	400	288	681	582	1,890	2,200	2,640	3,600	3,910	885	1,490	782
AC-FT	74,560	60,760	78,450	92,740	151,200	180,400	207,200	381,800	343,000	156,000	119,000	94,300

CAL YR 1972 TOTAL 534,998 MEAN 1,462 MAX 2,660 MIN 196 AC-FT 1,061,000
WTR YR 1973 TOTAL 977,804 MEAN 2,679 MAX 11,500 MIN 288 AC-FT 1,939,000

NOTE.--No gage-height record Aug. 26 to Sept. 30.

11249500 MADERA CANAL AT FRIANT, CALIF.

LOCATION.--Lat 37°00'10", long 119°42'21", in NW¼SW¼ sec.5, T.11 S., R.21 E., Madera County, at Friant Dam 0.9 mile northeast of Friant.

PERIOD OF RECORD.--October 1943 to current year. October 1954 to September 1966 published as Friant-Madera Canal at Friant.

GAGE.--Discharge computed on basis of valve openings in dam and head on valves. Prior to Oct. 1, 1948, water-stage recorder at several sites at various datums. Oct. 1, 1948, to Sept. 30, 1949, water-stage recorder at site 8.8 miles downstream.

AVERAGE DISCHARGE.--30 years, 286 cfs (207,200 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,330 cfs July 2, 3, 10, 14, 1973; no flow many days in each year.

REMARKS.--Canal diverts from Millerton Lake (see sta 11250100) at right end of Friant Dam for irrigation between San Joaquin and Fresno Rivers.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

REVISIONS (WATER YEARS).--WSP 1151: 1944-48.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		113			0	21	652	989	951	1,320	1,300	784
2		202			0	0	650	1,030	958	1,330	1,300	746
3		118			0	0	685	1,080	962	1,330	1,310	720
4		0			0	0	703	1,100	966	1,320	1,310	709
5		0			0	0	700	1,090	1,000	1,320	1,300	628
6		0			0	0	730	1,060	1,030	1,310	1,300	580
7		0			0	43	744	997	1,090	1,310	1,300	571
8		0			0	83	741	941	1,130	1,300	1,280	564
9		0			0	97	738	892	1,180	1,320	1,260	556
10		0			0	97	717	870	1,210	1,330	1,240	585
11		0			0	97	705	866	1,210	1,320	1,170	642
12		0			0	128	640	862	1,210	1,320	1,100	655
13		0			0	152	604	842	1,280	1,320	1,070	662
14		0			0	229	603	830	1,310	1,330	1,100	660
15		0			0	271	602	830	1,270	1,300	1,120	444
16		0			0	272	601	838	1,180	1,310	1,110	328
17		0			0	272	600	815	1,150	1,310	1,080	202
18		0			0	287	599	757	1,150	1,300	1,040	0
19		0			0	297	597	741	1,140	1,300	1,020	0
20		0			31	252	595	752	1,170	1,290	1,010	0
21		0			118	185	593	760	1,200	1,250	1,000	0
22		0			150	142	592	766	1,200	1,230	991	0
23		0			150	161	658	862	1,200	1,200	978	0
24		0			149	172	724	913	1,200	1,190	964	0
25		0			128	205	783	915	1,200	1,180	952	25
26		0			118	224	803	858	1,230	1,250	920	0
27		0			118	241	799	828	1,250	1,290	890	0
28		0			80	479	885	834	1,280	1,310	847	0
29		0			------	637	921	842	1,300	1,310	820	0
30		0			------	655	966	882	1,310	1,300	807	0
31		------			------	654	------	931	------	1,290	795	------
TOTAL	0	433	0	0	1,042	6,353	20,930	27,573	34,917	40,090	33,684	10,061
MEAN	0	14.4	0	0	37.2	205	698	889	1,164	1,293	1,087	335
MAX	0	202	0	0	150	655	966	1,100	1,310	1,330	1,310	784
MIN	0	0	0	0	0	0	592	741	951	1,180	795	0
AC-FT	0	859	0	0	2,070	12,600	41,510	54,690	69,260	79,520	66,810	19,960

CAL YR 1972 TOTAL 77,072.00 MEAN 211 MAX 966 MIN 0 AC-FT 152,900
WTR YR 1973 TOTAL 175,083.00 MEAN 480 MAX 1,330 MIN 0 AC-FT 347,300

11250000 FRIANT-KERN CANAL AT FRIANT, CALIF.

LOCATION.--Lat 36°59'53", long 119°42'11", in SE¼SW¼ sec.5, T.11 S., R.21 E., Fresno County, at Friant Dam 0.9 mile northeast of Friant.

PERIOD OF RECORD.--March 1949 to current year.

GAGE.--Discharge computed on basis of valve openings in dam and head on valves. Prior to July 8, 1949, nonrecording gages at various sites and datums. July 8 to Sept. 30, 1949, water-stage recorder at site 0.2 mile downstream.

AVERAGE DISCHARGE.--24 years, 1,326 cfs (960,700 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 4,564 cfs Apr. 17, 1962, Aug. 4, 1971; no flow for several months in most years.

REMARKS.--Canal diverts from Millerton Lake (see sta 11250100) at left end of Friant Dam for irrigation in upper San Joaquin Valley.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	691	204			996	1,560	1,850	4,180	2,930	3,640	3,640	2,590
2	722	205			1,500	522	2,240	3,940	2,640	3,630	3,740	2,620
3	715	207			1,500	302	2,450	4,230	2,680	3,700	3,430	2,660
4	683	91			1,270	304	2,720	4,480	2,820	3,720	3,200	2,660
5	610	0			956	870	2,980	4,480	3,030	3,670	3,330	2,780
6	520	0			1,400	1,620	3,070	4,490	3,180	3,540	3,520	2,900
7	480	0			1,380	1,580	3,060	4,480	3,220	3,380	3,580	2,770
8	484	0			1,420	1,730	3,210	4,480	3,170	3,410	3,550	2,520
9	532	0			1,660	1,850	3,090	4,480	3,110	3,560	3,440	2,520
10	540	0			1,410	1,980	2,590	4,470	3,210	3,660	3,090	2,630
11	508	0			945	1,860	1,990	4,380	3,280	3,740	2,880	2,710
12	490	0			960	1,910	2,110	4,250	3,330	3,760	3,090	2,640
13	428	0			2,340	1,960	1,950	4,030	3,390	3,550	3,280	2,630
14	404	0			2,040	2,120	1,770	3,910	3,820	3,280	3,370	2,650
15	432	0			1,640	2,090	1,780	3,520	4,480	3,340	3,470	2,510
16	450	0			1,720	2,000	1,780	3,180	4,480	3,460	3,490	2,300
17	458	0			1,610	2,090	2,040	3,140	4,400	3,620	3,280	2,290
18	465	0			1,470	2,280	2,350	3,100	4,140	3,650	3,090	2,280
19	318	0			1,520	2,450	2,540	3,070	3,940	3,610	3,250	2,210
20	133	0			1,660	1,970	2,350	3,140	3,760	3,390	3,330	2,060
21	0	0			2,310	1,720	2,290	3,180	3,710	3,050	3,300	1,760
22	0	0			2,780	1,680	2,450	3,220	3,770	3,100	3,420	1,610
23	0	0			3,150	1,760	3,060	3,250	3,840	3,190	3,710	1,660
24	0	0			3,310	1,870	3,170	3,200	3,940	3,160	3,380	1,630
25	0	0			3,370	1,910	3,150	2,860	4,090	3,230	3,050	1,620
26	0	0			3,440	1,640	3,280	2,400	4,100	3,220	3,140	1,610
27	0	0			3,320	1,470	3,660	2,410	4,150	3,030	3,200	1,460
28	0	0			2,360	1,550	3,710	2,560	4,110	2,970	3,210	1,260
29	0	0			------	1,720	3,630	2,860	3,880	3,170	3,170	1,110
30	254	0			------	1,790	3,580	3,190	3,670	3,350	3,030	1,120
31	345	------			------	1,810	------	3,160	------	3,400	2,850	------
TOTAL	10,662	707	0	0	53,437	51,968	79,900	111,720	108,270	106,180	102,510	65,770
MEAN	344	23.6	0	0	1,908	1,676	2,663	3,604	3,609	3,425	3,307	2,192
MAX	722	207	0	0	3,440	2,450	3,710	4,490	4,480	3,760	3,740	2,900
MIN	0	0	0	0	945	302	1,770	2,400	2,640	2,970	2,850	1,110
AC-FT	21,150	1,400	0	0	106,000	103,100	158,500	221,600	214,800	210,600	203,300	130,500

CAL YR 1972 TOTAL 374,816.00 MEAN 1,024 MAX 3,45(MIN 0 AC-FT 743,400
WTR YR 1973 TOTAL 691,124.00 MEAN 1,893 MAX 4,49(MIN 0 AC-FT 1,371,000

11250100 MILLERTON LAKE AT FRIANT, CALIF.

LOCATION.--Lat 37°00'00", long 119°42'13", in SW¼SW¼ sec.5, T.11 S., R.21 E., Fresno County, near center of Friant Dam on San Joaquin River just upstream from Cottonwood Creek, and 0.9 mile northeast of Friant.

DRAINAGE AREA.--1,638 sq mi.

PERIOD OF RECORD.--October 1941 to current year. Monthend contents only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to May 29, 1944, nonrecording gage on left bank at same datum.

EXTREMES.--Current year: Maximum contents, 528,700 acre-ft June 12 (elevation, 579.66 ft); minimum, 143,500 acre-ft Sept. 30 (elevation, 472.27 ft).
Period of record: Maximum contents, 528,700 acre-ft June 12, 1973 (elevation, 579.66 ft); minimum since lake first filled, 133,600 acre-ft Apr. 11, 1969 (elevation, 467.81 ft).

REMARKS.--Reservoir is formed by gravity-type concrete dam with spillway near center, completed in December 1942. Control valves installed in February 1944 and spillway gates installed in November 1947. Usable capacity, 503,200 acre-ft between elevations 375.4 (invert of river outlet) and 578.0 ft (top of drum-type spillway gates) above mean sea level. Not available for release, 17,400 acre-ft. Millerton Lake is one of the storage units in Central Valley project. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

400	36,400	500	215,600
420	57,000	520	279,400
440	83,300	540	353,000
460	117,500	560	436,500
480	161,700	580	530,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145,800	193,600	249,100	320,700	414,300	424,600	476,100	369,100	481,700	501,600	355,000	201,200
2	146,500	194,400	251,100	322,400	415,000	429,500	472,400	366,200	488,500	498,700	348,200	197,500
3	147,200	195,800	252,600	324,300	415,700	434,800	468,600	362,700	493,100	495,200	342,000	193,600
4	147,900	198,000	255,900	327,000	417,200	440,400	464,200	358,600	498,500	490,000	336,400	190,100
5	148,800	199,200	258,800	329,500	419,200	444,700	459,000	354,600	503,300	485,200	330,500	186,700
6	149,900	200,400	261,500	331,200	420,700	447,600	454,700	350,500	508,900	481,300	324,300	183,200
7	150,700	202,500	264,700	332,300	424,800	451,000	450,400	346,500	513,800	477,100	318,300	179,900
8	150,800	204,500	268,000	333,800	427,000	453,800	445,900	342,700	518,900	472,400	313,000	177,100
9	151,000	206,400	269,400	337,100	429,200	456,000	441,600	339,000	525,300	467,500	307,300	174,200
10	151,900	208,700	270,600	339,800	435,700	457,200	438,300	335,600	527,400	462,300	301,900	171,100
11	152,900	210,700	273,200	342,300	450,100	460,600	436,200	332,300	528,600	457,300	298,200	167,700
12	154,000	212,900	276,300	344,900	457,600	462,800	434,100	329,200	528,700	452,100	294,500	164,500
13	155,200	215,000	278,200	347,000	456,700	463,900	432,500	326,600	527,500	447,100	290,500	161,200
14	156,400	217,500	280,400	348,800	454,800	464,300	430,900	324,100	526,000	442,600	286,200	158,200
15	156,600	219,500	282,600	351,000	451,100	464,500	429,200	326,700	522,200	438,100	281,900	155,700
16	157,800	221,600	283,900	356,000	447,200	464,900	427,500	336,700	519,200	433,500	277,300	153,800
17	159,000	223,800	286,200	362,300	443,200	464,700	425,500	349,600	515,900	428,500	273,300	152,100
18	160,100	225,300	289,500	366,800	438,700	464,200	422,900	364,800	512,600	423,600	268,900	150,900
19	161,600	225,900	292,800	371,800	433,900	464,100	419,900	378,800	510,100	418,700	263,800	150,000
20	163,400	227,700	295,900	375,200	429,900	468,200	417,100	388,900	509,400	414,100	259,000	149,200
21	166,600	229,800	299,100	378,500	427,700	471,100	414,400	396,000	509,500	410,400	254,600	149,300
22	169,200	231,600	302,400	381,900	426,400	473,500	411,500	403,700	509,500	406,500	249,500	149,700
23	171,900	233,100	305,200	385,300	423,700	475,400	407,200	410,200	509,300	402,600	243,800	149,900
24	175,000	234,800	306,700	388,600	420,800	476,700	402,800	417,700	507,900	398,800	238,300	150,300
25	178,000	236,400	308,200	392,100	418,200	478,200	398,400	423,900	505,300	395,000	233,500	149,100
26	181,000	237,800	310,000	395,400	416,200	482,400	393,900	429,900	502,600	390,900	228,700	147,800
27	183,700	239,300	312,200	398,800	416,800	484,900	388,500	435,600	501,900	387,400	223,800	146,200
28	185,400	241,400	314,400	402,300	421,600	484,900	382,900	444,100	503,900	382,100	219,000	145,300
29	188,100	244,200	316,900	405,600	------	484,000	377,700	455,100	503,900	374,700	214,000	144,400
30	189,800	246,900	318,300	408,900	------	482,800	373,200	463,900	503,000	368,000	209,300	143,500
31	192,200	------	319,500	412,700	------	479,500	------	472,900	------	361,800	204,900	------
MAX	192,200	246,900	319,500	412,700	457,600	484,900	476,100	472,900	528,700	501,600	355,000	201,200
MIN	145,800	193,600	249,100	320,700	414,300	424,600	373,200	324,100	481,700	361,800	204,900	143,500
(a)	491.75	510.20	531.23	554.54	556.61	569.43	545.07	568.03	574.40	542.24	496.30	472.28
(b)	+45,700	+54,700	+72,600	+93,200	+8,900	+57,900	-106,300	+99,700	+30,100	-141,200	-156,900	-61,400
(c)	800	420	210	410	670	790	1,440	2,510	3,670	3,740	2,600	1,280

CAL YR 1972 b +71,400
WTR YR 1973 b -3,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11251000 SAN JOAQUIN RIVER BELOW FRIANT, CALIF.

LOCATION.--Lat 36°59'04", long 119°43'24", in SW¼SW¼ sec.7, T.11 S., R.21 E., Fresno County, 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.--1,676 sq mi.

PERIOD OF RECORD.--October 1907 to current year. Published as "near Pollasky" October 1907 to December 1908 and as "near Friant" January 1909 to September 1938. Monthly discharge only for October 1907 to November 1908, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 294.00 ft above mean sea level (levels by Bureau of Reclamation). Oct. 18, 1907, to Nov. 9, 1913, nonrecording gage at site 4.5 miles upstream at different datum. Nov. 10, 1913, to Sept. 30, 1938, water-stage recorder at site 2.5 miles upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation in Millerton Lake and for diversions to Madera and Friant-Kern Canals).--66 years, 2,351 cfs (1,703,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,900 cfs Feb. 14 (gage height, 7.10 ft); minimum daily, 21 cfs Nov. 17.
Period of record: Maximum discharge, 77,200 cfs Dec. 11, 1937 (gage height, 23.8 ft, site and datum then in use); minimum, 38 cfs (regulated) July 29, 1940. Maximum discharge since construction of Friant Dam in 1941, 12,400 cfs June 6, 1969; minimum, 5.5 cfs Oct. 20, 1941.

REMARKS.--Records good. Flow regulated by Millerton Lake beginning in 1941 (see sta 11250100) and by other reservoirs described in REMARKS for San Joaquin River below Kerckhoff powerhouse. Diversion for irrigation through Madera and Friant-Kern Canals (see sta 11249500, 11250000) began in 1944 and 1949 respectively. See schematic diagram of San Joaquin River basin.

COOPERATION.--One discharge measurement furnished by Bureau of Reclamation.

REVISIONS (WATER YEARS).--WSP 843: 1914(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	88	75	54	49	97	2,060	545	147	144	129	117
2	100	87	70	54	47	85	2,050	99	147	144	140	115
3	97	87	71	54	46	88	2,040	99	147	147	149	115
4	97	80	68	54	46	110	2,040	99	147	147	149	112
5	97	70	62	54	49	82	2,040	99	149	149	149	106
6	102	70	62	55	55	88	2,030	99	151	147	149	104
7	110	70	58	55	85	97	2,020	99	151	147	144	100
8	110	70	52	57	66	88	2,000	100	507	147	140	95
9	115	65	50	62	58	83	2,000	100	1,310	147	140	95
10	119	60	52	49	101	80	2,000	99	2,800	144	138	94
11	119	57	52	28	459	112	1,990	99	2,770	144	138	94
12	119	47	52	27	565	87	1,990	108	2,710	142	138	94
13	119	47	52	26	2,010	80	1,980	136	2,380	142	134	97
14	119	44	50	26	2,680	73	2,000	156	1,920	142	132	85
15	113	24	50	26	3,820	71	2,000	167	932	142	129	83
16	108	22	57	41	3,730	70	1,990	165	197	142	127	88
17	106	21	65	62	3,710	70	1,980	166	149	147	127	88
18	99	22	63	55	3,660	68	1,980	167	144	144	127	88
19	95	24	60	58	3,650	66	1,980	159	144	142	125	95
20	90	24	54	46	2,980	177	2,020	155	144	142	125	97
21	90	28	54	46	1,260	115	2,040	156	144	142	125	97
22	90	49	54	44	130	134	2,040	156	144	142	125	95
23	88	50	54	41	78	100	2,040	157	144	140	123	95
24	85	54	55	39	78	94	2,040	150	142	134	123	97
25	85	62	55	39	73	90	2,030	145	144	132	121	100
26	85	68	55	39	73	117	2,020	147	142	134	121	102
27	87	71	57	36	99	845	2,010	148	144	132	121	106
28	87	78	55	34	160	1,940	2,010	147	142	132	119	106
29	87	78	55	46	------	2,110	2,010	148	142	132	117	106
30	88	80	54	60	------	2,090	1,480	148	144	132	117	104
31	88	------	54	54	------	2,080	------	141	------	129	117	------
TOTAL	3,100	1,697	1,777	1,421	29,817	11,487	59,910	4,559	18,578	4,373	4,058	2,970
MEAN	100	56.6	57.3	45.8	1,065	371	1,997	147	619	141	131	99.0
MAX	119	88	75	62	3,820	2,110	2,060	545	2,800	149	149	117
MIN	85	21	50	26	46	66	1,480	99	142	129	117	83
AC-FT	6,150	3,370	3,520	2,820	59,140	22,780	118,800	9,040	36,850	8,670	8,050	5,890
MEAN a	1,200	1,021	1,242	1,568	3,183	3,207	3,588	6,303	5,960	2,624	2,015	1,617
AC-FT a	73,800	60,750	76,330	96,430	176,700	197,200	213,500	387,600	354,600	161,300	123,900	96,230

CAL YR 1972 TOTAL 36,444 MEAN 99.6 MAX 188 MIN 21 AC-FT 72,290 MEAN a 1,456 AC-FT a 1,057,000
WTR YR 1973 TOTAL 143,747 MEAN 394 MAX 3,820 MIN 21 AC-FT 285,100 MEAN a 2,788 AC-FT a 2,018,000

a Adjusted for change in contents and evaporation in Millerton Lake and for diversions to Madera and Friant-Kern Canals.

11253310 CANTUA CREEK NEAR CANTUA CREEK, CALIF.

LOCATION.--Lat 36°24'08", long 120°25'57", in SE¼SE¼ sec.34, T.17 S., R.14 E., Fresno County, on left bank 9.2 miles southwest of town of Cantua Creek, and 19 miles north of Coalinga.

DRAINAGE AREA.--46.4 sq mi.

PERIOD OF RECORD.--Water years 1958-65 (annual maximum), October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 680 ft (from topographic map). Prior to October 1966, crest-stage gage at datum 2.00 ft lower.

AVERAGE DISCHARGE.--7 years, 3.40 cfs (2,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 418 cfs Feb. 11 (gage height, 3.91 ft); no flow for several months. Period of record: Maximum discharge, 1,920 cfs Feb. 24, 1969 (gage height, 6.60 ft), from rating curve extended above 170 cfs on basis of slope-area measurements at gage heights 4.57, 6.04, and 6.60 ft; no flow for several months in each year.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Some small dams for stock use above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0		0	1.1	27	6.2	3.6	1.8	.20		
2		0		0	1.0	21	6.2	3.6	1.9	.20		
3		0		0	1.0	18	6.0	3.6	1.7	.23		
4		0		0	4.5	17	6.0	3.8	1.4	.20		
5		0		0	4.8	15	5.8	4.0	1.3	.13		
6		0		0	66	23	5.8	4.0	1.3	.11		
7		0		0	29	20	5.8	3.8	1.1	.09		
8		0		0	14	17	5.8	3.6	1.0	.11		
9		0		2.7	9.4	15	5.8	3.4	.86	.09		
10		0		2.2	44	14	5.8	3.2	.86	.05		
11		0		.46	140	13	5.6	3.0	.86	.02		
12		0		.07	34	12	5.6	2.8	.94	.01		
13		0		0	37	11	5.6	2.8	1.0	.01		
14		23		0	29	11	5.6	2.8	1.1	0		
15		29		0	23	10	5.6	2.6	1.1	0		
16		29		18	18	9.5	5.6	2.4	1.0	0		
17		2.6		9.9	15	9.0	5.6	2.3	.86	0		
18		.80		47	14	8.5	5.3	2.3	.80	.01		
19		.20		15	12	7.5	5.3	2.4	.74	0		
20		.02		5.3	11	35	5.0	2.1	.56	0		
21		0		4.2	9.8	30	4.8	2.1	.46	.01		
22		0		3.2	8.6	25	4.5	2.1	.42	.01		
23		0		2.4	7.8	20	4.2	1.9	.42	0		
24		0		2.1	12	13	4.0	1.9	.42	0		
25		0		2.8	9.4	11	4.0	2.1	.38	0		
26		0		2.6	9.9	10	3.8	2.1	.35	0		
27		0		1.7	64	8.0	3.8	1.9	.32	0		
28		0		1.4	73	7.2	3.6	1.8	.29	0		
29		0		1.1	------	6.8	3.8	1.5	.23	0		
30		0		1.8	------	6.4	3.8	1.5	.20	0		
31		------		1.4	------	6.4	------	1.9	------	0		------
TOTAL	0	84.62	0	125.33	702.3	457.3	154.3	82.9	25.67	1.48	0	0
MEAN	0	2.82	0	4.04	25.1	14.8	5.14	2.67	.86	.048	0	0
MAX	0	29	0	47	140	35	6.2	4.0	1.9	.23	0	0
MIN	0	0	0	0	1.0	6.4	3.6	1.5	.20	0	0	0
AC-FT	0	168	0	249	1,390	907	306	164	51	2.9	0	0

CAL YR 1972 TOTAL 98.63 MEAN .27 MAX 29 MIN 0 AC-FT 196
WTR YR 1973 TOTAL 1,633.90 MEAN 4.48 MAX 140 MIN 0 AC-FT 3,240

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-14	unknown	2.77	81	2-10	0900	^.01	128
11-15	2300	3.89	412	2-11	0630	3.91	418
1-16	1700	2.67	66	2-28	0230	3.28	204
1-18	1600	2.88	100	3-6	1630	2.57	52
2-6	1530	3.40	240	3-20	unknown	2.75	78

NOTE.--No gage-height record Oct. 12 to Nov. 15, Mar. 15 to Apr. 15.

11253500 JAMES BYPASS NEAR SAN JOAQUIN, CALIF.

LOCATION.--Lat 36°39'09", long 120°10'49", in NE¼SW¼ sec.1, T.15 S., R.16 E., Fresno County, on right bank 3.2 miles north of San Joaquin.

PERIOD OF RECORD.--October 1947 to current year. Published as "Fresno Slough bypass" in WSP 1315-A and 1735. Daily discharge for period October 1954 to September 1972 are in files of Bureau of Reclamation.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (from topographic map).

AVERAGE DISCHARGE.--26 years, 155 cfs (112,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 5,570 cfs June 7, 1969; no flow for all or most of each year.

REMARKS.--Diversion above station for irrigation. James Bypass carries overflow from Kings River to San Joaquin River. No flow during water years 1972-73.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--Revised annual figures of discharge for the water years 1955-57 superseding figures published in WRD Calif. 1972 are given below.

	Water year		Calendar year	
Year	Mean	Acre-feet	Mean	Acre-feet
1955	0	0	5.30	3,840
1956	129	93,350	.123	89,510
1957	0	0	0	0

11257100 MIAMI CREEK NEAR OAKHURST, CALIF.

LOCATION.--Lat 37°23'37", long 119°39'12", in NE¼SE¼ sec.22, T.6 S., R.21 E., Madera County, Sierra National Forest, on left bank 200 ft downstream from county road bridge, and 4.6 miles north of Oakhurst.

DRAINAGE AREA.--10.6 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 8.22 cfs (5,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 239 cfs Jan. 16 (gage height, 5.72 ft); minimum daily, 0.40 cfs Oct. 1, 2.
Period of record: Maximum discharge, 804 cfs Feb. 1, 1963 (gage height, 9.08 ft); no flow many days in most years.

REMARKS.--No known diversions above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1963(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	1.1	1.8	3.2	5.3	31	18	19	7.7	3.4	1.5	.70
2	.40	1.1	1.7	3.3	5.2	25	17	20	7.9	3.3	1.5	.70
3	.50	1.1	1.8	3.2	5.4	22	16	20	7.5	3.2	1.4	.60
4	.50	2.5	4.8	2.7	10	21	17	20	7.0	3.1	1.4	.60
5	.70	2.5	3.2	2.8	8.1	19	17	18	6.6	3.0	1.3	.60
6	.60	1.6	2.6	2.9	14	20	19	17	6.4	2.9	1.5	.60
7	.50	1.8	3.1	2.8	33	19	20	18	6.2	2.9	1.5	.70
8	.60	2.8	2.9	3.8	20	19	21	18	5.8	2.8	1.5	.60
9	.60	1.9	3.0	7.3	14	18	21	18	5.8	2.8	1.5	.60
10	1.1	1.7	2.8	6.1	61	19	21	18	5.6	2.7	1.4	.60
11	1.1	3.8	2.5	5.2	88	38	22	18	5.4	2.5	1.4	1.0
12	.90	2.7	2.3	7.7	38	24	23	17	5.4	2.5	1.3	1.0
13	.80	2.2	2.4	6.6	29	21	23	17	5.4	2.4	1.3	1.0
14	.80	9.4	1.7	5.8	26	18	20	16	5.5	2.4	1.3	1.0
15	.90	6.5	2.3	5.2	21	17	19	15	5.6	2.4	1.2	.60
16	.90	7.7	2.7	91	18	16	18	15	5.4	2.4	1.2	.60
17	1.1	4.3	17	45	17	16	19	14	5.4	2.4	1.2	.60
18	1.0	3.3	11	33	16	15	19	13	5.2	2.3	1.1	.70
19	1.0	2.9	10	27	16	15	18	13	5.0	2.3	1.1	.70
20	1.3	2.8	7.9	15	16	23	17	12	4.6	2.3	1.0	.70
21	1.2	2.5	6.3	12	15	18	17	11	4.4	2.3	1.0	.80
22	1.1	2.3	6.8	9.5	14	16	18	11	4.2	2.3	1.0	.90
23	1.0	2.1	6.6	8.2	13	16	19	10	4.1	2.3	.90	1.0
24	1.0	2.1	5.2	7.5	17	18	21	9.8	4.1	2.1	.90	1.0
25	1.0	2.0	4.5	7.0	16	21	23	9.8	4.0	1.9	.90	1.0
26	.90	1.9	4.1	6.6	21	30	24	9.4	3.9	1.9	.90	1.0
27	.90	2.0	3.9	6.1	38	25	24	9.0	3.9	1.7	.80	.90
28	1.0	2.0	4.0	5.9	54	23	24	8.4	3.6	1.7	.80	.80
29	1.0	1.9	3.6	5.8	------	20	23	7.9	3.4	1.6	.80	.80
30	1.0	1.8	3.5	6.0	------	19	21	7.6	3.3	1.6	.80	.80
31	1.1	------	3.5	5.6	------	19	------	7.7	------	1.5	.80	------
TOTAL	26.90	84.3	139.5	359.8	649.0	641	599	437.6	158.3	74.9	36.20	23.20
MEAN	.87	2.81	4.50	11.6	23.2	20.7	20.0	14.1	5.28	2.42	1.17	.77
MAX	1.3	9.4	17	91	88	38	24	20	7.9	3.4	1.5	1.0
MIN	.40	1.1	1.7	2.7	5.2	15	16	7.6	3.3	1.5	.80	.60
AC-FT	53	167	277	714	1,290	1,270	1,190	868	314	149	72	46

CAL YR 1972 TOTAL 1,166.90 MEAN 3.19 MAX 17 MIN .10 AC-FT 2,310
WTR YR 1973 TOTAL 3,229.70 MEAN 8.85 MAX 91 MIN .40 AC-FT 6,410

11257500 FRESNO RIVER NEAR KNOWLES, CALIF.

LOCATION.--Lat 37°14'14", long 119°46'26", in SE¼NW¼ sec.15, T.8 S., R.20 E., Madera County, on left bank at Fresno Crossing, 0.1 mile downstream from Bean Gulch, and 6 miles northeast of Knowles.

DRAINAGE AREA.--133 sq mi.

PERIOD OF RECORD.--September 1911 to August 1913, November 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,086.4 ft above mean sea level (river-profile survey). Prior to June 13, 1930, nonrecording gage 10 ft upstream and June 13, 1930, to Jan. 13, 1931, water-stage recorder at site 40 ft upstream at datum 0.34 ft lower.

AVERAGE DISCHARGE.--58 years (1911-12, 1916-73), 79.7 cfs (57,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,720 cfs Feb. 11 (gage height, 6.52 ft); minimum daily, 0.74 cfs Oct. 1, 2.
Period of record: Maximum discharge, 13,300 cfs Dec. 23, 1955 (gage height, 11.52 ft), from rating curve extended above 3,900 cfs on basis of slope-area measurement of maximum flow; no flow at times in some years.

REMARKS.--Records good. Diversions for irrigation of 160 acres above station. Diversions into Fresno River basin above station of up to 50 cfs at times since 1897 from the San Joaquin River basin and up to 60 cfs at times since 1888 from the Merced River basin. Diversions are for irrigation downstream from station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1515: 1916-19, 1920(M), 1921-23, 1925-26(M), 1932(M), 1935-36(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	4.5	17	24	57	351	277	187	126	32	8.0	4.2
2	.74	6.2	17	20	53	268	251	181	130	31	8.0	4.1
3	.84	6.7	17	24	53	236	240	185	125	30	7.7	4.9
4	.98	9.8	27	23	92	295	227	183	119	28	7.9	4.8
5	.94	15	34	16	97	232	225	178	120	24	7.7	4.3
6	2.5	14	24	19	114	255	231	171	117	22	8.5	3.6
7	3.7	11	25	21	401	305	241	167	112	19	10	4.0
8	3.1	11	26	26	270	281	245	167	109	18	10	4.3
9	3.2	12	16	105	175	233	240	167	110	17	9.3	4.0
10	3.8	10	21	104	675	214	238	166	94	17	8.5	3.7
11	5.9	17	19	52	1,980	502	241	165	85	16	8.3	3.7
12	7.9	21	24	57	1,120	321	247	161	83	15	7.1	4.7
13	5.9	16	22	59	562	270	246	166	83	14	6.7	4.4
14	4.8	42	17	50	478	235	243	160	82	13	5.8	3.6
15	5.3	61	21	46	380	217	218	168	82	13	4.6	4.6
16	4.8	66	21	440	286	203	213	165	82	15	5.2	3.3
17	5.1	44	74	521	244	192	215	163	73	14	4.4	3.7
18	5.5	27	195	258	213	180	212	159	64	14	4.1	3.8
19	6.8	23	96	321	192	172	198	154	62	13	3.7	3.8
20	6.4	21	97	160	171	610	187	148	60	13	3.0	3.7
21	12	19	62	132	161	432	178	142	59	13	3.0	3.6
22	9.2	17	52	103	147	450	183	140	56	13	3.0	3.6
23	7.2	17	60	88	136	348	195	138	56	13	3.5	4.6
24	6.4	16	45	80	155	325	201	140	55	12	5.0	5.1
25	6.1	17	39	77	155	315	204	136	48	11	5.4	5.5
26	6.0	17	35	77	154	483	210	132	41	11	5.5	4.8
27	5.3	18	33	69	324	378	209	128	40	9.8	6.1	4.5
28	5.0	18	33	66	635	369	205	131	38	9.2	6.3	4.5
29	5.0	18	31	64	------	326	204	129	35	9.2	6.0	4.3
30	4.5	18	26	69	------	296	201	127	33	9.0	5.2	4.2
31	4.4	------	27	64	------	307	------	127	------	8.8	4.3	------
TOTAL	150.04	613.2	1,253	3,235	9,480	9,601	6,625	4,831	2,379	497.0	191.8	125.9
MEAN	4.84	20.4	40.4	104	339	310	221	156	79.3	16.0	6.19	4.20
MAX	12	66	195	521	1,980	610	277	187	130	32	10	5.5
MIN	.74	4.5	16	16	53	172	178	127	33	8.8	3.0	3.3
AC-FT	298	1,220	2,490	6,420	18,800	19,040	13,140	9,580	4,720	986	380	250

CAL YR 1972 TOTAL 12,224.23 MEAN 33.4 MAX 195 MIN 0 AC-FT 24,250
WTR YR 1973 TOTAL 38,981.94 MEAN 107 MAX 1,980 MIN .74 AC-FT 77,320

PEAK DISCHARGE (BASE, 590 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	2115	4.68	1,490	3-11	0800	3.26	723
2-11	1230	6.52	3,720	3-20	unknown	3.61	937
2-28	unknown	3.73	1,020				

11258000 FRESNO RIVER NEAR DAULTON, CALIF.

LOCATION.--Lat 37°05'51", long 119°53'19", in NW¼NW¼ sec.3, T.10 S., R.19 E., Madera County, on left bank 0.4 mile downstream from Willow Creek, and 5.3 miles southeast of Daulton.

DRAINAGE AREA.--258 sq mi.

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 377.37 ft above mean sea level. October 1941 to Sept. 27, 1946, at site 300 ft downstream and Sept. 28, 1946, to Sept. 28, 1949, at present site, at datum 8.37 ft higher. Sept. 29, 1949, to Mar. 19, 1963, at datum 6.00 ft higher. Mar. 20, 1963, to May 22, 1973, at datum 5.00 ft higher.

AVERAGE DISCHARGE.--32 years, 106 cfs (76,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs Feb. 11 (gage height, 10.60 ft); no flow many days.
Period of record: Maximum discharge, 17,500 cfs Dec. 23, 1955 (gage height, 17.64 ft, present datum), from rating curve extended above 6,400 cfs on basis of slope-area measurement at gage height 17.69 ft; maximum gage height, 17.69 ft Feb. 24, 1969 (present datum); no flow at times in most years.
Flood of Mar. 3, 1938, reached a discharge of 15,000 cfs (furnished by Bureau of Reclamation).

REMARKS.--Records good except those for period of no gage-height record and the month of September, which are fair. No diversion for irrigation between this station and station near Knowles. Some regulation at low flow by mining operations and construction of Hidden Dam above station. See REMARKS for station near Knowles.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	4.6	17	31	110	600	450	218	121	34	5.5	2.0
2	0	3.8	16	28	102	447	402	210	121	28	5.1	1.8
3	0	5.0	18	26	98	390	370	205	118	27	4.6	1.4
4	0	6.5	24	31	150	478	346	201	113	28	5.0	1.1
5	0	8.3	37	26	180	402	334	199	110	27	4.4	.92
6	0	14	33	23	200	373	326	196	106	22	4.0	.33
7	0	12	33	24	400	513	324	192	103	19	4.3	.61
8	0	11	34	28	720	435	324	190	101	18	4.9	.61
9	0	11	31	69	340	411	314	188	100	16	6.0	.17
10	0	12	22	123	1,200	365	310	186	97	8.7	5.8	2.3
11	0	14	26	86	4,500	805	305	186	88	.67	5.6	2.0
12	0	22	23	70	2,000	584	300	184	82	.53	5.8	.03
13	0	22	25	70	1,130	460	298	182	79	.14	7.6	.01
14	0	32	24	64	795	417	322	181	76	.10	5.1	.01
15	0	69	24	59	775	365	298	180	73	22	4.0	.01
16	0	66	25	150	541	339	280	180	69	11	3.0	.01
17	.18	69	31	1,080	454	324	269	178	66	1.1	1.4	0
18	3.1	41	129	366	402	312	265	173	63	.60	1.6	0
19	3.7	30	102	501	365	296	258	168	59	.84	2.3	.01
20	4.9	25	91	269	334	986	252	163	58	.15	2.0	.01
21	4.7	28	73	200	314	790	241	157	56	4.5	1.8	0
22	13	22	61	171	296	840	232	150	54	11	1.2	0
23	9.7	19	61	146	278	628	227	145	41	9.2	.80	.62
24	7.1	18	58	132	278	548	227	143	51	8.9	.47	2.6
25	6.3	17	49	121	296	502	229	139	46	8.8	.33	3.3
26	6.0	18	44	116	265	766	233	136	42	8.6	.96	.58
27	5.8	18	40	107	423	617	231	131	37	7.7	2.1	.15
28	5.2	19	39	99	1,070	578	228	129	38	6.9	2.4	.10
29	4.6	19	38	95	------	588	225	127	37	6.4	2.7	.07
30	3.9	20	32	96	------	488	222	123	37	5.7	1.6	.06
31	3.7	------	31	94	------	468	------	122	------	5.5	2.6	------
TOTAL	81.88	676.2	1,291	4,501	18,016	16,115	8,642	5,262	2,242	348.03	104.96	20.81
MEAN	2.64	22.5	41.6	145	643	520	288	170	74.7	11.2	3.39	.69
MAX	13	69	129	1,080	4,500	986	450	218	121	34	7.6	3.3
MIN	0	3.8	16	23	98	296	222	122	37	.10	.33	0
AC-FT	162	1,340	2,560	8,930	35,730	31,960	17,140	10,440	4,450	690	208	41

CAL YR 1972 TOTAL 13,008.86 MEAN 35.5 MAX 208 MIN 0 AC-FT 25,800
WTR YR 1973 TOTAL 57,300.88 MEAN 157 MAX 4,500 MIN 0 AC-FT 113,700

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	0300	5.16	1,850	3-11	1200	4.30	1,210
2-11	unknown	10.60	11,200	3-20	1145	5.57	2,190
2-28	1130	5.09	1,790				

NOTE.--No gage-height record Jan. 31 to Feb. 12.

11258900 WEST FORK CHOWCHILLA RIVER NEAR MARIPOSA, CALIF.

LOCATION.--Lat 37°25'14", long 119°52'25", in SW¼SE¼ sec.10, T.6 S., R.19 E., Mariposa County, 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.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,680 ft (from topographic map).

AVERAGE DISCHARGE.--16 years, 17.4 cfs (12,610 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,540 cfs Jan. 16 (gage height, 7.77 ft); no flow many days. Period of record: Maximum discharge, 4,350 cfs Jan. 25, 1969 (gage height, 8.93 ft in gage well, 11.1 ft, from floodmarks); no flow many days in each year.

REMARKS.--No known diversions above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.30	1.7	7.9	84	56	15	4.1	.30		
2		0	.30	1.6	7.3	62	51	14	4.4	.30		
3		0	.40	1.7	7.1	78	47	14	3.9	.20		
4		0	1.3	1.5	25	126	44	14	3.3	.20		
5		0	1.5	1.4	17	68	42	14	3.1	.10		
6		0	1.4	1.3	43	110	40	14	2.5	.10		
7		0	1.6	1.2	71	97	39	13	2.1	0		
8		0	1.6	1.8	34	88	36	12	1.9	0		
9		0	1.2	29	25	68	34	12	1.7	0		
10		0	1.0	26	369	63	33	11	1.4	0		
11		0	.90	9.9	1,100	145	31	10	1.4	0		
12		0	.80	17	397	83	30	9.8	1.3	0		
13		0	.80	10	173	65	32	9.0	1.3	0		
14		.90	.80	6.8	237	52	36	8.5	1.4	0		
15		1.8	.80	5.6	149	46	31	8.8	1.5	0		
16		6.1	.90	527	95	43	30	8.0	1.4	0		
17		2.9	46	137	69	42	28	7.5	1.3	0		
18		1.3	23	92	53	40	26	6.6	1.2	0		
19		.80	9.2	61	43	40	25	6.1	1.1	0		
20		.50	6.7	28	38	242	25	5.9	1.0	0		
21		.40	4.3	24	35	144	25	5.8	.80	0		
22		.40	3.6	17	31	125	25	5.6	.70	0		
23		.40	3.5	14	29	82	24	5.3	.70	0		
24		.30	3.1	12	46	71	19	5.7	.70	0		
25		.30	2.6	11	35	84	19	6.1	.60	0		
26		.30	2.3	10	49	193	18	5.6	.60	0		
27		.30	2.1	8.9	194	115	17	4.9	.50	0		
28		.30	2.2	7.9	250	91	16	4.6	.50	0		
29		.30	2.0	8.7	------	72	16	4.2	.40	0		
30		.30	1.8	11	------	62	16	3.8	.30	0		
31		------	1.7	9.5	------	65	------	4.0	------	0		------
TOTAL	0	17.60	129.70	1,095.5	3,629.3	2,746	911	268.8	47.10	1.20	0	0
MEAN	0	.59	4.18	35.3	130	88.6	30.4	8.67	1.57	.039	0	0
MAX	0	6.1	46	527	1,100	242	56	15	4.4	.30	0	0
MIN	0	0	.30	1.2	7.1	40	16	3.8	.30	0	0	0
AC-FT	0	35	257	2,170	7,200	5,450	1,810	533	93	2.4	0	0

CAL YR 1972 TOTAL 801.50 MEAN 2.19 MAX 94 MIN 0 AC-FT 1,590
WTR YR 1973 TOTAL 8,846.20 MEAN 24.2 MAX 1,100 MIN 0 AC-FT 17,550

11258980 CHOWCHILLA RIVER NEAR RAYMOND, CALIF.

LOCATION.--Lat 37°15'36", long 119°56'43", in SE¼SE¼ sec.1, T.8 S., R.18 E., Madera County, on right bank 20 ft downstream from County Road 613 bridge, 2,300 ft downstream from Chapman Creek, and 3.8 miles northwest of Raymond.

DRAINAGE AREA.--201 sq mi.

PERIOD OF RECORD.--October 1971 to current year. December 1958 to September 1970 in files of California Department of Water Resources.

GAGE.--Water-stage recorder and concrete improved control. Datum of gage is 565.67 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 8,530 cfs Feb. 11 (gage height, 14.43 ft); minimum daily, 0.02 cfs Oct. 4-9.
Period of record: Maximum discharge, 8,530 cfs Feb. 11, 1973 (gage height, 14.43 ft); minimum daily, 0.02 cfs Sept. 7, 8, 1972, Oct. 4-9, 1972.
REVISIONS.--The maximum discharge for the water year 1972 has been revised to 813 cfs Dec. 26, 1971 (gage height, 4.95 ft), superseding figure published in WRD Calif. 1972.

REMARKS.--Records good except those for flows below 0.2 cfs, which are fair. No large storage or diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--The figures of peak discharge for water year 1972 have been revised as given below. They supersede figures published in WRD Calif. 1972.
REVISED PEAK DISCHARGE.--Dec. 26 (0330) 813 cfs (4.95 ft); Feb. 6 (0730) 699 cfs (4.73 ft).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.03	4.5	13	52	452	338	90	24	3.1	.05	.05
2	.03	.03	4.2	12	48	387	302	85	25	2.9	.05	.05
3	.03	.03	4.2	12	45	338	282	81	25	2.7	.07	.04
4	.02	.03	6.4	11	69	666	265	80	22	2.5	.07	.04
5	.02	.03	12	11	119	381	248	80	20	2.3	.07	.04
6	.02	.03	13	10	94	404	237	80	19	2.1	.09	.04
7	.02	.04	13	9.8	362	592	228	75	17	1.9	.09	.04
8	.02	.04	14	12	204	423	216	73	15	1.7	.09	.04
9	.02	.03	12	43	128	366	205	70	14	1.5	.12	.05
10	.03	.03	9.8	170	895	330	199	66	12	1.3	.15	.05
11	.03	.03	8.9	75	4,070	540	189	63	12	1.1	.09	.05
12	.03	.03	7.7	75	2,210	393	179	58	11	.69	.07	.05
13	.03	.03	7.2	70	916	330	181	55	10	.62	.07	.05
14	.03	5.4	6.9	46	891	302	203	53	11	.50	.05	.05
15	.03	51	6.6	37	788	275	183	50	11	.44	.05	.05
16	.03	38	6.9	1,100	620	256	185	48	12	.38	.05	.05
17	.03	38	12	958	612	244	170	46	12	.38	.05	.05
18	.03	21	222	272	449	235	165	43	12	.28	.05	.05
19	.03	14	69	394	340	224	153	41	10	.28	.07	.05
20	.03	11	51	179	282	897	146	39	9.4	.23	.07	.05
21	.03	8.9	34	140	248	589	134	37	8.0	.23	.07	.05
22	.03	8.0	27	119	224	637	128	35	6.7	.19	.07	.05
23	.03	6.9	24	96	203	442	123	34	5.8	.15	.07	.05
24	.03	6.1	22	80	211	381	118	32	5.2	.19	.07	.05
25	.03	5.8	20	74	258	354	110	34	4.9	.23	.07	.05
26	.03	5.3	18	67	214	792	104	34	4.6	.28	.07	.04
27	.03	5.0	17	61	429	491	100	31	4.3	.15	.07	.04
28	.03	4.8	16	56	1,380	435	96	29	4.0	.12	.07	.04
29	.03	4.8	15	52	------	381	94	27	3.7	.09	.07	.04
30	.03	4.5	14	56	------	354	95	25	3.4	.07	.05	.04
31	.03	------	13	61	------	363	------	24	------	.07	.05	------
TOTAL	.87	238.91	711.3	4,371.8	16,361	13,254	5,376	1,618	354.0	28.67	2.20	1.39
MEAN	.028	7.96	22.9	141	584	428	179	52.2	11.8	.92	.071	.046
MAX	.03	51	222	1,100	4,070	897	338	90	25	3.1	.15	.05
MIN	.02	.03	4.2	9.8	45	224	94	24	3.4	.07	.05	.04
AC-FT	1.7	474	1,410	8,670	32,450	26,290	10,660	3,210	702	57	4.4	2.8

CAL YR 1972 TOTAL 4,122.88 MEAN 11.3 MAX 373 MIN .02 AC-FT 8,180
WTR YR 1973 TOTAL 42,318.14 MEAN 116 MAX 4,070 MIN .02 AC-FT 83,940

PEAK DISCHARGE (BASE, 660 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	2130	10.57	5,570	3-4	0530	5.24	1,010
1-19	0230	4.24	693	3-7	0100	5.02	900
2-10	1400	7.34	2,290	3-11	1200	4.68	741
2-11	1330	14.43	8,530	3-20	1130	6.50	1,730
2-14	2030	6.34	1,630	3-22	0400	4.89	836
2-28	0400	7.77	2,750	3-25	0830	5.61	1,210

11259300 CHOWCHILLA RIVER BELOW RAYNOR CREEK, NEAR RAYMOND, CALIF.

LOCATION.--Lat 37°12'00", long 120°00'23", in SE¼SW¼ sec.28, T.8 S., R.18 E., Madera County, on left bank 200 ft downstream from Raynor Creek, 1.9 miles downstream from Buchanan damsite, and 5.6 miles southwest of Raymond.

DRAINAGE AREA.--254 sq mi.

PERIOD OF RECORD.--October 1972 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 381.32 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 11,100 cfs Feb. 11 (gage height, 9.97 ft); no flow many days.

REMARKS.--Records good. No large storage or diversions above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.3	13	60	603	403	102	20	2.3	.01	
2		0	1.0	13	53	443	343	97	22	2.0	.01	
3		0	1.0	12	50	410	310	92	23	1.8	0	
4		0	1.8	11	55	850	286	91	22	1.6	0	
5		0	2.4	11	116	516	272	91	20	1.6	0	
6		0	9.8	11	93	489	256	91	17	1.3	0	
7		0	2.7	9.8	327	785	247	88	17	1.4	0	
8		0	4.1	11	239	585	235	84	16	1.4	0	
9		0	2.4	35	144	500	223	63	15	1.3	0	
10		0	1.4	148	795	423	217	46	14	1.1	0	
11		0	.87	87	5,160	656	205	76	13	.91	0	
12		0	.65	84	2,860	505	192	71	13	.82	0	
13		0	.55	81	1,150	407	190	67	12	.91	0	
14		.01	.45	59	972	363	220	63	11	.91	0	
15		27	.45	48	1,040	318	195	60	10	.91	0	
16		38	.35	569	611	290	185	55	10	.82	0	
17		52	3.6	1,160	491	272	171	52	12	.74	0	
18		30	169	304	431	256	162	48	11	.59	0	
19		21	88	409	399	244	152	44	9.7	.47	0	
20		16	63	188	347	1,080	145	42	9.1	.41	0	
21		13	44	136	318	746	134	39	9.1	.41	0	
22		11	34	126	276	782	130	38	9.1	.36	0	
23		9.1	31	116	208	560	125	37	9.1	.27	0	
24		7.7	28	105	200	478	117	23	9.1	.23	0	
25		7.0	24	93	265	439	116	26	8.5	.19	0	
26		6.2	18	84	208	959	114	33	8.5	.16	0	
27		6.2	20	81	558	628	110	32	7.9	.11	0	
28		4.9	18	75	1,690	555	107	30	6.7	.09	0	
29		2.7	17	67	------	464	103	27	3.9	.07	0	
30		2.0	16	65	------	423	105	23	2.8	.05	0	
31		------	15	66	------	427	------	17	------	.03	0	------
TOTAL	0	253.81	619.82	4,277.8	19,116	16,456	5,770	1,748	371.5	25.26	.02	0
MEAN	0	8.46	20.0	138	683	531	192	56.4	12.4	.81	.0006	0
MAX	0	52	169	1,160	5,160	1,080	403	102	23	2.3	.01	0
MIN	0	0	.35	9.8	50	244	103	17	2.8	.03	0	0
AC-FT	0	503	1,230	8,490	37,920	32,640	11,440	3,470	737	50	.04	0

WTR YR 1973 TOTAL 48,638.21 MEAN 133 MAX 5,160 MIN 0 AC-FT 96,470

PEAK DISCHARGE (BASE, 830 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	2200	7.51	3,720	3-4	0800	5.83	1,150
2-10	1530	6.73	2,270	3-7	0330	5.77	1,100
2-11	1400	9.97	11,100	3-11	1400	5.43	851
2-14	2300	6.48	1,880	3-20	1230	6.55	1,980
2-28	0500	7.35	3,400	3-26	1100	6.07	1,380

11260480 MARIPOSA CREEK NEAR CATHEYS VALLEY, CALIF.

LOCATION.--Lat 37°23'56", long 120°00'10", in SW¼NE¼ sec.21, T.6 S., R.18 E., Mariposa County, on downstream side of bridge on White Rock Road, 0.3 mile downstream from China Gulch, and 5.7 miles southeast of town of Catheys Valley.

DRAINAGE AREA.--65.7 sq mi.

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1963, published as "near Cathay."

GAGE.--Water-stage recorder. Altitude of gage is 1,230 ft (from topographic map).

AVERAGE DISCHARGE.--15 years, 27.8 cfs (20,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,140 cfs Feb. 11 (gage height, 10.27 ft); no flow many days.
Period of record: Maximum discharge, 7,460 cfs Feb. 24, 1969 (gage height, 11.63 ft); no flow many days in each year.
Flood of Apr. 3, 1958, reached a stage of 11.62 ft (discharge, 7,180 cfs).

REMARKS.--Probably minor diversions above the station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.7	5.9	15	178	79	15	3.5	.50		
2		0	1.7	5.7	14	122	74	14	3.7	.50		
3		0	1.9	5.7	14	128	67	14	3.4	.50		
4		0	3.9	5.4	25	239	56	13	3.1	.40		
5		0	4.4	5.1	21	139	54	13	2.9	.40		
6		0	4.5	5.0	97	282	52	13	2.6	.40		
7		0	8.1	4.9	163	327	48	12	2.4	.30		
8		0	9.2	6.2	78	254	44	11	2.1	.30		
9		0	7.4	153	54	179	41	11	1.9	.30		
10		0	6.4	161	491	140	39	10	1.8	.30		
11		0	5.5	58	2,550	279	36	9.5	1.7	.20		
12		0	5.2	201	787	171	34	9.1	1.5	.20		
13		0	4.9	75	317	132	34	8.5	1.5	.20		
14		38	4.7	44	376	104	39	8.2	1.5	.10		
15		37	5.0	32	288	83	32	7.8	1.5	.10		
16		63	5.4	1,040	171	70	30	7.2	1.4	0		
17		29	216	438	122	62	29	6.7	1.3	0		
18		11	95	220	93	55	27	6.3	1.2	0		
19		6.4	51	176	73	51	25	5.9	1.0	0		
20		4.8	33	90	60	454	23	5.5	.90	0		
21		4.0	21	63	53	302	22	5.3	.90	0		
22		3.5	17	46	45	331	21	5.2	.80	0		
23		3.1	14	35	39	220	21	5.0	.70	0		
24		2.8	12	29	63	169	21	4.8	.70	0		
25		2.5	10	26	52	136	19	5.1	.80	0		
26		2.3	9.0	23	76	285	18	4.7	.80	0		
27		2.2	8.4	19	278	174	17	4.4	.70	0		
28		2.0	8.0	17	481	139	16	4.2	.70	0		
29		1.9	7.2	17	------	114	16	3.8	.60	0		
30		1.8	6.5	19	------	99	16	3.6	.60	0		
31		------	6.1	16	------	98	------	3.6	------	0		------
TOTAL	0	215.3	594.1	3,041.9	6,896	5,516	1,050	250.4	48.20	4.70	0	0
MEAN	0	7.18	19.2	98.1	246	178	35.0	8.08	1.61	.15	0	0
MAX	0	63	216	1,040	2,550	454	79	15	3.7	.50	0	0
MIN	0	0	1.7	4.9	14	51	16	3.6	.60	0	0	0
AC-FT	0	427	1,180	6,030	13,680	10,940	2,080	497	96	9.3	0	0

CAL YR 1972 TOTAL 1,788.60 MEAN 4.89 MAX 224 MIN 0 AC-FT 3,550
WTR YR 1973 TOTAL 17,616.60 MEAN 48.3 MAX 2,550 MIN 0 AC-FT 34,940

11264500 MERCED RIVER AT HAPPY ISLES BRIDGE, NEAR YOSEMITE, CALIF.
(Hydrologic bench-mark station)

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

DRAINAGE AREA.--181 sq mi.

PERIOD OF RECORD.--August 1915 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,016.58 ft above mean sea level. Prior to Nov. 2, 1916, nonrecording gage at datum 0.55 ft lower.

AVERAGE DISCHARGE.--58 years, 342 cfs (247,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,240 cfs May 31 (gage height, 7.80 ft); minimum daily, 8.4 cfs Sept. 30.
Period of record: Maximum discharge, 9,860 cfs Dec. 23, 1955 (gage height, 12.73 ft), from rating curve extended above 4,000 cfs on basis of contracted-opening measurements at gage heights 10.4 and 11.55 ft; minimum, 1.5 cfs Sept. 30, 1926.

REMARKS.--Records excellent except those for January, February, and September, which are good. Up to 5 cfs can be diverted above station for Yosemite Valley water supply. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	35	78	85	103	124	125	950	2,910	655	328	24
2	15	34	74	85	103	119	118	1,020	2,270	542	318	21
3	18	34	74	81	101	118	118	1,160	2,060	474	332	20
4	24	43	78	74	104	120	124	1,060	2,000	457	433	19
5	41	50	64	63	100	114	150	830	2,150	470	326	19
6	45	49	69	64	107	114	222	720	2,170	537	357	18
7	50	49	64	60	116	108	288	896	2,320	470	374	17
8	62	50	62	68	114	108	322	1,270	2,370	437	252	16
9	62	45	53	74	110	104	393	1,700	2,400	433	197	16
10	62	51	63	76	120	108	368	1,930	1,960	417	161	15
11	69	54	57	83	127	120	409	2,240	1,800	382	137	14
12	68	53	58	120	141	113	429	2,380	1,730	371	116	14
13	60	57	56	118	137	114	405	2,340	1,680	336	103	13
14	53	66	54	108	132	104	322	2,390	1,360	288	96	12
15	49	72	56	106	127	104	303	2,640	974	267	93	12
16	47	86	57	147	122	113	285	2,790	914	273	90	12
17	47	90	148	146	120	119	357	3,100	920	261	88	11
18	48	86	200	161	120	118	374	3,220	914	255	84	11
19	49	83	241	152	120	119	354	3,150	1,040	233	77	10
20	64	74	230	146	118	124	336	2,550	1,090	202	71	10
21	79	73	200	152	112	119	343	2,270	1,140	192	67	10
22	83	72	188	143	103	118	457	2,310	1,090	165	63	9.8
23	78	65	157	143	101	119	645	2,060	974	155	58	9.8
24	72	64	139	137	104	129	836	2,190	735	146	53	9.6
25	64	69	124	130	99	148	1,030	1,850	795	137	49	9.4
26	57	83	118	120	101	157	1,270	1,720	1,040	137	46	9.2
27	53	90	116	118	110	152	1,400	1,920	1,450	143	43	9.0
28	50	89	112	114	122	148	1,480	2,690	1,340	165	39	8.8
29	46	84	85	113	------	132	1,350	2,900	956	168	33	8.6
30	39	79	97	108	------	129	1,120	2,820	836	161	28	8.4
31	35	------	86	107	------	125	------	3,610	------	161	26	------
TOTAL	1,604	1,933	3,258	3,402	3,194	3,761	15,733	64,676	45,388	9,490	4,538	396.6
MEAN	51.7	64.4	105	110	114	121	524	2,086	1,513	306	146	13.2
MAX	83	90	241	161	141	157	1,480	3,610	2,910	655	433	24
MIN	15	34	53	60	99	104	118	720	735	137	26	8.4
AC-FT	3,180	3,830	6,460	6,750	6,340	7,460	31,210	128,300	90,030	18,820	9,000	787

CAL YR 1972 TOTAL 101,707.0 MEAN 278 MAX 2,050 MIN 12 AC-FT 201,700
WTR YR 1973 TOTAL 157,373.6 MEAN 431 MAX 3,610 MIN 8.4 AC-FT 312,200

PEAK DISCHARGE (BASE, 1,900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-19	0030	7.57	3,850	6-9	0200	6.80	2,800
5-31	0030	7.80	4,240				

11266500 MERCED RIVER AT POHONO BRIDGE, NEAR YOSEMITE, CALIF.

LOCATION.--Lat 37°43'01", long 119°39'55", Mariposa County, Yosemite National Park, 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.

DRAINAGE AREA.--321 sq mi.

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for October and November 1916, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3,861.66 ft above mean sea level. Prior to Sept. 5, 1918, at datum 1.8 ft higher. Sept. 5, 1918, to Sept. 30, 1955, at datum 1.0 ft higher.

AVERAGE DISCHARGE.--57 years, 601 cfs (435,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,620 cfs May 31 (gage height, 10.32 ft); minimum daily, 24 cfs Sept. 29, 30.
Period of record: Maximum discharge, 23,400 cfs Dec. 23, 1955 (gage height, 21.52 ft, from floodmarks in well), from rating curve extended above 16,300 cfs on basis of computation of flow over diversion dam for Yosemite powerhouse, 1 mile downstream at gage heights 20.1 and 20.98 ft, present datum; minimum, 3.3 cfs Sept. 29, Oct. 1, 1924.

REMARKS.--Records excellent. No diversions between stations at Happy Isles bridge and Pohono bridge. One cfs sewage effluent returns between stations (see REMARKS for sta 11264500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	49	138	141	166	257	246	1,830	5,350	865	325	44
2	31	48	130	142	168	245	228	2,000	4,030	722	396	42
3	31	47	126	141	169	240	229	2,210	3,490	646	347	41
4	36	58	140	119	177	246	236	2,040	3,250	602	493	40
5	49	73	105	105	163	228	277	1,620	3,330	600	405	38
6	57	70	124	109	188	232	399	1,400	3,300	646	502	37
7	61	71	114	99	204	217	546	1,760	3,440	598	502	36
8	72	74	112	115	198	217	606	2,370	3,450	555	345	35
9	77	69	93	129	188	205	740	3,050	3,500	541	266	34
10	79	73	116	129	218	215	711	3,450	2,900	517	223	33
11	90	79	102	143	228	245	784	3,990	2,620	483	189	32
12	92	75	104	224	234	227	816	4,320	2,500	464	162	32
13	83	87	99	243	233	227	812	4,180	2,400	434	144	31
14	73	111	97	221	223	207	649	4,270	2,060	385	131	30
15	67	111	101	207	206	205	602	4,590	1,580	355	125	30
16	64	144	105	291	198	219	562	4,870	1,440	360	120	30
17	63	147	242	274	197	238	679	5,390	1,410	352	115	29
18	62	142	366	310	197	227	729	5,670	1,360	327	108	29
19	65	135	434	284	200	231	701	5,680	1,470	316	100	29
20	82	117	455	249	205	245	684	4,690	1,490	275	93	28
21	112	116	384	258	210	227	693	4,060	1,500	261	86	28
22	113	117	369	221	202	220	900	4,140	1,460	235	80	28
23	105	104	306	214	200	232	1,240	3,830	1,340	219	75	28
24	96	108	267	209	215	246	1,600	3,930	1,090	201	70	28
25	86	117	229	203	198	282	1,940	3,420	1,100	190	66	27
26	77	148	213	187	206	305	2,370	3,130	1,290	183	62	26
27	71	168	208	181	225	296	2,660	3,330	1,630	183	59	26
28	65	162	199	182	258	286	2,770	4,350	1,620	202	56	25
29	61	152	149	185	------	257	2,530	4,810	1,210	217	53	24
30	54	142	166	179	------	253	2,080	4,500	1,070	201	49	24
31	49	------	150	172	------	249	------	6,160	------	196	45	------
TOTAL	2,154	3,114	5,943	5,866	5,674	7,426	30,019	115,040	67,680	12,331	5,792	944
MEAN	69.5	104	192	189	203	240	1,001	3,711	2,256	398	187	31.5
MAX	113	168	455	310	258	305	2,770	6,160	5,350	865	502	44
MIN	31	47	93	99	163	205	228	1,400	1,070	183	45	24
AC-FT	4,270	6,180	11,790	11,640	11,250	14,730	59,540	228,200	134,200	24,460	11,490	1,870

CAL YR 1972 TOTAL 167,827 MEAN 459 MAX 2,690 MIN 28 AC-FT 332,900
WTR YR 1973 TOTAL 261,983 MEAN 718 MAX 6,160 MIN 24 AC-FT 519,600

PEAK DISCHARGE (BASE, 2,900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-28	0015	7.43	3,220	5-31	0330	10.32	6,620
5-19	0145	10.26	6,540				

11267350 BIG CREEK DIVERSION NEAR FISH CAMP, CALIF.

LOCATION.--Lat 37°28'10", long 119°36'51", in SE¼NE¼ sec.25, T.5 S., R.21 E., Mariposa County, Sierra National Forest, on right bank 0.5 mile downstream from diversion weir, 0.5 mile upstream from Rainier Creek, and 1.2 miles southeast of Fish Camp.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,400 ft (from topographic map).

EXTREMES.--Maximum daily discharge, 58 cfs May 11-19, 1973; no flow July 1, 2, 1973.

REMARKS.--Records good except those for winter period, which are fair.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	2.5	3.9	5.2	7.9	13	12	48	52	0	4.2	2.3
2	1.2	2.3	3.9	5.3	7.9	12	12	49	51	0	4.2	2.3
3	1.8	2.3	3.7	5.4	7.9	12	14	50	50	1.1	4.4	2.3
4	2.5	5.5	4.0	5.2	7.9	13	19	50	50	1.2	4.4	2.3
5	2.3	4.2	3.5	5.0	7.9	12	27	48	49	1.8	4.4	2.1
6	1.9	3.2	3.7	5.4	8.2	12	30	47	48	1.8	4.6	2.1
7	2.1	3.4	3.6	5.4	8.8	11	32	48	48	1.8	4.6	2.1
8	2.1	3.6	3.5	5.8	9.1	11	34	50	48	1.8	4.4	2.1
9	2.5	3.2	3.3	5.8	8.5	10	33	54	44	1.8	4.4	2.1
10	5.4	3.4	3.5	5.5	8.2	10	33	56	29	1.8	4.4	1.9
11	3.6	3.4	3.3	5.9	8.3	13	40	58	27	1.6	4.2	1.9
12	2.5	3.9	3.6	7.2	9.0	13	42	58	26	1.6	3.0	1.9
13	2.3	3.6	3.5	7.4	12	12	39	58	26	1.5	.93	1.9
14	2.1	4.2	3.5	7.0	11	11	29	58	26	2.3	1.0	1.9
15	2.3	5.9	4.0	6.5	10	10	24	58	26	4.6	1.8	1.9
16	2.3	4.9	4.5	10	9.8	9.5	28	58	23	4.6	3.4	1.9
17	3.2	4.6	9.0	11	9.6	11	35	58	12	4.6	2.4	1.9
18	3.4	4.2	10	12	9.4	10	35	58	11	4.6	1.5	1.9
19	2.5	3.9	11	11	9.4	9.8	30	58	11	4.6	1.5	1.9
20	5.3	3.6	12	10	9.4	11	28	57	11	4.6	1.5	1.9
21	3.4	4.2	10	9.8	10	10	32	56	10	4.6	2.0	1.9
22	2.7	3.6	9.5	9.1	10	9.5	39	56	6.4	4.6	2.9	1.9
23	2.5	3.6	8.8	9.1	9.4	10	45	56	3.6	4.4	2.9	1.6
24	2.3	3.9	8.2	9.1	9.8	11	48	55	1.6	4.4	2.9	1.4
25	2.3	4.2	7.4	9.1	9.4	12	49	54	.42	4.4	3.2	1.4
26	2.3	4.4	7.4	9.4	9.6	12	51	53	.26	4.4	3.4	1.2
27	2.3	4.4	7.2	9.9	10	12	52	53	.18	4.4	3.6	1.1
28	2.3	4.4	6.2	9.0	11	11	52	54	.11	4.4	3.4	1.1
29	2.3	4.2	5.4	8.5	------	11	52	54	.08	4.4	2.9	1.2
30	2.1	3.9	4.9	8.2	------	10	50	53	.03	4.4	2.5	1.4
31	2.3	------	5.2	7.9	------	9.9	------	53	------	4.2	2.3	------
TOTAL	78.41	116.6	181.2	241.1	259.4	344.7	1,046	1,676	690.68	96.3	97.23	54.8
MEAN	2.53	3.89	5.85	7.78	9.26	11.1	34.9	54.1	23.0	3.11	3.14	1.83
MAX	5.4	5.9	12	12	12	13	52	58	52	4.6	4.6	2.3
MIN	.31	2.3	3.3	5.0	7.9	9.5	12	47	.03	0	.93	1.1
AC-FT	156	231	359	478	515	684	2,070	3,320	1,370	191	193	109

CAL YR 1972 TOTAL 3,597.15 MEAN 9.83 MAX 42 MIN .14 AC-FT 7,130
WTR YR 1973 TOTAL 4,882.42 MEAN 13.4 MAX 58 MIN 0 AC-FT 9,680

11268000 SOUTH FORK MERCED RIVER NEAR EL PORTAL, CALIF.

LOCATION.--Lat 37°39'05", long 119°53'04", in NW¼NE¼ sec.29, T.3 S., R.19 E., Mariposa County, on right bank 1,500 ft upstream from mouth, and 5.9 miles west of El Portal.

DRAINAGE AREA.--241 sq mi.

PERIOD OF RECORD.--November 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 345 cfs (250,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,600 cfs May 19 (gage height, 9.80 ft, from high-water mark in well); minimum daily, 11 cfs Oct. 1-5.
Period of record: Maximum discharge, 46,500 cfs Dec. 23, 1955 (gage height, 18.70 ft), from rating curve extended above 11,000 cfs on basis of slope-area measurement at gage height 17.63 ft; minimum, 2.2 cfs Aug. 26, 27, 1961.

REMARKS.--Records good. Big Creek ditch diverts up to 60 cfs at times into Fresno River basin. Diversion of 0.5 cfs at Wawona for domestic use and irrigation of golf course. Records of chemical analyses and suspended-sediment discharge are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	21	68	79	145	738	346	972	1,760	199	38	15
2	11	21	68	85	138	562	318	972	1,530	173	44	15
3	11	21	65	93	140	490	302	1,210	1,410	156	36	15
4	11	25	72	74	283	490	302	1,070	1,260	145	33	15
5	11	38	115	64	271	430	326	844	1,350	140	44	15
6	12	34	77	69	374	430	398	684	1,350	138	42	15
7	12	31	82	70	876	426	520	884	1,380	123	49	15
8	13	38	81	81	525	410	571	1,190	1,400	117	56	14
9	18	36	79	103	366	370	613	1,560	1,280	113	41	13
10	23	33	57	159	1,310	354	592	1,730	1,070	104	35	13
11	29	50	76	125	1,740	530	641	2,040	972	95	31	12
12	36	48	69	259	1,120	435	661	2,150	940	88	28	12
13	32	42	63	280	785	398	634	1,820	852	84	27	12
14	28	189	58	209	642	354	535	1,870	720	79	25	12
15	26	134	63	173	545	326	455	2,030	545	74	25	12
16	24	196	191	666	455	312	418	2,150	525	72	24	12
17	24	111	702	1,060	394	309	450	2,380	510	66	22	12
18	27	84	343	785	358	296	500	2,500	490	62	20	12
19	26	73	402	792	336	283	460	2,570	495	60	19	12
20	28	67	286	430	315	530	445	2,000	480	59	19	12
21	37	60	239	340	305	480	445	1,700	455	55	18	12
22	42	57	242	268	280	460	520	1,810	390	55	18	12
23	41	56	196	233	265	450	677	1,710	346	53	18	12
24	35	54	163	212	332	490	930	1,770	289	49	16	14
25	31	54	136	202	332	500	1,090	1,400	299	46	17	14
26	28	59	125	183	358	525	1,370	1,330	318	42	17	15
27	25	74	121	168	720	470	1,500	1,400	366	39	19	14
28	25	81	123	161	1,310	445	1,530	1,850	350	37	19	13
29	24	78	97	156	------	390	1,380	1,980	262	36	18	12
30	23	72	95	163	------	362	1,150	1,810	231	36	17	12
31	22	------	91	154	------	354	------	2,100	------	34	16	------
TOTAL	746	1,937	4,645	7,896	15,020	13,399	20,079	51,486	23,625	2,629	851	395
MEAN	24.1	64.6	150	255	536	432	669	1,661	788	84.8	27.5	13.2
MAX	42	196	702	1,060	1,740	738	1,530	2,570	1,760	199	56	15
MIN	11	21	57	64	138	283	302	684	231	34	16	12
AC-FT	1,480	3,840	9,210	15,660	29,790	26,580	39,830	102,100	46,860	5,210	1,690	783

CAL YR 1972 TOTAL 75,410.9 MEAN 206 MAX 1,040 MIN 6.5 AC-FT 149,600
WTR YR 1973 TOTAL 142,708 MEAN 391 MAX 2,570 MIN 11 AC-FT 283,100

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-17	0030	8.89	2,130	5-19	unknown	9.80	3,600
2-11	1115	9.04	2,340	5-31	unknown	--	--
2-27	2400	8.81	2,020				

11268200 MERCED RIVER NEAR BRICEBURG, CALIF.

LOCATION.--Lat 37°38'09", long 119°55'56", in NW¼NE¼ sec.36, T.3 S., R.18 E., Mariposa County, on left bank 150 ft upstream from Feliciana Creek, and 2.8 miles northeast of Briceburg.

DRAINAGE AREA.--691 sq mi.

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,194.98 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 1,206 cfs (873,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,600 cfs May 19 (gage height, 13.01 ft); minimum daily, 43 cfs Sept. 30.
Period of record: Maximum discharge, 21,500 cfs Dec. 6, 1966 (gage height, 17.79 ft); minimum daily, 27 cfs Sept. 30, 1968.

REMARKS.--Records excellent. No regulation. Small diversions above station (see REMARKS for sta 11268000). Records of chemical analyses for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	87	222	254	365	1,360	816	3,250	7,950	1,190	312	78
2	52	87	218	261	355	1,090	755	3,500	6,220	1,010	459	76
3	50	87	208	270	360	961	722	4,000	5,350	891	400	74
4	51	98	268	237	532	980	695	3,750	4,900	830	538	73
5	55	128	241	199	525	883	765	2,930	5,120	802	501	69
6	71	136	215	216	643	901	948	2,380	4,990	837	543	68
7	82	128	228	206	1,350	912	1,250	2,930	5,170	801	585	65
8	88	135	216	224	933	875	1,400	3,930	5,100	732	470	64
9	103	140	194	365	716	806	1,600	5,210	5,170	707	355	62
10	120	138	195	370	2,030	778	1,560	5,820	4,270	674	300	59
11	126	200	212	331	3,210	1,080	1,680	6,740	3,900	632	263	57
12	145	190	190	633	2,050	950	1,770	7,260	3,730	591	231	56
13	141	178	194	707	1,470	892	1,760	6,960	3,550	567	207	56
14	126	350	182	550	1,210	799	1,470	7,000	3,080	512	189	53
15	116	284	186	473	1,050	744	1,300	7,700	2,350	466	180	52
16	109	363	193	1,870	901	707	1,190	8,070	2,120	454	174	52
17	107	281	728	1,850	802	725	1,340	9,020	2,050	449	166	51
18	109	253	1,070	1,420	733	695	1,490	9,450	1,980	420	158	51
19	109	231	896	1,420	696	682	1,410	9,530	2,060	421	150	50
20	117	213	967	873	672	1,090	1,380	7,810	2,090	374	144	48
21	147	196	745	760	651	1,040	1,360	6,380	2,060	353	133	49
22	174	195	686	608	604	984	1,610	6,750	1,980	334	127	49
23	171	190	635	540	577	973	2,110	6,400	1,820	312	120	49
24	157	181	506	499	681	1,030	2,850	6,560	1,510	292	114	50
25	148	186	425	475	682	1,070	3,510	5,360	1,450	274	109	51
26	133	208	384	442	698	1,140	4,250	5,010	1,630	259	104	51
27	122	250	367	406	1,140	1,080	4,770	5,260	2,010	252	104	49
28	114	258	368	399	2,200	1,040	4,960	6,850	2,170	256	101	47
29	108	247	315	396	------	921	4,600	7,650	1,600	274	96	45
30	101	232	287	401	------	857	3,810	6,910	1,390	271	90	43
31	94	------	288	383	------	842	------	9,100	------	256	82	------
TOTAL	3,399	5,850	12,029	18,038	27,836	28,887	59,131	189,470	98,770	16,493	7,505	1,697
MEAN	110	195	388	582	994	932	1,971	6,112	3,292	532	242	56.6
MAX	174	363	1,070	1,870	3,210	1,360	4,960	9,530	7,950	1,190	585	78
MIN	50	87	182	199	355	682	695	2,380	1,390	252	82	43
AC-FT	6,740	11,600	23,860	35,780	55,210	57,300	117,300	375,800	195,900	32,710	14,890	3,370

CAL YR 1972 TOTAL 265,143 MEAN 724 MAX 4,130 MIN 41 AC-FT 525,900
WTR YR 1973 TOTAL 469,105 MEAN 1,285 MAX 9,530 MIN 43 AC-FT 930,500

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1900	8.94	5,210	5-19	0145	13.01	11,600
4-28	0215	9.36	5,840	5-31	0245	12.33	10,400

11269300 MAXWELL CREEK AT COULTERVILLE, CALIF.

LOCATION.--Lat 37°42'58", long 120°11'20", in NW¼SE¼ sec.34, T.2 S., R.16 E., Mariposa County, on Dogtown Road bridge, 0.4 mile downstream from Cuneo Creek, and 0.5 mile northeast of Coulterville.

DRAINAGE AREA.--17.0 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,740 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 7.80 cfs (5,650 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 901 cfs Feb. 11 (gage height, 5.35 ft); no flow many days.
Period of record: Maximum discharge, 1,770 cfs Dec. 22, 1964 (gage height, 5.71 ft); no flow many days in each year.

REMARKS.--No diversion or storage above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1960(M), 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.10	1.4	5.2	32	31	4.4	2.1	.20		0
2		.10	.10	1.4	4.9	24	25	4.1	1.5	.20		0
3		.20	.20	1.4	5.2	27	23	4.1	1.1	.20		0
4		.20	1.1	1.1	9.3	71	20	3.8	1.0	.20		0
5		0	.60	1.0	8.5	40	18	3.8	.90	.10		0
6		.10	1.0	.90	45	58	16	3.6	.80	.20		0
7		.30	2.4	1.0	53	59	15	3.4	.70	.20		0
8		.40	1.9	1.5	23	50	13	3.0	.60	.10		.10
9		.50	1.4	40	18	34	13	3.0	.80	.10		.10
10		1.0	1.0	30	244	29	12	2.6	.70	.10		.10
11		2.8	.80	34	547	95	11	2.6	.70	.10		.10
12		1.1	.80	166	195	46	10	2.2	.70	.20		0
13		1.8	.80	22	68	32	11	2.4	.80	.10		0
14		15	.70	11	127	25	10	3.0	.80	.20		0
15		5.2	.70	7.8	89	20	8.9	2.6	.80	.20		0
16		2.8	.80	136	42	16	8.5	2.4	.70	.20		0
17		1.1	82	83	28	14	8.5	2.2	.60	.10		0
18		.50	15	61	20	13	7.8	1.9	.60	.10		0
19		.30	18	39	16	12	7.4	1.9	.50	.10		0
20		.20	7.4	18	14	99	6.7	1.9	.50	.10		0
21		.20	4.4	13	12	84	6.4	1.9	.50	.10		0
22		.20	4.6	10	10	89	6.1	1.9	.50	.10		0
23		.20	4.4	7.8	8.9	74	5.8	1.6	.50	.10		0
24		.10	3.2	6.7	11	55	5.4	1.8	.40	.10		0
25		.10	2.4	6.4	8.9	43	5.4	1.9	.40	.10		0
26		.10	2.1	5.8	36	79	5.2	1.8	.30	.10		0
27		.10	1.9	5.2	47	53	4.9	1.5	.40	.10		0
28		.20	2.4	4.4	62	58	4.6	1.3	.30	.10		0
29		.10	1.8	4.9	------	43	4.6	.90	.20	0		0
30		.10	1.6	6.1	------	36	4.6	.80	.20	0		0
31		------	1.5	5.8	------	39	------	.90	------	0		------
TOTAL	0	35.00	167.10	733.60	1,757.9	1,449	328.8	75.20	20.60	3.80	0	.40
MEAN	0	1.17	5.39	23.7	62.8	46.7	11.0	2.43	.69	.12	0	.013
MAX	0	15	82	166	547	99	31	4.4	2.1	.20	0	.10
MIN	0	0	.10	.90	4.9	12	4.6	.80	.20	0	0	0
AC-FT	0	69	331	1,460	3,490	2,870	652	149	41	7.5	0	.8

CAL YR 1972 TOTAL 607.40 MEAN 1.66 MAX 82 MIN 0 AC-FT 1,200
WTR YR 1973 TOTAL 4,571.40 MEAN 12.5 MAX 547 MIN 0 AC-FT 9,070

11269500 LAKE McCLURE AT EXCHEQUER, CALIF.

LOCATION.--Lat 37°35'02", long 120°16'09", in NW¼SE¼ sec.13, T.4 S., R.15 E., Mariposa County, on left end of New Exchequer Dam on Merced River, 0.9 mile east of Exchequer, and 5.5 miles northeast of Merced Falls.

DRAINAGE AREA.--1,037 sq mi.

PERIOD OF RECORD.--April 1926 to September 1930 (daily gage heights; also summary of yearly contents in WSP 881), October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Merced Irrigation District). Prior to Oct. 1, 1964, indicator in powerhouse at same datum. Oct. 1, 1964, to July 31, 1966, nonrecording gage at center of upstream face of dam at same datum.

EXTREMES.--Current year: Maximum contents, 959,400 acre-ft June 20, 21 (elevation, 857.6 ft); minimum, 273,900 acre-ft Nov. 28 (elevation, 704.2 ft).
Period of record: Maximum contents, 1,026,000 acre-ft July 14, 15, 1969 (elevation, 867.2 ft); practically no storage at times in 1926, 1930-31, 64-65 when reservoir was drained for inspection or construction. Minimum since construction of New Exchequer Dam under normal operations, 273,900 acre-ft Nov. 28, 1972 (elevation, 704.2 ft).

REMARKS.--Reservoir is formed by a rockfill dam with a reinforced concrete face completed in March 1967. Dam is downstream from and connected to the original concrete arch and gravity-type dam which was completed in April 1926. Usable capacity, 1,024,000 acre-ft between elevations 440.0 ft (invert entrance to outlet tunnel) and 867.0 ft (top of spillway gates). Dead storage, 300 acre-ft. Water is released through a series of powerplants down the Merced River to a diversion dam for Merced Irrigation District's main canal. Records, including extremes, represent total contents at 2400 hours.

REVISIONS (WATER YEARS).--WSP 881: 1926-32 (yearly summaries only). WSP 1345: 1951(M). WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

700	263,000	820	729,600
720	317,800	840	845,800
750	415,900	860	975,700
780	534,500	870	1,046,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291,100	277,000	274,700	293,600	344,800	460,300	559,600	622,900	887,100	950,000	850,700	746,800
2	290,200	276,800	275,200	292,700	345,100	462,700	561,800	625,300	896,100	948,000	847,600	743,400
3	287,500	276,500	275,000	293,000	346,100	465,800	563,600	628,700	903,200	945,300	844,600	740,700
4	284,500	276,500	274,700	293,600	347,300	469,700	565,000	632,200	909,700	942,600	840,900	737,900
5	282,600	276,300	274,700	292,700	348,000	472,100	565,400	635,100	915,500	939,900	837,900	734,600
6	281,000	276,000	275,000	293,000	349,900	475,200	566,800	636,600	921,400	937,300	834,800	731,300
7	280,000	276,000	275,000	293,600	354,000	479,600	567,700	638,000	928,700	934,600	831,800	728,500
8	277,600	275,700	275,200	293,300	355,900	483,600	570,000	641,500	935,300	932,600	828,100	725,800
9	277,000	275,700	275,500	294,700	358,200	486,000	571,800	647,500	941,900	930,000	825,100	722,500
10	277,000	275,500	275,700	295,800	368,300	489,300	574,500	654,500	945,900	926,000	821,500	719,200
11	277,300	275,500	275,000	297,200	395,700	494,100	576,300	663,600	949,300	923,400	817,900	716,500
12	277,600	275,500	275,500	300,800	407,300	497,000	578,600	674,800	952,700	920,100	814,300	714,400
13	277,800	275,000	275,200	303,100	414,100	499,900	580,500	685,700	956,000	916,800	811,400	711,700
14	278,100	274,700	275,500	304,800	420,200	502,800	582,800	695,700	957,400	913,600	808,400	707,900
15	278,100	275,000	275,200	305,100	424,200	504,000	584,200	706,300	958,100	910,300	804,800	705,800
16	278,300	275,500	275,700	313,400	427,900	505,700	584,200	719,200	958,100	907,100	800,700	703,700
17	278,300	274,700	278,300	321,600	430,500	507,800	584,200	733,500	958,700	904,500	797,800	700,500
18	278,300	274,700	280,800	325,500	432,700	509,400	585,100	747,300	958,700	900,600	794,200	698,300
19	278,300	274,700	282,600	330,600	434,900	510,300	585,500	762,000	958,700	897,400	790,700	696,200
20	278,300	274,200	284,800	333,700	436,000	516,100	586,000	774,000	959,400	894,100	787,800	694,100
21	278,300	274,400	285,900	335,800	437,900	521,200	586,500	782,600	959,400	890,300	784,300	691,500
22	278,300	274,200	287,500	336,100	438,600	525,900	586,900	791,900	958,100	886,500	780,900	688,300
23	278,300	274,200	288,100	337,700	440,500	529,300	588,300	800,700	957,400	882,700	776,300	686,200
24	278,300	274,400	289,400	338,300	442,000	533,200	589,700	809,600	956,700	879,500	771,700	684,700
25	278,300	274,200	290,500	339,800	443,500	537,100	593,000	816,700	956,000	876,300	768,800	682,600
26	278,300	274,200	290,200	340,200	445,800	542,300	597,700	822,700	955,400	872,500	765,400	680,500
27	278,300	274,400	290,800	341,400	448,400	545,400	603,800	830,000	954,000	868,800	762,000	677,900
28	278,100	273,900	291,600	342,300	456,100	548,900	610,000	839,700	954,000	865,000	759,100	675,400
29	277,800	274,400	291,600	343,600	------	552,000	615,200	851,300	953,300	861,900	756,300	674,800
30	277,600	274,400	292,200	344,500	------	554,300	619,500	861,300	951,300	858,200	752,900	673,300
31	277,300	------	292,700	345,500	------	556,900	------	875,100	------	854,400	749,600	------
MAX	291,100	277,000	292,700	345,500	456,100	556,900	619,500	875,100	959,400	950,000	850,700	746,800
MIN	277,000	273,900	274,700	292,700	344,800	460,300	559,600	622,900	887,100	854,400	749,600	673,300
(a)	705.5	704.4	711.2	729.1	760.8	785.1	798.6	844.7	856.4	841.4	823.6	809.4
(b)	-14,300	-2,900	+18,300	+52,800	+110,600	+100,800	+62,600	+255,600	+76,200	-96,900	-104,800	-76,300

CAL YR 1972 b -296,500
WTR YR 1973 b +381,700

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11270900 MERCED RIVER BELOW MERCED FALLS DAM, NEAR SNELLING, CALIF.

LOCATION.--Lat 37°31'18", long 120°19'53", in SE¼SW¼ sec.4, T.5 S., R.15 E., Merced County, on right bank 0.1 mile south of Merced Falls, 0.2 mile downstream from Merced Falls Dam, and 5.8 miles east of Snelling.

DRAINAGE AREA.--1,061 sq mi.

PERIOD OF RECORD.--April 1901 to current year. Records for water years 1914-16 incomplete, yearly estimates published in WSP 1315-A. Published as "near Merced Falls" 1901-13; as "at Exchequer" 1916-64. Records at present site are about equivalent when adjusted for diversion to North Side Canal and change in contents of Lake McClure.

GAGE.--Water-stage recorder. Datum of gage is 310.55 ft above mean sea level. See WSP 1930 for history of changes prior to Oct. 1, 1964.

AVERAGE DISCHARGE (adjusted for diversion to North Side Canal and change in contents in Lake McClure since 1965 and change in contents in McSwain Reservoir since 1969).--72 years, 1,333 cfs (965,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,890 cfs June 20 (gage height, 8.84 ft); minimum daily, 173 cfs Nov. 5.
Period of record (1901-13, 1915 to current year): Maximum discharge observed, 47,700 cfs Jan. 31, 1911 (gage height, 23.3 ft, site and datum then in use); no flow for part of Nov. 21, 1901. Maximum discharge since construction of Exchequer Dam in 1926, 46,200 cfs Dec. 4, 1950 (gage height, 22.6 ft, from floodmarks, site and datum then in use), from rating curve extended above 13,000 cfs on basis of computation of peak flow over dam; minimum daily, 3.4 cfs Mar. 5, 1966.

REMARKS.--Records excellent. Merced Falls Dam diverts water to North Side Canal to irrigate 4,100 acres below station. Flow regulated by Exchequer, McSwain, and Merced Falls powerplants, Lake McClure since 1926 (see sta 11269500), and McSwain Reservoir since 1966 (capacity, 9,200 acre-ft).

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	912	188	196	200	209	212	205	1,960	1,870	2,020	1,990	1,610
2	879	175	192	198	212	208	206	1,960	1,870	2,020	2,020	1,620
3	885	176	192	204	214	216	209	1,920	1,870	2,050	2,020	1,570
4	904	177	194	197	208	226	495	1,950	1,890	2,050	2,030	1,520
5	919	173	195	201	211	209	690	1,950	1,900	2,060	2,030	1,520
6	920	177	198	203	224	248	702	1,960	1,900	2,030	1,990	1,530
7	913	192	202	200	213	220	702	1,960	1,940	2,020	1,980	1,500
8	918	191	197	201	214	339	705	1,960	2,000	2,020	1,980	1,470
9	394	191	197	212	212	219	694	1,930	2,010	2,030	1,970	1,440
10	195	199	194	209	270	217	693	1,910	2,010	2,020	1,950	1,420
11	192	201	192	207	568	222	793	1,920	2,020	2,030	1,940	1,380
12	189	197	201	218	253	213	906	1,920	2,030	2,050	1,930	1,350
13	184	208	196	202	237	210	932	1,930	2,020	2,040	1,880	1,350
14	185	227	200	202	268	204	943	1,930	1,980	2,030	1,860	1,360
15	183	232	197	199	232	207	941	1,920	1,940	2,040	1,870	1,370
16	183	216	194	364	217	208	1,080	1,930	1,940	2,050	1,880	1,370
17	187	211	234	240	212	211	1,160	1,960	1,950	2,040	1,860	1,370
18	185	214	206	222	210	203	1,150	1,980	1,960	2,040	1,760	1,290
19	188	213	227	206	210	213	1,220	1,970	1,980	2,030	1,850	1,250
20	180	209	201	202	206	288	1,310	1,930	1,980	2,020	1,850	1,200
21	181	205	205	196	211	223	1,410	1,870	2,050	2,020	1,850	1,180
22	187	214	210	196	206	217	1,560	1,860	2,020	1,980	1,850	1,170
23	185	195	202	200	208	209	1,610	1,870	2,020	1,960	1,790	1,150
24	185	200	203	198	208	214	1,580	1,850	2,020	1,970	1,770	1,120
25	185	194	200	198	208	209	1,710	1,840	2,030	1,960	1,770	1,110
26	182	201	200	200	212	254	1,790	1,870	2,060	1,960	1,720	1,120
27	182	195	206	191	213	214	1,770	1,860	2,040	1,950	1,660	1,120
28	191	197	203	199	241	215	1,770	1,850	2,030	1,960	1,610	1,110
29	185	203	206	187	------	210	1,810	1,840	2,030	1,960	1,590	1,130
30	188	197	203	193	------	211	1,880	1,840	2,030	1,950	1,580	1,150
31	185	------	197	207	------	215	------	1,860	------	1,930	1,600	------
TOTAL	11,731	5,968	6,240	6,452	6,507	6,884	32,626	59,260	59,390	62,290	57,430	39,850
MEAN	378	199	201	208	232	222	1,088	1,912	1,980	2,009	1,853	1,328
MAX	920	232	234	364	568	339	1,880	1,980	2,060	2,060	2,030	1,620
MIN	180	173	192	187	206	203	205	1,840	1,870	1,930	1,580	1,110
AC-FT	23,270	11,840	12,380	12,800	12,910	13,650	64,710	117,500	117,800	123,600	113,900	79,040
(a)	629	446	135	83	6	0	2,087	4,747	4,715	4,786	4,124	2,910
MEAN b	97.1	226	489	1,065	2,234	1,861	2,174	6,141	3,348	520	215	57.0
AC-FT b	5,970	13,450	30,060	65,510	124,100	114,400	129,300	377,600	199,200	31,980	13,220	3,390

CAL YR 1972 TOTAL 412,910 MEAN 1,128 MAX 2,750 MIN 173 AC-FT 819,000 MEAN b 757 AC-FT b 549,200
WTR YR 1973 TOTAL 354,628 MEAN 972 MAX 2,060 MIN 173 AC-FT 703,400 MEAN b 1,530 AC-FT b 1,108,000

a Diversion, in acre-feet, to North Side Canal, furnished by Merced Irrigation District.
b Adjusted for diversion to North Side Canal and change in contents in Lake McClure and McSwain Reservoir.

11271290 MERCED RIVER AT SHAFFER BRIDGE, NEAR CRESSEY, CALIF.

LOCATION.--Lat 37°27'15", long 120°36'28", in NW¼SW¼ sec.36, T.5 S., R.12 E., Merced County, near center of span on downstream side of county road bridge, 0.6 mile upstream from Dry Creek, and 4.0 miles northeast of Cressey.

DRAINAGE AREA.--1,117 sq mi.

PERIOD OF RECORD.--October 1965 to current year (low flow only).

GAGE.--Water-stage recorder. Datum of gage is 116.79 ft above mean sea level.

REMARKS.--Records good. Most water released from Lake McClure (see sta 11269500, 11270900) is diverted upstream into the Main Canal of Merced Irrigation District. Flow past station consists of releases from diversion dam, irrigation return flow, and tributary inflow. No records computed above 200 cfs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	162					--	158	122	84	86	102
2	--	162					--	--	140	78	64	102
3	--	162					--	194	162	84	78	118
4	--	183					--	155	169	76	98	122
5	--	186			197		--	169	146	90	105	110
6	--	183					--	162	134	77	112	120
7	--	180					--	166	140	80	96	122
8	--	176					--	155	131	102	84	128
9	--	152					--	149	134	94	94	128
10	--	158					--	149	137	82	105	122
11	--	--					--	152	140	68	98	120
12	--	--					--	155	131	78	102	128
13	197	--					--	155	131	84	115	131
14	186	--					--	143	131	89	115	131
15	186	--					--	131	125	92	80	128
16	186	--					--	128	122	92	58	128
17	186	--					--	137	128	92	57	143
18	183	--					--	131	120	92	63	146
19	180	--					--	125	112	91	65	152
20	172	--					--	122	115	90	58	143
21	172	--					--	128	102	92	54	143
22	172	--					--	118	96	108	46	149
23	169	--					--	96	96	125	44	152
24	172	--					--	115	96	110	63	155
25	172	--					190	152	98	110	60	155
26	169	--					172	137	78	112	90	149
27	166	--					146	137	76	105	100	146
28	158	--					137	149	78	115	78	149
29	158	--			------		158	134	77	110	94	149
30	158	--			------		172	120	78	110	100	152
31	162	------			------		------	115	------	100	102	------
TOTAL	--	--	--	--	--	--	--	--	3,545	2,912	2,564	4,023
MEAN	--	--	--	--	--	--	--	--	118	93.9	82.7	134
MAX	--	--	--	--	--	--	--	--	169	125	115	155
MIN	--	--	--	--	--	--	--	--	76	68	44	102
AC-FT	--	--	--	--	--	--	--	--	7,030	5,780	5,090	7,980
(a)	3,330	3,250	3,520	3,580	3,440	3,910	53,160	107,500	106,700	113,600	102,400	65,980

a Diversion, in acre-feet, to Main Canal near diversion dam, near Merced Falls, furnished by Merced Irrigation District.

11271320 DRY CREEK NEAR SNELLING, CALIF.

LOCATION.--Lat 37°33'18", long 120°27'44", in NE¼SE¼ sec.30, T.4 S., R.14 E., Merced County, on left bank 650 ft downstream from Fields Road, and 2.8 miles northwest of Snelling.

DRAINAGE AREA.--67.6 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 230 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 21.0 cfs (15,210 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,590 cfs Feb. 11 (gage height, 14.33 ft); no flow for several months.
Period of record: Maximum discharge, 6,710 cfs Jan. 21, 1969 (gage height, 17.01 ft); no flow for several months in most years.

REMARKS.--Records good. Small weir upstream from gage regulates storage for stock pond and irrigation pumping.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.30	3.1	28	96	26	.11				
2		0	.30	2.5	19	46	18	.06				
3		0	.35	2.3	15	55	15	.04				
4		0	.47	2.0	25	253	13	.02				
5		0	.35	1.7	19	56	12	.02				
6		0	.40	1.6	80	108	11	.15				
7		0	.47	1.4	86	167	9.7	.91				
8		0	4.7	1.4	27	846	8.8	1.1				
9		0	4.1	28	18	132	7.2	1.1				
10		0	2.5	116	798	68	6.9	1.6				
11		0	1.6	67	2,450	128	6.6	1.7				
12		0	1.2	253	392	48	6.1	.73				
13		0	.91	57	237	33	5.2	.17				
14		0	.73	26	346	24	4.4	.08				
15		0	.64	18	193	20	4.7	.04				
16		32	.55	478	87	17	4.1	.01				
17		12	144	259	60	15	3.3	.01				
18		5.1	117	154	48	14	2.5	0				
19		1.8	144	98	39	13	1.6	0				
20		1.2	53	35	30	533	1.1	0				
21		.82	23	22	25	118	1.0	0				
22		.64	24	17	22	149	1.0	.52				
23		.55	29	13	18	48	.73	2.5				
24		.47	17	9.7	18	30	1.6	1.0				
25		.40	14	8.8	24	24	1.8	.30				
26		.35	9.4	13	74	624	1.7	.11				
27		.35	7.2	9.7	418	115	1.6	.02				
28		.30	7.8	7.2	454	86	1.4	.01				
29		.30	7.8	165	------	36	.47	.01				
30		.30	5.5	242	------	26	.25	0				
31		------	3.7	62	------	38	------	0	------			------
TOTAL	0	56.58	625.97	2,174.4	6,050	3,966	178.75	12.32	0	0	0	0
MEAN	0	1.89	20.2	70.1	216	128	5.96	.40	0	0	0	0
MAX	0	32	144	478	2,450	846	26	2.5	0	0	0	0
MIN	0	0	.30	1.4	15	13	.25	0	0	0	0	0
AC-FT	0	112	1,240	4,310	12,000	7,870	355	24	0	0	0	0

CAL YR 1972 TOTAL 1,063.67 MEAN 2.91 MAX 144 MIN 0 AC-FT 2,110
WTR YR 1973 TOTAL 13,064.02 MEAN 35.8 MAX 2,450 MIN 0 AC-FT 25,910

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1600	8.24	1,090	3-8	0600	12.26	3,160
2-11	0830	14.33	4,590	3-20	0600	9.93	1,880
2-14	1900	8.09	1,030	3-26	0230	11.37	2,650
2-27	2230	11.06	2,480				

11272500 MERCED RIVER NEAR STEVINSON, CALIF.

LOCATION.--Lat 37°22'15", long 120°55'46", in SW¼NE¼ sec.36, T.6 S., R.9 E., Merced County, on right bank 5 miles upstream from mouth, and 6 miles northwest of Stevinson.

DRAINAGE AREA.--1,273 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. October 1940 to Aug. 15, 1955, at datum 55.74 ft higher, Aug. 16, 1955, to Sept. 30, 1959, at datum 54.74 ft higher.

AVERAGE DISCHARGE.--33 years, 666 cfs (482,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,510 cfs Feb. 12 (elevation, 67.04 ft); minimum daily, 124 cfs Aug. 18.
Period of record: Maximum discharge, 13,600 cfs Dec. 5, 1950 (elevation, 73.79 ft, present datum); no flow July 19 to Aug. 21, 1961, result of temporary dam.

REMARKS.--Records good. Practically entire flow is diverted above station for irrigation of 120,000 acres; some return flow enters above station. Flow regulated by three reservoirs (combined capacity, 1,035,000 acre-ft), the largest of which is Lake McClure (see sta 11269500).

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	242	264	287	448	946	354	272	223	165	154	187
2	645	260	264	283	383	541	336	245	221	198	143	185
3	655	278	263	280	354	445	310	277	226	186	149	195
4	630	273	266	279	339	392	307	298	238	183	134	207
5	605	270	266	279	330	441	314	283	239	170	157	224
6	605	263	271	280	325	420	325	281	223	157	173	226
7	630	240	275	280	321	391	324	306	202	140	156	244
8	615	230	275	279	397	508	331	323	212	153	153	241
9	610	240	278	280	382	1,310	386	315	187	179	155	240
10	600	250	278	286	361	856	418	288	179	152	155	253
11	550	262	278	326	861	619	380	261	193	135	171	224
12	380	273	278	343	3,890	509	344	259	194	141	168	235
13	335	284	276	414	1,830	454	342	249	188	132	179	234
14	315	278	276	406	1,580	404	338	265	219	127	157	262
15	285	298	277	345	1,850	366	330	254	228	139	154	262
16	265	340	276	328	1,780	338	340	233	216	163	164	266
17	270	365	278	475	1,360	328	331	223	214	149	146	246
18	280	321	282	846	1,060	316	310	230	236	141	124	252
19	258	309	405	571	899	310	284	217	225	157	158	290
20	254	299	390	541	818	312	286	228	208	161	173	284
21	252	287	398	448	767	446	292	244	184	154	149	284
22	254	287	338	384	698	536	302	236	173	183	146	282
23	253	284	319	349	586	460	300	215	172	217	144	276
24	251	281	314	335	437	436	298	217	184	188	159	309
25	249	273	311	328	419	394	286	219	201	161	172	298
26	240	272	304	324	385	364	276	218	203	158	191	281
27	236	271	300	319	326	605	258	237	201	151	207	269
28	237	268	295	314	488	555	250	252	173	156	204	284
29	242	266	293	309	------	438	262	275	167	164	192	278
30	241	263	288	316	------	400	277	248	159	162	198	264
31	241	------	287	471	------	372	------	210	------	159	184	------
TOTAL	12,083	8,327	9,163	11,305	23,674	15,212	9,491	7,878	6,088	4,981	5,069	7,582
MEAN	390	278	296	365	846	491	316	254	203	161	164	253
MAX	655	365	405	846	3,890	1,310	418	323	239	217	207	309
MIN	236	230	263	279	321	310	250	210	159	127	124	185
AC-FT	23,970	16,520	18,170	22,420	46,960	30,170	18,830	15,630	12,080	9,880	10,050	15,040

CAL YR 1972 TOTAL 130,921 MEAN 358 MAX 1,340 MIN 82 AC-FT 259,700
WTR YR 1973 TOTAL 120,853 MEAN 331 MAX 3,890 MIN 124 AC-FT 239,700

11274000 SAN JOAQUIN RIVER NEAR NEWMAN, CALIF.

LOCATION (revised).--Lat 37°21'02", long 120°58'34", in NW¼SW¼ sec.3, T.7 S., R.9 E., Stanislaus County, on left bank 600 ft downstream from bridge on Hills Ferry Road, 650 ft downstream from Merced River, and 3.5 miles northeast of Newman.

DRAINAGE AREA.--9,520 sq mi.

PERIOD OF RECORD.--April 1912 to current year. Prior to Oct. 1, 1937, and subsequent to Oct. 1, 1943, flow that bypassed station at discharges above 9,000 cfs not included in records.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Mar. 3, 1931, nonrecording gage at various sites within 240 ft of bridge, and Mar. 3, 1931, to Sept. 30, 1959, water-stage recorder within 300 ft of bridge at datum 47.31 ft higher. Oct. 1, 1959, to Aug. 9, 1960, water-stage recorder at site 70 ft upstream at datum 0.25 ft lower. Aug. 9, 1960, to Mar. 29, 1971, at datum 0.25 ft lower.

AVERAGE DISCHARGE.--61 years, 2,036 cfs (1,475,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs Feb. 15 (elevation, 62.15 ft); minimum daily, 310 cfs Aug. 22.

Period of record: Maximum discharge (River only), 28,000 cfs Feb. 26, 1969 (elevation, 65.90 ft, from high-water mark in well); river and Merced River Slough, 34,400 cfs Feb. 26, 1969 (elevation, 65.90 ft, present datum); minimum, 15 cfs Aug. 9, 10, 1924.

Flood of Jan. 2, 1868, reached a stage of 21.7 ft, from floodmarks; flood of February 1886, reached a stage of 19.8 ft, from floodmarks; and flood of 1911 reached a stage of 19 ft, from floodmarks. All stages referred to datum in use from 1931 to 1959. Discharges unknown.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, ground-water withdrawals, diversions for irrigation, and imported water; low flows consist mainly of return water from irrigated areas.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	956	565	848	632	1,610	3,470	2,620	684	444	388	417	415
2	1,040	555	801	613	1,470	3,830	2,690	662	447	408	384	417
3	1,020	552	780	595	1,350	4,150	2,740	686	465	408	373	429
4	968	548	761	581	1,260	3,760	2,710	692	464	424	364	439
5	912	552	747	569	1,180	3,290	2,360	678	478	422	362	445
6	899	570	747	561	1,160	3,130	2,130	679	482	400	371	435
7	923	590	747	555	1,160	3,290	2,080	701	447	383	350	437
8	895	606	747	549	1,280	3,620	1,990	713	444	391	347	476
9	891	615	753	552	1,440	4,690	1,860	679	425	404	360	550
10	879	633	761	571	1,410	5,040	1,890	627	408	402	353	554
11	682	663	750	688	1,950	4,660	1,840	596	412	392	350	527
12	565	778	746	887	4,900	3,980	1,660	597	438	393	353	508
13	522	867	736	979	6,570	3,480	1,440	577	454	375	375	494
14	493	931	718	1,150	8,990	3,250	1,280	588	415	363	391	504
15	467	1,090	705	1,120	10,900	2,940	1,170	577	419	369	392	524
16	460	1,420	699	1,040	10,600	2,540	1,160	562	409	398	377	530
17	471	1,760	699	1,170	9,040	2,210	1,090	563	415	393	356	539
18	491	1,780	697	2,200	7,800	1,880	1,040	540	422	392	326	562
19	450	1,650	762	3,010	7,150	1,680	999	525	432	407	335	619
20	542	1,520	1,000	3,340	6,890	1,650	984	506	436	408	338	620
21	1,620	1,410	1,090	3,370	6,690	1,970	977	533	435	415	322	613
22	1,760	1,280	1,080	3,040	6,350	2,640	945	552	416	455	310	618
23	1,760	1,190	984	2,570	5,720	3,350	900	518	400	487	318	634
24	1,740	1,150	900	2,170	4,790	3,630	889	518	398	450	330	673
25	1,740	1,100	857	1,880	3,630	3,430	830	511	416	420	346	697
26	1,740	1,060	819	1,680	2,780	2,930	793	496	426	429	362	680
27	1,660	1,010	771	1,550	2,570	2,860	741	504	429	414	386	650
28	747	984	743	1,490	2,810	2,910	692	525	409	392	394	630
29	636	957	714	1,410	------	2,910	695	539	403	379	395	616
30	592	907	682	1,350	------	2,740	700	495	405	407	410	592
31	575	------	655	1,500	------	2,620	------	460	------	423	423	------
TOTAL	29,096	29,293	24,499	43,372	123,450	98,530	43,895	18,083	12,893	12,591	11,270	16,427
MEAN	939	976	790	1,399	4,409	3,178	1,463	583	430	406	364	548
MAX	1,760	1,780	1,090	3,370	10,900	5,040	2,740	713	482	487	423	697
MIN	450	548	655	549	1,160	1,650	692	460	398	363	310	415
AC-FT	57,710	58,100	48,590	86,030	244,900	195,400	87,070	35,870	25,570	24,970	22,350	32,580

CAL YR 1972 TOTAL 234,403 MEAN 640 MAX 1,780 MIN 166 AC-FT 464,900
WTR YR 1973 TOTAL 463,399 MEAN 1,270 MAX 10,900 MIN 310 AC-FT 919,200

11274500 ORESTIMBA CREEK NEAR NEWMAN, CALIF.

LOCATION (revised).--Lat 37°18'48", long 121°07'32", in SE¼NE¼ sec.19, T.7 S., R.8 E., Stanislaus County, on right bank 220 ft upstream from California aqueduct siphon, 3 miles downstream from Oso Creek, and 5 miles west of Newman.

DRAINAGE AREA.--134 sq mi.

PERIOD OF RECORD.--January 1932 to current year.

GAGE.--Water-stage recorder. Datum of gage is 216.01 ft above mean sea level. Prior to Oct. 1, 1958, at site 1,320 ft downstream at datum 24.14 ft lower. Oct. 1, 1958, to Aug. 13, 1969, at site 1,200 ft downstream at datum 27.14 ft lower.

AVERAGE DISCHARGE.--41 years, 15.3 cfs (11,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,510 cfs Feb. 11 (gage height, 6.56 ft); no flow for several months. Period of record: Maximum discharge, 10,200 cfs Apr. 2, 1958 (gage height, 6.57 ft, site and datum then in use), from rating curve extended above 5,000 cfs; no flow for all or parts of each year.

REMARKS.--Records good. No storage or diversion above station except for minor stock ponds.

REVISIONS (WATER YEARS).--WSP 1445: 1932(M), 1938(P), 1940-41(M), 1945, 1951(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0		0	34	209	25	2.4				
2		0		0	29	132	23	2.4				
3		0		0	27	102	20	3.0				
4		0		0	27	94	19	3.6				
5		0		0	32	76	18	3.6				
6		0		0	474	78	17	3.0				
7		0		0	800	74	16	2.4				
8		0		0	226	69	13	1.8				
9		0		84	120	63	13	1.8				
10		0		255	386	57	13	1.8				
11		0		73	914	55	13	1.2				
12		0		55	474	50	12	1.2				
13		2.7		41	564	46	13	.60				
14		6.9		30	350	42	13	.60				
15		4.4		24	226	39	13	.22				
16		173		391	158	37	13	0				
17		114		398	120	36	13	0				
18		25		255	95	34	11	0				
19		8.9		242	80	37	9.1	0				
20		2.1		97	69	69	8.4	0				
21		0		68	64	55	7.7	0				
22		0		52	55	54	7.0	0				
23		0		38	51	44	7.0	0				
24		0		32	52	40	6.3	0				
25		0		31	50	38	4.7	0				
26		0		30	48	36	4.7	0				
27		0		23	245	36	4.7	0				
28		0		19	494	32	3.6	0				
29		0		17	------	29	3.0	0				
30		0		37	------	29	3.0	0				
31		------		45	------	29	------	0	------			------
TOTAL	0	337.0	0	2,337	6,264	1,821	347.2	29.62	0	0	0	0
MEAN	0	11.2	0	75.4	224	58.7	11.6	.96	0	0	0	0
MAX	0	173	0	398	914	209	25	3.6	0	0	0	0
MIN	0	0	0	0	27	29	3.0	0	0	0	0	0
AC-FT	0	668	0	4,640	12,420	3,610	689	59	0	0	0	0

CAL YR 1972 TOTAL 337.0 MEAN .92 MAX 173 MIN 0 AC-FT 668
WTR YR 1973 TOTAL 11,135.82 MEAN 30.5 MAX 914 MIN 0 AC-FT 22,090

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0430	5.48	504	2-6	2400	6.38	1,310
1-9	2300	5.54	576	2-11	1000	6.56	1,510
1-16	1630	6.33	1,260	2-28	0630	5.77	746
1-18	2000	5.47	529	3-6	2100	4.33	95
1-30	1900	4.16	65	3-20	1000	4.29	89

11274630 DEL PUERTO CREEK NEAR PATTERSON, CALIF.

LOCATION.--Lat 37°29'12", long 121°12'29", in SE¼NW¼ sec.21, T.5 S., R.7 E., Stanislaus County, on left bank 1.0 mile upstream from Delta-Mendota Canal crossing, and 4.4 miles west of Patterson.

DRAINAGE AREA.--72.6 sq mi.

PERIOD OF RECORD.--October 1958 to May 1965 (maximums only), June 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 200 ft (from topographic map). Prior to June 1965, crest-stage gage at site 1.0 mile downstream at different datum.

AVERAGE DISCHARGE.--8 years, 5.41 cfs (3,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 491 cfs Feb. 6 (gage height, 4.51 ft); no flow for several months. Period of record: Maximum discharge, 1,800 cfs Feb. 16, 1959 (gage height, 14.68 ft, site and datum then in use), from rating curve extended above 690 cfs; no flow for several months in each year.

REMARKS.--Records good. Some stock ponds and small diversions above station.

REVISIONS (WATER YEARS).--WSP 1930: 1959-60(M), drainage area. WRD Calif. 1970: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.98	1.7	11	64	15	5.9	2.1	.40		
2		0	.84	1.7	9.9	47	14	5.6	2.3	.40		
3		0	1.1	1.7	10	43	14	5.6	2.1	.30		
4		0	1.3	1.7	12	52	13	5.6	1.9	.30		
5		0	1.3	1.5	14	41	13	6.3	1.7	.30		
6		0	2.1	1.7	186	44	13	5.9	1.7	.30		
7		0	3.6	1.5	249	45	13	5.6	1.5	.30		
8		0	3.6	2.1	86	41	11	5.2	1.3	.30		
9		0	3.1	30	52	38	11	4.9	1.1	.20		
10		0	2.6	68	117	33	11	4.5	.98	.08		
11		0	2.1	23	267	33	11	4.2	1.1	.11		
12		0	1.9	17	158	30	10	4.5	.98	.07		
13		0	1.9	13	162	27	10	4.5	.98	.03		
14		.13	1.7	10	108	25	10	4.9	1.2	.03		
15		10	1.7	8.2	83	24	9.4	4.9	1.3	.04		
16		49	1.7	60	62	23	9.0	5.2	1.3	.12		
17		44	1.9	72	51	22	8.6	4.9	1.3	.20		
18		17	2.1	68	43	21	8.2	3.9	1.1	.20		
19		7.8	2.3	65	39	23	7.8	3.9	.98	.20		
20		5.2	2.3	34	34	31	7.8	3.3	.80	.12		
21		3.3	1.9	27	30	28	7.8	3.9	.60	.12		
22		2.6	2.1	22	27	33	7.4	3.6	.50	.12		
23		1.9	1.9	17	25	26	7.8	3.9	.50	.05		
24		1.7	1.9	14	27	23	7.4	3.9	.50	0		
25		1.5	1.9	14	27	22	7.4	4.2	.50	0		
26		1.5	1.9	15	26	21	6.6	3.6	.40	0		
27		1.3	1.9	13	82	20	6.3	3.6	.40	0		
28		1.1	1.9	12	120	19	6.3	3.3	.40	0		
29		.98	1.9	11	------	17	6.3	3.1	.40	0		
30		.98	1.9	12	------	17	6.6	2.6	.40	0		
31		------	1.7	12	------	17	------	2.3	------	0		------
TOTAL	0	149.99	61.02	650.8	2,117.9	950	289.7	137.3	32.32	4.29	0	0
MEAN	0	5.00	1.97	21.0	75.6	30.6	9.66	4.43	1.08	.14	0	0
MAX	0	49	3.6	72	267	64	15	6.3	2.3	.40	0	0
MIN	0	0	.84	1.5	9.9	17	6.3	2.3	.40	0	0	0
AC-FT	0	298	121	1,290	4,200	1,880	575	272	64	8.5	0	0

CAL YR 1972 TOTAL 303.26 MEAN .83 MAX 49 MIN 0 AC-FT 602
WTR YR 1973 TOTAL 4,393.32 MEAN 12.0 MAX 267 MIN 0 AC-FT 8,710

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0400	2.71	97	2-6	1830	4.51	491
11-17	1000	2.50	72	2-10	1100	3.48	216
1-9	2400	3.13	152	2-11	1300	4.40	459
1-16	1900	3.52	224	2-13	0130	3.54	228
1-18	2000	3.13	152	2-27	1930	3.44	209

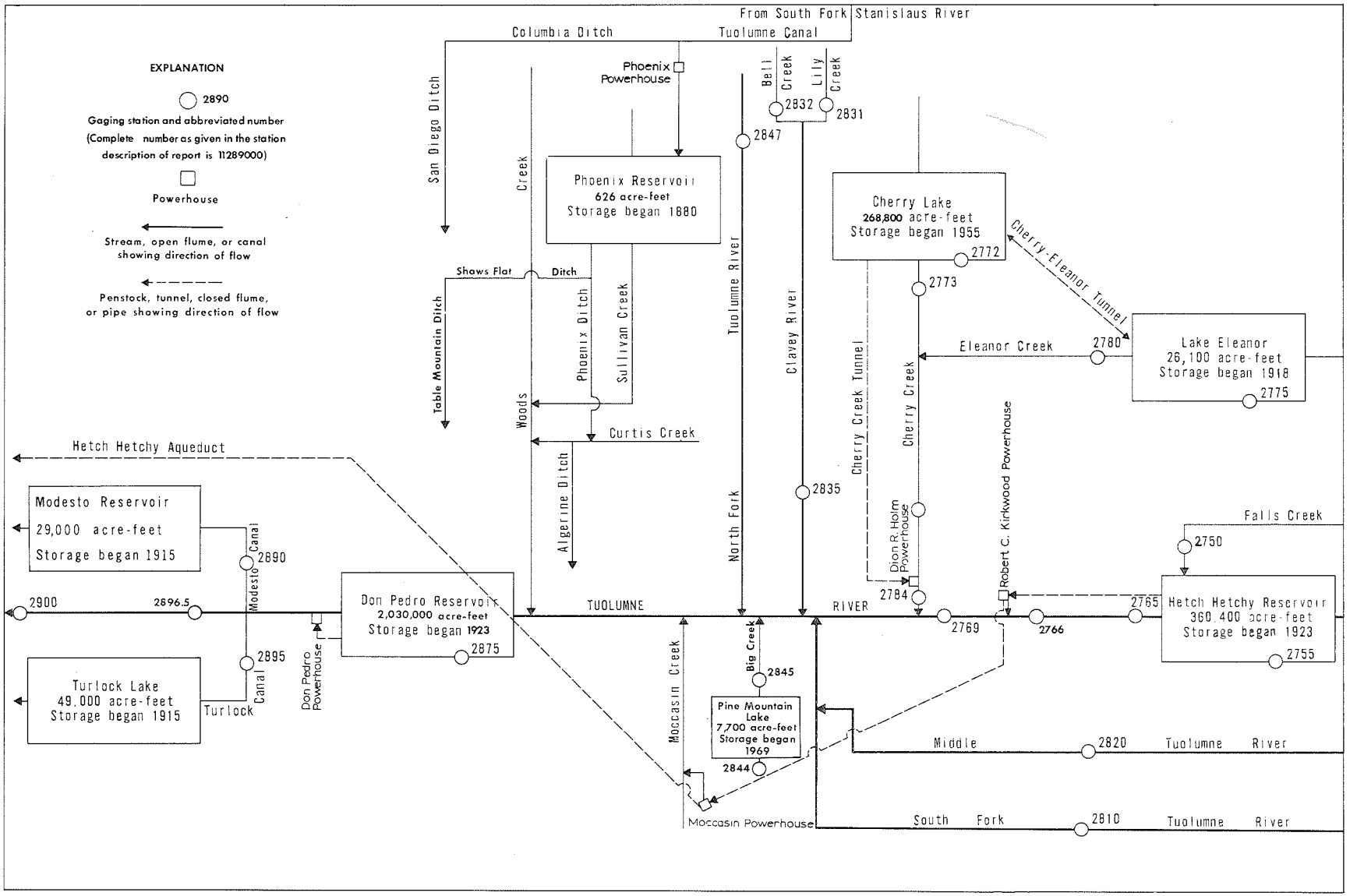

FIGURE 7.--Schematic diagram showing diversions and storage in Tuolumne River basin.

11275000 FALLS CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'15", long 119°45'48", in NW¼SE¼ sec.3, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, on right bank 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.

PERIOD OF RECORD.--October 1915 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1918, published as "near Sequoia."

GAGE.--Water-stage recorder. Altitude of gage is 5,350 ft (from topographic map).

AVERAGE DISCHARGE.--58 years, 143 cfs (103,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,510 cfs May 31 (gage height, 6.37 ft); no flow Sept. 20-30. Period of record: Maximum discharge, 6,660 cfs Nov. 19, 1950, Dec. 23, 1955 (gage height, 9.0 ft, from floodmarks), from rating curve extended above 2,500 cfs on basis of velocity-area studies; no flow at times in many years.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 531: 1917(M). WSP 931: 1938. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	4.8	39	36	37	64	54	335	1,050	188	12	1.7
2	.07	4.6	37	33	38	61	49	343	842	143	13	1.4
3	.06	4.5	34	31	37	58	48	397	616	121	14	1.2
4	.05	16	46	29	39	54	58	367	592	112	13	.96
5	.04	19	47	27	36	50	84	270	680	103	15	.80
6	.03	17	46	27	42	48	119	212	705	97	21	.64
7	.03	17	44	28	48	47	139	288	755	90	28	.49
8	.03	25	41	28	45	46	154	444	720	84	24	.38
9	.08	22	38	32	41	44	182	588	884	79	18	.28
10	1.5	20	40	33	45	48	190	630	745	73	16	.19
11	3.2	22	42	51	47	55	210	755	630	69	14	.14
12	7.1	22	38	208	46	49	202	854	655	68	11	.09
13	7.1	24	35	134	49	47	210	914	616	63	9.5	.07
14	6.9	34	33	94	51	45	150	902	476	57	7.9	.05
15	6.2	37	30	77	52	42	128	971	346	52	6.9	.04
16	6.0	45	30	122	50	51	121	1,010	305	47	6.4	.04
17	9.5	44	276	89	49	53	150	1,120	282	42	6.0	.02
18	8.5	40	235	91	51	50	139	1,100	302	37	5.3	.02
19	12	37	330	74	52	51	128	1,070	328	33	4.8	.01
20	24	33	232	68	53	52	124	890	349	30	4.3	0
21	28	31	152	58	52	48	134	730	364	29	3.8	0
22	22	30	212	55	48	51	178	750	367	25	3.4	0
23	20	29	128	52	50	57	260	670	349	22	3.0	0
24	17	30	89	49	51	69	346	788	295	20	2.7	0
25	15	38	70	46	48	74	406	612	285	18	2.4	0
26	12	51	61	46	49	70	476	504	295	16	2.3	0
27	10	52	59	47	58	70	604	520	340	16	2.2	0
28	8.5	48	57	41	69	66	665	750	382	16	2.1	0
29	7.3	44	52	41	------	57	608	964	305	15	2.1	0
30	6.6	40	47	39	------	51	437	932	252	14	2.2	0
31	5.1	------	41	38	------	54	------	1,180	------	13	2.0	------
TOTAL	243.97	880.9	2,661	1,824	1,333	1,682	6,753	21,860	15,112	1,792	278.3	8.52
MEAN	7.87	29.4	85.8	58.8	47.6	54.3	225	705	504	57.8	8.98	.28
MAX	28	52	330	208	69	74	665	1,180	1,050	188	28	1.7
MIN	.03	4.5	30	27	36	42	48	212	252	13	2.0	0
AC-FT	484	1,750	5,280	3,620	2,640	3,340	13,390	43,360	29,970	3,550	552	17

CAL YR 1972 TOTAL 39,586.59 MEAN 108 MAX 690 MIN .03 AC-FT 78,520
WTR YR 1973 TOTAL 54,428.69 MEAN 149 MAX 1,180 MIN 0 AC-FT 108,000

PEAK DISCHARGE (BASE, 900 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-17	0830	6.14	1,260	6-9	1000	5.95	1,080
5-31	1100	6.37	1,510				

11275500 HETCH HETCHY RESERVOIR AT HETCH HETCHY, CALIF.

LOCATION.--Lat 37°56'52", long 119°47'13", in NW¼NW¼ sec.16, T.1 N., R.20 E., Tuolumne County, Yosemite National Park, near center of O'Shaughnessy Dam on Tuolumne River at Hetch Hetchy, 1.5 miles downstream from Falls Creek.
DRAINAGE AREA.--455 sq mi.
PERIOD OF RECORD.--May 1923 to current year. Prior to October 1930 monthend contents, published in WSP 1315-A.
GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by city and county of San Francisco). Prior to Oct. 1, 1927, nonrecording gage at same site and datum.
EXTREMES.--Current year: Maximum contents, 363,100 acre-ft June 23, 28 (elevation, 3,807.4 ft); minimum, 39,200 acre-ft Apr. 7 (elevation, 3,579.6 ft).
Period of record: Maximum contents, 369,100 acre-ft Dec. 3, 1950 (elevation, 3,810.4 ft); no contents at times in 1929-31.
REMARKS.--Reservoir is formed by concrete gravity-type dam, completed to crest elevation 3,726.5 ft in 1923 and raised to 3,812.0 ft in 1937; storage began Apr. 6, 1923. Ten-foot drum gates were installed on spillway in 1949. Capacity, 360,400 acre-ft between elevations, 3,512.0 ft (somewhat above bottom outlet) and 3,806.0 ft (top of drum-type spillway gates) above mean sea level. Water is diverted from reservoir through tunnel to Robert C. Kirkwood powerplant 15 miles downstream where flow is diverted from powerplant tailrace in a closed conduit through Hetch Hetchy aqueduct to Moccasin Creek powerplant with flow in excess of aqueduct capacity being spilled to river. At Moccasin Creek diversion dam, water re-enters Hetch Hetchy aqueduct and flows into Crystal Springs Reservoir, which supplies city of San Francisco. Surplus water is spilled into Don Pedro Reservoir at Red Mountain Bar. Flow down river is for State Department of Fish and Game and Raker Act requirements. Hetch Hetchy Reservoir is main storage unit of Hetch Hetchy water-supply system for San Francisco. See schematic diagram of Tuolumne River basin. Records, including extremes, represent contents at 0800 hours.
COOPERATION.--Gage-height record furnished by city and county of San Francisco.
REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,512	0	3,540	8,700	3,640	97,000	3,740	238,900
3,513	51	3,560	22,900	3,660	119,900	3,760	273,700
3,515	154	3,580	39,500	3,680	146,200	3,780	310,400
3,520	410	3,600	57,400	3,700	175,000	3,800	348,600
3,530	3,300	3,620	76,500	3,720	206,000	3,810.4	369,100

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203,800	166,400	134,600	117,700	97,300	72,600	44,400	72,700	323,200	361,700	340,600	302,000
2	202,500	165,100	133,500	117,600	96,500	71,700	43,500	74,700	334,500	361,000	339,700	300,300
3	201,300	163,600	132,600	116,600	95,300	70,900	42,500	77,100	340,300	360,000	338,700	299,000
4	199,800	162,300	131,800	115,300	94,200	70,400	41,400	79,600	343,700	360,000	337,900	297,500
5	198,400	161,200	131,000	114,000	93,300	68,700	40,400	81,300	347,200	359,800	337,400	295,900
6	197,000	160,200	130,000	112,500	92,200	68,600	39,500	82,100	350,700	360,000	337,000	294,200
7	195,600	159,100	129,100	111,500	91,400	67,900	39,200	83,100	356,000	360,400	336,200	292,800
8	194,600	158,000	128,100	110,100	90,500	66,900	39,700	85,700	359,800	360,400	335,000	291,100
9	193,800	156,800	126,900	109,100	89,400	65,900	40,200	90,200	362,500	360,800	334,300	289,500
10	193,000	155,600	125,800	108,200	88,600	64,800	43,100	96,100	360,800	360,600	332,900	288,000
11	191,600	154,500	124,900	107,200	88,000	63,900	43,600	103,000	360,000	360,600	331,800	286,400
12	190,400	153,300	123,700	106,900	87,200	62,900	43,900	111,500	359,400	360,400	331,000	284,900
13	189,100	152,400	122,700	107,000	86,500	62,000	44,300	120,900	359,800	359,800	329,900	283,300
14	187,800	151,400	121,600	107,100	85,800	61,000	44,300	130,500	359,200	359,200	328,700	281,800
15	186,600	150,400	120,400	106,600	84,900	60,000	44,000	140,500	356,200	359,200	327,200	280,200
16	185,300	149,400	119,200	106,000	84,000	58,800	43,400	151,200	353,100	358,800	325,700	278,400
17	184,000	148,400	118,400	107,100	83,000	57,800	42,900	163,800	351,700	358,000	324,300	277,300
18	182,800	147,300	120,200	106,900	82,000	56,800	42,800	177,700	352,500	357,200	322,900	275,700
19	181,400	146,300	120,800	107,100	81,100	55,900	42,100	192,100	355,800	356,000	321,500	274,100
20	180,200	145,400	122,200	106,600	80,200	54,900	41,400	204,600	359,800	355,200	320,400	272,600
21	179,000	144,300	122,300	106,300	79,300	53,900	41,100	214,500	361,400	353,900	318,800	271,000
22	178,000	143,300	122,500	105,700	78,300	53,000	41,000	224,000	362,900	352,700	317,300	269,400
23	177,400	142,300	122,600	105,000	77,200	52,200	41,300	233,200	363,100	351,300	315,800	267,800
24	176,500	141,300	122,300	104,400	76,200	51,400	44,400	242,500	362,500	350,700	314,100	266,600
25	175,300	140,300	122,000	103,400	75,300	50,500	47,000	250,900	362,300	349,400	312,600	265,400
26	174,100	139,400	121,800	102,500	74,500	49,700	50,700	258,000	362,500	348,200	310,900	263,600
27	172,800	138,600	121,100	101,600	73,500	48,800	55,500	264,300	362,700	347,000	309,600	261,900
28	171,400	137,700	120,200	101,000	73,200	48,100	61,200	273,200	363,100	345,700	308,300	260,300
29	170,300	136,800	119,300	100,400	------	47,200	66,200	285,600	362,900	344,300	306,600	258,700
30	168,900	135,700	118,600	99,700	------	46,400	70,400	296,600	362,700	343,400	305,200	257,100
31	167,600	------	117,800	98,500	------	45,400	------	311,100	------	342,000	303,500	------
MAX	203,800	166,400	134,600	117,700	97,300	72,600	70,400	311,100	363,100	361,700	340,600	302,000
MIN	167,600	135,700	117,800	98,500	73,200	45,400	39,200	72,700	323,200	342,000	303,500	257,100
(a)	3,695.0	3,672.2	3,658.2	3,641.3	3,616.6	3,586.7	3,613.6	3,780.4	3,807.2	3,796.6	3,776.3	3,750.6
(b)	-37,500	-31,900	-17,900	-19,300	-25,300	-27,800	+25,000	+240,700	+51,600	-20,700	-38,500	-46,400

CAL YR 1972 b -15,700
WTR YR 1973 b +52,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11276500 TUOLUMNE RIVER NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°56'15", long 119°47'50", in SW¼SE¼ sec.17, T.1 N., R.20 E., Tuolumne County, 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.

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Hetch Hetchy damsite, near Sequoia" 1910-14 and as "below Hetch Hetchy damsite, near Sequoia" 1915-18.

GAGE.--Water-stage recorder with concrete control since May 5, 1970. Altitude of gage is 3,480 ft (from topographic map). Prior to Jan. 1, 1915, water-stage recorder at site 1 mile upstream, at damsite, at different datum. Jan. 1, 1915, to Sept. 30, 1968, water-stage recorder, at same site and datum. Oct. 1, 1968, to May 4, 1970, nonrecording gage at site 0.5 mile upstream at different datum.

AVERAGE DISCHARGE (prior to diversion to Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct).--57 years (1910-67), 999 cfs (723,800 acre-ft per year); 6 years (1967-73), 328 cfs (237,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,770 cfs June 9 (gage height, 11.93 ft); minimum daily, 28 cfs Apr. 8.
Period of record: Maximum discharge, 12,900 cfs June 1, 1943 (gage height, 13.90 ft); no flow Oct. 3, 4, 1968, Dec. 16, 1969, Feb. 20-26, 1970.

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 1 mile upstream beginning in April 1923 (see sta 11275500). Flow diverted above station through tunnel to Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct beginning April 26, 1967. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	33	35	38	32	34	34	362	945	1,190	50	76
2	36	33	34	37	35	32	32	422	1,490	920	49	76
3	36	33	33	37	35	33	31	485	2,460	540	48	75
4	37	34	33	37	36	33	32	506	2,860	372	59	75
5	38	34	34	37	36	32	33	506	2,870	185	70	75
6	38	33	36	37	37	32	32	509	2,890	62	76	75
7	38	34	39	37	39	32	48	515	3,280	60	76	75
8	38	34	38	38	36	32	28	536	3,980	69	76	75
9	38	33	36	39	36	31	41	572	6,180	75	76	75
10	38	34	38	39	48	31	39	680	5,960	61	76	75
11	38	35	40	41	49	32	88	792	4,950	55	75	75
12	38	35	40	46	46	37	180	832	4,450	55	76	74
13	38	35	40	40	44	40	213	868	3,970	47	75	74
14	37	36	40	38	42	40	213	888	3,970	47	76	74
15	36	36	40	38	40	40	213	892	3,540	52	75	74
16	36	36	40	51	37	39	213	792	2,610	52	78	56
17	35	35	52	46	36	38	213	684	1,540	51	86	37
18	34	35	41	49	36	39	213	542	574	51	78	37
19	34	34	45	44	34	37	213	478	68	51	78	38
20	34	35	40	40	33	40	107	488	507	51	77	39
21	33	35	40	39	32	40	36	494	1,490	50	77	39
22	33	35	40	37	32	39	36	470	1,870	50	77	39
23	33	34	39	37	32	40	36	452	1,840	49	77	40
24	33	34	39	37	32	39	38	460	1,620	49	76	40
25	32	34	38	36	32	38	38	465	1,520	50	76	40
26	32	34	38	36	33	37	73	470	1,610	49	76	39
27	32	34	38	36	36	36	228	475	2,160	48	76	39
28	33	35	38	36	38	36	320	480	2,380	47	76	39
29	33	35	38	35	------	35	352	503	1,750	50	76	38
30	33	35	38	35	------	34	352	596	1,550	51	76	38
31	33	------	38	34	------	33	------	812	------	50	76	------
TOTAL	1,093	1,032	1,198	1,207	1,034	1,111	3,725	18,026	76,884	4,589	2,269	1,721
MEAN	35.3	34.4	38.6	38.9	36.9	35.8	124	581	2,563	148	73.2	57.4
MAX	38	36	52	51	49	40	352	892	6,180	1,190	86	76
MIN	32	33	33	34	32	31	28	362	68	47	48	37
AC-FT	2,170	2,050	2,380	2,390	2,050	2,200	7,390	35,750	152,500	9,100	4,500	3,410

CAL YR 1972 TOTAL 22,847 MEAN 62.4 MAX 335 MIN 30 AC-FT 45,320
WTR YR 1973 TOTAL 113,889 MEAN 312 MAX 6,180 MIN 28 AC-FT 225,900

11276600 TUOLUMNE RIVER ABOVE EARLY INTAKE, NEAR MATHER, CALIF.

LOCATION.--Lat 37°52'46", long 119°56'46", in SE¼SW¼ sec.1, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 0.5 mile upstream from Early Intake, 2.4 miles upstream from Cherry Creek, and 5.0 miles west of Mather.

DRAINAGE AREA.--484 sq mi.

PERIOD OF RECORD.--October 1970 to current year. Records for the period October 1939 to September 1970 in the files of the California district office of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 2,420 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 7,660 cfs June 9 (gage height, 20.20 ft); minimum daily, 36 cfs Sept. 19.
Period of record: Maximum discharge, 7,660 cfs June 9, 1973 (gage height, 20.20 ft); minimum daily, 36 cfs Sept. 19, 1973.
Flood of June 1, 1943, reached a stage of 22.1 ft (discharge, 12,900 cfs).

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 12 miles upstream (see sta 11275500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	43	40	50	65	159	108	400	976	1,200	55	80
2	43	43	40	49	64	133	102	432	1,320	904	54	80
3	43	43	41	49	66	119	94	492	2,290	634	54	80
4	43	45	46	48	85	131	91	520	2,950	366	53	80
5	42	41	43	47	84	117	92	528	2,970	301	64	78
6	42	37	42	46	91	114	92	528	3,010	78	75	78
7	42	39	47	46	144	121	92	528	3,270	71	80	78
8	42	41	48	49	109	113	113	536	4,010	69	80	78
9	43	37	45	71	96	105	82	552	6,110	80	80	78
10	46	37	45	75	246	100	97	635	6,320	74	80	78
11	45	42	45	78	336	144	98	790	4,980	64	80	78
12	43	39	45	208	242	124	211	825	4,500	62	80	78
13	43	38	46	121	211	119	330	850	3,980	61	80	78
14	43	68	46	91	186	113	333	875	4,010	53	80	78
15	43	60	46	78	159	106	321	880	3,670	56	81	77
16	43	62	48	206	140	102	288	815	2,800	57	78	75
17	43	53	170	260	128	98	276	715	1,630	56	85	45
18	43	46	116	204	119	97	273	585	830	56	87	37
19	43	44	114	210	113	94	265	492	105	55	82	36
20	43	44	92	128	106	134	242	496	263	55	82	37
21	42	42	71	109	102	131	91	504	1,340	54	81	37
22	42	42	69	100	97	122	73	496	1,790	54	81	37
23	42	42	71	90	92	134	73	460	1,820	54	81	37
24	42	42	65	82	108	144	75	468	1,600	54	81	37
25	41	41	61	81	113	134	77	472	1,490	55	80	37
26	41	41	57	78	113	134	78	480	1,540	55	80	37
27	41	41	55	74	171	128	130	484	1,980	55	81	37
28	41	41	56	71	252	126	238	488	2,390	54	81	37
29	41	41	54	70	------	113	321	496	1,770	53	81	37
30	42	40	53	70	------	105	390	572	1,570	56	80	37
31	43	------	51	68	------	113	------	805	------	55	80	------
TOTAL	1,319	1,315	1,868	3,007	3,838	3,727	5,146	18,199	77,284	4,951	2,377	1,777
MEAN	42.5	43.8	60.3	97.0	137	120	172	587	2,576	160	76.7	59.2
MAX	46	68	170	260	336	159	390	880	6,320	1,200	87	80
MIN	41	37	40	46	64	94	73	400	105	53	53	36
AC-FT	2,620	2,610	3,710	5,960	7,610	7,390	10,210	36,100	153,300	9,820	4,710	3,520

CAL YR 1972 TOTAL 27,891 MEAN 76.2 MAX 390 MIN 37 AC-FT 55,320
WTR YR 1973 TOTAL 124,808 MEAN 342 MAX 6,320 MIN 36 AC-FT 247,600

11276900 TUOLUMNE RIVER BELOW EARLY INTAKE, NEAR MATHER, CALIF.

LOCATION.--Lat 37°52'54", long 119°58'09", in NW¼SW¼ sec.2, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 0.6 mile upstream from Cherry Creek, 0.7 mile downstream from Robert C. Kirkwood powerplant and Hetch Hetchy aqueduct, and 6.3 miles west of Mather.

DRAINAGE AREA.--487 sq mi.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,200 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 498 cfs (360,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,220 cfs June 9 (gage height, 8.44 ft); minimum daily, 36 cfs Dec. 2, 3.
Period of record: Maximum discharge, 11,300 cfs June 4, 1969 (gage height, 9.82 ft); minimum daily, 13 cfs Nov. 18, 19, 25-27, 1966, Feb. 1, 1967.

REMARKS.--Records good. Flow regulated by Hetch Hetchy Reservoir 13 miles upstream (see sta 11275500) and Robert C. Kirkwood powerplant beginning Apr. 26, 1967. Water is diverted to Hetch Hetchy aqueduct from the tailrace of the powerplant through a closed conduit. Flow in excess of aqueduct capacity is diverted to river. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	46	42	47	182	256	187	560	1,120	1,290	67	103
2	61	51	36	53	199	234	187	602	1,420	1,050	69	82
3	66	58	36	60	194	215	183	662	2,200	708	77	102
4	69	54	38	65	156	164	177	686	2,750	390	54	116
5	72	43	38	63	215	228	173	680	2,800	362	56	102
6	77	40	47	51	228	215	256	614	2,830	162	119	112
7	77	45	54	45	270	248	233	692	3,070	144	135	110
8	40	50	60	82	228	252	137	704	3,660	88	121	84
9	41	51	51	102	212	245	127	722	5,080	116	129	78
10	68	54	43	100	360	234	172	789	5,550	100	134	110
11	63	56	49	101	420	274	259	943	4,520	90	126	116
12	66	39	54	219	410	263	365	964	4,200	95	71	124
13	70	47	50	144	360	259	530	936	3,720	105	92	135
14	71	77	50	90	330	248	520	978	3,720	108	110	97
15	40	63	71	99	294	245	405	1,010	3,320	64	106	95
16	68	65	66	206	270	241	470	943	2,650	161	100	90
17	76	56	153	268	252	231	465	824	1,690	147	110	87
18	77	46	148	216	167	164	480	747	972	144	96	85
19	79	41	124	225	231	231	465	644	193	140	87	96
20	65	44	110	160	238	274	425	572	345	132	110	92
21	58	46	99	122	241	274	238	650	1,490	108	110	91
22	38	51	82	133	241	270	154	662	1,880	56	118	85
23	38	38	82	125	234	274	238	596	1,930	116	109	58
24	53	51	59	120	212	286	252	596	1,740	118	121	91
25	60	50	56	124	164	246	245	614	1,660	121	116	95
26	57	39	56	122	241	286	238	602	1,670	115	79	93
27	55	56	58	106	294	282	282	545	2,030	121	108	97
28	54	54	56	70	380	282	405	602	2,380	112	116	95
29	38	56	61	96	------	274	385	632	1,850	48	105	60
30	56	59	59	110	------	270	560	704	1,670	116	116	47
31	59	------	47	111	------	266	------	929	------	117	129	------
TOTAL	1,853	1,526	2,035	3,635	7,223	7,731	9,213	22,404	74,110	6,744	3,196	2,828
MEAN	59.8	50.9	65.6	117	258	249	307	723	2,470	218	103	94.3
MAX	79	77	153	268	420	286	560	1,010	5,550	1,290	135	135
MIN	38	38	36	45	156	164	127	545	193	48	54	47
AC-FT	3,680	3,030	4,040	7,210	14,330	15,330	18,270	44,440	147,000	13,380	6,340	5,610

CAL YR 1972 TOTAL 35,823 MEAN 97.9 MAX 430 MIN 36 AC-FT 71,050
WTR YR 1973 TOTAL 142,498 MEAN 390 MAX 5,550 MIN 36 AC-FT 282,600

11277200 CHERRY LAKE NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'33", long 119°54'47", in SE¼NW¼ sec.5, T.1 N., R.19 E., Tuolumne County, Stanislaus National Forest, on upstream face of Cherry Valley Dam on Cherry Creek, 4.2 miles upstream from Eleanor Creek, 7 miles north of Early Intake, and 7.3 miles northwest of Hetch Hetchy.

DRAINAGE AREA.--117 sq mi.

PERIOD OF RECORD.--August 1956 to current year. Prior to October 1959, published as Lake Lloyd near Hetch Hetchy.

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by city and county of San Francisco).

EXTREMES (at 0800).--Current year: Maximum contents, 218,900 acre-ft June 25 (elevation, 4,670.9 ft); minimum, 19,100 acre-ft Feb. 1 (elevation, 4,519.2 ft).
Period of record: Maximum contents, 269,300 acre-ft July 1-3, 1957 (elevation, 4,700.6 ft); normal minimum since reservoir first filled, 7,660 acre-ft Jan. 24, 1960 (elevation, 4,502.1 ft). Reservoir drained for inspection in 1961 and 1964.

REMARKS.--Reservoir is formed by a rockfill dam completed in 1956; storage began in December 1955. Usable capacity, 268,800 acre-ft between elevations 4,430 ft (bottom of sluice gates) and 4,700 ft (top of spillway gates) above mean sea level. Additional storage of 20 acre-ft is not available for release. Water is released down Cherry Creek for power development and domestic supply as part of Hetch Hetchy system of city and county of San Francisco. Unmeasured diversion from Lake Eleanor into Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake through tunnel to Cherry powerhouse near mouth of Cherry Creek began on Aug. 1, 1960. See schematic diagram of Tuolumne River basin. Records, including extremes, represent total contents at 0800 hours.

COOPERATION.--Gage-height record furnished by city and county of San Francisco.

CAPACITY TABLE (ELEVATION, IN FEET, AND USABLE CONTENTS, IN ACRE-FEET)

4,440	0	4,490	3,020	4,560	60,800	4,660	201,100
4,450	75	4,500	6,030	4,580	85,100	4,680	234,100
4,460	250	4,510	11,700	4,600	111,800	4,700	268,800
4,470	675	4,520	19,700	4,620	139,900	4,705	277,900
4,480	1,530	4,540	38,900	4,640	169,700		

CONTENTS, IN ACRE-FEET, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69,700	46,600	28,900	31,300	19,100	32,500	23,200	59,100	188,900	217,500	193,600	173,100
2	69,600	46,000	28,400	31,800	19,500	31,800	23,500	61,200	192,500	217,900	192,700	172,500
3	68,500	44,500	26,300	30,300	19,700	31,300	22,800	63,700	194,900	216,900	191,900	172,300
4	67,200	43,600	28,200	29,000	19,900	31,100	22,400	66,100	197,400	216,200	191,100	172,000
5	66,100	43,200	27,800	29,400	20,200	31,700	21,800	68,000	199,300	216,200	190,800	171,100
6	65,000	43,400	27,100	28,500	20,700	31,100	21,600	69,300	201,700	215,600	191,100	170,200
7	63,800	42,400	26,500	27,900	21,300	30,600	21,800	71,500	203,900	214,600	190,300	169,200
8	63,300	41,300	25,800	28,000	22,100	30,100	22,800	73,900	205,800	214,000	189,300	168,500
9	63,400	40,400	25,500	27,200	22,700	29,500	23,700	77,300	208,400	214,000	188,500	167,900
10	63,400	39,500	24,300	26,400	23,500	28,900	24,400	80,900	210,900	213,000	187,700	167,300
11	62,600	38,700	25,000	25,700	24,300	28,500	25,400	84,800	213,100	211,800	186,900	166,700
12	61,500	38,100	24,200	25,700	25,000	29,500	26,500	89,300	214,600	210,700	186,500	165,800
13	60,600	38,300	23,200	26,000	26,000	28,900	27,800	94,300	216,100	209,700	186,600	164,900
14	59,600	37,600	22,700	26,000	27,100	28,500	28,900	100,700	217,000	208,600	185,700	164,900
15	59,100	36,700	21,600	26,500	28,100	28,100	30,000	106,700	217,400	207,800	184,900	163,200
16	59,100	36,000	20,700	26,300	28,100	27,700	31,100	112,900	217,200	207,600	184,000	162,400
17	58,100	35,300	20,900	26,900	28,100	27,200	31,600	118,200	217,400	206,500	183,200	162,100
18	57,100	34,500	23,900	26,900	28,600	27,000	32,200	125,500	217,900	205,200	182,200	161,200
19	56,200	34,200	25,100	27,500	29,400	27,400	33,000	132,800	217,900	203,900	181,900	160,300
20	55,300	34,400	26,900	26,900	30,300	27,100	33,900	139,400	218,000	202,900	182,100	159,400
21	54,400	33,700	27,700	26,800	31,700	26,500	33,900	144,300	218,200	201,700	181,200	158,500
22	54,100	33,100	28,400	27,400	31,100	26,000	34,700	148,400	218,300	200,800	179,900	157,600
23	53,600	32,400	29,200	26,600	31,700	25,500	36,400	152,500	218,300	200,800	179,300	157,000
24	53,200	31,600	29,800	25,900	31,700	25,000	38,100	156,700	218,500	199,500	178,500	156,700
25	52,800	31,600	30,800	25,000	32,100	24,900	40,500	160,000	218,900	198,200	177,800	155,800
26	51,700	31,300	31,900	24,100	31,600	25,500	43,500	163,000	218,500	197,300	177,300	154,300
27	50,700	31,800	32,800	23,200	31,700	25,100	46,900	165,600	218,300	196,500	177,400	153,900
28	49,600	31,200	32,000	22,400	32,200	24,700	50,500	169,700	218,500	195,700	176,700	153,000
29	49,000	30,600	31,300	21,800	------	24,200	54,000	174,700	218,300	195,200	175,700	152,100
30	48,900	29,700	30,800	21,000	------	24,000	57,200	180,200	217,900	195,400	174,800	151,400
31	47,900	------	30,800	19,800	------	23,600	------	184,400	------	194,600	174,000	------
MAX	69,700	46,600	32,800	31,800	32,200	32,500	57,200	184,400	218,900	217,900	193,600	173,100
MIN	47,900	29,700	20,700	19,800	19,100	23,600	21,600	59,100	188,900	194,600	174,000	151,400
(a)	4,548.4	4,530.8	4,531.9	4,520.1	4,533.3	4,524.2	4,556.8	4,649.5	4,670.3	4,655.9	4,642.8	4,627.8
(b)	-22,400	-18,200	+1,100	-11,000	+12,400	-8,600	+33,600	+127,200	+33,500	-23,300	-20,600	-22,600

CAL YR 1972 b -22,400
WTR YR 1973 b +81,100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11277300 CHERRY CREEK BELOW CHERRY VALLEY DAM, NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'04", long 119°54'59", in SE¼SW¼ sec.5, T.1 N., R.19 E., Tuolumne County, Stanislaus National Forest, on right bank 0.7 mile downstream from Cherry Valley Dam, 3.5 miles upstream from Eleanor Creek, 6.7 miles north of Early Intake, and 7.2 miles west of Hetch Hetchy.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--November 1956 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,337.08 ft above mean sea level (levels by city and county of San Francisco).

AVERAGE DISCHARGE (since diversion to Cherry Creek powerplant).--13 years (1960-73), 19.3 cfs (13,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 20 cfs Jan. 16 (gage height, 3.23 ft); minimum daily, 3.9 cfs Apr. 25, 26.
Period of record: Maximum discharge, 3,830 cfs Apr. 25, 1958 (gage height, 9.95 ft); minimum daily, 1.6 cfs Apr. 10, 1957.

REMARKS.--Records good. Flow regulated by Cherry Lake 0.7 mile upstream (see sta 11277200). Diversion between Lake Eleanor and Cherry Lake began Mar. 6, 1960. Diversion from Cherry Lake to Cherry powerplant began Aug. 1, 1960. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	4.4	4.4	4.6	5.5	9.5	7.2	4.4	4.4	6.0	15	14
2	4.6	4.2	4.4	4.6	5.5	9.2	7.2	4.4	4.4	12	15	14
3	4.6	4.2	4.6	4.6	5.7	9.2	7.0	4.4	4.4	16	15	14
4	4.4	4.8	4.8	4.6	6.0	8.9	7.0	4.4	4.4	16	15	14
5	4.4	4.6	4.6	4.6	5.7	8.2	7.0	4.4	4.2	16	15	14
6	4.4	4.6	4.8	4.6	6.4	8.5	6.4	4.4	4.2	16	15	14
7	4.6	4.6	4.6	4.6	6.7	8.2	4.8	4.4	4.2	16	15	14
8	4.6	4.6	4.6	4.6	6.4	8.0	4.6	4.4	5.0	16	15	14
9	4.6	4.4	4.6	4.8	6.4	7.7	4.6	4.2	4.4	16	15	14
10	4.6	4.4	4.6	4.6	12	8.2	4.6	4.2	4.6	16	15	14
11	4.6	4.6	4.6	5.3	9.2	8.9	4.6	4.4	4.4	16	15	14
12	4.6	4.4	4.6	6.4	8.2	8.0	4.6	5.0	4.8	16	15	14
13	4.4	4.4	4.6	5.5	8.0	8.0	4.6	4.8	4.6	16	15	14
14	4.4	5.0	4.6	5.3	8.0	7.7	4.4	4.4	4.6	16	15	14
15	4.4	4.6	4.4	5.3	7.7	7.7	4.4	4.4	4.6	16	15	14
16	4.4	4.6	4.4	10	7.7	7.4	4.4	4.6	4.6	16	15	14
17	4.4	4.4	6.7	7.4	7.4	7.4	4.6	4.6	4.6	16	15	14
18	4.4	4.4	5.5	9.2	7.7	7.2	4.4	4.6	4.4	16	15	14
19	4.4	4.4	6.0	7.7	7.7	7.2	4.4	4.4	4.4	16	15	14
20	4.4	4.4	5.5	7.0	7.7	7.4	4.2	4.4	4.4	16	15	14
21	4.4	4.4	5.5	6.7	7.7	7.2	4.6	4.2	4.4	16	15	14
22	4.4	4.4	5.7	6.4	7.7	7.2	4.4	4.2	4.4	16	15	14
23	4.4	4.4	5.5	6.4	7.4	7.2	4.2	4.2	4.4	16	15	14
24	4.4	4.4	5.3	6.2	8.0	7.2	4.2	4.2	4.4	15	15	13
25	4.4	4.4	5.3	6.0	7.7	7.2	3.9	4.4	4.4	15	15	13
26	4.4	4.4	5.3	6.0	8.9	7.2	3.9	4.4	4.4	15	15	13
27	4.4	4.6	5.0	5.7	9.8	7.2	4.2	4.4	4.6	16	14	13
28	4.4	4.6	5.0	5.7	11	7.2	5.0	4.3	4.4	16	14	13
29	4.4	4.6	5.0	5.7	------	7.2	4.4	4.2	4.4	16	14	13
30	4.4	4.4	4.8	5.5	------	7.2	4.4	4.2	4.4	16	14	13
31	4.4	------	4.6	5.3	------	7.4	------	4.4	------	15	14	------
TOTAL	142.9	134.6	153.9	180.9	213.8	241.9	148.2	136.3	133.8	478.0	460	413
MEAN	4.61	4.49	4.96	5.84	7.64	7.80	4.94	4.40	4.46	15.4	14.8	13.8
MAX	9.3	5.0	6.7	10	12	9.5	7.2	5.0	5.0	16	15	14
MIN	4.4	4.2	4.4	4.6	5.5	7.2	3.9	4.2	4.2	6.0	14	13
AC-FT	283	267	305	359	424	480	294	270	265	948	912	819

CAL YR 1972 TOTAL 2,646.6 MEAN 7.23 MAX 16 MIN 4.2 AC-FT 5,250
WTR YR 1973 TOTAL 2,837.3 MEAN 7.77 MAX 16 MIN 3.9 AC-FT 5,630

11277500 LAKE ELEANOR NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'27", long 119°52'48", in SE¼NW¼ sec.3, T.1 N., R.19 E., Tuolumne County, Yosemite National Park, 720 ft from left bank on downstream side of dam on Eleanor Creek, 1.7 miles upstream from Miguel Creek, and 5.5 miles northwest of Hetch Hetchy.

DRAINAGE AREA.--78.1 sq mi.

PERIOD OF RECORD.--June 1918 to current year. Prior to October 1930, published in WSP 1315-A. Published as "near Sequoia" 1919-20.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by city and county of San Francisco). Prior to Oct. 1, 1927, nonrecording gage on upstream side of dam at same site and datum.

EXTREMES.--Current year: Maximum contents, 27,400 acre-ft June 20 (elevation, 4,661.3 ft); no usable contents Oct. 1 to Nov. 11; minimum elevation, 4,604.2 ft Oct. 2.
Period of record: Maximum contents, 31,000 acre-ft Dec. 11, 1937, from capacity table then in use (elevation, 4,663.4 ft); no usable contents at times in 1921, 1929-30, 1956-60, 1972-73.

REMARKS.--Reservoir is formed by multiple-arch dam completed in 1918; storage began June 23, 1918. Usable capacity, 26,100 acre-ft between elevations 4,620.9 ft (natural outlet of old lake) and 4,660.0 ft (top of 5-foot flashboards) above mean sea level. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River basin.

COOPERATION.--Periodic observations of elevation furnished by city and county of San Francisco.

REVISIONS.--WSP 1445: 1938(M). WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,626.2	639	4,634	4,700	4,644	11,900	4,654	20,600
4,627	996	4,636	5,960	4,646	13,500	4,656	22,400
4,628	1,480	4,638	7,330	4,648	15,300	4,658	24,300
4,630	2,450	4,640	8,710	4,650	17,000	4,660	26,100
4,632	3,580	4,642	10,300	4,652	18,800	4,663	29,100

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		--	1,580	--	--	2,560	2,060	9,340	27,300	26,900	24,400	12,900
2		--	1,530	--	--	2,560	2,010	9,660	27,000	27,000	24,000	12,500
3		--	1,530	--	--	2,510	2,060	9,980	26,800	27,100	23,500	12,100
4		--	1,580	--	--	2,510	2,110	10,400	26,800	27,200	23,200	11,800
5		--	1,580	--	--	2,450	2,160	10,500	26,800	27,100	22,800	11,500
6		--	1,530	--	--	2,450	2,450	10,200	26,800	27,200	22,500	11,100
7		--	1,530	--	--	2,450	2,730	10,100	26,800	27,100	22,100	10,700
8		--	1,480	--	--	2,400	3,070	10,900	26,900	27,200	21,800	10,300
9		--	1,480	--	--	2,730	3,350	11,800	26,900	27,200	21,400	9,980
10		--	1,480	--	--	2,960	3,521	12,600	26,700	27,200	21,000	9,580
11		--	1,430	--	--	2,960	3,690	13,800	26,600	27,200	20,700	9,180
12		639	1,430	--	--	2,900	3,920	15,100	26,700	27,100	20,300	8,790
13		683	1,380	--	--	2,790	3,920	16,600	26,800	27,200	20,000	8,430
14		861	1,380	--	--	2,560	3,690	18,000	26,600	27,100	19,600	8,090
15		950	--	--	--	2,350	3,410	19,300	26,500	27,100	19,200	7,680
16		1,040	--	--	--	2,160	3,240	20,700	26,500	27,100	18,800	7,330
17		1,140	--	--	2,510	2,060	3,180	22,400	26,800	27,100	18,400	6,920
18		1,190	--	--	2,510	2,010	3,180	23,700	27,000	27,100	18,100	6,580
19		1,240	--	--	2,560	2,010	3,130	24,800	27,100	27,100	17,600	6,160
20		1,290	--	--	2,560	2,010	3,130	25,500	27,400	27,000	17,300	5,750
21		1,290	--	--	2,560	2,060	3,180	26,100	27,300	27,000	17,000	5,340
22		1,290	--	--	2,560	2,060	3,350	26,600	27,200	27,000	16,600	4,990
23		1,290	--	--	2,560	2,060	3,860	27,200	27,100	27,000	16,200	4,650
24		1,290	--	--	2,620	2,060	4,540	27,100	27,100	27,000	15,900	4,310
25		1,330	--	--	2,620	2,060	5,340	27,000	27,000	26,800	15,400	4,030
26		1,430	--	3,920	2,620	2,110	6,230	26,900	27,000	26,500	15,100	3,690
27		1,530	--	--	2,620	2,110	7,400	26,900	27,200	26,100	14,700	3,350
28		1,580	--	--	2,560	2,110	8,430	27,200	27,100	25,800	14,400	2,960
29		1,580	--	--	------	2,110	9,020	27,200	27,100	25,400	14,100	2,620
30		1,580	--	--	------	2,110	9,260	27,100	27,000	25,100	13,700	2,300
31		------	--	--	------	2,110	------	27,100	------	24,800	13,300	------
MAX		--	--	--	--	2,960	9,260	27,200	27,400	27,200	24,400	12,900
MIN		--	--	--	--	2,010	2,010	9,340	26,500	24,800	13,300	2,300
(a)	4,615.7	4,628.2	--	--	4,630.2	4,629.3	4,640.7	4,661.0	4,660.9	4,658.5	4,645.7	4,629.7
(b)	--	--	--	--	--	-450	+7,150	+17,840	-100	-2,200	-11,500	-11,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
NOTE.--No elevation record Dec. 5 to Mar. 29. Occasional observer readings available during this period.

11278000 ELEANOR CREEK NEAR HETCH HETCHY, CALIF.

LOCATION.--Lat 37°58'09", long 119°52'52", in NW¼SW¼ sec.3, T.1 N., R.19 E., Tuolumne County, 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.

PERIOD OF RECORD.--October 1909 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Sequoia" 1910-18.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,500 ft (from topographic map). November 1909 to November 1915, nonrecording gage and water-stage recorder at site 1 mile upstream at different datum.

AVERAGE DISCHARGE (prior to diversion to Cherry Lake).--50 years (1909-59), 223 cfs (161,400 acre-ft per year); 14 years (1959-73), 62.9 cfs (45,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,490 cfs June 2 (gage height, 5.76 ft); minimum daily, 0.46 cfs Oct. 1-5, 12-14.
Period of record: Maximum discharge, 11,700 cfs Nov. 19, 1950 (gage height, 14.95 ft), from rating curve extended above 1,500 cfs on basis of velocity-area studies; no flow at times in 1910, 1930-31, 1933, 1956.

REMARKS.--Records good except those above 200 cfs, which are fair. Flow regulated by Lake Eleanor 0.5 mile upstream beginning in 1918 (see sta 11277500). Diversion from Lake Eleanor to Cherry Lake began in March 1960. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1923(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	4.4	4.8	4.4	5.2	6.1	4.8	4.4	1,050	140	14	14
2	.46	4.4	4.8	4.0	5.2	5.6	4.4	4.4	1,210	58	14	14
3	.46	4.4	4.8	4.0	5.2	5.6	4.4	4.4	754	19	14	14
4	.46	4.8	5.2	4.0	5.6	5.6	4.4	4.4	605	24	14	14
5	.46	4.8	4.8	4.0	5.6	5.6	4.0	4.4	570	37	14	14
6	.58	5.2	4.8	4.0	6.6	5.6	4.0	4.4	525	52	14	14
7	.58	4.8	4.8	4.0	6.6	6.1	4.4	4.4	545	56	14	14
8	.58	4.8	4.8	4.0	5.6	5.6	4.4	4.8	545	55	14	14
9	.58	4.8	4.8	4.4	5.6	5.6	4.4	4.8	575	51	14	14
10	.71	4.8	4.8	4.4	8.9	5.6	4.4	4.8	540	46	14	14
11	.58	4.4	4.8	6.6	7.0	6.6	4.8	4.4	470	40	14	14
12	.46	3.7	4.8	8.9	6.1	5.6	4.8	4.4	442	38	15	14
13	.46	3.4	4.8	5.6	6.1	5.6	4.8	4.4	418	34	14	14
14	.46	4.0	4.8	5.2	6.1	5.6	4.8	4.8	356	31	14	14
15	.58	4.0	4.8	5.2	6.1	5.2	4.4	4.8	253	29	14	14
16	.71	4.0	4.8	10	6.1	5.2	4.4	4.8	161	27	14	14
17	.71	3.7	11	6.6	6.1	4.8	4.0	4.8	103	25	14	14
18	.71	3.7	6.6	8.4	6.1	4.8	4.4	5.2	103	22	14	14
19	.85	3.4	7.9	6.6	5.6	4.8	4.0	12	130	20	14	14
20	1.5	4.0	6.1	6.1	5.6	5.2	4.0	20	166	19	14	14
21	3.1	4.8	5.6	6.1	5.6	4.8	4.0	43	204	17	14	14
22	4.8	4.8	6.1	5.6	5.6	4.8	4.0	62	212	16	14	14
23	6.1	4.8	5.6	5.6	5.2	5.2	4.4	113	235	16	14	14
24	6.1	4.8	5.2	5.2	6.1	5.6	4.8	370	220	14	14	14
25	5.6	4.8	5.2	5.2	5.6	5.2	4.8	305	188	12	14	14
26	6.1	4.8	5.2	5.2	7.0	4.8	4.8	243	177	9.8	14	14
27	5.6	4.8	4.8	5.2	7.5	4.8	4.8	190	177	17	14	14
28	4.4	4.8	4.8	5.2	7.9	4.8	4.4	204	190	16	14	14
29	4.0	4.8	4.8	5.2	------	4.8	4.8	458	190	13	14	15
30	4.4	4.8	4.4	5.2	------	4.4	4.4	555	173	14	14	15
31	4.4	------	4.4	5.2	------	4.8	------	590	------	15	14	------
TOTAL	66.95	133.5	164.9	169.3	171.5	164.4	133.2	3,247.8	11,487	982.8	435	422
MEAN	2.16	4.45	5.32	5.46	6.13	5.30	4.44	105	383	31.7	14.0	14.1
MAX	6.1	5.2	11	10	8.9	6.6	4.8	590	1,210	140	15	15
MIN	.46	3.4	4.4	4.0	5.2	4.4	4.0	4.4	103	9.8	14	14
AC-FT	133	265	327	336	340	326	264	6,440	22,780	1,950	863	837

CAL YR 1972 TOTAL 1,791.81 MEAN 4.90 MAX 13 MIN .46 AC-FT 3,550
WTR YR 1973 TOTAL 17,578.35 MEAN 48.2 MAX 1,210 MIN .46 AC-FT 34,870

11278300 CHERRY CREEK NEAR EARLY INTAKE, CALIF.

LOCATION.--Lat 37°53'40", long 119°57'42", in NW¼SE¼ sec.35, T.1 N., R.18 E., Tuolumne County, Stanislaus National Forest, 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.

PERIOD OF RECORD.--May 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,272.00 ft above mean sea level (levels by city and county of San Francisco).

AVERAGE DISCHARGE (since diversion to Dion R. Holm powerplant).--13 years (1960-73), 99.1 cfs (71,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,520 cfs June 2 (gage height, 7.58 ft); minimum daily, 5.5 cfs Oct. 6, 7.
Period of record: Maximum discharge, 16,500 cfs Feb. 1, 1963 (gage height, 14.50 ft), from rating curve extended above 4,600 cfs; minimum daily, 0.30 cfs Apr. 5, 6, 1964.

REMARKS.--Records good. Flow regulated by Cherry Lake 10 miles upstream (see sta 11277200) and Lake Eleanor 9.8 miles upstream (see sta 11277500). Diversion from Cherry Lake to Dion R. Holm powerplant began Aug. 1, 1960. Water is returned to creek 1.2 miles below station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	10	11	16	34	139	99	42	1,080	184	32	29
2	9.0	11	11	15	34	116	85	40	1,270	112	31	29
3	5.6	11	11	16	34	106	79	39	818	37	31	29
4	5.6	16	18	14	46	105	80	38	646	42	31	29
5	5.6	15	14	13	47	91	86	37	614	50	31	29
6	5.5	12	13	14	54	91	93	37	578	68	32	29
7	5.5	12	14	14	92	89	99	35	566	77	30	29
8	5.6	14	13	15	75	89	91	34	574	76	29	28
9	5.6	12	10	25	63	79	92	33	602	71	29	28
10	6.9	12	13	23	147	80	89	32	574	66	29	29
11	6.9	15	12	25	156	132	88	30	515	60	29	29
12	6.2	14	12	116	111	105	93	30	487	57	30	29
13	5.9	12	12	76	94	97	93	30	459	53	30	28
14	5.9	25	12	56	91	84	91	30	404	50	29	28
15	6.1	19	12	46	81	78	81	29	315	47	29	30
16	5.9	19	12	141	76	77	74	28	208	45	29	30
17	6.7	14	69	154	75	78	72	28	136	43	29	30
18	7.2	12	42	139	73	75	73	27	119	42	29	29
19	6.7	11	42	126	71	74	66	28	150	40	29	29
20	6.7	11	32	79	71	97	61	35	188	37	29	29
21	6.6	11	24	67	71	84	57	51	245	36	28	28
22	7.8	11	29	57	66	79	56	73	255	34	28	30
23	11	11	36	50	66	86	55	109	270	33	28	30
24	12	11	26	46	81	97	54	397	270	32	28	30
25	12	11	23	45	86	103	53	356	232	28	30	30
26	11	11	21	42	91	103	50	298	218	27	30	29
27	12	11	20	39	140	103	48	242	215	26	30	28
28	12	11	20	37	194	104	47	242	230	37	30	28
29	10	11	18	38	------	89	45	466	230	30	29	29
30	9.7	11	17	39	------	84	44	582	215	28	29	29
31	10	------	17	35	------	93	------	622	------	31	29	------
TOTAL	248.2	387	636	1,618	2,320	2,907	2,194	4,100	12,683	1,599	916	870
MEAN	8.01	12.9	20.5	52.2	82.9	93.8	73.1	132	423	51.6	29.5	29.0
MAX	15	25	69	154	194	139	99	622	1,270	184	32	30
MIN	5.5	10	10	13	34	74	44	27	119	26	28	28
AC-FT	492	768	1,260	3,210	4,600	5,770	4,350	8,130	25,160	3,170	1,820	1,730

CAL YR 1972 TOTAL 7,831.2 MEAN 21.4 MAX 70 MIN 5.5 AC-FT 15,530
WTR YR 1973 TOTAL 30,478.2 MEAN 83.5 MAX 1,270 MIN 5.5 AC-FT 60,450

11278400 CHERRY CREEK BELOW DION R. HOLM POWERHOUSE, NEAR MATHER, CALIF.

LOCATION (revised).--Lat 37°53'24", long 119°58'08", in NE¼NW¼ sec.2, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 600 ft upstream from mouth, 0.5 mile downstream from powerhouse, 0.8 mile northwest of Early Intake, and 6.2 miles west of Mather.

DRAINAGE AREA.--234 sq mi.

PERIOD OF RECORD.--March 1963 to current year. Prior to October 1965, published as "below Cherry powerhouse, near Mather."

GAGE.--Water-stage recorder. Altitude of gage is 2,150 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 663 cfs (480,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,300 cfs June 1 (gage height, 9.92 ft); minimum daily, 14 cfs Oct. 9, 15, 22.
Period of record: Maximum discharge, 8,530 cfs Dec. 24, 1964 (gage height, 13.55 ft), from rating curve extended above 3,200 cfs; minimum daily, 3.6 cfs Oct. 26, 27, 1964.

REMARKS.--Records good. Flow regulated by Cherry Lake 11 miles upstream (see sta 11277200) and Lake Eleanor 10 miles upstream (see sta 11277500). Prior to May 1971, Cherry Creek Canal diverted 2 miles upstream from station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	533	541	23	215	719	284	614	1,720	186	398	352
2	536	533	401	565	207	653	680	609	1,830	664	577	208
3	539	533	18	565	208	609	665	610	1,170	571	567	220
4	533	398	549	571	225	110	658	617	1,340	47	382	583
5	525	20	541	574	112	657	672	597	1,290	589	35	583
6	541	533	533	515	53	669	628	218	1,250	607	557	583
7	290	545	545	20	90	658	624	449	1,260	482	564	580
8	15	533	541	574	75	661	270	609	1,250	74	571	442
9	14	533	401	585	62	656	678	604	1,300	624	575	259
10	486	541	20	585	152	567	659	606	1,030	619	569	579
11	529	401	549	589	190	130	623	607	1,220	598	380	590
12	577	20	545	688	127	668	630	589	1,180	604	115	580
13	545	549	545	586	105	666	628	215	1,130	590	576	590
14	285	565	549	60	101	652	557	596	1,070	457	571	524
15	14	557	545	604	90	648	269	579	968	140	572	517
16	522	553	407	711	84	653	625	599	725	594	576	272
17	529	553	78	715	80	569	618	579	461	590	578	592
18	529	392	569	700	79	81	617	591	772	580	383	594
19	533	20	577	694	76	651	605	567	801	583	53	588
20	529	545	561	580	75	653	604	209	828	583	572	593
21	290	545	553	65	75	660	518	360	880	449	574	598
22	14	541	553	588	71	650	239	629	885	43	573	440
23	17	20	431	770	232	654	593	665	776	581	573	265
24	533	541	32	773	431	582	593	997	558	575	577	587
25	541	398	30	773	436	117	514	1,030	866	566	474	587
26	541	16	557	772	443	676	514	948	848	576	60	584
27	480	545	549	702	495	675	609	541	841	573	562	590
28	285	545	549	545	533	677	519	536	857	451	569	587
29	16	549	557	768	------	658	239	1,130	871	39	571	445
30	533	549	407	765	------	661	574	1,270	732	571	569	301
31	518	------	23	756	------	586	------	1,310	------	574	588	------
TOTAL	11,865	13,106	13,256	17,781	5,122	17,926	16,506	20,080	30,709	14,780	14,861	14,813
MEAN	383	437	428	574	183	578	550	648	1,024	477	479	494
MAX	577	565	577	773	533	719	680	1,310	1,830	664	588	598
MIN	14	16	18	20	53	81	239	209	461	39	35	208
AC-FT	23,530	26,000	26,290	35,270	10,160	35,560	32,740	39,830	60,910	29,320	29,480	29,380

CAL YR 1972 TOTAL 173,017 MEAN 473 MAX 743 MIN 14 AC-FT 343,200
WTR YR 1973 TOTAL 190,805 MEAN 523 MAX 1,830 MIN 14 AC-FT 378,500

11281000 SOUTH FORK TUOLUMNE RIVER NEAR OAKLAND RECREATION CAMP, CALIF.

LOCATION.--Lat 37°49'18", long 120°00'43", in SE¼SE¼ sec.29, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, 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.

PERIOD OF RECORD.--March 1923 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (from topographic map). Prior to Nov. 22, 1931, at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--50 years, 92.9 cfs (67,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,750 cfs Jan. 16 (gage height, 6.35 ft); minimum daily, 3.9 cfs Oct. 2.
Period of record: Maximum discharge, 11,900 cfs Dec. 23, 1955 (gage height, 10.9 ft, from floodmarks), from rating curve extended above 1,300 cfs on basis of slope-area measurements at gage heights 7.48 and 10.9 ft; minimum, 0.3 cfs Aug. 23, 1934.

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1445: 1923, 1925(M), 1926-28, 1929-30(M), 1932(M), 1935-36(M), 1937-38, 1943(M), 1943(M), 1945(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	9.3	12	24	45	232	130	260	363	37	13	8.0
2	3.9	9.3	11	24	30	185	120	275	288	36	13	8.0
3	4.1	9.3	13	28	24	164	115	312	248	34	13	8.0
4	4.1	13	23	18	85	157	112	290	228	33	13	8.2
5	4.2	14	14	17	92	138	113	240	228	32	13	8.2
6	4.4	13	14	19	97	143	130	214	218	30	13	8.2
7	4.4	12	15	20	203	138	164	236	212	30	13	8.2
8	4.2	10	12	28	130	135	172	272	203	28	13	8.2
9	4.7	10	9.8	30	112	123	188	345	187	28	13	8.0
10	6.6	27	14	28	471	118	183	372	159	26	13	7.6
11	7.9	19	13	44	446	185	197	420	146	25	13	8.0
12	8.0	14	12	103	258	144	214	452	138	23	13	7.9
13	8.2	12	12	111	196	132	216	436	125	22	12	7.6
14	8.4	79	11	91	172	120	185	432	111	22	12	7.2
15	8.3	35	12	61	146	115	162	460	94	22	8.5	7.2
16	8.8	55	13	614	129	109	151	488	89	21	8.3	7.3
17	11	26	77	316	118	106	162	516	83	21	8.5	7.4
18	13	19	123	280	108	103	181	500	78	20	6.6	7.4
19	12	16	108	206	102	102	167	540	73	20	6.6	7.4
20	11	14	107	126	94	126	164	411	72	20	6.7	7.4
21	14	13	74	111	89	120	162	354	67	19	7.0	7.4
22	12	12	70	87	85	115	178	384	62	19	7.2	7.4
23	10	11	69	69	80	120	210	375	58	18	7.2	7.4
24	9.4	11	48	63	102	130	258	363	55	17	7.3	7.3
25	9.1	12	40	60	129	160	298	315	52	17	7.4	7.3
26	9.0	12	37	55	159	197	354	292	49	16	7.7	7.3
27	8.8	12	34	48	293	169	384	290	48	15	7.9	7.2
28	8.8	13	34	51	430	160	387	354	45	14	8.0	7.3
29	8.8	13	21	50	------	138	360	360	41	14	8.0	7.2
30	8.6	12	21	50	------	128	292	327	39	14	8.0	7.2
31	8.8	------	26	47	------	132	------	378	------	13	7.9	------
TOTAL	248.5	536.9	1,099.8	2,879	4,425	4,344	6,109	11,263	3,859	706	308.8	228.4
MEAN	8.02	17.9	35.5	92.9	158	140	204	363	129	22.8	9.96	7.61
MAX	14	79	123	614	471	232	387	540	363	37	13	8.2
MIN	3.9	9.3	9.8	17	24	102	112	214	39	13	6.6	7.2
AC-FT	493	1,060	2,180	5,710	8,780	8,620	12,120	22,340	7,650	1,400	613	453

CAL YR 1972 TOTAL 17,561.1 MEAN 48.0 MAX 194 MIN 3.0 AC-FT 34,830
WTR YR 1973 TOTAL 36,007.4 MEAN 98.7 MAX 614 MIN 3.9 AC-FT 71,420

PEAK DISCHARGE (BASE, 900 CFS).--Jan. 16 (1600) 1,750 cfs (6.35 ft); Feb. 10 (0800) 1,010 cfs (5.32 ft).

11282000 MIDDLE TUOLUMNE RIVER AT OAKLAND RECREATION CAMP, CALIF.

LOCATION (revised).--Lat 37°49'42", long 120°00'38", in SW¼NW¼ sec.28, T.1 S., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank 1,000 ft downstream from Oakland Recreation Camp, 0.8 mile upstream from South Fork Tuolumne River, and 2.7 miles east of Buck Meadows Post Office.

DRAINAGE AREA.--73.5 sq mi.

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for October 1916, published in WSP 1315-A. Published as Middle Fork of Tuolumne River near Buck Meadows 1917-32 and as "near Buck Meadows" 1933-40.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (from topographic map).

AVERAGE DISCHARGE.--57 years, 74.6 cfs (54,050 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs May 19 (gage height, 6.13 ft); minimum daily, 1.7 cfs Oct. 1-3, 7, Sept. 14-19, 21, 29.
Period of record: Maximum discharge, 4,920 cfs Dec. 23, 1955 (gage height, 11.75 ft from flood profile, 11.05 ft, from floodmarks inside gage well), from rating curve extended above 2,300 cfs on basis of slope-area measurement of maximum flow; no flow Sept. 4-14, 1924, Aug. 12 to Oct. 5, 1931, Sept. 11-17, 1934, Sept. 7-14, 1961.

REMARKS.--Records good. No regulation but small diversion above station for irrigation. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1919(M), 1938(M), 1951(P). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	3.4	6.5	15	25	96	65	211	596	43	7.2	2.5
2	1.7	3.7	6.2	15	25	78	59	225	489	40	7.2	2.9
3	1.7	3.8	7.2	18	27	72	55	263	418	37	6.7	3.2
4	1.8	7.0	11	11	42	71	55	255	382	34	8.0	2.8
5	1.8	8.2	6.4	8.6	34	62	58	207	398	32	7.0	2.5
6	1.8	6.5	8.1	10	66	74	66	180	370	31	10	2.4
7	1.7	6.0	7.9	12	90	69	78	201	382	29	17	2.2
8	1.8	7.3	6.8	17	56	66	80	265	368	28	15	2.0
9	2.0	5.9	5.4	40	46	60	89	335	340	27	11	2.0
10	2.6	5.2	7.5	27	271	57	89	372	293	25	8.1	1.9
11	3.7	8.9	8.1	31	280	85	96	425	265	23	7.2	1.8
12	4.0	7.0	7.3	101	148	66	100	468	255	22	7.0	1.8
13	4.1	6.0	7.0	62	105	62	106	448	227	21	6.4	1.8
14	4.2	34	6.8	46	94	54	92	465	198	20	5.6	1.7
15	4.1	15	8.1	36	78	51	83	498	165	20	5.1	1.7
16	4.1	19	7.5	257	66	50	78	531	153	19	4.8	1.7
17	5.0	11	86	141	59	50	84	599	144	18	4.5	1.7
18	5.9	8.6	51	151	54	48	95	611	135	17	4.3	1.7
19	4.8	8.1	64	102	51	50	89	743	128	17	4.0	1.7
20	5.9	7.9	62	55	50	87	89	590	120	17	3.6	1.8
21	5.9	6.5	43	46	48	62	88	489	110	16	4.2	1.7
22	5.6	7.2	43	36	45	59	100	525	101	15	3.8	1.8
23	5.6	6.3	38	33	43	65	119	528	89	14	3.8	2.0
24	5.0	6.0	30	32	71	71	148	537	83	13	3.2	2.1
25	4.6	7.2	25	31	64	81	182	442	76	12	3.2	2.1
26	4.2	6.7	23	28	97	97	221	425	71	11	3.3	2.1
27	4.0	6.8	22	27	148	86	259	430	67	9.6	3.7	2.0
28	3.8	7.3	22	27	175	81	279	540	62	8.6	4.3	1.8
29	3.7	6.8	13	27	------	70	279	579	53	8.2	4.3	1.7
30	3.7	6.4	13	27	------	65	231	531	47	8.6	3.6	1.8
31	3.7	------	16	26	------	67	------	622	------	7.7	4.9	------
TOTAL	114.2	249.7	668.8	1,495.6	2,358	2,112	3,512	13,540	6,585	643.7	192.0	60.9
MEAN	3.68	8.32	21.6	48.2	84.2	68.1	117	437	220	20.8	6.19	2.03
MAX	5.9	34	86	257	280	97	279	743	596	43	17	3.2
MIN	1.7	3.4	5.4	8.6	25	48	55	180	47	7.7	3.2	1.7
AC-FT	227	495	1,330	2,970	4,680	4,190	6,970	26,860	13,060	1,280	381	121

CAL YR 1972 TOTAL 16,324.27 MEAN 44.6 MAX 271 MIN .60 AC-FT 32,380
WTR YR 1973 TOTAL 31,531.90 MEAN 86.4 MAX 743 MIN 1.7 AC-FT 62,540

PEAK DISCHARGE (BASE, 760 CFS).--May 19 (0530) 1,020 cfs (6.13 ft); May 29 (0100) 804 cfs (5.58 ft).

11283100 LILY CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°08'41", long 119°53'59", (unsurveyed), in T.3 N., R.19 E., Tuolumne County, Stanislaus National Forest, on left bank 1,500 ft downstream from Mud Lake, and 5.7 miles southeast of Pinecrest.

DRAINAGE AREA.--11.9 sq mi.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,990 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 44.8 cfs (32,460 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 738 cfs May 18 (gage height, 7.59 ft); minimum daily, 0.06 cfs Oct. 1.
Period of record: Maximum discharge, 1,700 cfs Dec. 23, 1964 (gage height, 10.77 ft), from rating curve extended above 420 cfs; no flow many days in 1970.
Flood of Feb. 1, 1963, reached a stage of 11.7 ft, from floodmarks (discharge, 2,030 cfs).

REMARKS.--Records good except those for the winter months, which are fair. Small regulation by Y-Meadow Reservoir (capacity, 180 acre-ft). No diversions above station. See schematic diagram of Tuolumne River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.36	14	12	8.0	11	8.8	117	365	14	.46	.20
2	.07	.36	13	12	8.2	9.3	8.0	153	216	11	.46	.20
3	.07	.36	11	11	8.0	8.9	7.8	170	182	8.8	.39	.20
4	.09	1.1	9.0	6.1	7.2	9.5	11	136	179	7.1	.39	.20
5	.11	2.5	6.0	6.2	6.6	7.2	16	72	189	6.6	.42	.18
6	.11	2.1	5.9	6.8	7.0	7.5	50	79	191	5.8	.46	.16
7	.14	1.5	5.8	7.0	8.6	8.0	60	150	180	4.8	.39	.16
8	.16	2.7	5.8	7.3	7.5	8.4	69	208	187	4.3	.36	.16
9	.22	2.9	5.8	7.6	7.2	8.6	77	240	170	4.0	.36	.15
10	.46	2.7	6.7	8.0	6.8	8.9	81	259	138	3.4	.36	.15
11	1.1	3.2	6.3	8.9	8.2	8.0	84	289	129	2.7	.33	.16
12	.50	3.5	6.1	20	9.0	8.5	85	302	117	2.3	.30	.39
13	.39	3.9	6.1	17	9.4	9.0	83	322	101	1.9	.30	.46
14	.39	3.2	6.1	14	8.5	9.2	52	345	77	1.6	.28	.50
15	.46	5.6	6.1	16	8.6	8.7	44	327	58	1.4	.28	.56
16	.46	5.3	6.1	14	8.5	8.2	36	354	58	1.4	.28	.62
17	1.3	5.4	10	10	8.3	7.8	54	378	61	1.4	.26	.62
18	1.4	5.6	40	11	8.1	6.9	61	386	61	1.2	.24	.62
19	1.7	5.4	53	11	8.5	10	53	410	64	1.0	.26	.62
20	3.0	5.1	45	8.2	8.7	9.5	51	275	64	.88	.26	.56
21	1.7	5.1	39	8.9	8.9	8.2	56	249	64	.80	.26	.50
22	.98	5.6	61	7.3	8.6	6.0	90	238	57	.74	.24	.50
23	.80	5.7	37	7.6	8.4	6.1	135	267	49	.74	.23	.68
24	.68	6.6	27	7.8	9.1	7.3	172	227	41	.68	.22	.74
25	.62	8.8	22	8.4	9.9	7.8	184	220	41	.56	.22	.68
26	.46	14	21	7.7	9.6	8.0	220	187	44	.50	.26	.62
27	.42	15	21	7.2	11	9.3	240	229	45	.50	.30	.56
28	.42	16	18	8.0	11	9.9	222	295	32	.50	.26	.56
29	.42	15	16	8.4	------	8.0	170	318	25	.56	.22	.50
30	.39	14	14	8.1	------	9.0	119	314	19	.50	.24	.56
31	.39	------	12	7.8	------	11	------	249	------	.46	.22	------
TOTAL	19.47	168.58	555.8	301.3	237.4	263.7	2,595.6	7,765	3,204	92.12	9.51	12.77
MEAN	.63	5.62	17.9	9.72	8.48	8.51	86.7	250	107	2.97	.31	.43
MAX	3.0	16	61	20	11	11	240	410	365	14	.46	.74
MIN	.06	.36	5.8	6.1	6.6	6.0	7.8	72	19	.46	.22	.15
AC-FT	39	334	1,100	598	471	523	5,160	15,400	6,360	183	19	25

CAL YR 1972 TOTAL 10,941.23 MEAN 29.9 MAX 189 MIN .06 AC-FT 21,700
WTR YR 1973 TOTAL 15,229.25 MEAN 41.7 MAX 410 MIN .06 AC-FT 30,210

PEAK DISCHARGE (BASE, 160 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-26	2000	5.83	369	5-29	2200	6.20	440
5-18	2130	7.59	738				

11283200 BELL CREEK NEAR PINECREST, CALIF.

LOCATION.--Lat 38°09'46", long 119°56'32", in NE¼NE¼ sec.36, T.4 N., R.18 E., Tuolumne County, on right bank 1,400 ft downstream from Bell Meadows, and 3 miles southeast of Pinecrest.

DRAINAGE AREA.--9.11 sq mi.

PERIOD OF RECORD.--September 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,450 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 27.2 cfs (19,710 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 312 cfs May 17 (gage height, 5.27 ft); minimum daily, 0.04 cfs Sept. 9.
Period of record: Maximum discharge, 934 cfs Dec. 23, 1964 (gage height, 7.54 ft), from rating curve extended above 160 cfs on basis of slope-area measurement at gage height 8.79 ft; no flow at times in most years.
Flood of Feb. 1, 1963, reached a stage of 8.79 ft, from floodmarks (discharge, 1,410 cfs), from slope-area measurement of maximum flow.

REMARKS.--Records good except those for winter months, which are fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.30	3.9	5.0	7.2	10	8.2	94	177	15	.85	.09
2	.20	.29	3.8	4.7	7.5	8.6	7.4	113	128	13	.80	.09
3	.13	.28	2.8	4.4	7.4	8.1	7.2	118	113	12	.73	.08
4	.11	1.0	1.9	4.1	7.1	8.5	10	99	106	10	.72	.07
5	.13	2.2	.84	3.9	5.9	6.6	14	70	108	9.6	.69	.06
6	.12	2.3	.88	4.1	6.6	6.8	36	74	108	8.6	.73	.05
7	.14	1.8	1.3	4.1	7.9	7.2	47	100	106	7.5	.65	.05
8	.15	1.6	.90	4.3	6.8	7.5	51	130	107	6.8	.57	.06
9	.17	1.8	.71	4.7	6.7	7.8	56	145	100	6.1	.55	.04
10	.54	1.3	.92	5.0	6.2	8.0	54	160	88	5.4	.53	.05
11	.80	1.3	.70	6.4	7.3	7.3	62	177	85	4.8	.47	.07
12	.35	1.8	.73	20	8.6	7.6	71	189	75	4.2	.43	.06
13	.25	1.6	.78	16	8.4	8.0	60	188	64	3.7	.40	.06
14	.33	3.8	.95	14	7.8	8.3	44	196	52	3.3	.35	.06
15	.40	6.2	1.1	15	7.7	8.1	41	191	43	3.0	.32	.07
16	.51	7.8	1.3	13	7.6	7.6	37	212	39	2.8	.31	.07
17	1.2	5.8	8.0	9.4	7.5	7.1	49	223	38	2.6	.26	.07
18	1.6	3.4	20	10	7.3	6.5	50	215	40	2.5	.24	.08
19	1.6	2.3	38	10	7.6	9.0	46	206	40	2.3	.23	.07
20	2.9	2.4	28	7.8	7.8	8.7	45	172	41	2.1	.20	.09
21	2.0	2.3	22	8.2	8.0	7.7	52	155	42	2.0	.19	.09
22	.95	2.3	25	7.0	7.9	5.5	68	141	38	1.8	.15	.10
23	.72	2.6	17	7.2	7.7	5.7	94	151	33	1.7	.15	.15
24	.60	2.9	13	7.5	7.8	6.5	116	138	31	1.6	.15	.15
25	.54	4.0	10	8.2	8.8	6.9	129	132	30	1.4	.17	.13
26	.42	6.5	9.4	7.7	9.0	7.4	147	120	33	1.3	.22	.12
27	.39	6.1	8.6	6.4	9.7	8.2	158	132	32	1.2	.28	.10
28	.36	4.5	8.0	7.6	9.8	8.8	150	159	27	1.2	.21	.08
29	.33	3.9	6.9	7.8	------	7.3	118	171	22	1.1	.15	.09
30	.28	4.1	6.2	7.5	------	8.2	94	169	18	.97	.12	.09
31	.28	------	5.6	7.1	------	9.9	------	155	------	.87	.09	------
TOTAL	18.62	88.47	249.21	248.1	215.6	239.4	1,921.8	4,695	1,964	140.44	11.91	2.44
MEAN	.60	2.95	8.04	8.00	7.70	7.72	64.1	151	65.5	4.53	.38	.081
MAX	2.9	7.8	38	20	9.8	10	158	223	177	15	.85	.15
MIN	.11	.28	.70	3.9	5.9	5.5	7.2	70	18	.87	.09	.04
AC-FT	37	175	494	492	428	475	3,810	9,310	3,900	279	24	4.8

CAL YR 1972 TOTAL 7,222.84 MEAN 19.7 MAX 114 MIN .05 AC-FT 14,330
WTR YR 1973 TOTAL 9,794.99 MEAN 26.8 MAX 223 MIN .04 AC-FT 19,430

PEAK DISCHARGE (BASE, 125 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-26	1915	4.76	216	6-1	0415	4.93	246
5-17	1745	5.27	312				

11283500 CLAVEY RIVER NEAR BUCK MEADOWS, CALIF.

LOCATION.--Lat 37°54'02", long 120°04'15", in SE¼NE¼ sec.35, T.1 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 300 ft upstream from Forest Service road bridge, 1.7 miles downstream from Quilty Creek, and 6 miles north of Buck Meadows Post Office.

DRAINAGE AREA.--144 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,374.08 ft above mean sea level.

AVERAGE DISCHARGE.--14 years, 248 cfs (179,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,250 cfs May 19 (gage height, 10.76 ft); minimum daily, 8.0 cfs Oct. 1, 7.
Period of record: Maximum discharge, 19,200 cfs Feb. 1, 1963 (gage height, 21.40 ft), from rating curve extended above 2,000 cfs on basis of slope-area measurement of maximum flow; minimum, 3.4 cfs Sept. 7, 8, 1961.

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	15	39	73	142	503	327	998	951	98	23	15
2	8.2	14	37	75	141	446	305	1,060	751	89	23	15
3	8.6	14	40	79	145	419	301	1,170	611	80	22	15
4	9.1	38	59	50	190	386	320	1,060	567	71	22	15
5	8.7	37	34	49	178	347	371	814	551	66	23	14
6	8.4	24	30	58	245	346	469	732	552	62	23	14
7	8.0	24	30	53	455	325	616	936	529	59	23	14
8	8.3	32	30	69	329	316	669	1,110	497	55	21	13
9	8.8	25	30	95	266	297	743	1,270	490	52	21	13
10	13	24	32	100	566	308	747	1,330	428	49	21	13
11	18	34	33	134	550	411	813	1,500	380	46	20	13
12	14	28	34	620	422	354	944	1,560	365	43	20	13
13	12	25	33	483	359	338	923	1,580	329	41	19	13
14	13	90	31	324	336	309	696	1,630	299	40	19	12
15	15	53	32	260	300	296	645	1,540	234	39	18	13
16	16	83	33	946	271	298	600	1,620	222	38	17	13
17	17	50	278	728	250	303	676	1,700	207	37	16	13
18	16	41	478	601	239	290	728	1,540	209	36	16	13
19	16	38	464	503	233	292	673	1,640	204	35	16	13
20	18	34	387	363	235	321	651	1,240	201	34	16	13
21	19	31	256	313	240	295	648	1,070	193	33	16	13
22	19	32	314	255	232	284	750	1,000	184	32	15	13
23	16	28	270	228	228	294	928	976	172	31	15	14
24	15	28	188	209	283	313	1,150	965	150	30	16	14
25	13	30	143	197	297	339	1,270	831	144	29	16	14
26	13	32	126	176	336	351	1,450	736	140	28	17	14
27	13	38	120	164	432	366	1,570	736	144	27	17	13
28	13	43	113	160	603	357	1,540	886	134	26	17	13
29	13	42	82	160	------	330	1,350	936	118	25	16	12
30	12	40	90	162	------	314	1,090	1,030	109	24	15	15
31	12	------	81	150	------	324	------	864	------	24	15	------
TOTAL	402.1	1,067	3,947	7,837	8,503	10,472	23,963	36,060	10,065	1,379	574	405
MEAN	13.0	35.6	127	253	304	338	799	1,163	336	44.5	18.5	13.5
MAX	19	90	478	946	603	503	1,570	1,700	951	98	23	15
MIN	8.0	14	30	49	141	284	301	732	109	24	15	12
AC-FT	798	2,120	7,830	15,540	16,870	20,770	47,530	71,530	19,960	2,740	1,140	803

CAL YR 1972 TOTAL 59,690.9 MEAN 163 MAX 651 MIN 7.1 AC-FT 118,400
WTR YR 1973 TOTAL 104,674.1 MEAN 287 MAX 1,700 MIN 8.0 AC-FT 207,600

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1745	10.36	2,010	5-19	0200	10.76	2,250
4-26	2300	10.23	1,940	5-30	0245	9.15	1,420

11284400 BIG CREEK ABOVE WHITES GULCH, NEAR GROVELAND, CALIF.

LOCATION.--Lat 37°50'31", long 120°11'02", in SW¼NE¼ sec.23, T.1 S., R.16 E., Tuolumne County, on right bank 500 ft upstream from Whites Gulch, and 2.5 miles east of Groveland.

DRAINAGE AREA.--16.4 sq mi.

PERIOD OF RECORD.--May 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,561.79 ft above mean sea level (levels by Boise-Cascade Corp).

EXTREMES.--Current year: Maximum discharge, 690 cfs Feb. 11 (gage height, 5.01 ft); no flow for several months.
Period of record: Maximum discharge, 1,230 cfs Jan. 16, 1970 (gage height, 5.80 ft); no flow many days in each year.
Flood of December 1964 reached a stage of 6.4 ft, from floodmarks (discharge not determined).

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.09	.52	3.9	35	22	3.4	1.2	.06		
2		0	.08	.51	3.5	23	18	3.2	1.2	.05		
3		0	.08	.56	4.3	27	16	3.2	1.0	.05		
4		.03	.19	.47	15	45	15	3.3	.88	.04		
5		0	.16	.40	9.8	29	14	3.4	.80	.04		
6		0	.15	.37	41	45	12	3.2	.74	.03		
7		0	.17	.34	77	44	11	3.1	.66	.03		
8		0	.19	.81	31	37	10	2.9	.60	.02		
9		0	.15	21	20	26	9.6	2.8	.56	.02		
10		.02	.14	29	248	24	9.1	2.7	.49	.02		
11		.13	.13	18	468	42	8.4	2.4	.45	.01		
12		.14	.12	126	218	26	7.8	2.3	.41	.01		
13		.14	.11	27	95	23	9.7	2.2	.42	.01		
14		3.2	.10	11	86	19	10	2.2	.48	.01		
15		1.3	.11	7.1	70	16	8.7	2.1	.47	.01		
16		1.4	.13	177	39	14	8.4	2.0	.42	.01		
17		.54	17	88	26	13	7.7	1.9	.41	.01		
18		.24	11	62	20	12	8.0	1.8	.37	.01		
19		.16	8.4	47	16	11	6.8	1.7	.29	0		
20		.12	4.2	20	13	51	6.2	1.6	.25	0		
21		.11	2.2	14	12	38	5.7	1.4	.20	0		
22		.11	1.9	9.7	9.9	41	5.3	1.4	.16	0		
23		.10	1.6	7.1	8.6	48	5.1	1.3	.15	0		
24		.09	1.1	5.9	17	46	4.9	1.3	.15	0		
25		.09	.85	5.4	14	44	4.6	1.4	.12	0		
26		.09	.75	5.1	27	78	4.4	1.3	.11	0		
27		.09	.73	4.0	43	47	4.1	1.1	.10	0		
28		.09	.98	3.6	75	37	3.9	1.1	.09	0		
29		.09	.79	4.4	------	26	3.9	.97	.07	0		
30		.09	.64	6.3	------	23	3.9	.95	.07	0		
31		------	.57	4.7	------	29	------	.97	------	0		------
TOTAL	0	8.37	54.81	707.28	1,711.0	1,019	264.2	64.59	13.32	.44	0	0
MEAN	0	.28	1.77	22.8	61.1	32.9	8.81	2.08	.44	.014	0	0
MAX	0	3.2	17	177	468	78	22	3.4	1.2	.06	0	0
MIN	0	0	.08	.34	3.5	11	3.9	.95	.07	0	0	0
AC-FT	0	17	109	1,400	3,390	2,020	524	128	26	.9	0	0

CAL YR 1972 TOTAL 555.49 MEAN 1.52 MAX 94 MIN 0 AC-FT 1,100
WTR YR 1973 TOTAL 3,843.01 MEAN 10.5 MAX 468 MIN 0 AC-FT 7,620

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0830	3.69	190	2-11	0615	5.01	690
1-16	1615	4.63	498				

11284500 BIG CREEK NEAR GROVELAND, CALIF.

LOCATION.--Lat 37°51'30", long 120°12'19", in NE¼NW¼ sec.15, T.1 S., R.16 E., Tuolumne County, on right bank 0.4 mile downstream from Pine Mountain Dam, and 1.9 miles northeast of Groveland.

DRAINAGE AREA.--25.0 sq mi.

PERIOD OF RECORD.--October 1931 to September 1933, July 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,425 ft (from topographic map). Prior to Oct. 1, 1969, at site 1,700 ft upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents in Pine Mountain Lake).--16 years, 11.8 cfs (8,550 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,100 cfs Feb. 11 (gage height, 4.56 ft), from rating curve extended as explained below; minimum daily, 0.70 cfs on several days in July to September.
Period of record: Maximum discharge, 4,530 cfs Feb. 1, 1963 (gage height, 7.71 ft, site and datum then in use), from rating curve extended above 1,500 cfs on basis of slope-area measurement of maximum flow; no flow for several months in most years. Maximum discharge since construction of Pine Mountain Dam in 1969, 1,100 cfs Feb. 11, 1973 (gage height, 4.56 ft), from rating curve extended above 340 cfs on basis of slope-area measurement of maximum flow; minimum daily, 0.01 cfs many days in 1970-71.
Flood of December 1955 reached a stage of 7.6 ft, from floodmarks, at site 1,700 ft upstream at different datum (discharge, 4,300 cfs).

REMARKS.--Records good. Flow regulated by Pine Mountain Lake beginning Oct. 15, 1969 (capacity, 7,700 acre-ft). Some diversion for irrigation of golf course. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.83	.83	8.0	.91	.98	56	37	4.2	.80	.75	.76	.74
2	.83	.84	8.0	.91	.97	38	30	4.4	.81	.74	.76	.74
3	.84	.87	8.0	.91	1.1	45	25	3.5	.82	.74	.77	.75
4	.85	1.4	5.8	.91	1.3	78	23	3.7	.77	.74	.77	.74
5	.83	.91	.91	.91	.97	49	21	4.2	.76	.73	.77	.73
6	.83	.88	.92	.91	2.1	69	20	4.6	.75	.74	.77	.74
7	.84	.98	.92	.91	90	71	18	3.6	.84	.72	.76	.74
8	.86	.91	.91	1.1	53	62	17	3.5	.84	.73	.76	.74
9	.89	.91	.91	1.3	37	45	16	3.4	.84	.73	.76	.71
10	.92	.95	.91	.96	384	44	15	3.2	.83	.70	.76	.70
11	.87	1.6	.91	1.9	786	84	14	2.9	.83	.70	.76	.70
12	.85	.91	.91	2.0	354	48	13	2.9	.83	.70	.76	.71
13	.83	1.4	.91	1.1	142	41	16	3.1	.84	.70	.76	.73
14	.85	2.2	.91	.97	128	34	17	2.5	.83	.70	.76	.74
15	.87	1.3	.91	1.0	103	26	14	2.4	.79	.71	.79	.74
16	.88	1.1	.91	260	62	23	14	2.2	.79	.74	.74	.73
17	.83	.93	1.8	166	42	21	13	2.1	.79	.75	.74	.72
18	.83	.91	.93	103	30	20	13	2.0	.79	.75	.74	.73
19	.83	.91	1.2	81	26	23	11	1.7	.79	.75	.74	.71
20	.83	.91	.91	35	21	108	11	1.3	.79	.76	.73	.70
21	.83	.91	.91	23	19	74	9.4	.93	.79	.76	.73	.70
22	.83	6.2	.96	17	17	74	8.9	.93	.79	.76	.70	.71
23	.83	14	.91	14	16	74	7.6	.85	.79	.76	.70	.75
24	.86	11	.91	11	28	69	7.6	.88	.79	.76	.71	.75
25	.91	7.6	.91	11	24	64	7.8	.88	.79	.76	.71	.75
26	.91	7.6	.91	11	45	108	6.2	.98	.79	.76	.74	.74
27	.91	7.6	.94	9.3	69	70	6.3	1.1	.73	.75	.74	.73
28	.91	7.6	.93	7.6	107	58	6.8	.96	.75	.75	.73	.70
29	.91	8.0	.91	9.9	------	43	5.5	.80	.74	.75	.74	.70
30	.91	8.0	.91	64	------	36	5.2	.85	.74	.75	.73	.72
31	.84	------	.91	98	------	58	------	.83	------	.76	.73	------
TOTAL	26.64	100.16	55.69	937.50	2,590.42	1,713	429.3	71.39	23.83	22.90	23.12	21.79
MEAN	.86	3.34	1.80	30.2	92.5	55.3	14.3	2.30	.79	.74	.75	.73
MAX	.92	14	8.0	260	786	108	37	4.6	.84	.76	.79	.75
MIN	.83	.83	.91	.91	.97	20	5.2	.80	.73	.70	.70	.70
AC-FT	53	199	110	1,860	5,140	3,400	852	142	47	45	46	43
(a)	6,550	6,610	6,800	7,630	7,870	7,870	7,820	7,800	7,670	7,320	7,030	6,840

CAL YR 1972 TOTAL 895.93 MEAN 2.45 MAX 62 MIN .58 MEAN b 1.49 AC-FT b 1,080
WTR YR 1973 TOTAL 6,015.74 MEAN 16.5 MAX 786 MIN .70 MEAN b 16.7 AC-FT b 12,080

a Contents, in acre-feet, of Pine Mountain Lake at end of month.
b Adjusted for change in contents of Pine Mountain Lake.

11284700 NORTH FORK TUOLUMNE RIVER NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'56", long 120°05'55", in NW¼SW¼ sec.22, T.3 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 0.6 mile upstream from small tributary, 1.5 miles east of Long Barn, and 3.8 miles upstream from Wrights Creek.

DRAINAGE AREA.--23.1 sq mi.

PERIOD OF RECORD.--August 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 28.2 cfs (20,430 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 350 cfs Jan. 16 (gage height, 4.86 ft, backwater from ice); minimum daily, 0.60 cfs Sept. 13.
Period of record: Maximum discharge, 1,670 cfs Jan. 21, 1969 (gage height, 7.61 ft), from rating curve extended above 650 cfs on basis of slope-area measurement at gage height 9.8 ft; minimum daily, 0.2 cfs Sept. 18-25, 1962.
Flood of Dec. 23, 1955, reached a stage of 9.8 ft, from floodmarks (discharge, 2,560 cfs by slope-area measurement).

REMARKS.--Records good except those for December to February, which are fair. No storage or diversion above station. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.76	1.3	3.3	8.2	19	76	51	113	35	4.8	1.2	.91
2	.82	1.2	4.5	8.4	19	66	46	110	31	4.7	1.2	.92
3	.80	1.2	2.8	8.7	20	61	45	112	27	4.0	1.1	.91
4	.75	8.5	3.3	5.4	22	57	47	110	25	3.2	1.1	.73
5	.83	4.4	3.8	5.5	23	52	52	104	22	3.2	1.1	.67
6	.75	2.5	4.2	6.4	25	51	65	87	20	3.2	1.1	.64
7	.75	3.7	4.3	6.0	60	50	76	86	18	3.1	1.1	.64
8	.83	3.7	3.8	7.6	44	47	79	92	16	3.3	1.0	.64
9	.99	2.5	3.5	10	36	44	87	101	15	3.0	.99	.61
10	1.7	2.5	4.4	11	75	49	93	108	14	3.1	.94	.61
11	1.7	3.7	4.2	14	72	61	102	122	13	2.8	.91	.62
12	1.4	2.7	3.8	63	59	54	112	132	12	2.6	.86	.68
13	1.3	3.7	3.6	61	45	50	114	134	12	2.5	.81	.60
14	1.4	14	3.4	39	36	45	96	139	11	2.5	.80	.62
15	1.9	9.5	3.5	32	34	43	89	138	11	2.5	.74	.63
16	1.7	11	3.6	121	33	42	82	132	11	2.5	.70	.62
17	1.8	6.0	35	98	32	42	87	131	9.7	2.5	.68	.64
18	1.8	4.9	52	82	32	40	89	118	8.4	2.5	.63	.66
19	1.8	4.6	51	66	32	41	83	107	8.0	2.3	.64	.68
20	1.9	3.9	41	49	33	44	78	92	7.4	2.3	.62	.67
21	1.6	3.5	28	40	33	39	76	80	7.0	2.3	.62	.70
22	1.4	3.2	34	33	31	39	80	73	6.8	2.2	.65	.79
23	1.3	4.7	29	30	31	40	91	67	6.7	2.1	.63	.81
24	1.3	3.6	22	28	37	43	109	62	6.4	2.0	.66	.92
25	1.3	2.7	16	26	43	48	124	58	6.2	1.9	.73	.98
26	1.3	2.7	14	23	48	50	136	50	5.9	1.8	.76	.87
27	1.3	2.7	13	22	62	52	152	44	6.2	1.6	.85	.84
28	1.2	2.6	12	21	89	51	153	41	5.8	1.5	.92	.78
29	1.3	2.5	9.2	21	------	47	140	39	5.3	1.4	.81	.75
30	.99	3.4	9.8	20	------	46	127	38	5.0	1.4	.75	.70
31	.99	------	9.0	20	------	51	------	36	------	1.3	.70	------
TOTAL	39.66	127.1	435.0	986.2	1,125	1,521	2,761	2,856	387.8	80.1	26.30	21.84
MEAN	1.28	4.24	14.0	31.8	40.2	49.1	92.0	92.1	12.9	2.58	.85	.73
MAX	1.9	14	52	121	89	76	153	139	35	4.8	1.2	.98
MIN	.75	1.2	2.8	5.4	19	39	45	36	5.0	1.3	.62	.60
AC-FT	79	252	863	1,960	2,230	3,020	5,480	5,660	769	159	52	43

CAL YR 1972 TOTAL 5,301.47 MEAN 14.5 MAX 61 MIN .40 AC-FT 10,520
WTR YR 1973 TOTAL 10,367.00 MEAN 28.4 MAX 153 MIN .60 AC-FT 20,560

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-18	unknown	4.11	171	4-27	2145	4.10	170
1-16	unknown	4.86	350	5-14	1830	4.05	160

11287500 DON PEDRO RESERVOIR NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°42'06", long 120°25'16", in NE¼SW¼ sec.3, T.3 S., R.14 E., Tuolumne County, at New Don Pedro Dam on Tuolumne River, 500 ft downstream from Mexican Gulch, and 3.4 miles northeast of La Grange.

DRAINAGE AREA.--1,533 sq mi.

PERIOD OF RECORD.--September 1923 to current year. 1923-24 (year-end contents only) and October 1924 to September 1930 monthend contents, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Turlock Irrigation District). Prior to Feb. 1, 1941, nonrecording gage at site 1.5 miles upstream at same datum. Feb. 2, 1941, to Nov. 3, 1970, water-stage recorder at site 1.5 miles upstream at same datum. Nov. 4, 1970, to Apr. 26, 1972, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 1,176,000 acre-ft June 18 (elevation, 749.7 ft); minimum, 341,200 acre-ft Oct. 31, Nov. 1 (elevation, 608.9 ft).
Period of record: Maximum contents, 1,176,000 acre-ft June 18, 1973 (elevation, 749.7 ft); minimum, 29,200 acre-ft Sept. 1-3, 5, 1934; minimum elevation, 475.0 ft Sept. 1, 2, 1934. Minimum since construction of New Don Pedro Dam in 1970 under normal operations, 340,400 acre-ft Oct. 28, 29, 1971 (elevation, 608.7 ft).

REMARKS.--Reservoir is formed by earthfill dam completed June 23, 1971; storage began Nov. 3, 1970. Total capacity, 2,030,000 acre-ft at elevation 830.0 ft (top of uncontrolled spillway), of which 309,000 acre-ft below elevation 600.0 ft (mutually agreed-upon minimum) is not available for release. Water passes through powerplant at dam and down Tuolumne River to La Grange Dam, 2.5 miles downstream, where it is diverted into Turlock and Modesto Canals for irrigation. This reservoir is operated jointly by Turlock and Modesto Irrigation Districts. Prior to June 1971 reservoir was formed by a concrete gravity-type dam completed Jan. 1, 1923, capacity, 290,400 acre-ft. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Tuolumne River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

550	158,700	650	517,400	770	1,359,000
570	212,900	680	679,000	800	1,669,000
590	274,800	710	869,700	830	2,030,000
620	384,100	740	1,095,000		

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	361.0	341.0	357.0	412.0	543.0	707.0	878.0	964.0	1,063	1,174	1,050	955.0
2	359.0	342.0	359.0	413.0	543.0	714.0	880.0	964.0	1,069	1,172	1,048	955.0
3	357.0	342.0	360.0	415.0	547.0	719.0	883.0	966.0	1,076	1,171	1,043	954.0
4	356:0	343.0	360.0	417.0	549.0	726.0	886.0	966.0	1,083	1,167	1,038	950.0
5	354.0	344.0	362.0	418.0	551.0	730.0	888.0	966.0	1,088	1,163	1,034	948.0
6	353.0	343.0	361.0	420.0	553.0	736.0	890.0	966.0	1,093	1,160	1,030	946.0
7	352.0	343.0	362.0	422.0	558.0	742.0	894.0	966.0	1,098	1,156	1,027	943.0
8	352.0	343.0	364.0	422.0	561.0	748.0	898.0	966.0	1,105	1,152	1,024	940.0
9	350.0	344.0	365.0	426.0	564.0	754.0	900.0	968.0	1,115	1,148	1,023	939.0
10	348.0	343.0	366.0	430.0	580.0	760.0	904.0	970.0	1,128	1,144	1,020	937.0
11	348.0	345.0	366.0	435.0	607.0	765.0	907.0	974.0	1,137	1,139	1,017	934.0
12	347.0	346.0	367.0	447.0	622.0	770.0	910.0	979.0	1,146	1,135	1,016	932.0
13	346.0	345.0	368.0	453.0	630.0	776.0	914.0	984.0	1,154	1,131	1,012	930.0
14	346.0	346.0	368.0	456.0	638.0	781.0	919.0	988.0	1,160	1,127	1,008	930.0
15	346.0	347.0	369.0	459.0	634.0	786.0	923.0	992.0	1,168	1,123	1,005	928.0
16	345.0	348.0	370.0	468.0	648.0	791.0	926.0	997.0	1,173	1,119	1,002	928.0
17	345.0	349.0	374.0	484.0	652.0	795.0	929.0	1,002	1,175	1,115	999.0	927.0
18	345.0	351.0	378.0	492.0	656.0	797.0	933.0	1,007	1,176	1,111	997.0	925.0
19	345.0	352.0	383.0	500.0	659.0	801.0	936.0	1,013	1,175	1,108	995.0	923.0
20	345.0	352.0	387.0	505.0	662.0	810.0	938.0	1,017	1,172	1,104	992.0	922.0
21	345.0	352.0	390.0	509.0	665.0	816.0	942.0	1,020	1,171	1,101	990.0	921.0
22	345.0	352.0	393.0	512.0	667.0	823.0	946.0	1,023	1,172	1,097	988.0	920.0
23	345.0	354.0	396.0	516.0	670.0	829.0	948.0	1,027	1,173	1,092	985.0	921.0
24	344.0	354.0	397.0	519.0	675.0	834.0	950.0	1,032	1,175	1,088	982.0	920.0
25	344.0	356.0	399.0	522.0	679.0	840.0	953.0	1,037	1,175	1,084	978.0	919.0
26	343.0	356.0	400.0	526.0	683.0	846.0	955.0	1,041	1,173	1,079	974.0	918.0
27	343.0	357.0	402.0	529.0	691.0	852.0	958.0	1,043	1,173	1,073	970.0	917.0
28	343.0	357.0	405.0	532.0	701.0	858.0	961.0	1,045	1,173	1,069	966.0	915.0
29	343.0	357.0	407.0	534.0	------	863.0	963.0	1,047	1,174	1,065	962.0	913.0
30	342.0	357.0	410.0	538.0	------	868.0	964.0	1,052	1,174	1,060	960.0	913.0
31	341.0	------	412.0	542.0	------	873.0	------	1,057	------	1,056	958.0	------
MAX	361.0	357.0	412.0	542.0	701.0	873.0	964.0	1,057	1,176	1,174	1,050	955.0
MIN	341.0	341.0	357.0	412.0	543.0	707.0	878.0	964.0	1,063	1,056	958.0	913.0
(a)	608.9	--	626.7	654.9	683.7	710.5	723.1	735.3	749.5	735.1	722.3	716.2
(b)	-21,200	+16,200	+54,100	+130,400	+158,900	+172,300	+90,400	+93,500	+117,000	-118,000	-98,400	-44,400

CAL YR 1972 b -27,000
WTR YR 1973 b +550,600

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11289000 MODESTO CANAL NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°40'04", long 120°27'26", in SE¼SW¼ sec.17, T.3 S., R.14 E., Stanislaus County, on right bank 0.5 mile northeast of La Grange, and 1 mile downstream from intake at La Grange Dam.

PERIOD OF RECORD.--April 1903 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. V-notch sharp-crested weir since Mar. 19, 1963. Datum of gage is 272.4 ft above mean sea level (levels by Modesto Irrigation District). Prior to July 1904, nonrecording gage at approximately present site at different datum. July 1904 to March 1920, nonrecording gage in concrete well 0.9 mile upstream and 460 ft below intake, set by water surface elevation to read same as previous gage. March 1920 to February 1924, nonrecording gage and February 1924 to March 1932, water-stage recorder, 0.9 mile upstream and 500 ft below intake at different datum.

AVERAGE DISCHARGE.--70 years, 401 cfs (290,500 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,820 cfs July 1, 1935; no flow at times most years.

REMARKS.--Records excellent. Canal diverts from right bank of Tuolumne River at La Grange Dam for irrigation in Modesto and Waterford Irrigation Districts. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1904-9 (monthly figures only).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	222	252		0	1.9	23	1,150	716	864	1,150	520
2	72	204	61		0	72	1,030	1,130	897	1,010	1,000	309
3	350	172	27		0	25	1,060	1,190	894	1,010	1,100	309
4	243	31	354		0	25	925	1,170	1,170	810	1,030	853
5	359	26	280		0	47	739	1,100	1,190	1,050	807	696
6	347	334	409		0	138	646	1,000	1,230	840	897	678
7	93	314	401		0	64	85	995	1,170	809	867	674
8	70	337	341		0	39	101	1,040	1,190	805	843	642
9	129	372	108		0	21	640	1,110	1,190	1,110	780	304
10	395	452	28		.41	21	632	1,250	844	1,140	926	592
11	411	59	396		1.0	22	718	863	811	1,150	1,070	632
12	389	27	403		0	43	573	957	744	1,050	897	705
13	373	59	346		0	46	494	958	726	1,010	1,100	380
14	370	54	454		0	32	231	967	768	905	1,170	302
15	25	85	361		0	21	217	978	851	809	1,170	359
16	353	77	100		0	20	522	964	855	906	1,100	301
17	362	38	29		0	21	702	1,000	865	932	1,020	423
18	347	23	177		0	21	775	1,000	869	942	895	430
19	365	22	85		0	243	764	961	1,040	811	908	460
20	343	238	96		0	96	522	964	1,180	814	973	343
21	303	394	13		0	370	349	965	1,270	810	942	297
22	24	373	0		0	145	209	962	871	809	897	255
23	26	26	0		0	22	913	915	883	835	881	256
24	356	134	0		0	21	949	787	872	960	872	255
25	362	62	0		0	22	960	707	1,190	1,100	943	256
26	367	24	0		0	77	680	977	1,280	1,190	851	317
27	345	373	0		0	58	527	972	1,210	1,100	935	511
28	301	471	0		0	92	290	1,000	1,260	1,050	914	518
29	28	474	0		------	82	292	1,070	1,100	809	1,010	654
30	426	487	0		------	144	746	757	1,020	1,070	965	255
31	391	------	0		------	24	------	555	------	1,130	654	------
TOTAL	8,395	5,964	4,721	0	1.41	2,075.9	17,314	30,414	30,156	29,640	29,567	13,486
MEAN	271	199	152	0	.050	67.0	577	981	1,005	956	954	450
MAX	426	487	454	0	1.0	370	1,060	1,250	1,280	1,190	1,170	853
MIN	24	22	0	0	0	1.9	23	555	716	805	654	255
AC-FT	16,650	11,830	9,360	0	2.8	4,120	34,340	60,330	59,810	58,790	58,650	26,750

CAL YR 1972 TOTAL 139,430.60 MEAN 381 MAX 1,110 MIN 0 AC-FT 276,600
WTR YR 1973 TOTAL 171,734.31 MEAN 471 MAX 1,280 MIN 0 AC-FT 340,600

11289500 TURLOCK CANAL NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°39'57", long 120°26'24", in NW¼NW¼ sec.21, T.3 S., R.14 E., Stanislaus County, on right bank 2,400 ft downstream from intake at La Grange Dam, and 1.2 miles east of La Grange.

PERIOD OF RECORD.--October 1898 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 277.70 ft (levels by Turlock Irrigation District). July 1, 1899 to Sept. 14, 1915, nonrecording gage at different sites and datums near canal intake. Sept. 15, 1915, to Apr. 15, 1924, nonrecording gage and Apr. 16, 1924, to winter of 1936-37, water-stage recorder, both at present site at datum 0.25 ft higher.

AVERAGE DISCHARGE.--75 years, 607 cfs (439,800 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 2,280 cfs June 12, 1949, July 26, 1973; no diversion for irrigation during some periods in some years. Prior to 1939, unmeasured small discharge during winter called zero.

REMARKS.--Records excellent. Canal diverts from left bank of Tuolumne River at La Grange Dam for irrigation in Turlock Irrigation District and to supply town of La Grange. During fall and winter some unmeasured flow is diverted from canal at tunnel 0.3 mile above gage, passed through La Grange powerplant and returned to river. See schematic diagram of Tuolumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1899-1908 (monthly figures only). WSP 1445: 1917-20, 1922.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	204	160	19	5.2	2.8	4.8	1,980	1,440	1,520	2,150	1,690
2	305	205	67	197	5.2	3.1	300	2,000	1,130	1,920	2,100	684
3	1,130	152	16	11	4.8	2.8	226	1,930	945	2,020	2,080	684
4	1,100	26	124	11	4.4	3.7	333	1,980	1,520	2,000	2,170	1,580
5	1,160	22	210	161	4.8	2.6	583	2,070	2,040	2,100	1,710	1,610
6	1,160	258	397	24	5.2	.73	628	2,070	2,070	2,020	1,850	1,690
7	974	302	116	12	5.2	0	575	2,060	2,030	1,980	1,510	1,650
8	19	294	120	536	5.2	0	28	2,060	2,080	1,750	1,450	1,640
9	1,120	275	111	367	4.8	0	654	2,000	2,010	2,080	1,210	612
10	749	287	53	141	6.4	0	680	1,840	1,080	2,190	1,390	1,670
11	766	104	153	175	8.4	0	711	1,660	1,560	2,180	1,350	1,670
12	737	158	135	44	4.8	0	797	1,090	1,830	2,160	183	1,570
13	716	876	117	10	5.2	.64	917	725	1,640	2,120	1,370	1,390
14	483	693	196	10	6.0	3.7	523	1,140	1,740	2,090	1,520	1,250
15	60	658	166	131	5.2	2.8	27	1,250	1,560	1,840	1,490	1,350
16	375	697	137	146	4.4	2.8	876	1,310	1,430	2,050	1,450	234
17	614	467	67	118	4.4	2.8	645	1,390	1,260	2,110	1,410	1,250
18	479	172	122	11	4.4	2.8	716	1,440	1,340	2,110	1,170	1,450
19	492	59	46	10	4.4	2.8	676	889	1,740	2,090	220	1,530
20	360	412	20	10	5.2	2.8	679	716	1,930	2,070	1,340	1,420
21	40	284	46	9.8	3.7	2.6	528	829	2,040	2,050	1,270	1,230
22	39	261	19	9.9	3.4	2.6	95	834	2,070	1,800	1,230	885
23	48	17	31	9.8	3.4	1.8	710	898	1,880	2,000	1,290	161
24	340	167	29	9.8	3.4	1.8	1,100	816	1,360	2,090	1,900	1,150
25	310	95	19	9.4	3.1	1.8	1,120	790	1,900	2,180	2,040	1,180
26	657	46	41	9.4	3.7	3.1	1,540	846	2,190	2,280	1,690	1,330
27	587	263	70	9.4	3.7	9.0	1,950	1,010	2,190	2,150	1,920	1,300
28	82	495	92	9.4	3.7	7.8	1,970	1,370	2,230	1,820	1,920	1,270
29	40	326	50	9.5	------	6.8	1,990	1,600	2,100	1,970	1,890	1,300
30	532	411	20	9.1	------	5.2	1,970	1,450	1,990	2,190	1,400	103
31	543	------	19	11	------	4.8	------	1,240	------	2,110	1,430	------
TOTAL	16,044	8,686	2,969	2,250.5	131.7	84.17	23,551.8	43,283	52,325	63,040	47,103	36,533
MEAN	518	290	95.8	72.6	4.70	2.72	785	1,396	1,744	2,034	1,519	1,218
MAX	1,160	876	397	536	8.4	9.0	1,990	2,070	2,230	2,280	2,170	1,690
MIN	19	17	16	9.1	3.1	0	4.8	716	945	1,520	183	103
AC-FT	31,820	17,230	5,890	4,460	261	167	46,710	85,850	103,800	125,000	93,430	72,460

CAL YR 1972 TOTAL 284,767.10 MEAN 778 MAX 2,200 MIN 2.6 AC-FT 564,800
WTR YR 1973 TOTAL 296,001.17 MEAN 811 MAX 2,280 MIN 0 AC-FT 587,100

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.

LOCATION.--Lat 37°39'59", long 120°26'28", in NW¼NW¼ sec.21, T.3 S., R.14 E., Stanislaus County, on left bank 0.5 mile downstream from La Grange Dam, and 1.1 miles east of La Grange.

DRAINAGE AREA.--1,538 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 170.19 ft above mean sea level (levels by Turlock Irrigation District).

EXTREMES (River only).--Current year: Maximum discharge, 2,630 cfs Oct. 2 (gage height, 8.82 ft); minimum daily, 2.8 cfs Sept. 23.
Period of record: Maximum discharge, 2,720 cfs Feb. 1, 1971 (gage height, 8.73 ft); minimum daily, 0.10 cfs Oct. 29 to Nov. 3, 1970.
(Combined flow).--Current year: Maximum discharge, 3,880 cfs June 26; minimum daily, 136 cfs Apr. 1.
Period of record: Maximum discharge, 3,880 cfs June 26, 1973; minimum daily, 0.45 cfs Nov. 2, 1970.

REMARKS.--Records good. Flow diverted into Modesto Canal (see sta 11289000) and Turlock Canal (see sta 11289500) at La Grange Dam. Flow regulated by Don Pedro powerplant, Don Pedro Reservoir, 4.5 miles upstream (see sta 11287500), Hetch Hetchy Reservoir (see sta 11275500), Cherry Lake (see sta 11277200), and Lake Eleanor (see sta 11277500). Tuolumne Canal (see sta 11297500) diverts water from the Stanislaus River basin into the Tuolumne River basin for power, irrigation, and domestic supply in the vicinity of Sonora upstream from station. Diversion through Hetch Hetchy aqueduct to San Francisco began Oct. 19, 1934; an average of 293 cfs was diverted during the current year. Records of water temperatures for the current year are published in Part 2 of this report. See schematic diagram of Tuolumne River basin. For records of combined discharge of river and Modesto and Turlock canals, see following page.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	510	417	300	749	346	108	19	8.5	8.7	193	17
2	1,370	515	371	488	699	315	90	18	8.6	9.3	9.3	7.4
3	197	515	383	608	323	330	94	31	8.4	13	93	7.4
4	197	428	414	740	262	328	92	11	119	9.1	71	10
5	195	374	430	617	630	329	91	11	194	12	8.8	7.6
6	194	415	441	365	675	392	91	11	232	9.1	8.7	7.5
7	194	414	593	307	557	355	93	11	211	8.7	8.4	7.2
8	195	410	538	520	559	391	90	15	247	8.4	8.6	6.3
9	195	418	388	542	550	329	90	17	127	126	8.6	6.0
10	195	416	383	518	313	327	90	14	9.3	102	7.4	6.3
11	196	401	419	538	301	328	90	14	8.9	64	46	9.8
12	197	380	420	536	560	370	89	14	8.8	44	6.8	43
13	198	426	420	378	459	371	77	13	8.5	9.0	18	6.4
14	195	420	419	306	470	366	76	387	8.7	8.5	159	5.5
15	201	415	420	501	457	335	76	956	8.8	8.6	179	5.0
16	496	418	259	558	445	336	76	13	8.8	8.7	59	5.3
17	246	413	272	637	260	331	77	12	8.7	8.7	6.7	5.1
18	245	378	329	754	259	329	77	12	8.8	8.8	5.9	5.3
19	244	377	331	723	262	329	86	12	20	8.9	3.9	6.7
20	381	415	332	363	413	330	85	11	240	8.8	5.2	5.4
21	498	417	398	305	360	335	85	11	312	8.9	5.8	5.4
22	243	410	376	662	322	336	85	10	11	8.7	6.7	4.7
23	243	375	346	685	338	334	85	10	8.6	8.8	6.6	2.8
24	485	416	310	739	260	334	87	9.7	8.5	8.9	7.3	4.0
25	483	372	360	587	259	333	86	7.2	184	170	8.5	4.5
26	248	370	377	553	548	337	87	8.5	405	286	9.8	4.9
27	244	410	389	343	470	332	86	8.8	334	88	9.8	7.6
28	495	415	350	298	336	332	85	11	300	82	9.2	15
29	242	415	333	801	------	331	84	9.6	11	9.1	19	37
30	498	417	304	536	------	332	84	9.6	9.3	82	11	30
31	500	------	303	477	------	329	------	8.4	------	156	9.6	------
TOTAL	9,907	12,475	11,825	16,285	12,096	10,532	2,592	1,705.8	3,078.2	1,392.7	1,009.6	296.1
MEAN	320	416	381	525	432	340	86.4	55.0	103	44.9	32.6	9.87
MAX	1,370	515	593	801	749	392	108	956	405	286	193	43
MIN	194	370	259	298	259	315	76	7.2	8.4	8.4	3.9	2.8
AC-FT	19,650	24,740	23,450	32,300	23,990	20,890	5,140	3,380	6,110	2,760	2,000	587

CAL YR 1972 TOTAL 81,664.7 MEAN 223 MAX 1,370 MIN 1.5 AC-FT 162,000
WTR YR 1973 TOTAL 83,194.4 MEAN 228 MAX 1,370 MIN 2.8 AC-FT 165,000

11289650 TUOLUMNE RIVER BELOW LA GRANGE DAM, NEAR LA GRANGE, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF TUOLUMNE RIVER, MODESTO CANAL NEAR LA GRANGE AND TURLOCK CANAL NEAR LA GRANGE, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	936	829	319	754	351	136	3,150	2,160	2,390	3,490	2,230
2	1,750	924	499	685	704	390	1,420	3,150	2,040	2,940	3,110	1,000
3	1,680	839	426	619	328	358	1,380	3,150	1,850	3,040	3,270	1,000
4	1,540	485	892	751	266	357	1,350	3,160	2,810	2,820	3,270	2,440
5	1,710	422	920	778	635	379	1,410	3,180	3,420	3,160	2,530	2,310
6	1,700	1,010	1,250	389	680	531	1,370	3,080	3,530	2,870	2,760	2,380
7	1,260	1,030	1,110	319	562	419	753	3,070	3,410	2,800	2,390	2,330
8	284	1,040	999	1,060	564	430	219	3,120	3,520	2,560	2,300	2,290
9	1,440	1,070	607	909	555	350	1,380	3,130	3,330	3,320	2,000	922
10	1,340	1,160	464	659	320	348	1,400	3,100	1,930	3,430	2,320	2,270
11	1,370	564	968	713	310	350	1,520	2,540	2,380	3,390	2,470	2,310
12	1,320	565	958	580	565	413	1,460	2,060	2,580	3,250	1,090	2,320
13	1,290	1,360	883	388	464	418	1,490	1,700	2,370	3,140	2,490	1,780
14	1,050	1,170	1,070	316	476	402	830	2,490	2,520	3,000	2,850	1,560
15	286	1,160	947	632	462	359	320	3,180	2,420	2,660	2,840	1,710
16	1,220	1,190	496	704	449	359	1,470	2,290	2,290	2,960	2,610	540
17	1,220	918	368	755	264	355	1,420	2,400	2,130	3,050	2,440	1,680
18	1,070	573	628	765	263	353	1,570	2,450	2,220	3,060	2,070	1,890
19	1,100	458	462	733	266	575	1,530	1,860	2,800	2,910	1,130	2,000
20	1,080	1,070	448	373	418	429	1,290	1,690	3,350	2,890	2,320	1,770
21	841	1,100	457	315	364	708	962	1,810	3,620	2,870	2,220	1,530
22	306	1,040	395	672	325	484	389	1,810	2,950	2,620	2,130	1,140
23	317	418	377	695	341	358	1,710	1,820	2,770	2,840	2,180	420
24	1,180	717	339	749	263	357	2,140	1,610	2,240	3,060	2,780	1,410
25	1,160	529	379	596	262	357	2,170	1,500	3,270	3,450	2,990	1,440
26	1,270	440	418	562	552	417	2,310	1,830	3,880	3,760	2,550	1,650
27	1,180	1,050	459	352	474	399	2,560	1,990	3,730	3,340	2,860	1,820
28	878	1,380	442	307	340	432	2,350	2,380	3,790	2,950	2,840	1,800
29	310	1,220	383	811	------	420	2,370	2,680	3,210	2,790	2,920	1,990
30	1,460	1,320	324	545	------	481	2,800	2,220	3,020	3,340	2,380	388
31	1,430	------	322	488	------	358	------	1,800	------[2]	3,400	2,090	------
TOTAL	34,336	27,158	19,519	18,539	12,226	12,697	43,479	75,400	85,540	94,060	77,690	50,320
MEAN	1,108	905	630	598	437	410	1,449	2,432	2,851	3,034	2,506	1,677
MAX	1,750	1,380	1,250	1,060	754	708	2,800	3,180	3,880	3,760	3,490	2,440
MIN	284	418	322	307	262	348	136	1,500	1,850	2,390	1,090	388
AC-FT	68,110	53,870	38,720	36,770	24,250	25,180	86,240	149,600	169,700	186,600	154,100	99,810

CAL YR 1972 TOTAL 506,079 MEAN 1,383 MAX 3,080 MIN 246 AC-FT 1,004,000
WTR YR 1973 TOTAL 550,964 MEAN 1,509 MAX 3,880 MIN 136 AC-FT 1,093,000

11290000 TUOLUMNE RIVER AT MODESTO, CALIF.

LOCATION.--Lat 37°37'38", long 120°59'11", in SE¼SW¼ sec.33, T.3 S., R.9 E., Stanislaus County, on left bank at bridge on Ninth Street in Modesto, and 0.2 mile downstream from Dry Creek.

DRAINAGE AREA.--1,884 sq mi.

PERIOD OF RECORD.--1878-84, 1891-94, 1897 (gage heights only), January 1895 to December 1896, April 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level, unadjusted (levels by Modesto Irrigation District). Prior to July 11, 1947, at site 1,700 ft downstream at same datum, July 11, 1947, to Nov. 16, 1953, at site 1,000 ft downstream at same datum.

AVERAGE DISCHARGE.--34 years (1895-96, 1940-73), 1,395 cfs (1,011,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,440 cfs Feb. 12 (elevation, 49.55 ft); minimum daily, 168 cfs July 24.
Period of record (1895-96, 1940 to current year): Maximum discharge observed, 57,000 cfs Dec. 9, 1950 (elevation, 69.19 ft); minimum, 85 cfs Oct. 25, 1961.

REMARKS.--Records excellent. Flow regulated by reservoirs and powerplants above station. In addition to diversions into Modesto and Turlock Canals (see sta 11289000, 11289500), there are diversions for irrigation of about 1,300 acres between station above La Grange Dam and at Modesto. See REMARKS for sta 11289650 for Tuolumne River below La Grange Dam. Records of water temperatures for the current year are published in Part 2 of this report. See schematic diagram of Tuolumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	239	601	935	429	833	1,530	543	320	226	266	296	229
2	273	619	933	429	888	752	424	300	234	227	333	230
3	1,000	619	903	537	874	633	349	289	241	229	316	249
4	609	684	901	640	596	687	352	280	258	218	235	226
5	408	595	922	798	499	799	361	282	233	202	257	220
6	369	533	943	845	733	645	392	269	297	193	259	214
7	361	538	943	639	973	786	383	301	359	189	227	234
8	331	546	947	579	918	1,200	399	260	361	201	235	253
9	327	545	953	744	754	2,390	396	258	379	197	211	227
10	334	581	932	908	766	926	393	243	348	200	223	230
11	333	629	923	1,410	2,080	718	362	249	304	255	212	242
12	352	612	943	1,170	5,750	728	409	264	246	256	215	239
13	361	579	991	1,600	3,200	658	362	257	237	225	233	230
14	419	610	1,050	917	1,480	625	383	258	260	231	197	249
15	451	655	959	595	1,620	610	396	354	224	235	209	257
16	404	767	804	722	1,110	572	412	945	243	231	321	255
17	534	787	595	2,130	784	543	372	407	250	215	315	240
18	456	723	576	2,040	590	527	329	289	229	210	256	242
19	414	655	728	1,520	516	527	312	278	220	230	254	220
20	428	593	727	1,310	493	593	306	251	228	237	226	222
21	466	787	651	704	543	1,140	301	248	264	209	208	223
22	595	874	583	553	547	813	309	233	388	266	216	221
23	471	912	555	705	509	870	325	234	380	233	212	256
24	404	903	512	773	508	645	332	236	277	168	232	250
25	534	921	482	818	510	593	335	254	277	210	225	262
26	593	905	493	702	612	676	330	239	243	215	218	262
27	464	894	508	670	697	1,170	323	238	396	341	224	257
28	401	915	515	529	1,600	716	318	233	468	344	216	257
29	537	933	486	462	------	612	333	236	463	295	235	231
30	448	934	469	786	------	578	337	229	350	338	248	238
31	534	------	443	1,210	------	561	------	239	------	275	237	------
TOTAL	13,850	21,449	23,305	27,874	30,983	24,823	10,878	8,973	8,883	7,341	7,501	7,165
MEAN	447	715	752	899	1,107	801	363	289	296	237	242	239
MAX	1,000	934	1,050	2,130	5,750	2,390	543	945	468	344	333	262
MIN	239	533	443	429	493	527	301	229	220	168	197	214
AC-FT	27,470	42,540	46,230	55,290	61,450	49,240	21,580	17,800	17,620	14,560	14,880	14,210

CAL YR 1972 TOTAL 156,608 MEAN 428 MAX 1,260 MIN 147 AC-FT 310,600
WTR YR 1973 TOTAL 193,025 MEAN 529 MAX 5,750 MIN 168 AC-FT 382,900

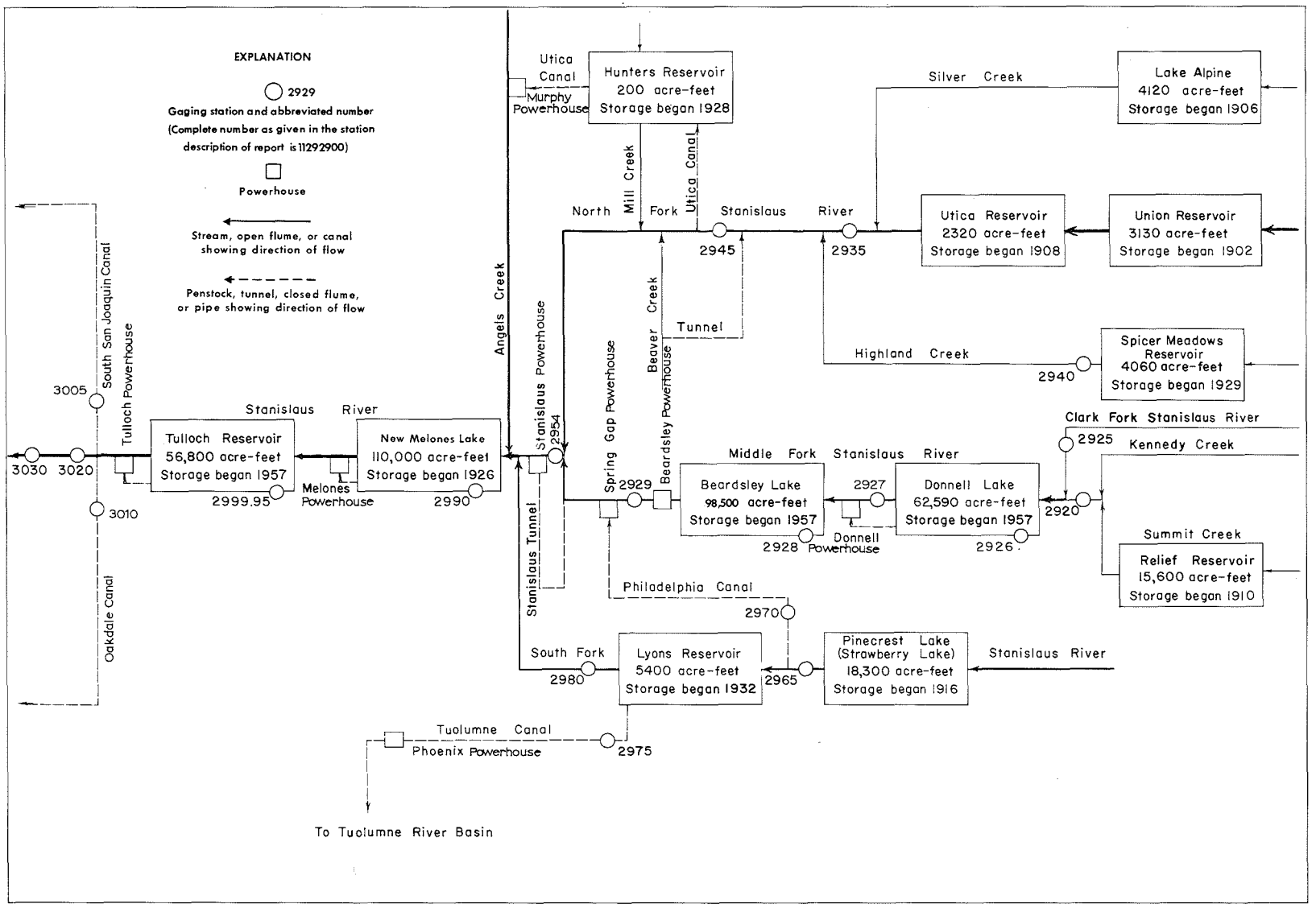

FIGURE 8.--Schematic diagram showing diversions and storage in Stanislaus River basin.

11292000 MIDDLE FORK STANISLAUS RIVER AT KENNEDY MEADOWS, NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°17'51", long 119°44'25", in SW¼NE¼ sec.11, T.5 N., R.20 E., Tuolumne County, Stanislaus National Forest, on right bank at upper end of Kennedy Meadows, 1.3 miles upstream from Deadman Creek, 1.6 miles downstream from Relief Reservoir, and 5.8 miles southwest of Dardanelle.

DRAINAGE AREA.--47.5 sq mi.

PERIOD OF RECORD.--October 1938 to current year. Records for water year 1946 incomplete, yearly estimate published in WSP 1315-A. Prior to October 1960, published as "at Kennedy Meadows."

GAGE.--Water-stage recorder. Datum of gage is 6,320.1 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE (unadjusted).--35 years, 134 cfs (97,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,550 cfs May 18 (gage height, 6.55 ft); minimum daily, 25 cfs Oct. 4, 6, Dec. 8.
Period of record: Maximum discharge recorded, 1,700 cfs Nov. 20, 1950 (gage height, 6.66 ft); minimum daily recorded, 7.2 cfs Feb. 11, 1948.

REMARKS.--Flow regulated by Relief Reservoir 1.6 miles upstream (usable capacity, 15,600 acre-ft). Contents of Relief Reservoir were 5,130 acre-ft on Sept. 30, 1972, and 3,500 acre-ft on Sept. 30, 1973. No diversion above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1315-A: 1939(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	30	29	31	28	30	31	129	730	235	235	70
2	28	29	29	31	28	30	29	139	685	217	243	69
3	27	29	29	30	28	30	30	154	644	174	242	69
4	25	33	28	29	28	30	31	142	622	177	240	68
5	26	31	28	28	28	29	37	120	452	156	235	68
6	25	29	26	29	28	29	46	113	522	187	232	67
7	26	30	26	29	29	29	52	130	682	182	229	82
8	27	29	25	29	28	29	57	166	719	170	138	117
9	121	28	26	29	28	28	65	203	767	177	96	115
10	212	28	27	28	28	29	68	236	678	219	94	115
11	209	29	28	28	31	30	74	268	630	233	91	114
12	204	28	27	33	30	27	79	306	564	225	90	113
13	200	29	26	31	29	30	77	331	547	236	89	112
14	219	31	26	30	28	28	68	370	424	234	89	114
15	231	30	26	29	28	29	63	421	320	228	88	118
16	224	30	26	29	28	29	61	411	303	253	87	117
17	137	29	48	29	28	29	68	596	288	273	86	116
18	37	29	43	29	29	29	69	1,090	224	278	84	115
19	38	29	56	30	30	29	68	1,220	252	275	83	107
20	61	28	47	32	30	30	65	921	388	268	82	97
21	85	29	43	31	30	29	67	730	418	217	81	66
22	84	28	45	29	29	29	79	687	421	137	80	35
23	84	27	40	30	29	28	101	698	388	114	79	32
24	83	28	37	29	30	29	125	740	320	98	78	29
25	79	29	35	29	30	31	152	662	354	99	78	29
26	83	30	35	29	29	34	192	537	403	115	81	28
27	87	30	34	31	30	34	222	565	527	121	80	27
28	85	30	33	28	31	33	225	754	456	119	76	27
29	83	29	34	28	------	32	187	932	388	134	73	27
30	55	29	33	29	------	31	145	972	305	184	71	27
31	29	------	33	28	------	31	------	799	------	224	70	------
TOTAL	2,983	877	1,028	914	810	924	2,633	15,542	14,421	5,959	3,700	2,290
MEAN	96.2	29.2	33.2	29.5	28.9	29.8	87.8	501	481	192	119	76.3
MAX	231	33	56	33	31	34	225	1,220	767	278	243	118
MIN	25	27	25	28	28	27	29	113	224	98	70	27
AC-FT	5,920	1,740	2,040	1,810	1,610	1,830	5,220	30,830	28,600	11,820	7,340	4,540

CAL YR 1972 TOTAL 39,077 MEAN 107 MAX 696 MIN 19 AC-FT 77,510
WTR YR 1973 TOTAL 52,081 MEAN 143 MAX 1,220 MIN 25 AC-FT 103,300

11292500 CLARK FORK STANISLAUS RIVER NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°21'50", long 119°52'13", in NE¼NE¼ sec.22, T.6 N., R.19 E., Tuolumne County, Stanislaus National Forest, on right bank 0.5 mile upstream from mouth, and 2.6 miles northwest of Dardanelle.

DRAINAGE AREA.--67.5 sq mi.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,507.3 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--23 years, 151 cfs (109,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,580 cfs May 18 (gage height, 7.68 ft); minimum daily, 23 cfs Oct. 30.
Period of record: Maximum discharge, 4,350 cfs Nov. 20, 1950 (gage height, 11.88 ft), from rating curve extended above 1,300 cfs on basis of slope-area measurement of maximum flow; minimum, 11 cfs Apr. 3, 1958.

REMARKS.--Records good except those for the winter period, which are fair. No storage or diversion above station. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	29	37	46	39	45	54	328	826	215	71	40
2	42	29	40	45	39	45	53	369	743	196	68	40
3	32	28	38	45	39	45	54	388	715	182	64	40
4	28	42	29	41	40	45	57	354	707	171	74	39
5	28	36	30	37	38	44	69	291	747	166	69	38
6	28	31	26	37	40	45	95	283	775	158	65	38
7	28	34	26	38	40	44	113	351	778	146	62	37
8	31	32	26	40	39	44	116	432	835	139	59	37
9	28	30	26	42	38	44	155	498	841	132	57	36
10	31	31	26	46	39	45	162	578	741	125	55	36
11	32	32	26	53	47	46	181	674	683	118	53	36
12	30	30	27	89	46	45	189	760	638	113	52	35
13	29	32	28	80	39	44	177	767	595	121	50	35
14	28	33	29	71	37	44	143	822	497	114	50	34
15	29	34	30	67	37	44	131	873	430	110	49	35
16	30	33	38	86	37	47	123	960	402	109	47	35
17	33	33	182	77	38	48	133	1,020	376	103	47	34
18	38	32	172	55	40	47	136	1,120	374	98	46	34
19	36	33	218	53	40	48	135	1,190	380	102	46	35
20	41	30	163	51	41	49	129	988	382	92	45	35
21	38	34	78	50	42	47	133	880	395	87	44	35
22	35	30	72	48	41	45	172	831	389	84	43	35
23	34	28	60	46	42	46	237	852	355	81	43	37
24	33	42	55	44	43	50	287	814	329	77	43	37
25	30	40	51	43	42	56	341	748	326	74	43	36
26	31	35	50	42	42	59	410	669	349	72	50	34
27	30	35	49	42	43	60	458	705	351	72	53	33
28	30	33	47	41	45	57	460	839	315	76	45	33
29	28	33	50	41	------	54	409	972	285	75	43	32
30	23	34	54	40	------	54	347	995	248	69	41	32
31	27	------	50	40	------	54	------	868	------	68	41	------
TOTAL	969	988	1,833	1,576	1,133	1,490	5,659	22,219	15,807	3,545	1,618	1,073
MEAN	31.3	32.9	59.1	50.8	40.5	48.1	189	717	527	114	52.2	35.8
MAX	42	42	218	89	47	60	460	1,190	841	215	74	40
MIN	23	28	26	37	37	44	53	283	248	68	41	32
AC-FT	1,920	1,960	3,640	3,130	2,250	2,960	11,220	44,070	31,350	7,030	3,210	2,130

CAL YR 1972 TOTAL 42,058 MEAN 115 MAX 625 MIN 23 AC-FT 83,420
WTR YR 1973 TOTAL 57,910 MEAN 159 MAX 1,190 MIN 23 AC-FT 114,900

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-18	2300	7.68	1,580	6-8	2100	6.70	1,130
5-29	2145	7.01	1,260				

11292600 DONNELL LAKE NEAR DARDANELLE, CALIF.

LOCATION.--Lat 38°19'46", long 119°57'37", (unsurveyed), T.6 N., R.18 E., Tuolumne County, Stanislaus National Forest, on left bank in hoist house of Donnell Dam on Middle Fork Stanislaus River, 1.2 miles downstream from Niagara Creek, and 6.9 miles west of Dardanelle.

DRAINAGE AREA.--230 sq mi.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1960, published as Donnells Reservoir near Dardanelle.

GAGE.--Water-stage recorder. Datum of gage is 4.84 ft above mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 64,300 acre-ft June 6, 8, 21, 22, 24 (gage height, 4,915.9 ft); minimum, 6,690 acre-ft Mar. 30 (gage height, 4,743.7 ft).
Period of record: Maximum contents, 64,900 acre-ft May 8, 1963 (gage height, 4,917.3 ft); minimum since reservoir first filled, 4,800 acre-ft Apr. 19, 1965 (gage height, 4,735.3 ft).

REMARKS.--Lake is formed by concrete arch-type dam completed in 1957. Usable capacity, 62,590 acre-ft between gage heights 4,720.0 ft (minimum operating head) and 4,917.0 ft (top of spillway gates). Lake is for power and conservation storage. Water passes through a 7.2-mile tunnel to a powerplant and down the Middle Fork Stanislaus River to Beardsley Lake (see sta 11292800). Records, including extremes, represent total contents at 2400 hours of which 2,150 acre-ft is below minimum operating head. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,735	4,730	4,790	19,100
4,740	5,830	4,800	22,100
4,750	8,220	4,820	28,400
4,760	10,800	4,850	38,700
4,770	13,400	4,880	49,800
4,780	16,200	4,917.3	64,900

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26,500	28,600	26,700	25,600	10,700	8,040	7,480	19,300	64,200	63,900	59,000	39,500
2	26,100	28,500	26,900	25,000	10,500	8,000	7,380	20,600	64,100	63,700	58,700	38,700
3	25,700	28,300	27,000	24,200	10,700	8,370	7,210	22,000	64,100	63,400	58,500	38,000
4	25,300	28,600	26,900	23,800	11,000	8,700	7,140	23,000	64,100	63,100	58,300	37,100
5	24,800	28,700	26,700	23,000	10,800	8,600	6,950	23,600	64,100	63,100	58,000	36,300
6	24,500	28,600	26,600	23,200	10,500	8,570	7,140	24,000	64,300	62,700	57,700	35,300
7	24,500	28,600	26,200	23,300	10,300	8,520	8,070	25,000	64,200	62,700	57,300	34,500
8	24,600	28,500	26,000	22,600	10,200	8,470	9,080	26,700	64,300	62,700	56,800	33,800
9	24,300	28,400	26,100	21,400	9,970	8,420	9,460	28,900	64,200	62,400	56,100	33,100
10	24,300	28,300	26,300	20,300	10,300	8,770	9,410	31,600	64,100	62,400	55,600	32,400
11	24,300	28,400	26,100	19,300	10,600	9,150	9,480	35,100	64,200	62,400	54,900	31,700
12	24,400	28,500	26,000	18,800	10,300	9,130	9,590	39,100	64,200	62,200	54,300	30,900
13	24,300	28,500	25,800	18,000	9,920	9,100	9,590	43,400	64,100	62,100	53,700	30,100
14	24,800	28,400	25,100	17,000	9,460	9,050	9,280	47,700	64,100	62,100	53,000	29,400
15	25,300	28,300	24,400	16,300	9,000	8,640	8,850	52,400	64,000	62,000	52,200	28,600
16	25,800	28,200	24,500	15,900	8,520	8,290	8,320	57,500	64,100	61,900	51,500	27,900
17	26,300	28,200	25,200	15,400	8,800	8,670	8,000	62,800	64,100	61,900	50,700	27,400
18	26,500	28,300	25,000	14,900	9,080	9,000	7,700	63,700	64,100	61,900	49,900	27,000
19	26,600	27,700	25,100	14,300	9,100	8,640	7,550	62,500	64,200	61,800	49,200	26,600
20	26,800	27,300	25,100	14,300	8,640	8,320	7,170	62,400	64,200	61,700	48,400	26,200
21	27,000	27,100	24,900	13,700	8,240	7,870	6,850	62,600	64,300	62,500	47,700	25,700
22	27,300	26,900	25,400	13,000	7,870	7,480	6,830	63,500	64,300	63,000	47,000	25,200
23	27,500	26,900	25,900	12,300	7,800	7,190	7,310	64,100	64,200	62,600	46,200	25,100
24	27,700	27,000	26,300	11,600	8,120	7,550	8,290	63,900	64,300	62,100	45,500	24,700
25	27,900	27,100	26,600	11,200	8,440	7,970	9,480	63,900	64,200	61,500	44,800	24,300
26	28,200	27,300	26,200	10,900	8,440	7,800	11,300	63,900	64,200	61,000	44,000	23,900
27	28,400	27,200	25,800	11,100	8,070	7,550	13,600	64,200	64,200	60,500	43,300	23,600
28	28,600	27,000	25,400	11,400	8,040	7,290	15,800	64,200	64,200	60,300	42,600	23,200
29	28,800	27,000	24,900	11,200	------	6,970	17,400	64,200	64,200	59,700	41,800	23,300
30	28,800	26,900	25,100	11,100	------	6,690	18,500	63,900	64,100	59,500	41,100	23,300
31	28,700	------	25,400	10,900	------	7,070	------	63,900	------	59,200	40,300	------
MAX	28,800	28,700	27,000	25,600	11,000	9,150	18,500	64,200	64,300	63,900	59,000	39,500
MIN	24,300	26,900	24,400	10,900	7,800	6,690	6,830	19,300	64,000	59,200	40,300	23,200
(a)	4,820.7	4,815.3	4,810.5	4,760.6	4,749.3	4,745.3	4,787.9	4,914.9	4,915.4	4,903.7	4,854.4	4,804.0
(b)	+2,500	-1,800	-1,500	-14,500	-2,860	-970	+11,430	+45,400	+200	-4,900	-18,900	-17,000

CAL YR 1972 b +8,400
WTR YR 1973 b -2,900

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292700 MIDDLE FORK STANISLAUS RIVER AT HELLS HALF ACRE BRIDGE, NEAR PINECREST, CALIF.

LOCATION.--Lat 38°14'49", long 120°01'51", in SW¼NE¼ sec.31, T.5 N., R.18 E., Tuolumne County, on left bank 200 ft upstream from Donnell powerhouse, 800 ft downstream from Hells Half Acre bridge, 1.1 miles upstream from Cow Creek, and 4.7 miles northwest of Pinecrest.

DRAINAGE AREA.--287 sq mi.

PERIOD OF RECORD.--February 1956 to current year. Prior to October 1965, published as Middle Fork Stanislaus River at Hells Half Acre bridge.

GAGE.--Water-stage recorder. Datum of gage is 3,418.31 ft above mean sea level (river-profile survey). Prior to Aug. 9, 1961, at site 1,600 ft upstream at different datum.

AVERAGE DISCHARGE.--17 years, 248 cfs (179,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,920 cfs May 19 (gage height, 11.82 ft); minimum daily, 22 cfs Oct. 1-9, 11-14.

Period of record: Maximum discharge, 10,200 cfs Dec. 24, 1964 (gage height, 13.64 ft in gage well, 14.2 ft outside, from floodmarks), from rating curve extended above 5,200 cfs on basis of slope-area measurement at gage height 12.20 ft; minimum daily, 3.3 cfs Nov. 9, 10, 1957.

Maximum stage known since at least 1905, 23 ft Dec. 23, 1955, from floodmarks at present site (discharge, 26,600 cfs by slope-area measurement).

REMARKS.--Records good. Flow regulated by Relief Reservoir since 1909 (capacity, 15,600 acre-ft), by Donnell Lake (see sta 11292600), and by diversion around station through Donnell powerhouse. See schematic diagram of Stanislaus River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	23	26	42	77	160	150	508	2,070	73	30	33
2	22	36	25	42	76	153	139	547	1,950	56	30	33
3	22	29	26	42	77	150	137	567	1,730	52	42	33
4	22	25	32	37	86	146	146	515	1,660	50	41	33
5	22	27	27	38	81	134	175	408	1,610	46	41	32
6	22	26	27	38	90	135	225	385	1,460	45	41	32
7	22	25	28	38	102	128	266	453	1,780	43	41	36
8	22	26	28	39	97	126	272	522	1,760	42	41	36
9	22	28	30	41	92	122	327	579	1,940	41	38	36
10	23	26	26	39	116	128	356	626	1,660	40	37	36
11	22	27	27	71	113	151	394	704	1,390	39	37	36
12	22	35	26	370	109	136	415	778	1,270	38	37	36
13	22	36	26	235	105	133	399	835	1,110	39	38	36
14	22	36	26	152	106	124	319	818	893	43	36	35
15	23	30	26	127	100	121	306	769	568	39	36	35
16	23	33	26	229	97	126	284	807	422	37	36	35
17	23	29	102	212	98	131	322	821	360	36	35	35
18	24	27	124	193	99	126	333	3,530	344	36	35	34
19	23	28	128	167	99	129	309	5,250	254	35	35	35
20	24	27	103	136	100	137	295	3,680	376	35	35	35
21	23	26	77	128	102	124	296	2,790	501	35	35	34
22	23	26	126	111	99	122	340	2,160	530	35	34	35
23	23	25	94	103	99	123	423	2,240	563	35	34	34
24	23	25	72	98	108	132	506	2,690	214	34	35	34
25	23	25	60	94	108	147	558	2,270	308	34	35	36
26	23	25	56	89	118	156	651	1,820	385	33	35	35
27	23	26	54	85	138	161	703	1,640	565	32	36	35
28	23	26	53	83	164	156	701	2,380	472	32	35	35
29	23	26	46	84	------	145	629	3,010	354	32	34	35
30	23	26	46	83	------	143	557	3,290	230	31	33	35
31	23	------	43	79	------	151	------	2,500	------	31	33	------
TOTAL	702	835	1,616	3,325	2,856	4,256	10,933	49,892	28,729	1,229	1,121	1,040
MEAN	22.6	27.8	52.1	107	102	137	364	1,609	958	39.6	36.2	34.7
MAX	24	36	128	370	164	161	703	5,250	2,070	73	42	36
MIN	22	23	25	37	76	121	137	385	214	31	30	32
AC-FT	1,390	1,660	3,210	6,600	5,660	8,440	21,690	98,960	56,980	2,440	2,220	2,060

CAL YR 1972 TOTAL 40,977 MEAN 112 MAX 1,140 MIN 21 AC-FT 81,280
WTR YR 1973 TOTAL 106,534 MEAN 292 MAX 5,250 MIN 22 AC-FT 211,300

11292800 BEARDSLEY LAKE NEAR STRAWBERRY, CALIF.

LOCATION.--Lat 38°12'17", long 120°04'31", in SE¼NW¼ sec.14, T.4 N., R.17 E., Tuolumne County, Stanislaus National Forest, in hoist house of Beardsley Dam on Middle Fork Stanislaus River, 2.4 miles upstream from Spring Gap powerhouse, 3.9 miles west of Strawberry, and 4.7 miles west of Pinecrest.

DRAINAGE AREA.--309 sq mi.

PERIOD OF RECORD.--June 1957 to current year. Prior to October 1960, published as Lake Hartley near Strawberry.

GAGE.--Water-stage recorder. Datum of gage is 7.84 ft above mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 97,700 acre-ft June 16, July 4 (gage height, 3,396.8 ft); minimum, 24,400 acre-ft Mar. 25 (gage height, 3,271.4 ft).
Period of record: Maximum contents, 98,700 acre-ft June 27, 1957 (gage height, 3,398.2 ft); minimum since reservoir first filled, 20,000 acre-ft Jan. 27, 28, 1962 (gage height, 3,261.3 ft).

REMARKS.--Reservoir is formed by rockfill, earth-core dam completed in 1957. Capacity, 98,500 acre-ft between gage heights 3,145.0 ft (tunnel invert) and 3,398.0 ft (top of spillway gates). No dead storage. Reservoir is used for power and conservation storage. Water passes through Beardsley Powerplant and down Middle Fork Stanislaus River to Melones Reservoir (see sta 11299000). Records, including extremes, represent contents at 2400 hours. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,261	19,900	3,350	66,400
3,290	33,100	3,370	79,200
3,320	48,800	3,398	98,500

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71,200	51,200	50,500	31,500	35,500	28,700	25,000	58,600	97,300	97,400	94,700	93,700
2	70,800	51,400	49,500	31,400	35,300	28,600	25,000	60,200	97,400	97,600	94,700	93,700
3	70,600	51,600	48,400	31,400	34,500	28,200	25,000	61,700	97,400	97,600	94,500	93,700
4	70,100	51,700	47,800	31,100	33,800	27,700	25,100	62,900	97,400	97,700	94,400	93,700
5	69,700	51,800	47,000	31,100	33,600	27,500	25,300	64,000	97,500	97,600	94,400	93,800
6	69,300	52,000	46,200	30,600	33,400	27,400	25,700	65,000	97,400	97,400	94,300	93,900
7	68,500	52,300	45,700	29,700	33,700	27,200	25,500	66,100	97,200	97,200	94,300	94,100
8	67,600	52,500	45,000	29,800	33,000	27,000	25,200	67,300	97,500	97,000	94,400	94,100
9	67,200	52,700	43,900	30,300	32,700	26,700	26,100	68,700	97,200	96,900	94,400	94,000
10	66,800	53,000	42,900	30,700	32,200	26,200	27,300	70,100	97,300	96,900	94,200	94,200
11	66,400	53,100	42,100	31,000	31,600	25,700	28,600	71,600	97,400	96,900	94,200	94,300
12	65,800	53,100	41,300	32,200	31,700	25,900	29,900	73,100	97,400	96,900	94,100	94,400
13	65,400	53,300	40,600	33,200	31,500	26,000	31,400	74,800	97,600	96,900	94,000	94,600
14	64,600	53,700	40,400	34,000	31,600	25,700	32,500	76,700	97,400	96,900	94,000	94,800
15	63,700	53,900	40,200	34,500	31,800	25,800	33,600	78,200	97,400	97,000	94,000	94,800
16	62,800	54,100	39,200	35,200	31,900	25,900	34,700	79,800	97,700	96,900	94,100	94,900
17	62,000	54,300	38,400	35,800	31,200	25,400	36,000	81,500	97,400	96,900	94,200	94,900
18	61,000	54,300	38,400	36,400	30,500	24,800	37,200	86,000	97,600	97,000	94,200	94,700
19	60,200	55,100	38,400	37,000	30,300	24,900	38,300	90,200	97,400	97,200	94,200	94,400
20	59,400	55,600	38,200	36,900	30,300	25,100	39,400	91,800	97,400	97,200	94,200	94,200
21	58,600	55,900	38,000	37,200	30,300	25,400	41,400	93,200	97,400	96,400	94,100	93,900
22	57,600	56,200	37,500	37,600	30,300	25,500	44,200	94,400	97,500	65,400	94,100	93,700
23	56,600	56,300	36,700	37,900	30,200	25,500	45,600	96,200	97,400	65,400	94,000	93,100
24	55,600	55,900	35,900	38,100	29,500	24,900	46,900	97,600	97,500	95,400	93,800	92,700
25	54,500	54,900	34,900	38,200	28,900	24,400	48,400	97,300	97,500	95,400	93,800	92,300
26	53,600	53,900	34,900	38,200	28,600	24,600	50,300	97,200	97,600	95,400	93,800	92,000
27	52,700	53,200	34,600	37,400	28,900	24,900	52,200	97,500	97,500	95,400	93,900	91,600
28	51,800	52,400	34,500	36,700	28,800	25,200	54,000	97,300	97,500	95,000	93,800	91,200
29	50,900	51,600	34,400	36,400	------	25,500	55,600	97,400	97,400	95,200	93,700	90,300
30	50,700	50,800	33,300	36,000	------	25,700	57,100	97,200	97,400	94,900	93,700	89,500
31	50,900	------	32,400	35,800	------	25,300	------	97,500	------	94,800	93,700	------
MAX	71,200	56,300	50,500	38,200	35,500	28,700	57,100	97,600	97,700	97,700	94,700	94,900
MIN	50,700	50,800	32,400	29,700	28,600	24,400	25,000	58,600	97,200	65,400	93,700	89,500
(a)	3,323.8	3,323.6	3,288.5	3,295.4	3,280.9	3,273.4	3,334.6	3,396.6	3,396.4	3,392.8	3,391.3	3,385.3
(b)	-21,100	-100	-18,400	+3,400	-7,000	-3,500	+31,800	+40,400	-100	-2,600	-1,100	-4,200

CAL YR 1972 b -1,600
WTR YR 1973 b +17,500

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11292900 MIDDLE FORK STANISLAUS RIVER BELOW BEARDSLEY DAM, CALIF.

LOCATION.--Lat 38°11'36", long 120°05'53", in NW¼NW¼ sec.22, T.4 N., R.17 E., Tuolumne County, Stanislaus National Forest, on right bank 0.5 mile downstream from Beardsley afterbay dam, 1.5 miles downstream from Beardsley Dam, and 5.7 miles west of Pinecrest.

DRAINAGE AREA.--316 sq mi.

PERIOD OF RECORD.--December 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,044.7 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--16 years, 620 cfs (449,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,520 cfs May 30 (gage height, 9.81 ft); minimum daily, 20 cfs Nov. 2, 3, 6, 13.
Period of record: Maximum discharge, 6,630 cfs May 24, 1969 (gage height, 11.07 ft); minimum daily, 3.0 cfs Oct. 10, 11, 1958.

REMARKS.--Records excellent. No diversion above station. Flow regulated by Relief Reservoir (capacity, 15,600 acre-ft), Donnell Lake since April 1957 (see sta 11292600), and by Beardsley Lake since January 1957 (see sta 11292800). See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	468	26	369	509	479	454	414	533	2,800	779	528	532
2	470	20	529	507	479	455	417	546	2,550	650	528	532
3	467	20	528	504	479	456	416	499	2,420	717	528	532
4	471	21	528	504	479	457	415	582	2,280	680	528	532
5	471	21	533	504	479	457	414	612	2,210	722	528	528
6	470	20	548	504	482	456	417	612	2,060	683	536	504
7	472	21	553	504	476	453	416	616	2,520	620	536	476
8	471	21	557	504	479	455	416	620	2,220	594	536	486
9	472	21	560	504	476	455	432	623	2,790	553	532	486
10	473	21	560	504	476	455	497	625	2,200	515	532	479
11	473	21	556	508	479	454	508	629	1,990	497	532	472
12	471	21	553	532	476	305	514	635	1,830	504	528	472
13	472	20	550	532	479	307	519	638	1,660	500	528	472
14	472	21	548	528	476	458	531	641	1,650	504	532	472
15	468	33	547	528	476	457	527	648	1,210	500	532	472
16	469	49	545	508	468	456	535	651	996	504	532	472
17	469	39	546	465	451	454	533	654	1,150	500	528	472
18	471	38	544	458	456	454	488	1,860	973	500	532	472
19	468	37	547	458	458	457	491	3,820	999	500	532	472
20	475	37	544	458	458	459	465	3,490	1,080	496	528	472
21	503	38	544	451	456	455	98	2,760	1,120	500	528	476
22	501	36	517	462	457	455	60	2,090	1,190	493	528	476
23	501	36	507	472	457	457	118	2,030	1,240	496	532	472
24	499	137	505	476	459	454	561	2,550	856	496	528	472
25	503	544	506	476	458	455	579	3,100	1,020	493	532	472
26	500	547	507	430	456	441	571	2,510	1,000	496	528	472
27	500	543	505	472	456	424	562	2,140	1,190	516	528	472
28	497	544	506	468	456	420	541	3,120	1,130	528	532	472
29	520	544	500	472	------	418	554	3,590	1,070	528	528	472
30	221	549	501	472	------	412	564	4,000	954	528	532	472
31	35	------	505	476	------	415	------	2,940	------	528	532	------
TOTAL	14,193	4,046	16,348	15,150	13,116	13,620	13,573	50,364	48,358	17,120	16,444	14,535
MEAN	458	135	527	489	468	439	452	1,625	1,612	552	530	485
MAX	520	549	560	532	482	459	579	4,000	2,800	779	536	532
MIN	35	20	369	430	451	305	60	499	856	493	528	472
AC-FT	28,150	8,030	32,430	30,050	26,020	27,020	26,920	99,900	95,920	33,960	32,620	28,830

CAL YR 1972 TOTAL 169,952 MEAN 464 MAX 1,310 MIN 20 AC-FT 337,100
WTR YR 1973 TOTAL 236,867 MEAN 649 MAX 4,000 MIN 20 AC-FT 469,800

11293500 NORTH FORK STANISLAUS RIVER BELOW SILVER CREEK, CALIF.

LOCATION.--Lat 38°26'22", long 120°00'53", in SE¼ sec.20, T.7 N., R.18 E., Alpine County, Stanislaus National Forest, on right bank 100 ft downstream from Silver Creek, and 5.6 miles northeast of Big Meadow.

DRAINAGE AREA.--27.8 sq mi.

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,677.3 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--21 years, 77.3 cfs (56,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,460 cfs May 16 (gage height, 7.94 ft); minimum daily, 3.3 cfs Sept. 27.
Period of record: Maximum discharge, 2,780 cfs Dec. 24, 1964 (gage height, 11.16 ft, from floodmarks), from rating curve extended above 500 cfs; minimum daily, 0.3 cfs Oct. 10, 1958.
Flood of Nov. 20, 1950, reached a stage of 11.17 ft, from Pacific Gas and Electric Co. recorder chart (discharge, 2,790 cfs).

REMARKS.--Flow regulated by Lake Alpine, Union, and Utica Reservoirs (combined capacity, 9,600 acre-ft). No diversion above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: 1954(M), drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	19	18	17	17	19	39	269	327	17	24	21
2	36	40	17	16	17	20	35	352	318	15	24	21
3	39	39	16	16	17	25	32	367	307	14	24	21
4	38	43	15	15	17	33	34	282	299	12	24	21
5	21	43	15	15	16	32	49	153	305	11	25	21
6	5.3	40	15	14	16	32	81	169	309	10	24	21
7	4.8	39	15	14	16	34	123	302	288	9.0	24	21
8	4.6	31	15	14	16	31	129	395	279	8.3	24	21
9	4.5	34	15	14	16	30	164	514	264	9.1	24	21
10	6.3	33	15	14	16	30	176	631	217	10	24	21
11	6.6	33	15	14	17	37	204	755	180	9.7	24	21
12	5.1	33	14	26	17	34	227	870	154	9.1	24	21
13	4.9	34	14	39	16	32	204	793	138	15	24	21
14	4.6	33	14	29	16	30	128	747	111	22	24	21
15	4.7	27	14	24	16	28	107	728	75	22	24	21
16	5.1	16	14	23	16	30	93	884	65	19	24	21
17	4.4	16	88	20	16	33	122	916	58	13	24	21
18	16	16	97	19	16	32	141	857	57	13	24	21
19	39	15	122	18	17	33	127	815	52	12	24	21
20	41	15	60	18	17	42	113	614	50	12	23	21
21	41	15	42	18	18	39	124	539	49	12	21	20
22	41	14	55	17	18	38	192	527	47	12	21	21
23	42	14	33	17	18	33	283	553	41	12	21	20
24	42	15	26	17	18	34	342	498	35	12	21	20
25	42	17	23	17	17	41	375	489	32	12	21	16
26	42	20	22	17	17	48	446	382	31	12	22	3.6
27	42	20	22	17	17	54	504	390	32	11	22	3.3
28	42	19	21	17	18	51	489	534	29	12	21	3.4
29	41	19	22	17	------	44	368	644	25	12	21	4.2
30	41	18	21	17	------	39	277	566	21	12	21	4.2
31	27	------	18	17	------	39	------	378	------	16	21	------
TOTAL	769.9	770	913	567	469	1,077	5,728	16,913	4,195	397.2	713	535.7
MEAN	24.8	25.7	29.5	18.3	16.8	34.7	191	546	140	12.8	23.0	17.9
MAX	42	43	122	39	18	54	504	916	327	22	25	21
MIN	4.4	14	14	14	16	19	32	153	21	8.3	21	3.3
AC-FT	1,530	1,530	1,810	1,120	930	2,140	11,360	33,550	8,320	788	1,410	1,060

CAL YR 1972 TOTAL 26,490.7 MEAN 72.4 MAX 426 MIN 3.7 AC-FT 52,540
WTR YR 1973 TOTAL 33,047.8 MEAN 90.5 MAX 916 MIN 3.3 AC-FT 65,550

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	2245	6.92	778	5-16	2130	7.94	1,460
5-2	2215	6.49	498	5-29	2130	7.49	1,180
5-12	2145	7.84	1,400				

11294000 HIGHLAND CREEK BELOW SPICER MEADOWS RESERVOIR, CALIF.

LOCATION.--Lat 38°23'34", long 119°59'50", in SW¼ sec.3, T.6 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 500 ft downstream from Spicer Meadows Reservoir dam, 5.8 miles (revised) upstream from mouth, and 7 miles east of Big Meadow.

DRAINAGE AREA.--42.4 sq mi.

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,374.8 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--21 years, 122 cfs (88,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,480 cfs May 18 (gage height, 7.99 ft), from rating curve extended above 1,200 cfs; no flow Oct. 4, 21-24.
Period of record: Maximum discharge, 9,860 cfs Jan. 31, 1963 (gage height, 11.88 ft), from rating curve extended above 1,200 cfs; no flow Sept. 28 to Dec. 1, Dec. 4-6, 1964, Sept. 17, Oct. 4, 21-24, 1972.
Flood of Nov. 20, 1950, reached a stage of 11.50 ft, from Pacific Gas and Electric Co. recorder chart (discharge, 8,800 cfs).

REMARKS.--Flow regulated by Spicer Meadows Reservoir 500 ft upstream (capacity, 4,060 acre-ft). See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1930: 1953.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	18	4.0	34	40	49	57	385	578	53	15	11
2	2.4	4.3	4.0	32	41	47	52	490	520	49	15	11
3	.10	2.6	4.0	25	41	49	51	499	491	43	15	11
4	0	6.5	4.0	23	43	46	64	435	477	40	15	11
5	8.1	12	4.0	24	38	43	104	288	500	38	15	11
6	33	15	4.0	30	42	46	172	289	516	36	15	11
7	36	10	4.0	33	41	42	202	442	490	32	15	11
8	36	8.0	4.0	37	38	42	209	566	514	29	15	11
9	35	6.0	4.0	40	39	41	273	642	486	33	14	11
10	35	5.2	4.0	36	47	46	286	743	414	31	14	10
11	34	4.8	4.5	43	42	47	313	869	364	35	14	10
12	33	4.6	4.5	119	40	44	331	1,040	334	40	14	10
13	40	4.5	4.5	131	39	43	285	994	300	27	14	10
14	43	4.5	5.0	87	40	39	185	985	240	19	13	10
15	41	4.4	5.0	72	37	37	164	1,020	197	19	12	10
16	38	4.4	5.0	86	39	47	150	1,170	176	25	12	10
17	34	4.3	45	64	38	50	211	1,180	162	32	12	10
18	22	4.3	83	67	41	47	211	1,280	157	32	12	10
19	7.6	4.2	64	48	43	50	194	1,320	159	32	12	10
20	3.1	4.2	56	48	45	52	178	939	150	32	12	10
21	0	4.1	54	48	46	47	196	829	146	32	12	10
22	0	4.1	52	44	43	42	288	775	142	32	12	9.6
23	0	4.1	43	43	44	44	401	779	130	35	11	9.6
24	0	4.1	44	42	48	52	466	701	111	39	11	9.6
25	3.5	4.1	42	44	43	69	523	675	106	38	11	17
26	5.8	4.0	39	41	44	79	637	566	104	38	11	28
27	4.1	4.0	38	39	46	85	687	598	108	34	11	28
28	4.2	4.0	39	40	47	71	642	759	94	27	11	27
29	4.2	4.0	35	43	------	59	499	875	88	27	11	27
30	4.0	4.0	35	43	------	54	389	819	67	27	11	26
31	25	------	35	40	------	54	------	623	------	20	11	------
TOTAL	535.10	172.3	772.5	1,546	1,175	1,563	8,420	23,575	8,321	1,026	398	400.8
MEAN	17.3	5.74	24.9	49.9	42.0	50.4	281	760	277	33.1	12.8	13.4
MAX	43	18	83	131	48	85	687	1,320	578	53	15	28
MIN	0	2.6	4.0	23	37	37	51	288	67	19	11	9.6
AC-FT	1,060	342	1,530	3,070	2,330	3,100	16,700	46,760	16,500	2,040	789	795

CAL YR 1972 TOTAL 37,670.15 MEAN 103 MAX 535 MIN 0 AC-FT 74,720
WTR YR 1973 TOTAL 47,904.70 MEAN 131 MAX 1,320 MIN 0 AC-FT 95,020

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	2030	6.25	1,060	5-18	2215	7.99	2,480
5-2	2100	5.58	712	5-29	2145	6.61	1,280
5-12	2030	7.21	1,740	6-8	2200	5.57	708

11294500 NORTH FORK STANISLAUS RIVER NEAR AVERY, CALIF.

LOCATION.--Lat 38°14'45", long 120°17'20", in SW¼NE¼ sec.35, T.5 N., R.15 E., Calaveras County, Stanislaus National Forest, 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.

PERIOD OF RECORD.--July 1914 to September 1925, November 1928 to current year. Yearly discharge only for some years, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3,388.3 ft above mean sea level (river-profile survey). Prior to September 1922, nonrecording gage at same site at datum 0.05 ft lower.

AVERAGE DISCHARGE.--56 years, 418 cfs (302,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,320 cfs May 12 (gage height, 8.27 ft); minimum daily, 31 cfs Oct. 6.
Period of record: Maximum discharge, 36,000 cfs Jan. 31, 1963 (gage height, 15.00 ft, from floodmarks), from rating curve extended above 14,000 cfs on basis of slope-area measurement at gage height 13.8 ft; minimum daily, 5.5 cfs Dec. 6, 7, 1929.

REMARKS.--Flow regulated at low and medium stages by Lake Alpine, Spicer Meadows, Union and Utica Reservoirs (combined capacity, 13,600 acre-ft). Diversion of a maximum of 10 cfs during summer from Beaver Creek into river above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M). WSP 1515: 1915(M), 1932(M), 1936(M), 1938, 1940(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	47	44	104	174	387	356	1,480	1,580	137	49	37
2	44	42	41	107	178	359	331	1,780	1,490	122	49	37
3	40	43	44	108	182	347	306	1,950	1,350	111	48	37
4	42	87	62	88	211	339	319	1,690	1,280	101	49	36
5	41	99	40	90	194	303	414	1,120	1,260	93	50	36
6	31	73	40	95	213	303	666	1,050	1,300	87	51	36
7	37	64	39	86	262	288	867	1,580	1,220	83	49	35
8	47	59	38	87	229	279	828	1,950	1,160	75	48	35
9	48	44	37	101	209	264	1,050	2,230	1,140	69	47	34
10	53	43	37	102	332	275	1,080	2,490	985	71	47	35
11	51	50	38	183	297	354	1,210	2,900	857	69	46	35
12	45	46	40	961	264	304	1,300	3,370	764	71	46	35
13	42	47	42	759	242	281	1,260	3,510	697	75	45	35
14	49	77	43	460	245	259	878	3,170	580	75	45	34
15	57	61	43	362	228	246	786	3,110	466	69	44	34
16	52	68	43	850	220	267	684	3,450	411	69	42	35
17	51	43	470	584	222	292	841	3,560	369	68	41	35
18	49	39	472	529	227	278	965	3,360	344	66	44	35
19	42	38	541	404	233	279	864	3,490	328	65	41	35
20	48	35	370	298	239	309	807	2,740	308	65	41	35
21	43	33	243	295	246	287	796	2,380	291	64	40	35
22	40	36	441	246	234	266	1,050	2,340	279	63	38	35
23	39	33	292	227	233	267	1,460	2,290	259	62	38	36
24	38	33	262	222	263	285	1,760	2,190	227	64	38	36
25	38	36	203	218	272	351	1,910	2,040	212	68	38	35
26	39	45	178	199	291	418	2,230	1,730	208	67	39	35
27	42	52	169	183	364	456	2,440	1,700	213	66	42	40
28	42	50	164	186	451	434	2,430	2,050	206	61	40	36
29	42	47	130	192	------	376	2,030	2,330	182	53	38	35
30	41	45	133	198	------	339	1,610	2,310	164	51	37	35
31	41	------	120	186	------	347	------	1,780	------	50	37	------
TOTAL	1,353	1,515	4,859	8,710	6,955	9,839	33,528	73,120	20,130	2,310	1,347	1,064
MEAN	43.6	50.5	157	281	248	317	1,118	2,359	671	74.5	43.5	35.5
MAX	57	99	541	961	451	456	2,440	3,560	1,580	137	51	40
MIN	31	33	37	86	174	246	306	1,050	164	50	37	34
AC-FT	2,680	3,010	9,640	17,280	13,800	19,520	66,500	145,000	39,930	4,580	2,670	2,110

CAL YR 1972 TOTAL 116,859 MEAN 319 MAX 1,700 MIN 30 AC-FT 231,800
WTR YR 1973 TOTAL 164,730 MEAN 451 MAX 3,560 MIN 31 AC-FT 326,700

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
4-27	2345	7.05	3,240	5-16	2200	8.13	5,040
5-3	0015	6.45	2,470	5-29	2330	7.04	3,230
5-12	2215	8.27	5,320				

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.

LOCATION.--Lat 38°08'29", long 120°22'19", in NW¼SW¼ sec.6, T.3 N., R.15 E., Calaveras County, on right bank 1,000 ft upstream from Stanislaus powerplant, and 3.6 miles south of Hathaway Pines.

DRAINAGE AREA.--629 sq mi.

PERIOD OF RECORD.--July 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,030.00 ft above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE (River only).--6 years, 843 cfs (610,800 acre-ft per year).
(Combined river and powerplant).--6 years, 1,348 cfs (976,700 acre-ft per year).

EXTREMES (River only).--Current year: Maximum discharge, 8,510 cfs May 19 (gage height, 14.73 ft); minimum daily, 29 cfs Aug. 25, Aug. 30 to Sept. 1.
Period of record: Maximum discharge, 17,300 cfs Jan. 21, 1970 (gage height, 17.98 ft, recorded, 18.6 ft, from floodmarks); minimum daily, 19 cfs Aug. 17, 1968.
(Combined flow).--Current year: Maximum discharge, 9,040 cfs May 19; minimum daily, 45 cfs Nov. 3.
Period of record: Maximum discharge, 17,900 cfs Jan. 21, 1970; minimum daily, 45 cfs Nov. 3, 1972.

REMARKS.--Records excellent. Many diversions above station for hydro-electric powerplants. Small diversions for domestic water supply. Stanislaus tunnel diverts from left bank of Middle Fork Stanislaus River 13.7 miles upstream from station in SE¼ sec.24 , T.4 N., R.16 E., to Stanislaus powerplant 1,000 ft downstream from station. See schematic diagram of Stanislaus River basin. For records of combined discharge of river and tunnel, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records of diversion to Stanislaus powerplant furnished by Pacific Gas and Electric Co.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	52	116	165	333	850	634	2,040	4,110	490	37	29
2	36	47	56	181	308	780	620	2,360	3,890	257	37	30
3	38	45	42	159	297	730	607	2,640	3,480	303	36	31
4	38	125	73	103	389	755	631	2,380	3,330	255	37	31
5	38	142	65	86	347	675	751	1,710	3,170	268	37	31
6	36	85	76	104	365	655	994	1,480	3,150	276	34	30
7	34	72	108	108	565	655	1,220	2,050	3,320	193	37	30
8	36	81	113	120	485	620	1,130	2,550	3,130	152	39	31
9	39	62	104	199	432	578	1,490	3,000	3,570	130	37	37
10	44	58	156	244	996	574	1,590	3,240	2,900	86	37	42
11	45	73	102	462	1,260	805	1,810	3,670	2,480	107	37	39
12	49	59	99	2,400	1,070	675	1,970	4,130	2,180	43	37	35
13	47	52	96	1,450	804	566	1,980	4,480	1,940	40	36	34
14	45	117	95	910	749	522	1,450	4,170	1,820	43	37	33
15	50	105	92	725	646	502	1,340	3,990	1,320	49	38	33
16	52	112	93	2,010	565	517	1,200	4,310	923	51	38	34
17	55	80	585	1,500	518	523	1,350	4,500	1,080	52	36	34
18	62	61	874	1,300	496	500	1,530	5,150	813	49	35	34
19	52	57	835	1,060	492	530	1,350	7,310	846	45	37	34
20	45	60	680	736	470	692	1,260	6,560	859	44	37	33
21	40	59	473	632	443	625	1,140	5,320	967	42	34	34
22	45	53	677	517	412	602	1,420	4,620	937	45	31	35
23	44	51	547	457	408	616	1,880	4,240	1,030	44	30	36
24	42	49	439	427	434	579	2,340	4,730	723	43	30	37
25	38	51	345	407	529	662	2,620	5,090	664	44	29	38
26	38	51	295	365	542	760	3,070	4,220	737	44	31	37
27	38	65	272	291	760	798	3,400	3,670	895	38	33	36
28	37	91	266	300	1,020	772	3,390	4,800	878	31	32	36
29	36	114	209	324	------	675	2,970	5,750	725	38	32	35
30	38	115	191	404	------	621	2,360	6,290	668	39	29	34
31	59	------	184	374	------	618	------	4,650	------	41	29	------
TOTAL	1,332	2,244	8,358	18,520	16,135	20,032	49,497	125,100	56,535	3,382	1,076	1,023
MEAN	43.0	74.8	270	597	576	646	1,650	4,035	1,885	109	34.7	34.1
MAX	62	142	874	2,400	1,260	850	3,400	7,310	4,110	490	39	42
MIN	34	45	42	86	297	500	607	1,480	664	31	29	29
AC-FT	2,640	4,450	16,580	36,730	32,000	39,730	98,180	248,100	112,100	6,710	2,130	2,030

CAL YR 1972 TOTAL 154,036 MEAN 421 MAX 1,860 MIN 26 AC-FT 305,500
WTR YR 1973 TOTAL 303,234 MEAN 831 MAX 7,310 MIN 29 AC-FT 601,500

SAN JOAQUIN RIVER BASIN

11295400 STANISLAUS RIVER NEAR HATHAWAY PINES, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF STANISLAUS RIVER AND STANISLAUS POWERPLANT AT STANISLAUS, NEAR HATHAWAY PINES, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	566	52	624	692	864	1,380	1,160	2,580	4,640	1,020	572	565
2	566	47	488	710	838	1,310	1,150	2,900	4,420	790	572	566
3	568	45	581	687	827	1,260	1,140	3,170	4,010	835	572	567
4	567	125	610	635	918	1,280	1,160	2,910	3,860	788	572	567
5	566	142	599	616	876	1,200	1,280	2,240	3,700	801	572	566
6	565	85	609	634	894	1,190	1,520	2,010	3,680	809	570	565
7	564	72	640	637	1,090	1,180	1,750	2,580	3,850	726	572	565
8	566	81	645	649	1,010	1,150	1,660	3,080	3,660	685	575	568
9	568	62	635	729	960	1,110	2,020	3,530	4,110	663	573	574
10	573	67	686	773	1,530	1,100	2,130	3,770	3,430	611	572	578
11	575	102	635	990	1,790	1,340	2,350	4,200	3,010	598	573	575
12	577	103	628	2,930	1,600	1,150	2,510	4,660	2,710	588	572	570
13	576	108	625	1,980	1,330	950	2,520	5,010	2,470	583	572	569
14	574	194	624	1,440	1,280	1,060	1,990	4,700	2,350	584	572	568
15	579	180	620	1,250	1,170	1,040	1,880	4,520	1,850	589	573	568
16	581	202	620	2,540	1,090	1,060	1,740	4,840	1,460	589	574	569
17	584	164	1,110	2,030	1,050	1,060	1,880	5,030	1,610	591	572	569
18	591	145	1,400	1,830	1,020	1,040	2,060	5,680	1,350	587	571	569
19	580	130	1,360	1,590	1,020	1,070	1,890	7,840	1,380	582	573	568
20	563	132	1,210	1,260	998	1,230	1,770	7,090	1,390	580	572	568
21	568	131	1,000	1,160	971	1,160	1,260	5,850	1,500	578	569	570
22	577	121	1,200	1,040	940	1,140	1,420	5,150	1,470	581	566	571
23	576	86	1,080	984	936	1,150	1,880	4,770	1,560	580	565	571
24	572	83	966	955	962	1,110	2,850	5,260	1,260	578	564	572
25	569	495	872	935	1,060	1,190	3,160	5,630	1,200	579	564	573
26	569	591	822	881	1,070	1,290	3,610	4,750	1,270	579	567	571
27	569	603	800	830	1,290	1,330	3,920	4,200	1,430	572	567	570
28	564	626	794	836	1,550	1,300	3,930	5,330	1,410	567	567	570
29	552	647	737	858	------	1,210	3,510	6,290	1,260	574	567	569
30	288	647	718	938	------	1,150	2,900	6,830	1,200	574	564	569
31	59	------	711	906	------	1,150	------	5,190	------	577	564	------
TOTAL	16,912	6,268	24,649	34,925	30,934	36,340	64,000	141,590	72,500	19,938	17,670	17,080
MEAN	546	209	795	1,127	1,105	1,172	2,133	4,567	2,417	643	570	569
MAX	591	647	1,400	2,930	1,790	1,380	3,930	7,840	4,640	1,020	575	578
MIN	59	45	488	616	827	950	1,140	2,010	1,200	567	564	565
AC-FT	33,540	12,430	48,890	69,270	61,360	72,080	126,900	280,800	143,800	39,550	35,050	33,880

CAL YR 1972 TOTAL 325,810 MEAN 890 MAX 2,390 MIN 45 AC-FT 646,200
WTR YR 1973 TOTAL 482,806 MEAN 1,323 MAX 7,840 MIN 45 AC-FT 957,600

11296500 SOUTH FORK STANISLAUS RIVER AT STRAWBERRY, CALIF.

LOCATION.--Lat 38°11'51", long 120°00'27", in SW¼ sec.16, T.4 N., R.18 E., Tuolumne County, Stanislaus National Forest, 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.

PERIOD OF RECORD.--October 1911 to January 1917, August 1938 to current year. Monthly discharge only for October 1913 and yearly estimates for 1912-13, published in WSP 1315-A. Published as "near Confidence" 1911-13.

GAGE.--Water-stage recorder. Datum of gage is 5,235.1 ft above mean sea level (river-profile survey). October 1911 to January 1917, nonrecording gage at site 1 mile downstream at different datum.

AVERAGE DISCHARGE.--40 years (1911-16, 1938-73), 128 cfs (92,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,400 cfs May 19 (gage height, 5.84 ft); minimum daily, 15 cfs Nov. 3.
Period of record: Maximum discharge, 3,900 cfs Nov. 21, 1950 (gage height, 9.25 ft), from rating curve extended above 1,100 cfs on basis of contracted-opening measurement of maximum flow at bridge 0.3 mile below station; minimum, 1.3 cfs Nov. 22, 23, 1946.

REMARKS.--Flow regulated at low and medium stages by Pinecrest Lake 1.2 miles upstream beginning in 1916 (capacity, 18,300 acre-ft). No diversion above station. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1945(M). WSP 1515: 1916, 1943(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	38	35	39	203	33	46	156	765	67	25	36
2	66	26	34	38	197	32	46	176	674	59	25	36
3	67	15	34	38	155	32	45	184	627	54	24	36
4	67	19	34	37	44	32	46	165	592	48	31	36
5	67	18	34	52	27	36	50	124	655	58	37	46
6	67	17	47	60	32	42	57	120	679	61	37	63
7	67	17	77	59	34	44	65	146	687	58	37	63
8	67	17	102	52	37	44	73	190	695	61	37	78
9	67	17	101	47	37	45	85	227	628	63	37	90
10	67	27	98	47	34	44	93	261	583	60	36	85
11	67	35	97	50	34	47	106	299	518	61	37	85
12	72	35	96	89	34	45	121	344	517	61	38	84
13	76	57	68	82	34	44	115	370	445	60	37	84
14	72	78	51	64	33	44	94	455	365	61	37	98
15	69	77	51	60	33	43	88	854	270	59	37	107
16	69	77	51	69	33	44	81	985	233	58	37	102
17	69	68	72	61	33	45	76	1,100	220	58	37	101
18	69	61	77	60	33	45	76	1,040	232	58	37	101
19	69	60	78	56	34	44	74	1,110	261	58	37	101
20	69	60	71	55	34	46	74	883	277	57	37	100
21	69	59	57	54	34	45	79	619	273	57	37	99
22	68	40	58	53	34	44	99	605	244	57	37	99
23	67	21	49	58	34	44	130	714	215	57	36	99
24	67	21	46	150	35	45	162	733	191	57	36	98
25	68	22	43	221	35	46	185	663	176	57	36	99
26	68	22	42	220	36	47	220	494	184	37	36	101
27	67	26	42	213	37	48	240	533	201	24	36	99
28	48	36	40	206	36	47	244	798	176	24	36	99
29	38	35	38	203	------	47	208	937	130	24	36	99
30	38	35	40	207	------	47	163	935	89	25	36	98
31	38	------	38	209	------	47	------	780	------	25	36	------
TOTAL	2,006	1,136	1,801	2,909	1,416	1,338	3,241	17,000	11,802	1,624	1,095	2,522
MEAN	64.7	37.9	58.1	93.8	50.6	43.2	108	548	393	52.4	35.3	84.1
MAX	76	78	102	221	203	48	244	1,110	765	67	38	107
MIN	38	15	34	37	27	32	45	120	89	24	24	36
AC-FT	3,980	2,250	3,570	5,770	2,810	2,650	6,430	33,720	23,410	3,220	2,170	5,000

CAL YR 1972 TOTAL 36,056 MEAN 98.5 MAX 647 MIN 14 AC-FT 71,520
WTR YR 1973 TOTAL 47,890 MEAN 131 MAX 1,110 MIN 15 AC-FT 94,990

11297000 PHILADELPHIA CANAL NEAR STRAWBERRY, CALIF.

LOCATION.--Lat 38°10'39", long 120°02'46", in NW¼NW¼ sec.30, T.4 N., R.18 E., Tuolumne County, Stanislaus National Forest, on right bank 250 ft downstream from diversion dam on South Fork Stanislaus River, and 2.8 miles southwest of Strawberry.

PERIOD OF RECORD.--October 1939 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,960 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--34 years, 43.1 cfs (31,230 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 64 cfs in 1941, 1961-63, 1965, 1971-72; no flow at times in some years.

REMARKS.--Canal diverts from right bank of South Fork Stanislaus River for power development in Spring Gap powerplant of Pacific Gas and Electric Co.; tailrace empties into Middle Fork Stanislaus River at powerplant above Sand Bar Flat. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	3.7	17	37	58	42	57	57	59	59	18	1.9
2	60	3.6	17	37	58	43	56	58	60	59	18	.65
3	60	3.2	17	37	56	43	55	59	60	55	18	.03
4	60	3.3	17	40	37	43	56	58	60	50	14	.03
5	48	3.3	17	43	25	44	57	58	60	52	11	.85
6	57	3.2	24	45	28	51	58	59	60	57	11	29
7	60	3.2	28	44	31	55	59	61	60	53	11	58
8	60	3.2	29	44	35	53	58	61	61	53	11	61
9	60	3.2	29	43	39	52	57	56	62	53	11	61
10	60	9.5	29	43	36	52	55	60	63	53	11	60
11	60	16	29	45	36	55	55	62	59	52	11	60
12	60	16	29	47	35	55	57	61	59	53	11	60
13	61	29	28	47	35	54	57	61	59	53	11	60
14	61	50	26	46	35	53	57	62	58	53	11	60
15	60	50	26	47	35	51	58	60	57	52	11	60
16	60	50	26	54	35	51	58	49	59	52	11	60
17	60	52	27	56	35	52	58	59	59	52	11	60
18	60	54	37	57	35	52	57	60	59	52	11	60
19	41	54	50	56	35	52	49	60	60	52	11	60
20	31	54	50	55	35	53	56	59	60	52	3.8	60
21	31	54	49	55	35	52	20	58	59	52	.03	60
22	31	39	49	52	36	54	10	59	59	52	.03	60
23	31	17	48	52	37	52	24	60	59	52	.03	60
24	31	17	45	56	37	52	59	60	59	52	2.2	60
25	31	17	43	56	39	54	58	60	60	52	4.5	60
26	31	17	42	56	40	56	59	58	60	36	1.2	60
27	31	17	40	56	40	57	59	59	60	18	.03	60
28	16	17	38	56	41	57	60	62	59	18	.03	60
29	3.7	17	39	58	------	53	56	61	58	18	.38	60
30	3.7	17	37	59	------	56	57	60	59	18	.03	60
31	3.7	------	37	59	------	57	------	59	------	18	1.1	------
TOTAL	1,383.1	693.4	1,019	1,538	1,059	1,606	1,594	1,836	1,786	1,453	246.36	1,472.46
MEAN	44.6	23.1	32.9	49.6	37.8	51.8	53.1	59.2	59.5	46.9	7.95	49.1
MAX	61	54	50	59	58	57	60	62	63	59	18	61
MIN	3.7	3.2	17	37	25	42	10	49	57	18	.03	.03
AC-FT	2,740	1,380	2,020	3,050	2,100	3,190	3,160	3,640	3,540	2,880	489	2,920

CAL YR 1972 TOTAL 14,174.70 MEAN 38.7 MAX 64 MIN .03 AC-FT 28,120
WTR YR 1973 TOTAL 15,686.32 MEAN 43.0 MAX 63 MIN .03 AC-FT 31,110

11297500 TUOLUMNE CANAL NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'35", long 120°10'03", in SW¼ sec.24, T.3 N., R.16 E., Tuolumne County, Stanislaus National Forest, on left bank 300 ft downstream from intake, 350 ft downstream from Lyons Reservoir on South Fork Stanislaus River, 2 miles west of Long Barn, and 15 miles northeast of Sonora.

PERIOD OF RECORD.--October 1937 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 4,110.0 ft above mean sea level (river-profile survey). Prior to June 1938, at site 200 ft downstream at different datum.

AVERAGE DISCHARGE.--36 years, 26.5 cfs (19,200 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 57 cfs May 9-13, 1973; no flow at times in some years.

REMARKS.--Canal diverts from left bank of South Fork Stanislaus River into Tuolumne River basin for power and domestic supply in vicinity of Sonora. See schematic diagram of Stanislaus River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	19	20	25	37	46	47	47	56	53	44	48
2	36	18	20	25	38	47	47	48	55	47	44	48
3	36	25	20	24	38	47	47	48	56	43	44	48
4	35	25	20	24	38	47	46	51	55	43	44	48
5	36	25	20	25	39	47	47	52	55	45	44	48
6	35	25	26	25	43	47	48	48	55	46	44	48
7	33	25	29	25	47	47	49	48	55	46	44	46
8	33	25	29	27	46	47	49	54	54	46	44	44
9	34	25	29	28	46	47	49	57	54	46	45	44
10	34	29	29	28	48	47	48	57	54	47	46	44
11	33	31	29	27	48	48	49	57	54	48	46	42
12	28	31	29	26	47	48	49	57	55	47	46	41
13	25	31	29	26	46	48	48	57	54	47	46	41
14	25	31	29	25	46	47	47	54	53	47	46	41
15	25	31	29	25	46	47	47	43	56	46	46	41
16	18	31	28	26	46	47	47	53	54	46	45	41
17	17	28	28	26	46	47	47	53	53	46	46	41
18	17	26	28	27	46	47	47	52	53	46	46	41
19	17	26	26	27	46	47	47	52	56	46	46	41
20	17	26	26	27	46	50	48	50	56	45	46	41
21	26	25	25	28	46	23	48	51	52	44	45	41
22	26	25	25	26	46	31	50	52	53	43	45	41
23	26	25	25	24	47	37	51	53	52	45	46	41
24	17	23	25	31	48	37	47	53	52	48	46	40
25	16	20	25	37	48	37	47	54	52	48	46	40
26	17	19	25	38	48	37	47	54	51	46	46	40
27	18	20	25	43	48	37	47	53	53	46	46	40
28	27	20	25	35	48	37	47	53	52	46	47	40
29	27	20	25	35	------	37	48	53	50	46	48	40
30	19	20	25	35	------	43	47	54	54	46	48	40
31	17	------	25	35	------	47	------	55	------	45	48	------
TOTAL	806	750	798	885	1,262	1,348	1,432	1,623	1,614	1,429	1,413	1,280
MEAN	26.0	25.0	25.7	28.5	45.1	43.5	47.7	52.4	53.8	46.1	45.6	42.7
MAX	36	31	29	43	48	50	51	57	56	53	48	48
MIN	16	18	20	24	37	23	46	43	50	43	44	40
AC-FT	1,600	1,490	1,580	1,760	2,500	2,670	2,840	3,220	3,200	2,830	2,800	2,540

CAL YR 1972 TOTAL 12,479 MEAN 34.1 MAX 52 MIN 16 AC-FT 24,750
WTR YR 1973 TOTAL 14,640 MEAN 40.1 MAX 57 MIN 16 AC-FT 29,040

11298000 SOUTH FORK STANISLAUS RIVER NEAR LONG BARN, CALIF.

LOCATION.--Lat 38°05'33", long 120°10'02", in SW¼ sec.24, T.3 N., R.16 E., Tuolumne County, Stanislaus National Forest, 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.

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and masonry control. Datum of gage is 4,073.4 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--36 years, 85.6 cfs (62,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,370 cfs May 19 (gage height, 5.86 ft); minimum daily, 1.0 cfs Oct. 25.
Period of record: Maximum discharge, 4,900 cfs Nov. 21, 1950 (gage height, 9.3 ft), from rating curve extended above 1,100 cfs on basis of computation of maximum flow over Lyons Dam; no flow at times in 1937-39, 1952.

REMARKS.--Flow regulated by Lyons Reservoir 600 ft upstream (capacity, 5,400 acre-ft) and Pinecrest Lake (capacity, 18,300 acre-ft). Tuolumne Canal (see sta 11297500) diverts at Lyons Dam; other diversions, see schematic diagram of Stanislaus River basin.

COOPERATION.- Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.3	2.0	2.4	131	99	30	75	736	2.7	2.2	2.0
2	2.0	2.1	2.0	2.4	122	74	21	84	677	3.0	2.2	1.8
3	2.0	2.0	2.0	2.4	120	59	14	103	579	2.7	2.2	1.8
4	2.0	2.1	2.0	2.3	62	54	11	95	545	2.7	2.2	1.8
5	1.5	2.0	2.0	2.2	14	40	11	60	572	2.5	2.1	1.8
6	1.4	1.9	2.0	2.2	20	38	16	37	630	2.3	1.8	1.8
7	1.6	2.1	2.0	2.2	67	31	29	49	647	2.2	1.9	2.0
8	1.6	2.0	2.0	2.1	41	22	38	68	632	2.2	2.0	2.2
9	1.9	2.0	2.0	2.1	27	15	53	131	621	2.2	2.0	2.0
10	2.0	2.1	2.0	2.0	137	18	66	152	518	2.2	2.0	2.0
11	2.0	2.2	2.0	2.3	132	61	76	200	453	2.2	1.9	1.9
12	1.9	2.0	2.0	2.2	84	40	92	240	445	2.2	1.8	1.8
13	1.9	2.1	2.0	1.9	58	31	99	280	389	2.1	2.0	1.8
14	1.8	2.3	2.0	1.8	51	22	74	306	258	2.0	1.9	1.8
15	1.8	2.2	2.1	1.9	39	16	57	744	165	2.0	2.2	1.8
16	1.9	2.2	2.2	2.6	31	12	45	971	65	2.1	2.1	1.8
17	2.2	2.0	2.3	2.2	27	9.1	41	1,120	2.9	2.2	1.8	1.8
18	1.6	2.0	2.3	2.4	23	5.9	39	1,080	2.9	2.2	1.8	1.8
19	1.8	2.0	2.6	2.2	21	3.9	36	1,170	84	2.2	1.8	1.7
20	2.4	2.0	2.9	2.1	19	17	30	966	170	2.2	2.2	1.6
21	2.0	2.0	2.6	2.0	17	35	34	703	173	2.2	2.7	1.6
22	2.0	2.0	2.5	2.0	13	22	72	498	159	2.2	2.8	1.6
23	2.0	2.0	2.2	2.1	9.6	20	96	655	114	2.4	2.7	1.6
24	2.4	2.0	2.2	2.3	30	27	95	755	88	2.9	2.6	2.0
25	1.0	2.0	2.2	2.5	41	32	110	641	74	2.5	2.5	2.3
26	1.8	2.0	2.2	3.8	50	35	143	491	69	2.0	2.6	2.2
27	1.8	2.0	2.3	115	87	36	168	425	88	2.2	2.6	2.1
28	1.4	2.1	2.4	137	143	39	181	688	80	2.2	2.3	2.1
29	1.3	2.0	2.4	137	------	34	163	923	45	2.2	2.0	2.0
30	2.0	1.9	2.4	137	------	24	107	1,010	4.6	2.1	2.0	2.1
31	2.3	------	2.4	138	------	31	------	806	------	2.1	2.0	------
TOTAL	57.2	61.6	68.2	722.6	1,616.6	1,002.9	2,047	15,526	9,086.4	71.1	66.9	56.6
MEAN	1.85	2.05	2.20	23.3	57.7	32.4	68.2	501	303	2.29	2.16	1.89
MAX	2.4	2.3	2.9	138	143	99	181	1,170	736	3.0	2.8	2.3
MIN	1.0	1.9	2.0	1.8	9.6	3.9	11	37	2.9	2.0	1.8	1.6
AC-FT	113	122	135	1,430	3,210	1,990	4,060	30,800	18,020	141	133	112

CAL YR 1972 TOTAL 14,139.9 MEAN 38.6 MAX 585 MIN 1.0 AC-FT 28,050
WTR YR 1973 TOTAL 30,383.1 MEAN 83.2 MAX 1,170 MIN 1.0 AC-FT 60,260

11299000 MELONES LAKE NEAR SONORA, CALIF.

LOCATION.--Lat 37°57'12", long 120°30'49", in NW¼SE¼ sec.11, T.1 N., R.13 E., Tuolumne County, at gate tower near left bank at Melones Dam on Stanislaus River, 0.1 mile downstream from Bear Creek, and 7.5 miles southwest of Sonora.
DRAINAGE AREA.--904 sq mi.
PERIOD OF RECORD.--1926 (year-end content only, published in WSP 1315-A), June 1927 to current year. Prior to October 1970, published as Melones Reservoir at Melones Dam.
GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Prior to Feb. 28, 1961, nonrecording gage at same site and datum.
EXTREMES.--Current year: Maximum contents, 113,720 acre-ft June 9 (elevation, 735.6 ft); minimum, 3,643 acre-ft Nov. 5 (elevation, 615.8 ft).
Period of record: Maximum contents observed, 115,800 acre-ft May 27, 1951 (elevation, 736.7 ft); minimum observed, 3,220 acre-ft Dec. 7, 1957 (elevation, 613.5 ft).
REMARKS.--Reservoir is formed by concrete overflow dam; storage began Aug. 21, 1926. Dam completed in December 1926. Capacity for power development 1 mile below dam is 106,140 acre-ft between elevations 628.0 ft (minimum operating level) and 735.0 ft (top of drum-type spillway gates) above mean sea level; usable capacity for irrigation, 109,980 acre-ft between elevation 610.0 ft (floor of outlet tunnel) and 735.0 ft above mean sea level. Dead storage, 2,630 acre-ft. Released water flows down Stanislaus River to Tulloch Reservoir (see sta 11299995). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River basin.
COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.
REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

610	2,630	635	8,750	660	21,500	700	59,140
615	3,495	640	10,680	665	25,025	710	72,200
620	4,480	645	12,905	670	28,900	720	86,930
625	5,650	650	15,450	680	37,580	730	103,460
630	7,070	655	18,340	690	47,620	736.7	115,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10,977	5,966	21,173	25,319	56,643	87,556	41,109	31,574	108,747	106,736	49,057	10,558
2	10,977	4,459	22,185	25,246	56,173	88,349	38,050	31,405	112,055	105,280	46,871	10,477
3	11,020	4,090	23,438	25,319	55,703	88,808	34,959	32,250	113,165	103,642	45,272	10,436
4	11,063	3,855	24,658	25,099	55,585	89,747	31,997	33,721	113,350	102,100	43,400	10,477
5	11,147	3,643	25,991	24,952	54,880	90,223	29,149	34,692	113,165	100,570	41,700	10,599
6	11,190	4,111	26,607	24,731	54,528	90,710	27,146	34,959	113,350	98,870	39,751	10,599
7	11,275	4,030	26,607	24,658	55,115	91,360	26,376	35,942	113,535	97,170	38,050	10,680
8	11,275	4,132	26,530	24,437	55,233	92,010	25,466	37,956	113,350	95,320	36,215	10,765
9	11,190	4,090	26,453	24,878	55,115	92,173	25,172	41,012	113,720	93,478	34,514	10,850
10	11,270	4,111	26,376	25,991	60,970	92,173	25,099	44,336	112,980	91,523	32,854	10,850
11	11,402	4,111	26,222	28,260	71,640	93,148	25,393	48,615	112,795	89,591	31,067	10,977
12	11,232	4,213	26,068	36,761	77,698	92,660	26,299	53,602	113,165	87,713	29,315	11,063
13	11,190	5,522	25,914	40,139	80,350	92,010	26,761	59,628	113,535	85,576	27,620	11,020
14	10,977	6,022	25,687	41,400	83,175	92,010	25,837	64,873	113,350	83,622	25,914	11,063
15	10,765	6,560	25,540	41,500	84,974	91,685	24,584	70,380	113,165	81,834	24,148	11,063
16	10,518	7,294	25,319	49,167	85,576	89,591	23,012	75,654	112,980	79,760	22,390	11,105
17	10,436	8,050	26,684	53,948	85,877	85,576	22,048	80,350	112,795	77,698	20,779	11,147
18	10,396	9,604	28,340	57,355	85,877	81,834	22,048	84,974	112,240	75,800	19,128	11,232
19	10,315	10,113	28,820	59,750	85,576	77,844	21,637	93,813	111,870	73,779	17,392	11,275
20	10,113	10,680	29,066	60,360	85,425	75,654	21,238	98,020	111,315	71,780	15,789	11,275
21	9,911	11,147	28,580	60,482	84,974	73,205	20,649	98,020	111,685	69,820	14,280	11,317
22	9,870	11,575	28,180	60,238	84,372	70,800	20,256	98,870	111,500	67,915	13,380	11,360
23	9,794	11,935	28,020	59,750	83,771	67,780	20,714	99,550	111,685	65,917	13,095	11,487
24	9,414	12,160	27,300	59,140	83,324	64,873	23,083	100,400	111,315	64,090	12,763	11,445
25	8,570	13,000	26,453	58,783	83,026	62,082	25,172	101,080	110,394	62,205	12,430	11,445
26	7,614	14,330	25,466	57,950	82,877	59,262	26,761	100,230	109,845	60,360	12,160	11,402
27	7,646	15,789	25,025	57,117	84,221	56,290	28,983	99,210	109,662	58,426	11,845	11,487
28	7,198	17,218	25,246	56,408	86,479	53,486	31,067	100,220	109,296	56,525	11,487	11,530
29	6,770	18,580	25,393	56,055	------	50,284	32,510	101,760	108,747	54,763	11,275	11,487
30	6,190	19,940	25,393	56,879	------	46,978	32,433	106,554	108,015	52,793	10,977	11,445
31	6,274	------	25,393	56,879	------	43,920	------	106,554	------	50,965	10,722	------
MAX	11,402	19,940	29,066	60,482	86,479	93,148	41,109	106,554	113,720	106,736	49,057	11,530
MIN	6,190	3,643	21,173	24,437	54,528	43,920	20,256	31,405	108,015	50,965	10,722	10,436
(a)	627.3	657.6	665.5	698.1	719.7	686.5	674.2	731.7	732.5	693.0	640.1	641.8
(b)	-4,661	+13,666	+5,453	+31,486	+29,600	-42,559	-11,487	+74,121	+1,461	-57,050	-40,243	+723

CAL YR 1972 b -367
WTR YR 1973 b +510

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11299995 TULLOCH RESERVOIR NEAR KNIGHTS FERRY, CALIF.

LOCATION (revised).--Lat 37°52'34", long 120°36'12", in Rancheria Del Rio Estanislao Grant, T.1 S., R.12 E., Tuolumne County, in center of dam on Stanislaus River, 1.9 miles upstream from Goodwin Dam, and 5.3 miles northeast of Knights Ferry.

DRAINAGE AREA.--980 sq mi.

PERIOD OF RECORD.--November 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Oakdale and South San Joaquin Irrigation Districts).

EXTREMES.--Current year: Maximum contents, 66,700 acre-ft May 31 (elevation, 509.8 ft); minimum, 12,200 acre-ft Oct. 5 (elevation, 433.5 ft).
Period of record: Maximum contents, 69,500 acre-ft Jan. 7, 1965 (elevation, 512.0 ft); minimum, 4,580 acre-ft Oct. 3, 1960 (elevation, 404.0 ft).

REMARKS.--Reservoir is formed by gravity-type concrete dam completed in October 1957. Usable capacity, 56,840 acre-ft between elevations 431.0 ft (normal minimum water surface) and 511.0 ft (top of radial gates) above mean sea level. Dead storage, 11,560 acre-ft. Reservoir is used for conservation and power. Water passes down Stanislaus River, some first passing through Tulloch Powerplant at dam. Part of flow is diverted at Goodwin Dam to Oakdale Canal (see sta 11301000) and South San Joaquin Canal (see sta 11300500). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Stanislaus River basin.

REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

404	4,580	460	23,600
411	6,020	475	33,100
420	8,200	490	45,300
430	11,100	512	69,500
445	16,400		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,200	38,800	31,900	51,300	56,800	52,300	43,400	45,500	64,900	65,500	65,700	45,400
2	13,200	39,000	31,200	51,200	56,500	52,000	43,400	45,700	63,300	65,500	65,400	43,900
3	12,500	39,200	30,400	51,300	56,200	52,100	43,300	46,200	62,300	65,600	65,100	42,300
4	12,400	39,600	29,700	51,500	56,000	52,600	43,100	46,300	62,800	65,700	64,900	40,600
5	12,200	39,800	28,900	51,800	55,600	52,700	43,300	46,500	63,400	65,700	64,600	38,900
6	12,400	40,100	28,900	52,100	55,400	53,000	43,200	46,600	64,200	65,800	64,400	37,300
7	13,200	40,200	29,800	52,500	55,300	52,500	43,100	46,800	64,700	65,800	64,200	35,800
8	13,900	40,400	30,600	53,000	55,100	52,000	43,000	47,100	65,600	65,800	64,200	34,500
9	14,700	40,500	31,400	54,400	54,800	50,200	43,300	47,600	66,300	66,000	64,200	33,200
10	15,600	40,700	32,100	55,100	57,300	48,600	43,900	48,200	66,500	66,000	64,100	31,900
11	16,300	40,800	32,900	56,200	61,400	47,500	44,400	48,700	65,400	66,000	64,100	30,600
12	17,100	40,800	33,700	56,600	61,300	46,500	44,800	49,400	64,500	66,000	64,000	29,300
13	18,000	40,600	34,500	55,700	58,800	45,800	45,000	50,100	64,900	65,800	63,900	28,000
14	19,000	40,500	35,300	55,100	57,200	45,100	45,200	50,900	65,800	65,800	63,800	26,700
15	20,200	40,500	36,100	55,300	54,700	44,400	45,300	51,700	65,800	65,700	63,500	25,400
16	20,600	40,500	36,900	58,500	52,400	44,200	45,300	49,700	65,700	65,700	63,400	24,100
17	21,200	40,500	38,400	59,300	51,400	44,300	45,400	46,500	65,600	65,600	63,200	22,800
18	21,700	40,200	40,000	60,100	51,000	44,300	45,600	44,400	65,600	65,500	62,900	21,700
19	22,300	40,200	42,200	60,200	50,900	44,300	45,800	43,100	65,500	65,500	62,600	20,600
20	23,400	40,000	43,800	60,100	51,300	45,100	45,900	45,100	65,400	65,400	62,300	19,600
21	24,900	39,700	45,200	59,900	51,100	45,400	45,800	47,700	65,200	65,400	61,700	18,500
22	25,900	38,900	46,500	59,600	51,000	45,400	45,700	49,400	65,100	65,400	60,700	17,400
23	27,100	38,100	47,800	59,200	50,800	45,100	45,600	52,600	65,000	65,400	59,100	16,400
24	28,600	37,300	49,000	58,800	50,600	44,800	45,500	57,000	64,900	65,200	57,400	15,400
25	30,200	36,500	50,300	58,300	50,500	44,400	45,200	60,800	64,700	65,200	55,800	14,600
26	31,900	35,800	51,500	57,900	50,400	44,300	45,000	62,200	64,900	65,100	54,200	14,000
27	33,500	35,100	51,900	57,600	51,500	44,200	45,100	62,200	64,900	65,100	52,700	13,400
28	34,700	34,200	51,800	57,200	52,100	44,200	45,200	63,500	65,000	65,000	51,200	12,700
29	36,200	33,400	51,600	56,800	------	44,000	45,300	66,500	65,200	65,000	49,800	12,500
30	37,300	32,700	51,500	57,300	------	43,800	45,400	65,700	65,400	66,200	48,400	12,300
31	38,400	------	51,400	57,200	------	43,700	------	66,700	------	66,000	46,900	------
MAX	38,400	40,800	51,900	60,200	61,400	53,000	45,900	66,700	66,500	66,200	65,700	45,400
MIN	12,200	32,700	28,900	51,200	50,400	43,700	43,000	43,100	62,300	65,000	46,900	12,300
(a)	482.0	474.5	496.3	501.7	497.0	488.2	490.1	509.8	508.7	509.2	491.7	433.9
(b)	+23,300	-5,700	+18,700	+5,800	-5,100	-8,400	+1,700	+21,300	-1,300	+600	-19,100	-34,600

CAL YR 1972 b +6,100
WTR YR 1973 b -2,800

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11300500 SOUTH SAN JOAQUIN CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'16", long 120°38'14", in Rancheria Del Rio Estanislao Grant, Tuolumne County, on left bank 0.8 mile downstream from headgate at Goodwin Dam, and 3.0 miles northeast of Knights Ferry.

PERIOD OF RECORD.--May 1914 to current year. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 334.18 ft above mean sea level (levels by Oakdale Irrigation District). Prior to Mar. 12, 1915, nonrecording gage 100 ft downstream. Mar. 12, 1915, to July 1, 1921, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--59 years, 425 cfs (307,900 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,310 cfs July 16, 1967; no flow at times in each year except 1951, 1969, 1973.

REMARKS.--Records excellent. Canal diverts from right bank of Stanislaus River at Goodwin Dam for irrigation in Oakdale and South San Joaquin Irrigation Districts. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	631	7.1	11	1.0	1.0	83	205	1,210	1,170	1,090	1,160	917
2	630	7.4	11	1.0	1.0	83	206	1,220	1,170	1,090	1,160	917
3	612	6.2	8.4	1.0	1.0	83	285	1,220	1,170	1,090	1,130	916
4	571	5.3	.40	1.0	1.0	83	420	1,230	1,130	1,090	1,100	916
5	570	5.3	.40	1.0	1.0	83	528	1,240	1,110	1,090	1,100	913
6	344	2.2	.70	1.0	1.2	83	567	1,240	1,110	1,090	1,100	864
7	33	.40	.80	1.0	1.0	83	564	1,240	1,140	1,090	1,070	792
8	5.6	.40	.60	1.0	1.0	84	564	1,240	1,250	1,090	1,040	736
9	2.2	.40	.40	1.2	1.0	85	676	1,250	1,280	1,090	1,040	736
10	1.2	.40	.40	1.0	1.6	86	867	1,260	1,280	1,090	1,030	736
11	1.2	.40	.40	1.2	2.2	87	939	1,260	1,270	1,090	1,030	727
12	1.0	.40	.40	1.2	1.2	87	953	1,260	1,280	1,090	1,030	725
13	1.2	.50	.40	1.0	1.2	35	977	1,260	1,290	1,090	1,030	725
14	1.2	.70	.40	1.0	1.2	7.0	981	1,260	1,280	1,090	1,030	727
15	1.2	.80	1.0	1.0	1.0	17	983	1,260	1,260	1,090	1,020	725
16	1.2	.40	4.6	1.6	1.0	83	984	1,260	1,240	1,090	1,020	725
17	.90	.40	3.0	1.2	1.0	113	981	1,250	1,240	1,090	1,020	725
18	.70	.30	.20	1.2	1.0	113	979	1,260	1,230	1,100	1,020	703
19	.70	.30	.30	1.0	1.0	133	980	1,260	1,230	1,100	1,020	694
20	.70	.30	.80	1.0	1.0	113	1,020	1,270	1,230	1,100	1,020	685
21	.60	.30	1.0	1.0	1.0	98	1,080	1,280	1,230	1,080	1,020	686
22	.60	.20	1.2	1.0	1.0	97	1,090	1,270	1,230	1,070	1,020	686
23	.80	.20	1.2	1.0	1.0	97	1,130	1,270	1,230	1,080	1,020	686
24	.90	.20	1.0	1.0	1.0	56	1,160	1,270	1,230	1,080	1,020	687
25	1.2	.20	1.0	1.0	1.0	92	1,160	1,270	1,190	1,080	1,030	587
26	11	.20	1.0	1.0	1.0	94	1,160	1,270	1,130	1,080	1,020	532
27	22	.20	1.0	1.0	36	94	1,170	1,130	1,120	1,080	991	533
28	26	.20	1.0	1.0	83	94	1,190	1,040	1,120	1,090	938	536
29	32	.20	1.0	1.0	------	95	1,200	1,050	1,120	977	918	340
30	16	4.7	1.0	1.0	------	140	1,200	1,120	1,120	448	917	293
31	7.4	------	1.0	1.0	------	206	------	1,160	------	1,160	918	------
TOTAL	3,528.50	46.20	57.00	32.6	147.6	2,787.0	26,199	38,080	36,080	33,055	31,982	21,170
MEAN	114	1.54	1.84	1.05	5.27	89.9	873	1,228	1,203	1,066	1,032	706
MAX	631	7.4	11	1.6	83	206	1,200	1,280	1,290	1,160	1,160	917
MIN	.60	.20	.20	1.0	1.0	7.0	205	1,040	1,110	448	917	293
AC-FT	7,000	92	113	65	293	5,530	51,970	75,530	71,560	65,560	63,440	41,990

CAL YR 1972 TOTAL 198,241.21 MEAN 542 MAX 1,170 MIN 0 AC-FT 393,200
WTR YR 1973 TOTAL 193,164.90 MEAN 529 MAX 1,290 MIN .20 AC-FT 383,100

11301000 OAKDALE CANAL NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'32", long 120°37'56", in SW¼SE¼ sec.10, T.1 S., R.12 E., Tuolumne County, on left bank 0.3 mile downstream from headgate at Goodwin Dam, and 3.4 miles northeast of Knights Ferry.

PERIOD OF RECORD.--May 1914 to current year. Records for water years 1933-36 incomplete, monthly and yearly estimates published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft (from topographic map). Prior to Apr. 29, 1916, nonrecording gage at site 1,000 ft upstream at different datum. Apr. 29, 1916, to July 3, 1925, nonrecording gage and July 4, 1925, to Apr. 3, 1949, water-stage recorder at present site at datum 0.18 ft higher.

AVERAGE DISCHARGE.--59 years, 161 cfs (116,600 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 556 cfs July 8-11, 1967; no flow at times in most years.

REMARKS.--Records excellent. Canal diverts water from left bank of Stanislaus River at Goodwin Dam 0.3 mile upstream for irrigation in Oakdale Irrigation District. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	418	2.1	17	0	.02	.10	26	456	521	492	493	438
2	418	2.3	11	0	0	.08	26	474	521	497	494	436
3	293	2.6	4.8	0	0	.09	15	507	520	506	493	433
4	6.5	3.0	0	0	0	.15	.08	509	520	506	493	429
5	6.0	3.0	0	0	0	.10	.08	510	520	506	493	425
6	6.0	3.0	.01	0	.10	.21	.06	511	521	507	494	426
7	4.6	3.0	.03	0	.10	.15	.08	511	521	507	460	426
8	3.8	3.4	.02	.02	.06	.38	41	516	520	508	435	425
9	4.2	3.0	0	.23	.02	.12	212	521	520	509	433	424
10	4.2	3.0	0	.18	1.2	.10	252	520	521	517	430	425
11	3.8	2.6	0	.22	1.5	.08	339	520	520	516	430	425
12	3.8	3.0	0	.26	.32	24	420	521	519	516	431	425
13	3.8	.99	0	.10	.15	50	418	521	519	516	431	424
14	3.8	.01	0	.06	.27	46	373	520	520	517	431	423
15	3.8	.04	0	.03	.18	7.1	373	520	515	517	432	422
16	4.6	.02	0	.60	.12	.06	384	521	512	517	441	416
17	5.5	0	.18	.22	.08	.03	402	519	512	517	442	405
18	5.5	0	.08	.18	.06	.03	431	519	511	517	443	372
19	5.5	0	.15	.12	.06	.03	449	519	511	517	443	370
20	5.0	0	.06	.08	.03	.19	448	521	512	518	443	370
21	4.2	0	0	.01	.03	.21	450	522	512	480	444	370
22	3.4	0	0	0	.01	12	460	522	513	470	443	370
23	4.2	0	0	0	0	36	462	521	511	488	443	370
24	3.8	0	0	0	0	36	463	522	512	491	443	370
25	3.4	0	0	0	0	14	464	521	511	491	444	370
26	3.4	0	0	0	.03	.01	471	520	483	491	444	371
27	3.0	0	0	0	.85	.02	475	521	485	491	445	371
28	3.0	0	0	0	.22	.03	478	521	491	491	445	372
29	3.0	0	0	0	------	.08	479	522	491	491	443	363
30	2.1	11	0	.11	------	7.5	465	520	491	488	443	360
31	2.3	------	0	.08	------	18	------	520	------	491	442	------
TOTAL	1,245.2	46.06	33.33	2.50	5.41	252.85	9,276.30	15,968	15,356	15,586	13,964	12,026
MEAN	40.2	1.54	1.08	.081	.19	8.16	309	515	512	503	450	401
MAX	418	11	17	.60	1.5	50	479	522	521	518	494	438
MIN	2.1	0	0	0	0	.01	.06	456	483	470	430	360
AC-FT	2,470	91	66	5.0	11	502	18,400	31,670	30,460	30,910	27,700	23,850

CAL YR 1972 TOTAL 85,639.79 MEAN 234 MAX 441 MIN 0 AC-FT 169,900
WTR YR 1973 TOTAL 83,761.65 MEAN 229 MAX 522 MIN 0 AC-FT 166,100

11302000 STANISLAUS RIVER BELOW GOODWIN DAM, NEAR KNIGHTS FERRY, CALIF.

LOCATION.--Lat 37°51'06", long 120°38'13", in Rancheria Del Rio Estanislao Grant, Calaveras County, on right bank 250 ft upstream from Owl Creek, 0.9 mile downstream from Goodwin Dam, and 2.9 miles northeast of Knights Ferry.

DRAINAGE AREA.--986 sq mi.

PERIOD OF RECORD.--February 1957 to current year. Records equivalent to those published as Stanislaus River at Knights Ferry, 1903-14, and as Stanislaus River near Knights Ferry, 1915-32, if adjusted for diversions in Stanislaus and San Joaquin Water Company's canal and Oakdale and South San Joaquin canals.

GAGE.--Water-stage recorder. Datum of gage is 252.83 ft above mean sea level.

AVERAGE DISCHARGE.--16 years, 741 cfs (536,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,240 cfs May 16 (gage height, 13.07 ft); minimum daily, 1.6 cfs Sept. 27.
Period of record: Maximum discharge, 40,200 cfs Dec. 24, 1964 (gage height, 28.85 ft, in gage well, 31.2 ft outside, from floodmarks), from rating curve extended above 27,000 cfs; minimum daily, 0.3 cfs Sept. 13, 14, Oct. 1, 1960.
Flood of Dec. 23, 1955, reached a stage of 37.7 ft, from floodmarks (discharge, 62,900 cfs, by computation of flow over Goodwin Dam).

REMARKS.--Records good. Flow regulated by reservoirs and powerplants at Donnell, Beardsley Lake, Melones, Tulloch, and several smaller reservoirs above station. South San Joaquin Canal (see sta 11300500) and Oakdale Canal (see sta 11301000) divert at Goodwin Dam 1.0 mile upstream. See schematic diagram of Stanislaus River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	63	398	905	1,760	1,690	3,120	1,530	3,390	3.2	4.0	3.4
2	1.8	64	403	918	1,770	1,690	2,990	1,260	2,380	3.4	4.0	3.2
3	16	76	403	827	1,770	1,700	2,870	1,030	2,700	3.4	4.0	3.2
4	72	89	421	710	1,780	1,710	2,720	666	2,370	3.5	4.2	3.0
5	72	88	408	692	1,770	1,710	2,320	268	2,190	3.5	4.0	3.0
6	124	86	421	674	1,780	1,730	2,190	268	2,220	3.5	4.0	3.0
7	183	88	426	674	1,790	2,070	1,930	272	2,230	3.6	3.6	2.9
8	189	91	430	680	1,790	2,520	1,880	195	2,140	3.8	3.5	2.9
9	189	84	430	692	1,790	2,800	1,360	117	2,140	4.0	3.4	2.8
10	177	89	435	1,100	1,830	2,720	950	117	2,440	4.2	3.4	2.9
11	186	84	412	1,250	1,840	2,650	814	119	2,340	4.4	3.4	2.9
12	180	89	398	1,750	2,660	2,550	860	122	1,550	4.4	3.4	2.8
13	180	88	408	1,720	3,210	2,210	1,090	128	756	4.4	3.4	2.8
14	177	88	403	1,680	3,220	2,060	1,320	131	496	4.6	3.2	2.8
15	177	93	403	1,530	3,220	2,060	1,330	138	524	4.6	3.2	2.8
16	416	89	403	1,760	2,970	2,700	1,330	2,110	144	4.6	3.4	2.8
17	435	91	416	1,810	2,280	3,420	1,050	3,420	48	4.6	3.4	2.6
18	398	86	552	1,810	1,890	3,430	801	3,130	4.4	4.6	3.5	2.3
19	421	91	704	1,800	1,730	3,420	794	2,880	4.0	4.6	3.6	2.2
20	142	86	788	1,800	1,450	3,560	620	3,180	4.0	4.8	3.6	2.2
21	56	95	879	1,790	1,740	3,620	372	3,400	4.0	4.6	3.6	2.2
22	54	421	886	1,790	1,730	3,660	344	2,520	3.8	4.2	3.6	2.2
23	59	430	886	1,790	1,730	3,600	312	1,510	4.4	4.6	3.6	2.0
24	55	426	892	1,780	1,730	3,580	280	1,450	4.4	4.6	3.6	1.8
25	53	426	898	1,780	1,730	3,500	846	2,150	4.4	4.6	3.6	1.8
26	54	421	905	1,780	1,740	3,480	1,410	3,210	4.0	4.6	3.6	1.7
27	59	426	912	1,780	1,720	3,450	1,400	3,360	4.6	4.6	3.6	1.6
28	64	430	924	1,770	1,670	3,440	1,490	2,780	3.4	4.6	3.6	1.7
29	69	430	924	1,770	------	3,420	1,490	3,090	3.2	4.6	3.5	1.8
30	64	412	905	1,780	------	3,340	1,520	3,870	3.4	20	3.4	1.7
31	67	------	905	1,770	------	3,160	------	3,850	------	4.2	3.4	------
TOTAL	4,391.6	5,620	18,978	44,362	56,090	86,650	41,803	52,271	30,110.0	146.9	111.3	75.0
MEAN	142	187	612	1,431	2,003	2,795	1,393	1,686	1,004	4.74	3.59	2.50
MAX	435	430	924	1,810	3,220	3,660	3,120	3,870	3,390	20	4.2	3.4
MIN	1.8	63	398	674	1,450	1,690	280	117	3.2	3.2	3.2	1.6
AC-FT	8,710	11,150	37,640	87,990	111,300	171,900	82,920	103,700	59,720	291	221	149

CAL YR 1972 TOTAL 78,379.43 MEAN 214 MAX 1,700 MIN .88 AC-FT 155,500
WTR YR 1973 TOTAL 340,608.80 MEAN 933 MAX 3,870 MIN 1.6 AC-FT 675,600

11303000 STANISLAUS RIVER AT RIPON, CALIF.

LOCATION.--Lat 37°43'47", long 121°06'34", in NW¼SE¼ sec.29, T.2 S., R.8 E., Stanislaus County, on left bank 15 ft downstream from railroad bridge, 1.1 miles southeast of Ripon, and 15 miles upstream from mouth.

DRAINAGE AREA.--1,075 sq mi.

PERIOD OF RECORD.--October 1940 to current year. April to September 1940 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 0.72 ft above mean sea level. October 1940 to Nov. 17, 1953, at site 100 ft upstream at same datum.

AVERAGE DISCHARGE.--33 years, 1,035 cfs (749,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,180 cfs June 2 (gage height, 50.71 ft); minimum daily, 151 cfs Oct. 29.
Period of record: Maximum discharge, 62,500 cfs Dec. 24, 1955 (gage height, 63.25 ft); minimum, 40 cfs July 21, 1961.
Flood of Feb. 12, 1938, reached a stage of 64.4 ft, from floodmarks.

REMARKS.--Records good. Flow regulated by reservoirs and powerplants above station (see REMARKS for sta 11302000). South San Joaquin and Oakdale Canals (see sta 11300500, 11301000) divert at Goodwin Dam 34 miles upstream. Diversions for irrigation of 57,250 acres in vicinity of Oakdale area. See schematic diagram of Stanislaus River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	154	599	915	1,890	2,120	3,310	1,590	4,100	237	171	253
2	247	154	588	914	1,850	1,910	3,270	1,600	3,980	217	163	269
3	248	153	590	922	1,840	1,870	3,180	1,410	3,060	238	174	272
4	301	167	595	903	1,840	1,940	3,100	1,180	3,040	209	157	272
5	293	181	602	787	1,860	1,960	2,960	944	2,840	189	196	216
6	247	180	601	773	1,860	1,860	2,680	647	2,620	166	175	274
7	213	173	609	765	2,010	2,010	2,500	591	2,580	168	181	279
8	203	173	626	761	1,960	2,360	2,260	561	2,560	164	178	245
9	227	173	627	768	1,880	2,960	2,160	532	2,480	207	154	241
10	238	179	620	951	1,920	2,910	1,780	474	2,530	189	185	244
11	234	193	618	1,230	2,450	2,820	1,490	457	2,760	191	183	211
12	227	208	612	1,420	3,060	2,740	1,310	396	2,710	183	165	204
13	233	193	589	1,900	3,030	2,630	1,250	382	2,010	177	157	234
14	236	195	595	1,780	3,340	2,430	1,500	367	1,290	171	194	255
15	238	215	592	1,700	3,460	2,250	1,710	348	1,050	174	191	230
16	240	236	594	1,630	3,450	2,220	1,690	308	953	184	172	306
17	266	266	605	2,250	3,190	2,600	1,660	1,420	774	201	186	337
18	423	229	662	2,210	2,610	3,200	1,430	3,120	586	190	187	327
19	402	207	710	2,080	2,180	3,350	1,150	3,210	452	201	238	268
20	425	189	799	1,950	1,980	3,440	1,100	3,070	376	210	236	296
21	377	192	801	1,860	1,760	3,600	998	3,260	348	194	181	246
22	246	257	865	1,830	1,880	3,750	768	3,550	351	199	152	213
23	198	359	879	1,820	1,890	3,890	745	3,060	311	225	164	237
24	178	523	888	1,820	1,880	3,720	632	1,970	321	197	175	256
25	169	560	898	1,830	1,870	3,670	574	1,740	330	196	177	234
26	164	573	904	1,840	1,870	3,660	873	2,240	270	193	169	254
27	157	579	907	1,840	1,890	3,670	1,370	3,140	251	172	240	314
28	153	584	915	1,830	2,140	3,600	1,440	3,580	221	181	220	319
29	151	593	921	1,820	------	3,560	1,530	3,180	220	166	176	246
30	152	598	928	1,850	------	3,520	1,590	3,230	229	203	199	212
31	154	------	920	2,010	------	3,460	------	3,870	------	177	217	------
TOTAL	7,424	8,636	22,259	46,959	62,840	89,680	52,010	55,427	45,603	5,969	5,713	7,764
MEAN	239	288	718	1,515	2,244	2,893	1,734	1,788	1,520	193	184	259
MAX	425	598	928	2,250	3,460	3,890	3,310	3,870	4,100	238	240	337
MIN	151	153	588	761	1,760	1,860	574	308	220	164	152	204
AC-FT	14,730	17,130	44,150	93,140	124,600	177,900	103,200	109,900	90,450	11,840	11,330	15,400

CAL YR 1972 TOTAL 123,052 MEAN 336 MAX 1,680 MIN 87 AC-FT 244,100
WTR YR 1973 TOTAL 410,284 MEAN 1,124 MAX 4,100 MIN 151 AC-FT 813,800

11303500 SAN JOAQUIN RIVER NEAR VERNALIS, CALIF.
(International Hydrological Decade River Station)

LOCATION.--Lat 37°40'34", long 121°15'55", in El Pescadero Grant, San Joaquin County, on left bank 12 ft downstream from Durham Ferry highway bridge, 2.6 miles downstream from Stanislaus River, and 3.2 miles northeast of Vernalis.

DRAINAGE AREA.--13,536 sq mi.

PERIOD OF RECORD.--July 1922 to current year (1922-23 and 1925-29, low-water records only).

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. July 1922 to September 1946, at various sites on or within 100 ft of Durham Ferry bridge. Prior to Apr. 1, 1931, at different datum. Apr. 1, 1931, to Sept. 30, 1959, at datum 5.06 ft above mean sea level. Oct. 1, 1959, to Nov. 30, 1967, at site 120 ft upstream at present datum.

AVERAGE DISCHARGE.--45 years (1924, 1929-73), 4,438 cfs (3,215,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,100 cfs Feb. 18 (elevation, 21.63 ft); minimum daily, 950 cfs Aug. 23.
Period of record: Maximum discharge recorded, 79,000 cfs Dec. 9, 1950 (elevation, 32.81 ft, present datum), including flow through breaks in levee; maximum elevation, 34.55 ft Jan. 27, 1969; minimum discharge, 19 cfs Aug. 10, 1961.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation; low flows consist mainly of return flow from irrigated areas. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 831: 1936. WSP 931: 1940. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,840	1,440	2,730	2,300	4,870	7,920	7,280	2,860	4,670	1,250	1,050	1,190
2	1,830	1,470	2,680	2,200	4,690	7,700	7,090	2,820	4,750	1,270	1,050	1,270
3	2,000	1,490	2,620	2,210	4,590	7,240	6,920	2,810	4,360	1,150	1,020	1,380
4	2,320	1,560	2,540	2,240	4,440	7,280	6,870	2,620	3,920	1,190	1,040	1,300
5	2,280	1,610	2,510	2,250	4,160	7,410	6,790	2,540	3,820	1,160	1,050	1,210
6	2,140	1,530	2,500	2,290	4,080	7,020	6,470	2,180	3,500	1,070	1,110	1,170
7	2,000	1,500	2,500	2,290	4,730	6,680	5,960	2,040	3,460	1,010	1,020	1,230
8	1,980	1,520	2,510	2,170	5,270	7,100	5,620	1,990	3,420	992	960	1,280
9	1,980	1,550	2,510	2,170	4,900	8,300	5,380	1,870	3,350	1,050	975	1,380
10	1,960	1,550	2,510	2,350	4,700	9,380	4,990	1,840	3,340	1,050	960	1,400
11	1,930	1,730	2,510	3,030	5,310	9,120	4,590	1,780	3,420	986	1,050	1,370
12	1,800	1,880	2,490	3,550	8,200	8,860	4,240	1,730	3,490	997	1,140	1,380
13	1,690	1,930	2,470	4,070	11,100	8,420	3,930	1,680	3,190	992	1,100	1,310
14	1,650	2,060	2,450	4,520	11,400	7,720	3,790	1,700	2,630	955	1,070	1,350
15	1,680	2,160	2,460	3,970	11,500	7,100	3,950	1,600	2,240	1,050	1,050	1,390
16	1,620	2,380	2,420	3,740	12,300	6,730	3,960	1,660	2,090	1,120	1,090	1,500
17	1,570	2,700	2,360	4,330	12,900	6,360	3,800	2,130	2,000	1,140	1,100	1,540
18	1,710	3,000	2,240	6,410	12,900	6,540	3,540	3,540	1,910	1,090	1,080	1,510
19	1,740	3,020	2,260	6,370	12,000	6,550	3,100	4,100	1,660	997	1,050	1,470
20	1,650	2,830	2,430	6,660	11,000	6,540	2,900	4,190	1,520	1,050	1,100	1,550
21	1,650	2,660	2,680	6,520	10,200	6,730	2,810	4,210	1,470	1,110	1,050	1,590
22	2,200	2,690	2,750	6,140	9,760	7,230	2,620	4,440	1,470	1,140	955	1,490
23	2,580	2,720	2,740	5,850	9,500	7,710	2,540	4,440	1,560	1,230	950	1,580
24	2,580	2,770	2,700	5,620	9,130	8,130	2,280	3,560	1,560	1,170	1,070	1,720
25	2,550	2,820	2,580	5,340	8,590	8,280	2,130	2,950	1,520	1,120	1,100	1,720
26	2,650	2,830	2,510	5,070	7,760	8,310	2,040	3,020	1,410	1,020	1,140	1,790
27	2,700	2,810	2,440	4,740	6,910	8,250	2,380	3,630	1,340	960	1,190	1,770
28	2,560	2,770	2,420	4,510	6,780	8,200	2,620	4,320	1,440	1,000	1,230	1,740
29	1,890	2,750	2,380	4,280	------	7,890	2,660	4,360	1,430	1,070	1,150	1,780
30	1,580	2,760	2,330	4,170	------	7,710	2,850	4,070	1,340	1,080	1,100	1,760
31	1,430	------	2,330	4,470	------	7,530	------	4,360	------	1,080	1,080	------
TOTAL	61,740	66,490	77,560	125,830	223,670	235,940	126,100	91,040	77,280	33,549	33,080	44,120
MEAN	1,992	2,216	2,502	4,059	7,988	7,611	4,203	2,937	2,576	1,082	1,067	1,471
MAX	2,700	3,020	2,750	6,660	12,900	9,380	7,280	4,440	4,750	1,270	1,230	1,790
MIN	1,430	1,440	2,240	2,170	4,080	6,360	2,040	1,600	1,340	955	950	1,170
AC-FT	122,500	131,900	153,800	249,600	443,600	468,000	250,100	180,600	153,300	66,540	65,610	87,510

CAL YR 1972 TOTAL 573,962 MEAN 1,568 MAX 3,650 MIN 403 AC-FT 1,138,000
WTR YR 1973 TOTAL 1,196,399 MEAN 3,278 MAX 12,900 MIN 950 AC-FT 2,373,000

11306000 SOUTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°08'40", long 120°39'46", in SW¼NW¼ sec.4, T.3 N., R.12 E., Calaveras County, on right bank 0.1 mile downstream from San Antonio Creek, and 3.7 miles south of San Andreas.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--April 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 860 ft (from topographic map). Prior to Feb. 13, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--23 years, 81.5 cfs (59,050 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,700 cfs Jan. 16 (gage height, 9.80 ft), from rating curve extended above 2,600 cfs on basis of slope-area measurement at gage height 11.41 ft; no flow Oct. 1-25.
Period of record: Maximum discharge, 17,600 cfs Dec. 23, 1955 (gage height, 10.29 ft), from rating curve extended above 5,700 cfs on basis of slope-area measurement of peak flow; no flow at times in most years.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Some small diversions for irrigation above station.

REVISIONS (WATER YEARS).--WSP 1395: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.90	11	26	226	403	200	62	20	6.6	1.0	.30
2	0	1.1	8.1	22	171	311	171	57	20	6.3	.83	.30
3	0	.98	6.7	20	160	371	159	53	19	6.1	.85	.30
4	0	6.4	11	18	247	511	146	52	18	5.2	.88	.30
5	0	19	14	15	186	342	141	56	17	5.1	.79	.30
6	0	5.6	14	15	328	458	139	53	15	5.0	.79	.30
7	0	3.0	31	14	586	429	137	48	15	4.7	.80	.30
8	0	5.1	28	17	344	514	132	45	13	4.7	.79	.30
9	0	6.1	17	551	250	346	132	42	15	4.4	.75	.30
10	0	3.2	14	449	2,200	304	128	39	12	4.2	.70	.30
11	0	9.5	12	972	2,830	450	126	37	12	4.0	.63	.30
12	0	12	9.8	1,580	1,700	312	124	35	11	4.0	.56	.30
13	0	6.6	8.8	410	725	262	135	34	12	3.3	.49	.30
14	0	9.0	7.8	206	908	230	146	32	12	3.0	.46	.31
15	0	15	8.1	151	610	201	128	32	13	3.2	.40	.32
16	0	19	9.1	3,740	402	182	121	31	12	3.4	.34	.33
17	0	13	123	1,130	314	170	117	29	12	3.2	.31	.33
18	0	11	173	1,510	263	160	128	28	11	3.1	.23	.33
19	0	10	234	728	226	153	114	26	10	3.2	.17	.33
20	0	9.3	118	347	199	581	104	24	10	3.1	.14	.33
21	0	8.4	67	250	182	471	97	24	9.6	2.9	.13	.40
22	0	7.8	70	190	162	473	92	24	8.9	2.9	.11	.72
23	0	7.5	79	155	151	316	89	20	8.6	2.8	.08	11
24	0	7.1	65	132	155	262	88	22	8.8	2.7	.04	14
25	0	6.8	51	146	162	230	84	24	8.4	2.3	.01	17
26	.30	6.6	40	142	206	217	81	24	8.0	2.0	.02	20
27	.72	6.5	34	114	860	208	78	22	9.8	1.8	.11	16
28	.85	7.6	33	100	812	216	74	21	11	1.7	.25	15
29	.96	10	29	124	------	186	69	20	8.3	1.4	.26	13
30	.97	13	25	630	------	171	68	19	7.0	1.3	.28	10
31	.93	------	22	338	------	256	------	20	------	1.2	.30	------
TOTAL	4.73	247.08	1,373.4	14,242	15,565	9,696	3,548	1,055	367.4	108.8	13.50	123.30
MEAN	.15	8.24	44.3	459	556	313	118	34.0	12.2	3.51	.44	4.11
MAX	.97	19	234	3,740	2,830	581	200	62	20	6.6	1.0	20
MIN	0	.90	6.7	14	151	153	68	19	7.0	1.2	.01	.30
AC-FT	9.4	490	2,720	28,250	30,870	19,230	7,040	2,090	729	216	27	245

CAL YR 1972 TOTAL 8,823.24 MEAN 24.1 MAX 878 MIN 0 AC-FT 17,500
WTR YR 1973 TOTAL 46,344.21 MEAN 127 MAX 3,740 MIN 0 AC-FT 91,920

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1500	5.33	1,650	1-30	0830	4.75	110
1-11	2230	6.87	3,500	2-10	2230	7.68	5,060
1-16	1500	9.80	9,700	2-27	2000	7.40	4,500
1-18	1400	6.85	3,410				

NOTE.--No gage-height record Oct. 1 to Nov. 1, Aug. 28 to Sept. 30.

11308000 NORTH FORK CALAVERAS RIVER NEAR SAN ANDREAS, CALIF.

LOCATION.--Lat 38°13'17", long 120°41'54", in NE¼NW¼ sec.7, T.4 N., R.12 E., Calaveras County, on right bank 0.5 mile upstream from Chile Gulch, and 1.8 miles northwest of San Andreas.

DRAINAGE AREA.--85.2 sq mi.

PERIOD OF RECORD.--March 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (from topographic map). Prior to Feb. 14, 1952, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--23 years, 48.5 cfs (35,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,360 cfs Jan. 16 (gage height, 8.43 ft); no flow many days. Period of record: Maximum discharge, 6,200 cfs Dec. 23, 1955 (gage height, 12.52 ft), from rating curve extended above 3,900 cfs; no flow at times in most years.

REMARKS.--Records good. Small diversions above station for irrigation.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.0	8.5	13	140	200	119	28	13	5.0	.46	0
2	0	2.5	7.3	12	99	147	97	27	13	4.4	.34	0
3	0	2.7	4.2	13	83	132	85	26	12	4.1	.22	0
4	0	14	6.2	12	142	287	76	27	11	3.6	.11	0
5	0	11	9.0	11	108	194	70	28	11	3.1	.03	0
6	0	5.3	9.6	10	114	173	65	27	9.9	2.7	0	0
7	0	6.3	12	9.4	300	197	61	25	9.5	2.5	0	0
8	0	10	12	11	204	214	57	24	9.2	2.4	0	0
9	0	8.2	9.2	110	145	175	54	23	8.8	2.4	0	0
10	0	7.6	8.3	210	781	160	52	22	8.3	2.1	0	0
11	0	15	7.7	415	1,270	342	49	22	8.4	1.7	0	0
12	0	17	7.3	1,140	1,170	220	47	21	8.1	1.6	0	0
13	0	9.6	6.9	234	500	170	50	20	8.8	1.5	0	0
14	0	15	6.5	116	407	139	64	19	9.8	1.4	0	0
15	0	23	6.6	80	340	115	51	19	10	1.5	0	0
16	0	35	7.0	1,070	236	99	48	18	9.7	1.6	0	0
17	0	26	200	634	182	89	51	17	9.1	1.7	0	0
18	0	14	144	615	145	81	67	16	8.2	1.8	0	0
19	0	10	107	477	119	77	52	16	7.7	1.6	0	.01
20	0	8.4	67	219	99	257	46	15	6.8	1.7	0	.41
21	0	7.1	36	145	87	260	43	15	6.1	1.8	0	.47
22	0	6.4	35	104	76	296	40	15	5.4	1.9	0	.79
23	0	5.8	45	78	68	253	38	15	5.3	1.9	0	1.3
24	0	5.4	31	62	64	195	37	14	5.6	1.7	0	1.5
25	.21	5.1	24	61	67	158	35	16	5.4	1.5	0	2.0
26	1.5	4.8	20	62	84	145	34	15	4.8	1.3	0	1.9
27	1.7	4.8	18	51	232	136	32	14	5.7	1.2	0	1.6
28	1.9	4.6	18	45	431	145	31	13	10	1.0	0	1.4
29	2.0	5.2	18	46	------	128	30	13	7.9	.84	0	1.2
30	2.0	8.4	16	276	------	108	30	12	6.0	.73	0	.99
31	1.8	------	14	228	------	138	------	12	------	.64	0	------
TOTAL	11.11	300.2	921.3	6,569.4	7,693	5,430	1,611	594	254.5	62.91	1.16	13.57
MEAN	.36	10.0	29.7	212	275	175	53.7	19.2	8.48	2.03	.037	.45
MAX	2.0	35	200	1,140	1,270	342	119	28	13	5.0	.46	2.0
MIN	0	2.0	4.2	9.4	64	77	30	12	4.8	.64	0	0
AC-FT	22	595	1,830	13,030	15,260	10,770	3,200	1,180	505	125	2.3	27

CAL YR 1972 TOTAL 5,333.58 MEAN 14.6 MAX 585 MIN 0 AC-FT 10,580
WTR YR 1973 TOTAL 23,462.15 MEAN 64.3 MAX 1,270 MIN 0 AC-FT 46,540

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-11	2330	7.36	1,910	2-10	0800	6.50	1,550
1-16	1800	8.43	2,360	2-27	2400	5.00	940
1-18	1830	5.90	1,310				

11308700 NEW HOGAN LAKE NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°09'01", long 120°48'45", in SW¼SW¼ sec.31, T.4 N., R.11 E., Calaveras County, in control house at New Hogan Dam on the Calaveras River, 3.0 miles south of Valley Springs.

DRAINAGE AREA.--362 sq mi.

PERIOD OF RECORD.--December 1963 to current year. Prior to October 1971, published as "New Hogan Reservoir."

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 196,206 acre-ft Apr. 30 (elevation, 679.46 ft); minimum, 111,972 acre-ft Nov. 2, 3 (elevation, 649.49 ft).
Period of record: Maximum contents, 241,200 acre-ft Apr. 18, 1967 (elevation, 692.53 ft); minimum since initial season of normal operation, 9,360 acre-ft Oct. 27, 1964 (elevation, 516.81 ft).

REMARKS.--Reservoir is formed by an earthfill dam and four earthfill dikes. Storage began Dec. 20, 1963. Total capacity, 323,859 acre-ft between elevations 534.5 ft (invert of outlet valve) and 713.0 ft (top of spillway gates). Elevation of spillway crest is 679.5 ft. No dead storage. The reservoir is operated for flood control according to existing downstream channel conditions. Reservoir releases limited, insofar as possible, to amounts that will not cause flows greater than 6,000 cfs at Bellota. Records, including extremes, show contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET AND CONTENTS, IN ACRE-FEET)

545	723	600	27,320
550	1,240	610	39,169
555	1,956	630	70,540
560	2,951	650	113,200
570	6,134	670	166,978
580	11,147	700	269,652
590	18,020		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114,872	111,996	113,732	119,994	172,599	162,475	185,645	196,012	189,350	178,435	165,086	151,233
2	114,726	111,972	113,707	120,069	170,825	163,822	186,489	195,852	189,129	178,098	164,615	150,896
3	114,629	111,972	113,732	120,169	169,060	164,998	187,210	195,723	188,940	177,762	164,115	150,615
4	114,459	112,212	113,732	120,244	167,572	164,380	187,807	195,626	188,688	177,303	163,705	150,251
5	114,338	112,188	113,780	120,269	165,735	162,241	188,436	195,594	188,310	176,876	163,206	149,915
6	114,168	112,188	113,828	120,294	164,704	160,524	188,940	195,562	187,901	176,510	162,797	149,635
7	113,998	112,236	113,925	120,343	165,765	159,163	189,413	195,369	187,555	176,266	162,329	149,328
8	113,901	112,212	113,974	120,518	165,204	160,553	189,551	195,273	187,304	175,901	161,921	148,854
9	113,780	112,236	114,022	122,501	163,705	162,417	190,457	195,145	187,022	175,475	161,513	148,519
10	113,659	112,236	114,022	124,527	169,896	164,027	190,901	195,016	186,614	175,049	161,134	148,158
11	113,538	112,501	114,071	128,605	180,834	164,674	191,313	194,792	186,239	174,564	160,815	147,908
12	113,441	112,597	114,071	138,355	184,273	164,586	191,854	194,599	185,863	174,110	160,437	147,685
13	113,393	112,790	114,071	141,023	179,356	164,057	192,235	194,375	185,457	173,625	160,118	147,408
14	113,296	112,886	114,095	142,326	174,473	163,265	192,841	194,119	185,083	173,233	159,683	147,159
15	113,176	113,152	114,095	143,335	169,030	162,680	193,256	193,863	184,646	172,659	159,249	146,909
16	113,103	113,417	114,119	158,499	164,704	162,855	193,639	193,671	184,304	172,177	158,758	146,633
17	113,103	113,611	114,896	164,733	163,793	163,556	194,055	193,447	183,962	171,756	158,239	146,384
18	113,031	113,683	115,846	171,816	163,793	164,292	194,535	193,192	183,589	171,245	157,750	146,080
19	112,910	113,804	116,877	175,840	164,057	165,234	194,920	192,905	183,278	170,765	157,232	145,832
20	112,885	113,901	117,393	177,731	163,060	168,107	195,145	192,586	182,844	170,285	156,773	145,529
21	112,814	113,877	117,669	178,957	161,018	170,555	195,337	192,299	182,441	169,896	156,314	145,254
22	112,766	113,877	118,084	179,264	159,452	173,384	195,498	192,013	181,915	169,388	155,828	145,034
23	112,694	113,677	118,380	179,110	158,787	175,323	195,659	191,758	181,420	168,941	155,342	144,814
24	112,645	113,653	118,777	178,987	158,499	176,815	195,787	191,409	180,926	168,494	154,857	144,622
25	112,645	113,853	119,000	178,865	158,499	178,098	195,852	191,059	180,556	168,107	154,373	144,484
26	112,549	113,804	119,074	178,037	159,481	179,448	195,980	190,806	180,125	167,631	153,890	144,375
27	112,477	113,780	119,372	175,840	162,709	180,618	196,012	190,552	179,756	167,156	153,408	144,238
28	112,357	113,780	119,571	173,625	164,409	181,698	196,045	190,362	179,448	166,652	153,011	144,101
29	112,261	113,780	119,695	172,901	------	182,658	196,109	190,172	179,080	166,267	152,530	143,909
30	112,164	113,780	119,820	174,564	------	183,527	196,206	189,887	178,711	165,883	152,078	143,772
31	112,044	------	119,895	174,140	------	184,709	------	189,603	------	165,499	151,627	------
MAX	114,872	113,901	119,895	179,264	184,273	184,709	196,206	196,012	189,350	178,435	165,086	151,233
MIN	112,044	111,972	113,707	119,994	158,499	159,163	185,645	189,603	178,711	165,499	151,627	143,772
(a)	649.52	650.24	652.73	672.39	669.13	675.83	679.46	677.39	673.89	669.50	664.69	661.86
(b)	-3,047	+1,736	+6,115	+54,245	-9,731	+20,300	+11,497	-6,603	-10,892	-13,212	-13,872	-7,855
(c)	809	287	178	287	353	577	1,235	1,800	2,224	2,477	2,257	1,610

CAL YR 1972 b -39,991
WTR YR 1973 b +28,681

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11308900 CALAVERAS RIVER BELOW NEW HOGAN DAM, NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°08'53", long 120°49'26", in NW¼NE¼ sec.1, T.3 N., R.10 E., Calaveras County, on right bank at county road bridge, 0.5 mile upstream from Cosgrove Creek, 0.8 mile downstream from New Hogan Dam, and 3.0 miles south of Valley Springs.

DRAINAGE AREA.--363 sq mi.

PERIOD OF RECORD.--January 1961 to current year. Published as "below Hogan Dam" 1961-63 and as "below New Hogan Dam" 1964.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 519.8 ft above mean sea level (levels by Corps of Engineers). Auxiliary nonrecording gage 300 ft downstream at different datum used May 1, 1962, to Jan. 26, 1963.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation in New Hogan Lake).--12 years, 238 cfs (172,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,020 cfs Feb. 12 (gage height, 6.23 ft); minimum daily, 0.60 cfs Dec. 23-26.
Period of record: Maximum discharge, 7,830 cfs Jan. 25, 26, 1969 (gage height, 7.46 ft); no flow many days in 1961-65, 1971.

REMARKS.--Records good. Flow regulated by New Hogan Lake (see sta 11308700). Some seepage of North Fork Stanislaus River water enters basin from diversion canals and reservoirs, normally not over 1.5 cfs. Small diversions above station for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	28	16	1.2	1,500	2,100	26	177	133	176	223	185
2	68	28	16	1.2	1,500	4.3	26	186	134	174	255	159
3	66	28	16	6.0	1,500	266	26	174	135	188	245	149
4	65	29	16	12	1,490	1,680	26	167	152	202	240	157
5	65	29	17	13	1,480	1,980	26	146	211	210	240	144
6	65	29	17	14	1,490	1,990	26	148	222	177	240	146
7	65	29	17	14	1,500	1,700	26	147	192	157	227	147
8	65	29	17	14	1,490	1,010	26	133	175	180	215	151
9	65	29	17	17	1,480	5.6	27	144	160	210	209	154
10	49	15	17	16	1,510	262	28	167	164	245	193	154
11	34	2.2	16	18	2,120	1,030	28	176	178	250	193	137
12	23	1.2	16	22	3,800	1,030	28	177	209	255	193	113
13	22	1.4	16	18	5,470	1,020	28	176	215	253	193	105
14	36	2.4	16	16	4,900	1,020	28	176	213	250	207	103
15	36	2.5	16	16	4,560	852	28	176	210	250	195	101
16	36	3.3	16	42	3,220	391	29	176	215	250	230	101
17	26	2.1	16	24	1,370	20	29	176	204	250	230	122
18	19	2.1	15	25	720	20	29	170	179	250	230	136
19	18	2.0	15	9.0	533	12	40	154	163	250	230	136
20	22	12	8.2	3.7	1,060	8.0	63	157	232	250	219	136
21	22	28	.70	3.2	1,470	5.5	94	176	250	250	206	125
22	22	27	.70	303	1,230	5.1	98	186	250	250	215	102
23	22	27	.60	493	736	3.3	98	176	250	250	215	101
24	22	27	.60	490	506	2.8	98	176	243	250	222	92
25	22	27	.60	487	377	2.6	98	176	230	258	235	64
26	24	27	.60	870	2.9	3.1	98	176	230	280	235	45
27	26	25	1.1	1,460	3.9	5.2	98	161	197	255	235	54
28	26	25	1.2	1,480	1,370	5.2	98	143	181	235	235	63
29	26	21	1.3	702	------	10	98	133	176	221	235	73
30	27	16	1.3	523	------	27	123	139	176	210	235	75
31	26	------	1.2	1,280	------	26	------	127	------	210	216	------
TOTAL	1,175	554.2	326.10	8,393.3	48,388.8	16,496.7	1,594	5,072	5,885	7,096	6,891	3,530
MEAN	37.9	18.5	10.5	271	1,728	532	53.1	164	196	229	222	118
MAX	68	29	17	1,480	5,470	2,100	123	186	250	280	255	185
MIN	18	1.2	.60	1.2	2.9	2.6	26	127	133	157	193	45
AC-FT	2,330	1,100	647	16,650	95,980	32,720	3,160	10,060	11,670	14,070	13,670	7,000
MEAN a	1.50	52.4	113	1,158	1,159	871	267	85.6	50.4	54.3	33.5	12.7
AC-FT a	92	3,120	6,940	71,180	86,570	53,580	15,890	5,260	3,000	3,340	2,060	755

CAL YR 1972 TOTAL 39,325.90 MEAN 107 MAX 295 MIN .60 AC-FT 78,000 MEAN a 70.5 AC-FT a 51,200
WTR YR 1973 TOTAL 105,402.10 MEAN 289 MAX 5,470 MIN .60 AC-FT 209,100 MEAN a 348 AC-FT a 251,790

a Adjusted for change in contents and evaporation in New Hogan Lake.

11312000 BEAR CREEK NEAR LOCKEFORD, CALIF.

LOCATION.--Lat 38°09'10", long 121°08'17", in NW¼SE¼ sec.31, T.4 N., R.8 E., San Joaquin County, on right bank 15 ft downstream from county road bridge, and 0.8 mile southeast of Lockeford.

DRAINAGE AREA.--47.6 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A. October 1926 to November 1930 at site 3 miles downstream; records not equivalent.

GAGE.--Water-stage recorder and low-water concrete control. Datum of gage is 80.68 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--43 years, 11.9 cfs (8,620 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 844 cfs Jan. 16 (gage height, 14.15 ft); no flow many days. Period of record: Maximum discharge, 2,930 cfs Apr. 3, 1958 (gage height, 15.13 ft); no flow for several months in most years.

REMARKS.--Records fair. No storage or diversion above station. Occasionally water is released from East Bay Municipal Utility District aqueduct into Bear Creek above station. Summer discharge influenced by return flows from irrigated areas.

REVISIONS.--WSP 1635: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	0	.18	.80	37	81	8.0	.08	1.9	2.4	.46	.13
2	1.8	0	.14	.75	23	38	6.1	.04	.99	1.8	.28	.13
3	1.7	0	.14	.70	18	44	5.3	.02	.05	.16	1.0	.10
4	1.1	0	.11	.65	35	178	4.7	0	.01	.02	.76	.06
5	1.6	0	.09	.60	40	57	4.0	0	.02	.03	1.4	.05
6	1.7	0	.12	.41	74	109	3.6	0	.05	.15	.39	.04
7	1.9	0	.11	.33	395	124	3.0	0	.66	.21	.28	.15
8	2.9	0	.11	.35	164	476	2.5	.05	.43	.05	.20	.51
9	2.4	0	.14	155	66	189	2.6	.33	.32	.48	.10	.09
10	3.6	0	.51	263	371	64	2.5	.62	.11	.14	.21	.04
11	3.2	1.1	.45	102	542	96	1.1	1.5	.12	.46	.43	1.1
12	2.7	2.7	.38	346	398	49	.14	1.0	.05	.65	.52	1.1
13	2.3	2.3	.44	103	163	31	14	.31	.09	.40	.39	1.2
14	2.4	5.7	.93	38	102	21	12	.05	.08	.34	.25	.18
15	2.6	5.4	.64	23	89	14	3.7	.21	.04	.52	.25	.08
16	2.3	27	.51	520	49	11	2.4	.60	.02	.16	.05	.04
17	2.1	7.8	.75	431	35	9.5	1.9	.25	.01	.05	.04	.04
18	1.5	5.1	.95	363	26	8.3	1.7	.07	0	.34	.04	.03
19	.21	3.1	8.8	258	22	7.6	1.8	.23	.68	.09	.24	.03
20	.07	2.1	11	60	17	123	1.4	.26	.31	.02	.15	.06
21	.05	1.7	5.1	45	14	60	1.0	.06	.79	.63	1.3	.05
22	.04	1.3	3.0	34	12	98	.85	.04	.20	1.1	1.4	.55
23	.03	.81	2.0	23	9.8	39	.27	.51	1.4	.05	.34	.41
24	.03	.49	1.3	17	8.9	23	1.8	.22	1.4	.03	.06	.05
25	.01	.29	1.1	54	7.6	16	.13	1.5	1.1	.06	.10	.03
26	0	.29	.85	50	15	12	.05	1.7	.21	.05	.29	.02
27	0	.28	.70	28	146	10	.25	.31	.04	.29	.98	.03
28	0	.21	1.1	20	226	10	.25	.05	.04	.51	1.2	.02
29	0	.18	1.0	16	------	7.8	2.1	1.1	.04	.84	.46	.01
30	0	.19	.90	151	------	6.8	1.5	.44	.91	.19	.65	0
31	0	------	.85	55	------	7.8	------	.65	------	.70	.29	------
TOTAL	40.44	68.04	44.40	3,159.59	3,105.3	2,020.8	90.64	12.20	12.07	12.92	14.51	6.33
MEAN	1.30	2.27	1.43	102	111	65.2	3.02	.39	.40	.42	.47	.21
MAX	3.6	27	11	520	542	476	14	1.7	1.9	2.4	1.4	1.2
MIN	0	0	.09	.33	7.6	6.8	.05	0	0	.02	.04	0
AC-FT	80	135	88	6,270	6,160	4,010	180	24	24	26	29	13

CAL YR 1972 TOTAL 665.99 MEAN 1.82 MAX 130 MIN 0 AC-FT 1,320
WTR YR 1973 TOTAL 8,587.24 MEAN 23.5 MAX 542 MIN 0 AC-FT 17,030

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-10	0030	12.27	542	2-10	0900	12.33	550
1-16	1500	14.15	844	2-11	1330	12.60	588
1-18	1800	13.02	647	3-8	1130	13.26	686

11313000 DELTA-MENDOTA CANAL AT TRACY PUMPING PLANT, NEAR TRACY, CALIF.

LOCATION.--Lat 37°47'49", long 121°35'03", in SW¼SW¼ sec.31, T.1 S., R.4 E., Alameda County, at Tracy pumping plant at intake to canal, 6 miles southeast of Byron, and 10 miles northwest of Tracy.

PERIOD OF RECORD.--June 1951 to current year. Prior to October 1959, published as "near Tracy."

GAGE.--Water-stage recorder on forebay, pressure gages on pump discharge lines, and operating time of pumps. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--22 years, 1,892 cfs (1,371,000 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 4,935 cfs Aug. 11, 1969; no flow many days in most years.

REMARKS.--Discharge computed from records of operation of pumps. Water is diverted from Sacramento-San Joaquin Delta by way of Old River and a dredged channel to the Tracy pumping plant where it is lifted 200 ft into canal. Water, less intermediate diversions, flows into Mendota Pool on San Joaquin River to replace water diverted at Friant Dam. The canal is a part of the Central Valley project.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,950		0	0	764	755	752	4,190	4,620	4,590	4,650	4,050
2	3,920		0	0	540	760	751	4,180	4,580	4,570	4,660	3,980
3	3,840		0	0	0	746	800	4,140	4,610	4,590	4,700	3,900
4	3,960		0	0	0	754	970	4,210	4,640	4,560	4,660	3,940
5	3,960		0	0	0	752	1,620	4,220	4,590	4,610	4,650	3,970
6	3,990		0	0	3.0	754	1,610	4,210	4,590	4,620	4,660	3,600
7	3,970		0	0	0	754	1,620	4,220	4,580	4,610	4,660	3,540
8	4,000		10	0	0	754	1,630	4,190	4,570	4,650	4,740	3,860
9	3,970		0	0	946	752	1,700	4,190	4,570	4,660	4,720	3,860
10	3,980		0	1,280	1,420	748	1,960	4,480	4,570	4,590	4,720	3,870
11	3,980		0	1,730	1,400	702	2,080	4,580	4,590	4,670	4,640	3,870
12	4,000		0	1,730	1,280	737	2,200	4,590	4,420	4,680	4,620	3,810
13	4,000		0	1,730	928	562	2,380	4,600	4,610	4,680	4,550	3,770
14	3,980		0	1,720	831	440	2,380	4,620	4,610	4,710	4,520	3,880
15	3,980		0	2,070	855	434	2,380	4,620	4,600	4,690	4,530	3,880
16	3,780		0	2,530	800	434	2,480	4,610	4,610	4,670	4,540	3,890
17	3,370		0	2,520	757	432	2,580	4,600	4,590	4,660	4,560	3,750
18	3,340		0	2,540	593	435	2,730	4,620	4,590	4,660	4,520	3,760
19	3,340		0	2,540	603	472	2,730	4,610	4,590	4,670	4,530	3,750
20	3,290		4.0	2,510	645	550	2,820	4,600	4,570	4,660	4,530	3,760
21	3,290		0	2,510	660	543	2,820	4,590	4,590	4,650	4,460	3,750
22	3,280		0	2,520	645	726	3,000	4,590	4,600	4,650	4,460	3,750
23	3,310		0	2,530	632	684	3,300	4,570	4,590	4,650	4,460	3,760
24	3,280		0	2,530	607	657	3,470	4,600	4,600	4,650	4,460	3,760
25	3,320		0	2,530	603	642	3,650	4,590	4,600	4,580	4,180	3,750
26	3,270		0	2,380	642	530	3,710	4,600	4,610	4,630	4,280	3,760
27	3,290		0	2,400	790	533	3,720	4,580	4,620	4,660	4,280	3,740
28	2,230		0	2,400	722	567	3,970	4,580	4,620	4,660	3,990	3,740
29	1,960		0	1,680	------	752	4,170	4,590	4,600	4,650	4,070	3,740
30	520		0	467	------	753	4,200	4,610	4,600	4,630	4,090	3,740
31	60	------	0	770	------	750	------	4,620	------	4,640	4,060	------
TOTAL	104,410	0	14.0	45,617	17,666.0	19,864	74,183	138,800	137,730	143,850	139,150	114,180
MEAN	3,368	0	.45	1,472	631	641	2,473	4,477	4,591	4,640	4,489	3,806
MAX	4,000	0	10	2,540	1,420	760	4,200	4,620	4,640	4,710	4,740	4,050
MIN	60	0	0	0	0	432	751	4,140	4,420	4,560	3,990	3,540
AC-FT	207,100	0	28	90,480	35,040	39,400	147,100	275,300	273,200	285,300	276,000	226,500

CAL YR 1972 TOTAL 1,068,550.00 MEAN 2,920 MAX 4,490 MIN 0 AC-FT 2,119,000
WTR YR 1973 TOTAL 935,464.00 MEAN 2,563 MAX 4,740 MIN 0 AC-FT 1,855,000

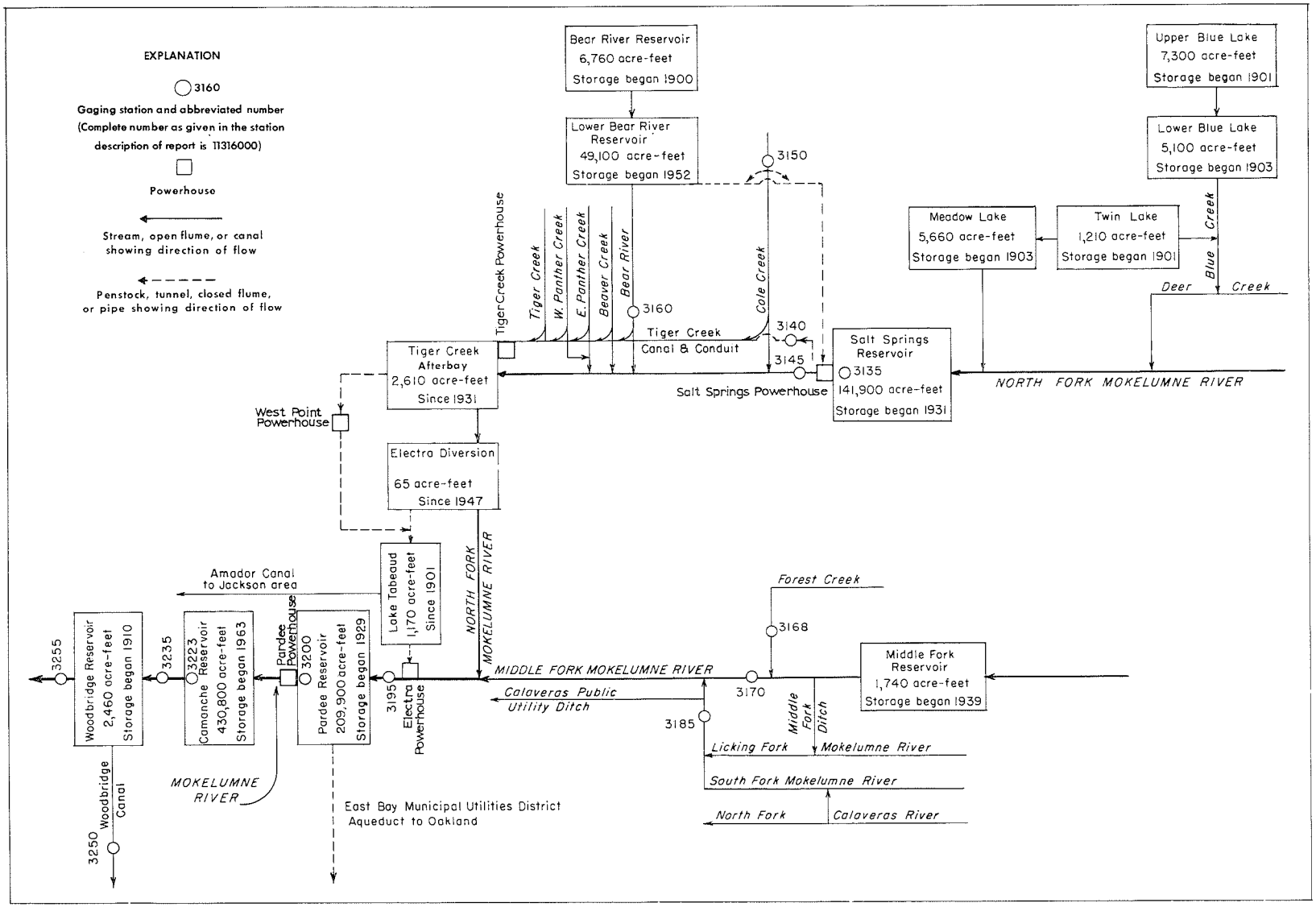

FIGURE 9.--Schematic diagram showing diversions and storage in Mokelumne River basin.

11313500 SALT SPRINGS RESERVOIR NEAR WEST POINT, CALIF.

LOCATION.--Lat 38°30'00", long 120°12'55", in SE¼ sec.33, T.8 N., R.16 E., Calaveras County, Eldorado National Forest, at right end of Salt Springs Dam on North Fork Mokelumne River, 2 miles upstream from Cole Creek, and 18 miles northeast of West Point.
DRAINAGE AREA.--169 sq mi.
PERIOD OF RECORD.--March 1931 to current year. Prior to October 1964, records published as usable contents.
GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.).
EXTREMES (at 1700).--Current year: Maximum contents observed, 141,900 acre-ft June 14-20 (elevation, 3,958.0 ft); minimum, 7,840 acre-ft Apr. 4 (elevation, 3,742.2 ft).
Period of record: Maximum contents observed, 141,900 acre-ft for several days in June or July each year 1948-54, 1956-58, 1960, 1962-63, 1965, 1967, 1969-73 (elevation, 3,958.0 ft); no contents at times in 1932-33, 1945, 1962.
REMARKS.--Reservoir is formed by concrete-faced, rockfill dam, completed in 1931; storage began in March 1931. Capacity, 141,900 acre-ft between elevations 3,667.75 (outlet drain) and 3,958.0 ft (top of radial gates) above mean sea level. Storage of 1,860 acre-ft is available for release to river only. Water is released through powerhouse just below dam and discharged into Tiger Creek powerhouse conduit (see sta 11314000). Figures given herein represent total contents. See schematic diagram of Mokelumne River basin.
COOPERATION.--Records of contents furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.
REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,667.75	45	3,740.0	7,320
3,700.0	1,250	3,750.0	9,800
3,705.0	1,680	3,760.0	12,700
3,710.0	2,200	3,780.0	19,600
3,715.0	2,810	3,800.0	28,000
3,720.0	3,520	3,850.0	54,900
3,725.0	4,320	3,900.0	90,800
3,730.0	5,230	3,958.0	141,900
3,735.0	6,230		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80,542	61,280	42,797	35,633	30,377	22,316	9,455	42,196	137,365	138,792	116,195	97,823
2	79,937	60,678	41,978	34,830	29,396	21,789	8,888	43,901	138,601	137,935	115,841	96,920
3	79,711	60,013	41,005	34,432	28,842	21,388	8,513	46,328	138,887	137,175	115,399	96,022
4	79,109	59,089	40,201	34,036	28,337	21,189	8,074	48,474	139,460	136,322	114,518	95,208
5	78,509	58,434	39,776	33,691	27,790	21,070	7,835	49,955	140,608	135,378	113,815	94,316
6	78,060	57,655	39,299	33,348	27,248	20,952	8,098	50,614	140,608	134,530	113,026	93,831
7	77,538	57,139	38,825	32,910	27,114	20,676	8,965	51,885	140,129	133,685	112,676	93,347
8	77,017	56,625	38,250	32,426	26,890	20,364	9,351	54,039	140,129	132,655	112,240	92,303
9	76,497	56,179	37,213	32,233	26,490	19,938	9,879	56,882	141,088	131,722	111,804	91,583
10	76,053	55,734	36,190	31,992	26,534	19,252	10,902	60,212	140,608	130,885	111,629	90,866
11	75,758	54,914	35,683	31,849	26,667	18,763	12,076	64,270	141,184	130,049	110,847	90,230
12	75,463	54,102	35,230	33,397	26,890	18,317	13,002	69,022	141,280	129,217	109,893	89,755
13	74,947	53,295	34,730	34,631	26,667	18,132	14,290	74,874	141,280	128,294	109,202	89,280
14	74,360	52,925	34,234	35,381	26,623	17,949	15,466	80,315	141,857	127,099	108,685	88,807
15	73,848	52,557	33,741	35,683	26,357	17,620	15,810	86,300	141,857	125,634	108,168	87,942
16	73,265	52,312	32,861	36,700	26,268	17,187	15,880	93,187	141,857	124,450	107,739	87,080
17	72,756	51,824	32,716	37,834	26,180	16,158	16,263	100,553	141,857	124,086	107,224	86,067
18	72,539	51,036	34,581	38,720	25,872	15,126	17,043	108,254	141,857	123,814	106,455	85,678
19	71,815	50,254	36,444	39,194	25,654	14,856	17,620	116,904	141,857	123,542	105,517	85,135
20	71,095	49,836	38,093	39,299	25,219	14,522	18,280	124,359	141,857	123,089	104,668	84,748
21	70,377	49,360	38,878	39,299	24,916	14,159	18,614	128,202	141,665	122,185	104,330	84,208
22	69,449	48,887	39,564	39,036	24,530	13,735	19,176	133,217	141,472	121,283	103,907	83,208
23	68,455	47,889	39,511	38,668	24,105	13,191	20,286	137,270	141,280	120,115	103,401	82,290
24	67,749	47,192	39,141	38,145	23,431	12,380	22,194	139,460	140,800	119,846	102,980	81,452
25	66,836	46,271	38,616	37,316	22,602	11,925	24,488	139,269	140,416	119,667	102,056	80,920
26	66,416	45,360	38,198	36,444	21,910	11,776	27,383	138,887	140,321	119,399	101,136	80,239
27	65,720	44,683	38,041	35,532	21,950	11,687	30,801	138,887	140,321	119,130	100,387	79,786
28	64,682	44,180	37,834	34,531	22,275	11,568	34,930	139,746	140,129	118,327	100,054	79,184
29	63,584	43,790	37,626	33,544	------	11,189	38,616	139,460	139,746	117,526	99,639	78,209
30	63,039	43,292	36,956	32,474	------	10,704	40,790	138,315	139,460	116,727	99,142	77,240
31	62,021	------	36,292	31,466	------	10,068	------	137,460	------	116,461	98,812	------
MAX	80,542	61,280	42,797	39,299	30,377	22,316	40,790	139,746	141,857	138,792	116,195	97,823
MIN	62,021	43,292	32,716	31,466	21,910	10,068	7,835	42,196	137,365	116,461	98,812	77,240
(a)	3,861.0	3,830.4	3,817.2	3,807.4	3,786.7	3,751.0	3,825.8	3,953.4	3,955.5	3,930.5	3,909.9	3,882.4
(b)	-19,100	-18,700	-7,000	-4,830	-9,190	-12,200	+30,700	+96,700	+2,000	-23,000	-17,600	-21,600

CAL YR 1972 b +18,300
WTR YR 1973 b -3,910

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11314000 TIGER CREEK POWERHOUSE CONDUIT BELOW SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'47", long 120°13'04", in SW¼ sec.33, T.8 N., R.16 E., Amador County, Eldorado National Forest, on left bank 1,000 ft downstream from Salt Springs Dam and powerhouse.

PERIOD OF RECORD.--June 1931 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 3,620 ft (from topographic map). Auxiliary nonrecording gages in stilling wells upstream and downstream from control.

AVERAGE DISCHARGE.--42 years, 347 cfs (251,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 577 cfs June 22, 1945; no flow at times in some years.

REMARKS.--Conduit conveys water of North Fork Mokelumne River from tailrace of Salt Springs powerhouse to forebay of Tiger Creek powerhouse. Since December 1952, records include Bear River diversion to Salt Springs powerhouse. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	538	543	529	527	502	444	489	447	550	542	509	539
2	538	544	527	530	506	445	491	449	551	539	509	538
3	533	541	523	531	509	442	489	444	550	539	509	538
4	530	539	528	529	509	442	440	443	550	540	511	539
5	529	536	529	530	507	442	388	87	550	540	510	539
6	520	539	529	531	507	471	329	142	551	539	518	539
7	517	533	529	530	508	490	201	463	550	539	532	539
8	513	549	527	532	511	495	356	468	550	538	530	538
9	512	546	527	512	511	499	457	467	550	540	530	537
10	512	540	527	482	427	493	460	467	550	540	229	538
11	290	525	527	427	450	483	463	453	556	540	547	539
12	274	522	527	333	450	487	465	44	559	541	546	538
13	548	526	529	333	479	485	445	0	559	540	543	538
14	552	536	529	334	501	486	433	.50	556	540	535	537
15	549	486	529	333	501	488	449	0	553	538	539	539
16	546	500	531	313	501	484	450	0	553	539	540	540
17	539	532	482	299	505	472	457	0	553	542	538	540
18	539	510	357	300	500	474	464	0	551	542	538	539
19	545	525	417	360	498	484	460	0	538	541	538	541
20	550	544	316	449	498	497	462	0	533	543	522	543
21	550	544	416	460	500	490	470	0	538	543	524	541
22	550	541	505	466	499	491	480	0	533	540	512	538
23	550	539	524	478	498	495	465	0	527	540	539	536
24	550	539	524	501	495	497	458	0	528	540	489	538
25	551	536	525	507	498	488	454	0	524	539	538	540
26	551	537	524	502	487	469	449	455	517	539	539	538
27	548	533	527	504	445	489	445	550	515	532	540	539
28	546	533	529	501	414	485	440	550	504	528	501	540
29	542	532	528	501	------	483	439	552	497	528	539	539
30	539	529	529	501	------	486	437	552	320	522	539	539
31	540	------	526	501	------	491	------	551	------	509	459	------
TOTAL	16,191	15,979	15,676	14,137	13,716	14,867	13,185	7,583.50	16,016	16,662	15,992	16,165
MEAN	522	533	506	456	490	480	440	245	534	537	516	539
MAX	552	549	531	532	511	499	491	552	559	543	547	543
MIN	274	486	316	299	414	442	201	0	320	509	229	536
AC-FT	32,110	31,690	31,090	28,040	27,210	29,530	26,150	15,040	31,770	33,050	31,720	32,060

CAL YR 1972 TOTAL 160,162.00 MEAN 438 MAX 552 MIN 0 AC-FT 317,700
WTR YR 1973 TOTAL 176,189.50 MEAN 483 MAX 559 MIN 0 AC-FT 349,500

11314500 NORTH FORK MOKELUMNE RIVER BELOW SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'37", long 120°13'12", in NE¼NW¼ sec.4, T.7 N., R.16 E., Calaveras County, Stanislaus National Forest, on left bank 0.3 mile downstream from Salt Springs Dam, and 1.3 miles upstream from Cole Creek.

DRAINAGE AREA.--170 sq mi.

PERIOD OF RECORD.--September 1926 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "above Moore Creek" 1926-30.

GAGE.--Water-stage recorder. Altitude of gage is 3,590 ft (from topographic map). Prior to Sept. 12, 1928, at site 100 ft upstream and Sept. 12, 1928, to Sept. 23, 1940, at present site at datum 2.0 ft higher.

AVERAGE DISCHARGE (combined flow of North Fork Mokelumne River and Tiger Creek powerhouse conduit minus Bear River-Cole Creek diversion).--47 years, 470 cfs (340,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,100 cfs May 29 (gage height, 9.84 ft); minimum daily, 4.6 cfs Dec. 16.
Period of record: Maximum discharge, 16,000 cfs Nov. 21, 1950 (gage height, 17.20 ft), from rating curve extended above 3,900 cfs on basis of computations of flow over dam and discharge through powerhouse; minimum daily, 0.3 cfs Mar. 31, Apr. 1, 1931.

REMARKS.--Flow regulated by Salt Springs Reservoir 0.3 mile upstream since 1931 (see sta 11313500). Diversion from Bear River and Cole Creek to Salt Springs powerhouse averaged 151 cfs during current year. Diversion above station through Tiger Creek powerhouse conduit (see sta 11314000). See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.3	5.7	5.1	204	7.3	44	273	1,800	222	11	11
2	11	5.9	5.5	5.0	197	6.8	47	277	1,520	294	11	11
3	12	5.8	5.5	5.0	194	6.8	5.4	292	1,460	327	11	11
4	12	6.2	5.6	5.0	189	7.0	5.3	302	1,210	327	11	11
5	12	5.9	5.0	5.0	170	6.7	5.2	466	1,260	314	11	11
6	11	5.8	5.1	5.0	160	6.7	5.2	591	2,200	293	11	11
7	11	5.9	5.0	4.8	19	6.6	5.0	288	2,090	308	11	11
8	11	6.7	4.9	4.9	65	29	5.2	289	1,700	313	11	11
9	11	5.6	4.8	5.1	101	53	8.7	300	1,670	306	11	11
10	11	5.5	4.8	5.1	22	70	32	310	1,740	303	11	11
11	18	5.5	4.7	7.4	9.3	29	38	336	1,010	304	11	11
12	25	5.3	4.8	11	8.4	30	19	730	1,280	305	11	11
13	10	5.4	4.8	8.4	7.9	47	6.4	803	1,060	302	11	11
14	9.9	5.9	4.8	6.9	8.1	48	6.4	137	594	299	11	11
15	9.8	5.5	4.7	6.4	7.5	81	6.4	9.4	542	307	11	11
16	9.8	6.6	4.6	11	7.1	117	6.3	10	384	201	11	11
17	9.9	5.4	6.6	10	6.8	140	6.3	11	384	12	11	11
18	9.8	5.1	5.8	11	49	134	6.3	99	386	12	11	11
19	10	5.3	6.1	9.1	105	131	6.3	218	402	12	11	11
20	10	5.8	5.6	37	103	131	34	333	338	12	11	11
21	10	5.6	5.5	55	103	130	70	915	250	12	11	11
22	10	5.4	5.8	34	107	131	69	677	234	11	11	11
23	10	4.9	5.8	6.1	100	113	49	1,360	240	11	11	11
24	11	5.1	5.6	50	92	86	6.5	2,850	240	11	11	11
25	11	5.5	5.3	103	97	58	6.3	2,920	197	11	11	11
26	11	6.0	5.3	106	99	58	6.5	2,030	145	11	11	11
27	11	6.2	5.3	170	16	59	6.9	1,800	145	11	11	11
28	11	6.1	5.3	204	8.4	50	7.8	2,080	232	11	11	11
29	10	6.0	5.2	204	------	53	8.2	3,550	275	11	11	11
30	10	5.9	5.1	207	------	63	174	3,360	251	11	11	11
31	9.5	------	5.1	206	------	55	------	2,550	------	11	11	------
TOTAL	349.7	173.1	163.7	1,513.3	2,255.5	1,943.9	702.6	30,166.4	25,239	4,895	341	330
MEAN	11.3	5.77	5.28	48.8	80.6	62.7	23.4	973	841	158	11.0	11.0
MAX	25	7.3	6.6	207	204	140	174	3,550	2,200	327	11	11
MIN	9.5	4.9	4.6	4.8	6.8	6.6	5.0	9.4	145	11	11	11
AC-FT	694	343	325	3,000	4,470	3,860	1,390	59,840	50,060	9,710	676	655

CAL YR 1972 TOTAL 22,949.4 MEAN 62.7 MAX 1,460 MIN 4.6 AC-FT 45,520
WTR YR 1973 TOTAL 68,073.2 MEAN 187 MAX 3,550 MIN 4.6 AC-FT 135,000

11315000 COLE CREEK NEAR SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°31'26", long 120°12'28", in SE¼ sec.21, T.8 N., R.16 E., Amador County, Eldorado National Forest, on right bank 1.8 miles north of Salt Springs Dam, 3.4 miles upstream from mouth, and 6.3 miles southwest of Mokelumne Peak.

DRAINAGE AREA.--20.4 sq mi.

PERIOD OF RECORD.--July 1927 to November 1942, October 1943 to current year. Prior to October 1958, published as Cold Creek near Mokelumne Peak. October 1958 to September 1960, published as "near Mokelumne Peak."

GAGE.--Water-stage recorder. Altitude of gage is 5,970 ft (from topographic map).

AVERAGE DISCHARGE.--45 years, 64.0 cfs (46,370 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,480 cfs Dec. 17 (gage height, 5.84 ft); minimum daily, 0.08 cfs Sept. 11.
Period of record: Maximum discharge, 6,140 cfs Dec. 23, 1964 (gage height, 10.21 ft), from rating curve extended above 900 cfs on basis of slope-area measurement at gage height 9.69 ft; no flow many days in some years.

REMARKS.--Occasional pumping for domestic use in summer-home tract began in September 1961. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1515: 1928, 1930-31, 1938(M), 1944, 1947. WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.67	17	29	26	30	27	214	318	15	.60	.27
2	.51	.67	22	28	24	29	27	286	264	15	.55	.30
3	.59	.67	13	26	24	29	25	314	250	13	.47	.29
4	.59	27	23	25	23	27	28	276	235	12	.51	.16
5	.59	24	15	26	23	27	46	147	273	12	.56	.12
6	.59	18	14	27	22	25	93	124	248	12	.44	.10
7	.59	9.2	14	29	22	24	118	229	233	11	.39	.10
8	.59	9.2	13	30	22	23	113	309	234	11	.40	.18
9	.59	12	13	32	22	23	151	369	195	12	.37	.19
10	.59	7.8	12	37	26	24	152	447	162	12	.38	.12
11	.59	8.3	12	150	24	26	169	512	140	12	.37	.08
12	.56	9.5	12	100	23	25	179	608	125	11	.34	.09
13	.49	10	12	70	23	24	165	586	105	11	.23	.11
14	.46	18	12	54	22	24	93	559	80	10	.18	.10
15	.54	14	13	45	22	24	84	534	62	10	.19	.14
16	.56	16	12	61	20	26	71	605	59	9.0	.26	.19
17	.65	10	541	52	21	30	81	571	55	9.0	.26	.13
18	4.3	10	249	42	31	29	95	548	51	8.0	.25	.12
19	6.0	9.9	396	37	30	26	87	559	50	7.0	.27	.14
20	5.7	11	164	38	31	27	87	417	49	6.0	.27	.22
21	5.8	10	112	33	30	26	91	357	47	5.0	.27	.22
22	3.3	9.1	142	34	27	27	145	360	42	4.0	.25	.29
23	2.1	10	76	31	26	24	230	422	37	3.0	.28	.37
24	1.6	11	59	29	27	28	285	359	30	2.0	.29	.37
25	1.1	15	46	28	25	38	315	393	29	2.0	.31	.34
26	.95	30	41	29	25	41	384	279	26	1.0	.44	.29
27	.87	26	40	30	25	43	418	328	27	1.0	.61	.26
28	.78	18	37	26	28	37	406	432	23	.80	.43	.25
29	.70	17	35	26	------	32	320	458	20	.80	.36	.25
30	.69	23	32	26	------	28	223	362	16	.60	.29	.24
31	.70	------	30	25	------	27	------	342	------	.60	.22	------
TOTAL	44.07	395.01	2,229	1,255	694	873	4,708	12,306	3,485	238.80	11.04	6.03
MEAN	1.42	13.2	71.9	40.5	24.8	28.2	157	397	116	7.70	.36	.20
MAX	6.0	30	541	150	31	43	418	608	318	15	.61	.37
MIN	.40	.67	12	25	20	23	25	124	16	.60	.18	.08
AC-FT	87	784	4,420	2,490	1,380	1,730	9,340	24,410	6,910	474	22	12

CAL YR 1972 TOTAL 20,423.45 MEAN 55.8 MAX 541 MIN .20 AC-FT 40,510
WTR YR 1973 TOTAL 26,244.95 MEAN 71.9 MAX 608 MIN .08 AC-FT 52,060

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	1315	5.84	1,480	5-16	1615	4.95	949
12-19	0700	4.17	587	5-23	1830	4.46	710
4-27	2245	4.31	645	5-29	1915	4.53	742
5-12	1715	5.01	981				

11316000 BEAR RIVER NEAR SALT SPRINGS DAM, CALIF.

LOCATION.--Lat 38°29'37", long 120°17'18", in NE¼NW¼ sec.2, T.7 N., R.15 E., Amador County, Eldorado National Forest, 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.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 3,710 ft (from topographic map).

AVERAGE DISCHARGE.--22 years, 54.6 cfs (39,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 851 cfs May 23 (gage height, 3.42 ft); minimum daily, 1.9 cfs Nov. 3.
Period of record: Maximum discharge, 11,000 cfs Dec. 24, 1964 (gage height, 10.11 ft in gage well, 11.8 ft, from flood profile), from rating curve extended above 560 cfs on basis of slope-area measurements of maximum flow; minimum daily, 1.0 cfs Aug. 23-28, 1961.
Flood in November 1950 reached a stage of 11.2 ft, from floodmarks (discharge, 10,000 cfs).

REMARKS.--Flow regulated by Bear River Reservoir since 1900 (capacity, 6,760 acre-ft) and Lower Bear River Reservoir 4 miles upstream since December 1952 (capacity, 49,100 acre-ft). Water diverted for power from Lower Bear River Reservoir through tunnel to Salt Springs powerhouse on North Fork Mokelumne River since December 1952. Water diverted occasionally from Cole Creek into Lower Bear River Reservoir. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.3	3.1	8.6	17	42	30	84	517	6.6	5.3	4.7
2	4.8	4.2	3.0	8.5	16	40	25	83	409	6.5	5.3	4.7
3	4.4	1.9	3.6	8.7	17	38	25	82	353	6.5	5.3	4.6
4	4.4	16	9.5	7.4	19	35	27	78	312	6.3	5.3	4.6
5	4.4	7.3	4.5	6.8	17	30	34	68	340	6.2	5.3	4.6
6	4.3	3.2	4.2	6.8	21	29	45	64	339	6.1	5.2	4.6
7	4.7	4.4	4.1	7.2	23	27	51	65	296	6.0	5.2	4.6
8	4.4	5.5	4.0	7.6	20	25	55	67	278	5.9	5.2	4.5
9	4.6	3.7	3.9	8.6	19	24	66	67	263	5.9	5.2	4.8
10	5.4	3.5	3.8	7.5	29	29	70	68	194	5.8	5.1	4.4
11	4.7	5.3	3.7	55	24	34	74	71	150	5.7	5.1	4.4
12	4.5	4.1	3.7	172	22	27	78	71	116	5.7	5.1	4.4
13	4.4	4.4	3.7	91	21	25	87	66	72	6.7	5.0	4.4
14	4.5	9.7	3.7	59	21	23	71	66	21	6.0	5.0	4.4
15	4.8	6.2	4.0	49	20	23	69	62	12	5.7	5.0	4.4
16	4.5	7.5	5.0	112	19	24	62	56	11	5.7	5.0	4.4
17	5.1	5.1	67	90	19	24	68	51	11	5.6	4.9	4.4
18	6.0	4.4	25	76	19	23	64	46	10	5.6	4.9	4.4
19	4.7	4.0	55	56	19	24	60	40	9.6	5.2	4.9	4.4
20	4.9	3.8	22	45	20	25	57	496	9.3	4.1	4.9	4.5
21	4.5	3.2	17	41	19	22	58	625	9.1	5.7	4.8	4.4
22	4.4	3.6	42	32	19	22	63	595	8.9	5.7	4.8	4.4
23	4.3	3.2	21	28	19	24	74	648	9.1	5.7	4.8	4.6
24	4.3	3.4	16	25	23	24	86	624	8.6	5.7	4.8	4.5
25	4.2	4.0	14	24	23	27	95	633	8.4	5.7	4.8	4.5
26	4.2	5.0	13	21	30	30	107	477	7.8	5.6	5.2	4.4
27	4.2	5.5	12	20	42	33	113	467	8.4	5.6	5.1	4.3
28	4.2	5.2	12	19	46	29	111	584	7.5	5.6	4.9	4.3
29	4.2	4.5	10	19	------	27	100	633	7.1	5.5	4.7	4.2
30	4.2	4.0	9.9	19	------	28	89	585	6.7	5.4	4.7	4.2
31	4.2	------	9.3	18	------	31	------	523	------	5.4	4.7	------
TOTAL	141.1	150.1	412.7	1,148.7	623	868	2,014	8,145	3,804.5	179.4	155.5	134.0
MEAN	4.55	5.00	13.3	37.1	22.3	28.0	67.1	263	127	5.79	5.02	4.47
MAX	6.0	16	67	172	46	42	113	648	517	6.7	5.3	4.8
MIN	4.2	1.9	3.0	6.8	16	22	25	40	6.7	4.1	4.7	4.2
AC-FT	280	298	819	2,280	1,240	1,720	3,990	16,160	7,550	356	308	266

CAL YR 1972 TOTAL 7,555.7 MEAN 20.6 MAX 306 MIN 1.9 AC-FT 14,990
WTR YR 1973 TOTAL 17,776.0 MEAN 48.7 MAX 648 MIN 1.9 AC-FT 35,260

11316800 FOREST CREEK NEAR WILSEYVILLE, CALIF.

LOCATION.--Lat 38°24'12", long 120°26'45", in SW¼NW¼ sec.4, T.6 N., R.14 E., Calaveras County, on left bank 1.0 mile downstream from Lion Creek, 1.8 miles upstream from mouth, and 4 miles northeast of Wilseyville.

DRAINAGE AREA.--20.8 sq mi.

PERIOD OF RECORD.--July 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 23.7 cfs (17,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 445 cfs Jan. 16 (gage height, 5.30 ft); minimum daily, 2.4 cfs Sept. 2.
Period of record: Maximum discharge, 1,770 cfs Dec. 24, 1964 (gage height, 7.68 ft), from rating curve extended above 500 cfs on basis of slope-area measurement at gage height 7.41 ft; minimum, 0.6 cfs Aug. 24, 25, 1961.

REMARKS.--Records good. No regulation. Minor diversions above station for irrigation and domestic use. See schematic diagram of Mokelumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.0	4.4	9.0	29	65	51	60	19	6.8	3.7	2.7
2	2.7	3.0	4.2	8.4	27	60	45	58	17	6.9	3.7	2.4
3	2.7	3.0	4.8	8.4	28	59	43	58	16	6.2	3.8	2.7
4	2.7	15	8.8	6.8	37	60	44	58	15	6.5	4.2	2.6
5	2.7	11	5.0	8.4	33	55	44	55	15	6.5	4.4	2.7
6	2.6	6.5	4.5	9.6	37	54	46	51	14	6.2	4.3	2.7
7	2.5	8.0	5.6	10	50	51	49	48	14	6.1	4.5	2.7
8	2.6	8.8	6.2	12	46	50	50	48	14	6.4	4.5	2.7
9	2.8	6.0	5.2	16	41	46	53	48	13	6.8	4.6	2.8
10	3.1	5.8	5.0	15	106	52	55	47	13	6.5	4.4	2.7
11	3.1	9.2	5.1	74	98	75	58	48	12	6.0	4.4	2.8
12	2.8	7.3	5.1	166	84	57	61	49	12	5.7	4.4	2.8
13	2.8	7.5	4.8	62	66	53	72	51	12	5.2	3.9	2.8
14	2.8	18	4.6	44	62	48	64	53	12	5.5	3.2	2.8
15	3.3	13	5.1	34	54	44	63	49	12	5.4	2.8	2.6
16	3.1	16	6.0	165	49	42	59	44	11	5.1	2.9	2.6
17	3.3	11	49	93	46	41	61	43	11	5.4	2.7	2.6
18	3.8	8.7	25	91	42	39	61	40	9.8	5.3	3.0	3.0
19	3.4	8.3	33	69	40	37	58	38	8.2	5.0	3.0	2.8
20	3.0	7.7	20	53	37	46	55	35	8.4	4.9	2.9	2.9
21	2.9	6.9	17	48	35	40	53	32	8.4	4.8	3.3	3.1
22	2.8	6.4	22	39	34	41	53	29	8.3	4.7	3.3	3.2
23	2.7	5.7	20	34	32	46	55	27	8.7	5.4	3.3	3.3
24	2.7	5.7	16	31	35	46	58	26	9.2	5.5	3.3	3.4
25	2.7	5.5	13	29	38	46	61	26	8.8	4.8	3.3	3.4
26	2.7	5.3	12	28	48	50	65	25	9.0	4.2	3.3	3.1
27	2.7	5.0	11	25	68	52	71	23	9.5	4.5	3.4	2.9
28	2.8	4.8	11	24	80	51	74	22	8.6	4.5	3.3	2.8
29	2.7	4.6	9.6	25	------	46	71	20	7.7	4.2	3.2	2.8
30	3.0	4.5	9.6	33	------	45	66	19	7.0	4.0	3.0	2.5
31	3.0	------	9.0	32	------	52	------	20	------	3.6	2.9	------
TOTAL	89.0	231.2	361.6	1,302.6	1,382	1,549	1,719	1,250	343.6	168.6	110.9	84.9
MEAN	2.87	7.71	11.7	42.0	49.4	50.0	57.3	40.3	11.5	5.44	3.58	2.83
MAX	3.8	18	49	166	106	75	74	60	19	6.9	4.6	3.4
MIN	2.5	3.0	4.2	6.8	27	37	43	19	7.0	3.6	2.7	2.4
AC-FT	177	459	717	2,580	2,740	3,070	3,410	2,480	682	334	220	168

CAL YR 1972 TOTAL 4,490.1 MEAN 12.3 MAX 53 MIN 1.9 AC-FT 8,910
WTR YR 1973 TOTAL 8,592.4 MEAN 23.5 MAX 166 MIN 2.4 AC-FT 17,040

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0400	5.00	330	1-18	1230	4.41	138
1-16	1530	5.30	445	2-10	0400	4.49	162

11317000 MIDDLE FORK MOKELUMNE RIVER AT WEST POINT, CALIF.

LOCATION.--Lat 38°23'23", long 120°31'32", in SE¼NE¼ sec.10, T.6 N., R.13 E., Calaveras County, on right bank 200 ft downstream from highway bridge, 0.6 mile south of West Point, and 4.5 miles upstream from South Fork Mokelumne River.

DRAINAGE AREA.--68.4 sq mi.

PERIOD OF RECORD.--October 1911 to current year. Monthly discharge only for October 1911, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 2,450 ft (from topographic map). Prior to Oct. 6, 1926, nonrecording gage at site 1,200 ft upstream at different datum. Oct. 6, 1926, to Aug. 18, 1928, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--62 years, 60.8 cfs (44,050 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,060 cfs Jan. 16 (gage height, 5.03 ft); minimum daily, 4.1 cfs Aug. 18.
Period of record: Maximum discharge, 4,320 cfs Dec. 23, 1955 (gage height, 8.98 ft); no flow Aug. 23 to Sept. 14, 1931, Sept. 9, 1934.

REMARKS.--Records good except those for period of no gage-height record and those for the summer months, which are fair. Flow slightly regulated by Middle Fork Reservoir (capacity, 1,740 acre-ft), 6 miles above station, since January 1940. Several small diversions above station. At times water diverted 4 miles above station to South Fork Mokelumne River via Middle Fork ditch (capacity, 15 cfs) and Licking Fork Mokelumne River. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1515: 1919-20, 1927-28(M), 1936(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	8.2	11	21	78	214	150	187	77	26	8.3	6.7
2	7.9	10	10	22	75	190	135	173	73	26	8.5	5.6
3	8.6	6.1	11	22	78	185	125	171	67	24	8.4	5.5
4	8.5	27	18	17	115	202	123	174	63	22	9.9	6.0
5	7.7	17	16	23	103	176	127	171	60	21	11	6.8
6	7.5	12	15	32	109	172	129	159	56	22	9.6	7.2
7	7.5	14	14	42	167	162	142	151	53	15	11	8.9
8	7.5	17	14	38	141	165	145	150	50	17	8.6	13
9	7.5	12	17	70	126	146	154	155	49	22	9.1	8.9
10	8.7	11	22	68	402	155	160	161	49	23	9.4	7.3
11	8.4	18	18	110	434	239	171	161	48	15	9.1	8.4
12	7.8	17	19	480	375	179	180	166	55	16	9.3	17
13	7.8	17	16	230	247	160	204	166	42	16	8.7	18
14	7.8	30	17	130	218	143	198	176	39	17	8.0	29
15	9.1	23	21	60	186	133	180	178	38	17	5.1	29
16	9.1	29	20	500	160	126	175	174	36	15	5.0	28
17	9.0	20	110	300	143	123	173	171	36	16	4.2	23
18	8.7	19	87	220	130	117	187	166	33	14	4.1	25
19	8.5	19	93	170	120	115	176	156	31	12	5.6	23
20	8.2	18	62	140	112	154	166	152	30	12	5.9	27
21	7.4	16	43	110	106	127	157	138	31	13	6.0	26
22	7.0	17	57	92	100	128	153	123	30	12	5.4	23
23	6.5	15	56	80	94	144	159	117	29	13	6.7	26
24	6.2	14	42	66	104	143	168	107	30	11	6.8	27
25	5.8	13	34	58	118	141	181	104	29	8.4	7.0	33
26	5.2	12	29	50	147	152	190	102	28	7.0	7.1	25
27	4.9	12	28	45	234	157	206	96	31	12	7.4	19
28	5.0	12	28	37	300	156	218	87	29	12	7.0	19
29	5.3	12	25	46	------	141	221	81	25	10	5.9	25
30	7.4	11	22	85	------	136	205	77	24	8.0	7.6	44
31	8.3	------	22	80	------	154	------	75	------	9.0	6.6	------
TOTAL	233.1	478.3	997	3,444	4,722	4,835	5,058	4,425	1,271	483.4	232.3	570.3
MEAN	7.52	15.9	32.2	111	169	156	169	143	42.4	15.6	7.49	19.0
MAX	9.1	30	110	500	434	239	221	187	77	26	11	44
MIN	4.9	6.1	10	17	75	115	123	75	24	7.0	4.1	5.5
AC-FT	462	949	1,980	6,830	9,370	9,590	10,030	8,780	2,520	959	461	1,130

CAL YR 1972 TOTAL 12,382.6 MEAN 33.8 MAX 177 MIN 1.6 AC-FT 24,560
WTR YR 1973 TOTAL 26,749.4 MEAN 73.3 MAX 500 MIN 4.1 AC-FT 53,060

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	unknown	--	unknown	2-11	1930	3.52	486
1-16	unknown	5.03	1,060	2-27	2130	3.26	408

NOTE.--No gage-height record Jan. 10 to Feb. 1.

11318500 SOUTH FORK MOKELUMNE RIVER NEAR WEST POINT, CALIF.

LOCATION.--Lat 38°22'06", long 120°32'40", in SE¼SE¼ sec.16, T.6 N., R.13 E., Calaveras County, 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.

PERIOD OF RECORD.--October 1933 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (from topographic map). October 1933 to Sept. 19, 1957, at site 1,100 ft downstream at different datum.

AVERAGE DISCHARGE.--40 years, 83.6 cfs (60,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,450 cfs Jan. 16 (gage height, 6.67 ft); minimum daily, 3.4 cfs Sept. 10.
Period of record: Maximum discharge, 6,920 cfs Dec. 23, 1955 (gage height, 14.8 ft, from floodmarks, site and datum then in use), from rating curve extended above 2,700 cfs on basis of slope-area measurement of maximum flow; no flow Aug. 6, 7, Aug. 12 to Sept. 26, 1934.

REMARKS.--Records good. Several small diversions above station for domestic use and for irrigation of about 100 acres. Diversions into South Fork Mokelumne River basin above station at times from North Fork Calaveras River and from Middle Fork Mokelumne River for use below station. See schematic diagram of Mokelumne River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1934(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	9.0	13	25	105	279	178	206	60	26	7.4	10
2	7.6	9.3	13	25	92	241	162	200	57	26	4.0	9.7
3	7.4	12	13	25	95	243	152	199	55	24	5.4	11
4	7.5	44	22	21	135	267	150	193	53	23	6.9	10
5	8.0	29	18	30	121	227	155	178	50	22	7.5	9.3
6	8.1	18	18	44	145	225	165	166	48	22	9.8	7.8
7	7.8	21	18	53	233	206	181	166	47	22	8.0	4.9
8	7.3	27	18	39	188	212	183	165	45	21	8.9	4.3
9	7.8	16	23	83	159	187	196	165	44	21	7.5	3.8
10	11	17	31	76	607	207	205	161	42	20	7.6	3.4
11	11	33	21	248	686	284	217	165	42	19	7.5	4.1
12	10	23	24	700	613	222	232	165	41	18	6.5	4.9
13	10	21	20	252	347	202	262	163	42	18	5.2	5.8
14	9.1	56	23	147	290	181	224	160	43	19	5.0	6.4
15	12	41	27	116	230	168	215	154	40	19	5.3	5.2
16	14	57	25	730	194	153	204	143	40	19	5.4	4.8
17	15	35	172	509	169	148	218	134	39	14	5.4	5.7
18	13	25	101	465	151	140	218	125	38	10	5.4	7.0
19	14	22	116	341	138	137	203	115	36	9.4	5.5	8.0
20	12	22	76	218	129	216	193	104	35	9.7	5.6	7.9
21	11	19	55	174	123	187	185	98	34	9.7	6.5	7.9
22	11	18	71	139	116	185	188	92	33	9.2	9.5	7.4
23	11	16	64	119	110	182	197	85	31	8.7	10	7.8
24	10	15	51	104	121	177	214	81	30	8.1	11	9.8
25	9.4	15	42	100	135	176	227	80	28	7.3	11	13
26	9.4	15	37	89	176	188	245	74	28	6.6	10	12
27	9.5	14	34	80	282	190	260	70	31	6.0	11	11
28	9.5	14	35	74	385	190	264	63	29	9.6	11	9.8
29	9.3	14	30	83	------	171	247	62	26	8.2	11	9.9
30	9.0	13	28	156	------	165	225	61	26	6.4	9.6	9.8
31	9.1	------	27	125	------	187	------	61	------	5.4	9.6	------
TOTAL	308.3	692.3	1,266	5,390	6,275	6,143	6,165	4,054	1,193	467.3	240.0	232.4
MEAN	9.95	23.1	40.8	174	224	198	206	131	39.8	15.1	7.74	7.75
MAX	15	57	172	730	686	284	264	206	60	26	11	13
MIN	7.3	9.0	13	21	92	137	150	61	26	5.4	4.0	3.4
AC-FT	612	1,370	2,510	10,690	12,450	12,180	12,230	8,040	2,370	927	476	461

CAL YR 1972 TOTAL 12,765.6 MEAN 34.9 MAX 245 MIN 2.8 AC-FT 25,320
WTR YR 1973 TOTAL 32,426.3 MEAN 88.8 MAX 730 MIN 3.4 AC-FT 64,320

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0530	5.95	990	2-10	0700	5.72	860
1-16	1600	6.67	1,450	2-27	2030	5.05	545

11319500 MOKELUMNE RIVER NEAR MOKELUMNE HILL, CALIF.

LOCATION.--Lat 38°18'46", long 120°43'09", in SW¼SW¼ sec.1, T.5 N., R.11 E., Calaveras County, on downstream side of bridge 1.2 miles northwest of Mokelumne Hill, and 8 miles downstream from confluence of North and South Forks of Mokelumne River.

DRAINAGE AREA.--544 sq mi.

PERIOD OF RECORD.--January to June 1901, May 1903 to December 1904, October 1927 to current year. Yearly estimate only for water year 1928 (incomplete), published in WSP 1315-A. Published as "at Electra" 1901, 1903-4.

GAGE.--Water-stage recorder. Datum of gage is 589.88 ft above mean sea level (levels by California Division of Highways). Jan. 1 to June 30, 1901, and May 11, 1903, to Dec. 31, 1904, nonrecording gage at site 3 miles upstream at different datum. Nov. 10, 1927, to Aug. 26, 1952, water-stage recorder at site 40 ft upstream at present datum.

AVERAGE DISCHARGE.--47 years (1903-4, 1927-73), 974 cfs (705,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,420 cfs May 30 (gage height, 8.15 ft); minimum daily, 294 cfs Oct. 12.
Period of record: Maximum discharge, 33,700 cfs Dec. 3, 1950 (gage height, 18.5 ft); minimum observed, 5 cfs Aug. 13-15, 17, 18, 1904.

REMARKS.--Records excellent. Flow regulated by Salt Springs Reservoir beginning in 1931 (see sta 11313500), several smaller reservoirs, and four powerplants. Diversion above station for irrigation and domestic use. See schematic diagram of Mokelumne River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1903-4, 1928(M), 1936(M), 1938(M), 1940(M), 1943(M), 1945(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	558	535	602	634	1,180	1,440	1,190	1,560	3,690	760	467	526
2	636	684	506	678	1,140	1,440	1,120	1,500	2,860	890	557	567
3	612	576	665	707	1,100	1,350	1,040	1,590	2,730	848	503	530
4	598	724	628	671	1,220	1,400	1,000	1,550	2,360	922	585	556
5	579	799	656	644	1,250	1,320	983	1,460	2,280	916	492	589
6	604	630	630	623	1,180	1,310	923	1,410	3,140	889	556	533
7	578	578	666	620	1,500	1,310	940	1,400	3,260	853	501	556
8	542	679	746	702	1,400	1,300	935	1,470	2,740	896	588	596
9	607	664	512	922	1,260	1,250	1,150	1,590	2,540	890	494	510
10	595	640	607	977	2,190	1,250	1,290	1,480	2,890	894	310	468
11	540	632	604	1,260	2,560	1,470	1,330	1,640	1,950	877	631	581
12	294	640	658	3,440	2,520	1,370	1,300	1,850	1,960	855	526	491
13	509	685	685	1,780	1,790	1,240	1,460	2,110	1,920	934	563	536
14	517	630	512	1,230	1,630	1,260	1,400	1,790	1,390	834	618	623
15	585	706	650	992	1,420	1,160	1,350	1,110	1,460	885	577	592
16	643	791	683	2,350	1,270	1,140	1,270	924	1,040	894	478	652
17	638	576	1,050	2,380	1,220	1,190	1,350	1,010	1,120	662	605	656
18	689	603	1,240	2,030	1,210	1,130	1,420	1,010	1,040	674	523	461
19	625	606	1,020	1,800	1,170	1,140	1,300	941	1,040	539	536	473
20	675	726	900	1,390	1,140	1,390	1,300	1,310	1,120	612	537	588
21	560	650	913	1,320	1,070	1,310	1,240	2,130	926	588	563	577
22	615	652	804	1,120	1,140	1,260	1,260	2,140	959	610	567	556
23	649	605	807	869	1,060	1,260	1,290	2,270	854	565	491	550
24	576	664	774	1,020	1,090	1,230	1,310	4,020	846	569	500	568
25	593	606	836	1,070	1,180	1,200	1,370	4,240	773	577	575	679
26	603	589	659	1,050	1,180	1,190	1,380	3,760	812	593	616	582
27	568	575	732	1,110	1,490	1,270	1,600	3,210	711	562	512	554
28	615	603	756	1,070	1,750	1,210	1,710	3,540	871	496	633	550
29	642	627	780	1,080	------	1,230	1,660	5,200	938	591	507	553
30	593	716	664	1,330	------	1,120	1,500	5,420	654	549	608	525
31	619	------	683	1,170	------	1,200	------	4,230	------	616	450	------
TOTAL	18,257	19,391	22,628	38,039	39,310	39,340	38,371	68,865	50,874	22,840	16,669	16,778
MEAN	589	646	730	1,227	1,404	1,269	1,279	2,221	1,696	737	538	559
MAX	689	799	1,240	3,440	2,560	1,470	1,710	5,420	3,690	934	633	679
MIN	294	535	506	620	1,060	1,120	923	924	654	496	310	461
AC-FT	36,210	38,460	44,880	75,450	77,970	78,030	76,110	136,600	100,900	45,300	33,060	33,280

CAL YR 1972 TOTAL 251,108 MEAN 686 MAX 2,330 MIN 146 AC-FT 498,100
WTR YR 1973 TOTAL 391,362 MEAN 1,072 MAX 5,420 MIN 294 AC-FT 776,300

11320000 PARDEE RESERVOIR NEAR VALLEY SPRINGS, CALIF.

LOCATION.--Lat 38°15'25", long 120°50'59", in NW¼SW¼ sec.26, T.5 N., R.10 E., Amador County, at Pardee Dam on the Mokelumne River, 4.5 miles north of Valley Springs.
DRAINAGE AREA.--578 sq mi.
PERIOD OF RECORD.--March 1929 to September 1930 (lake elevation only), October 1930 to September 1933, published in reports of the Geological Survey. October 1933 to September 1961 in files of East Bay Municipal Utility District. October 1961 to current year.
GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by East Bay Municipal Utility District).
EXTREMES.--Current year: Maximum contents, 212,200 acre-ft June 7 (elevation, 565.64 ft); minimum, 187,200 acre-ft Dec. 16 (elevation, 557.17 ft).
Period of record: Maximum contents, 219,300 acre-ft Dec. 23, 1955 (elevation, 571.72 ft); minimum, 49,000 acre-ft Aug. 31, 1931 (elevation, 457.6 ft).
REMARKS.--Reservoir is formed by a curved concrete gravity dam, completed in 1929; storage began Mar. 9, 1929. Usable capacity, 194,100 acre-ft between elevations 393.50 ft (diversion tunnel invert) and 567.65 ft (spillway crest) above mean sea level. Dead storage, 15,800 acre-ft. Water is released from reservoir for municipal use in the area on the east side of San Francisco Bay. Small intermittent diversions are made to Jackson Valley Irrigation District. Records represent total contents at 2400 hours. See schematic diagram of Mokelumne River basin.
COOPERATION.--Records furnished by East Bay Municipal Utility District.
REVISIONS.--WSP 1930: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

523	125,100
530	136,500
540	153,800
550	172,700
560	193,200
570	215,300
580	239,100

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194,700	195,600	191,800	193,800	199,600	198,500	190,800	189,800	206,000	203,700	203,500	198,700
2	194,700	195,200	190,800	193,700	199,900	196,400	190,300	188,900	206,700	204,100	203,100	199,000
3	194,500	194,800	191,500	193,400	200,300	197,400	189,600	188,600	208,400	204,400	202,400	199,300
4	194,500	195,700	191,100	193,000	200,800	198,500	189,700	189,200	210,000	205,500	202,100	198,800
5	194,400	196,600	190,700	192,700	201,400	196,700	189,700	189,900	210,800	205,900	202,300	198,300
6	194,300	196,100	190,400	192,400	201,800	197,600	189,600	189,500	212,100	206,300	201,800	197,900
7	194,700	195,600	190,000	193,000	199,700	198,500	189,400	189,100	212,200	206,900	201,100	197,500
8	195,200	195,200	189,800	192,900	197,600	196,500	189,200	188,900	212,000	207,900	200,900	197,700
9	195,100	194,700	189,200	193,600	198,300	196,300	189,500	188,900	211,900	208,300	200,200	198,100
10	195,000	194,300	189,800	194,000	201,200	195,500	190,000	189,200	212,000	208,600	199,600	197,700
11	194,800	195,000	189,300	195,600	201,600	195,300	190,600	190,200	211,400	208,600	199,900	197,400
12	194,000	195,600	188,900	198,100	198,400	195,400	191,000	190,400	211,500	208,400	200,100	197,000
13	193,900	195,300	188,600	197,300	195,700	195,200	191,100	189,700	211,400	208,600	199,900	196,600
14	194,200	194,900	188,000	197,600	198,100	195,100	190,900	189,600	210,800	209,200	200,000	196,200
15	194,600	194,700	187,600	198,000	196,700	194,800	190,600	189,500	210,800	209,900	200,000	196,300
16	194,700	194,500	187,200	199,300	197,200	194,400	190,100	189,000	210,300	209,800	199,700	197,000
17	194,600	193,800	188,700	197,200	197,900	194,200	189,900	188,700	210,200	209,000	199,600	196,700
18	194,600	194,400	189,600	196,700	198,400	194,400	189,700	188,400	209,900	208,300	199,600	196,200
19	194,600	194,900	190,100	198,000	196,700	195,000	189,500	187,800	209,700	208,000	199,900	195,600
20	194,900	194,600	190,300	199,000	197,200	195,200	190,300	188,000	209,600	207,900	199,700	195,300
21	195,300	193,900	190,500	200,000	197,500	194,400	190,500	189,900	209,200	208,000	199,600	195,000
22	195,800	193,100	190,600	200,400	198,000	193,500	190,600	191,800	208,800	208,400	199,400	195,100
23	195,800	193,700	190,800	200,600	198,200	193,100	190,500	194,000	208,100	207,600	199,300	195,500
24	195,700	193,100	191,900	201,000	198,300	192,500	190,400	196,200	207,500	207,000	199,000	195,200
25	195,600	193,800	192,900	201,600	196,700	192,200	190,000	199,000	206,700	206,600	199,100	195,000
26	195,500	194,400	192,700	200,600	197,400	192,200	189,600	198,900	206,000	205,900	199,600	194,700
27	195,400	193,500	192,600	197,500	198,300	192,300	189,700	200,700	205,100	205,400	199,400	194,200
28	195,900	192,900	192,600	197,700	197,500	192,000	189,400	201,400	204,500	205,300	199,400	193,800
29	196,500	192,300	192,600	198,000	------	191,700	188,800	202,400	204,000	205,700	199,200	194,000
30	196,400	191,800	192,300	198,700	------	191,400	189,000	203,200	203,000	205,000	199,200	194,400
31	196,300	------	193,100	199,200	------	191,100	------	205,100	------	204,200	198,700	------
MAX	196,500	196,600	193,100	201,600	201,800	198,500	191,100	205,100	212,200	209,900	203,500	199,300
MIN	193,900	191,800	187,200	192,400	195,700	191,100	188,800	187,800	203,000	203,700	198,700	193,800
(a)	561.48	559.37	559.98	562.81	562.00	559.02	558.05	565.47	564.54	565.09	562.58	560.58
(b)	+2,000	-4,500	+1,300	+6,100	-1,700	-6,400	-2,100	+16,000	-2,100	+1,200	-5,500	-4,300
(c)	428	99	74	71	116	277	715	1,156	1,410	1,510	1,314	751
(d)	18,822	16,579	14,408	7,516	8,133	10,125	14,750	18,791	20,989	22,458	22,286	18,813

CAL YR 1972 b -2,700
WTR YR 1973 b +100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.
d Diversion, in acre-feet, from Pardee Reservoir to East Bay Municipal Utility District and Jackson Valley Irrigation District.

11322300 CAMANCHE RESERVOIR NEAR CLEMENTS, CALIF.

LOCATION.--Lat 38°13'31", long 121°01'17", in NE¼SE¼ sec.6, T.4 N., R.9 E., San Joaquin County, at Camanche Dam on the Mokelumne River, 4.3 miles northeast of Clements.

DRAINAGE AREA.--621 sq mi.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by East Bay Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 407,100 acre-ft June 13 (elevation, 232.33 ft); minimum, 244,500 acre-ft Oct. 15, 16 (elevation, 207.53 ft).
Period of record: Maximum contents, 425,700 acre-ft July 14, 1967 (elevation, 234.82 ft); minimum since initial season of operation, 68,700 acre-ft Sept. 5, 11, 18, 1966 (elevation, 164.97 ft).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 18, 1963. Usable capacity, 430,300 acre-ft between elevations 104.00 ft (invert of emergency valve release) and 235.50 ft (spillway crest) above mean sea level. Dead storage, 534 acre-ft. Camanche Reservoir provides holdover storage to meet downstream water requirements and flood control on the Mokelumne River. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Mokelumne River basin.

COOPERATION.--Records furnished by East Bay Municipal Utility District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

120	4,970	170	82,600
130	13,600	190	156,200
140	25,000	220	320,900
150	38,900	235.5	430,900
160	57,100		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246,300	247,300	266,200	279,100	273,800	287,600	315,200	340,900	390,100	400,900	366,700	333,100
2	245,900	248,100	267,600	279,000	273,100	290,400	316,100	343,000	392,100	399,600	365,600	332,100
3	245,900	249,100	267,300	279,500	272,800	290,400	317,100	344,500	392,800	398,500	364,700	330,900
4	245,900	249,200	268,100	280,100	272,700	290,200	317,400	345,100	393,100	396,800	363,500	330,700
5	246,900	248,900	268,000	280,200	272,500	292,700	317,600	345,700	393,800	395,500	361,600	330,500
6	246,000	249,600	269,800	280,600	272,800	292,700	317,800	346,900	395,900	394,200	360,700	330,200
7	246,600	250,500	270,600	279,800	276,700	292,600	318,000	348,200	399,500	392,800	359,900	330,000
8	245,100	251,200	271,400	280,400	279,500	296,300	318,400	349,400	402,000	391,000	358,800	329,200
9	245,100	252,100	272,200	281,800	279,200	296,400	318,600	350,700	403,600	389,900	357,800	328,900
10	245,000	253,200	272,000	282,400	279,700	297,300	319,100	351,300	405,600	388,700	356,700	327,900
11	245,000	253,500	272,700	283,400	283,600	297,900	319,500	351,700	406,400	387,900	355,500	327,700
12	245,400	253,300	273,400	285,300	290,300	297,900	320,100	352,900	406,800	387,100	354,000	327,500
13	245,300	254,300	274,200	285,900	292,300	297,700	321,300	355,500	407,100	386,200	352,900	327,200
14	244,900	255,200	275,000	284,100	290,500	298,400	322,900	357,000	407,000	384,600	352,100	327,000
15	244,500	256,500	275,700	282,200	290,400	299,700	324,200	357,000	406,600	383,000	351,200	326,500
16	244,500	257,500	276,900	283,300	288,400	300,900	325,600	356,800	406,100	382,500	350,100	325,200
17	244,900	258,500	277,100	287,300	286,500	301,600	326,900	356,600	405,400	382,200	349,000	324,700
18	245,200	258,200	277,400	289,300	284,400	301,900	328,100	356,300	404,900	381,600	347,800	324,200
19	245,500	258,200	278,200	288,000	284,700	302,300	328,700	355,900	404,500	380,400	346,400	323,900
20	245,600	259,300	279,000	285,900	283,200	303,300	329,300	355,600	404,700	379,200	345,300	323,600
21	245,500	260,300	279,600	283,700	282,600	305,300	329,700	355,200	404,400	377,900	344,300	323,100
22	245,200	261,600	280,400	281,400	281,900	307,100	330,200	355,000	404,000	376,100	343,200	322,400
23	245,500	261,400	280,800	279,200	281,400	308,400	330,700	354,800	403,700	375,400	342,000	321,200
24	245,700	262,400	280,300	276,800	281,200	309,400	332,000	357,700	403,600	374,600	341,100	320,700
25	246,100	263,400	279,200	275,000	282,900	310,100	333,300	360,500	403,500	373,700	339,900	320,300
26	246,300	261,400	279,500	273,700	283,100	310,500	334,600	365,000	403,500	373,200	338,400	319,900
27	246,600	262,900	280,000	275,600	284,500	310,900	335,800	366,500	403,200	372,000	337,500	319,600
28	246,400	263,800	280,300	274,800	287,700	311,600	337,600	370,000	403,100	370,600	336,600	319,300
29	246,000	265,000	280,600	274,200	------	312,200	339,700	376,200	402,900	368,600	335,600	318,500
30	246,200	265,800	280,600	274,200	------	313,000	340,500	383,000	402,600	368,000	334,500	317,200
31	246,500	------	280,000	274,000	------	314,200	------	386,600	------	367,600	333,700	------
MAX	246,600	265,800	280,800	289,300	292,300	314,200	340,500	386,600	407,100	400,900	366,700	333,100
MIN	244,500	247,300	266,200	273,700	272,500	287,600	315,200	340,900	390,100	367,600	333,700	317,200
(a)	207.88	211.20	213.55	212.56	214.80	218.97	222.94	229.53	231.72	226.86	221.93	219.44
(b)	+200	+19,300	+14,200	-6,000	+13,700	+26,500	+26,300	+46,100	+16,000	-35,000	-33,900	-16,500
(c)	1,967	792	537	878	1,092	1,676	3,096	4,828	5,960	6,257	5,423	3,643
(d)	18,792	16,579	14,408	7,516	8,133	10,125	14,750	18,613	20,810	22,274	22,102	18,634

CAL YR 1972 b -7,200
WTR YR 1973 b +70,900

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.
d Diversion, in acre-feet, from Camanche Reservoir to Mokelumne Aqueduct.

11323500 MOKELUMNE RIVER BELOW CAMANCHE DAM, CALIF.

LOCATION.--Lat 38°13'14", long 121°02'19", in NW¼NW¼ sec.7, T.4 N., R.9 E., San Joaquin County, on left bank 0.7 mile downstream from Murphy Creek, 1.0 mile downstream from Camanche Dam, and 3.4 miles northeast of Clements.

DRAINAGE AREA.--627 sq mi.

PERIOD OF RECORD.--October 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A and 1735. Prior to October 1961, published as "near Clements."

GAGE.--Water-stage recorder. Datum of gage is 82.71 ft above mean sea level. Oct. 28, 1904, to Apr. 18, 1926, nonrecording gage at bridge 3.3 miles downstream at datum 13.62 ft lower. Apr. 19, 1926, to Apr. 8, 1931, water-stage recorder, 75 ft downstream from bridge at datum 15.62 ft lower, Apr. 9, 1931, to Sept. 30, 1961, 700 ft upstream from bridge at datum 15.55 ft lower.

AVERAGE DISCHARGE.--24 years (1904-28), 1,111 cfs (804,300 acre-ft per year); 44 years (1929-73), 826 cfs (598,400 acre-ft per year), adjusted for change in contents of and evaporation from Camanche Reservoir since 1963. Storage and diversion by East Bay Municipal Utility District began in March 1929.

EXTREMES.--Current year: Maximum discharge, 2,350 cfs Jan. 16 (gage height, 6.99 ft); minimum daily, 97 cfs Oct. 26, 27.
Period of record: Maximum discharge, 28,800 cfs Nov. 21, 1950 (gage height, 24.40 ft, site and datum then in use); no flow July 9, Aug. 15, 20-23, 1924.

REMARKS.--Records good. Flow regulated by Camanche Reservoir 1 mile upstream beginning December 1963 (see sta 11322300), Salt Springs Reservoir beginning March 1931 (see sta 11313500), Pardee Reservoir beginning March 1929 (see sta 11320000), several smaller reservoirs, and four powerplants. East Bay Municipal Utility District aqueducts are the largest of several diversions above the station. Maximum capacity is 511 cfs with Pardee Reservoir full. Records of water temperatures for the current year are published in Part 2 of this report. See schematic diagram of Mokelumne River basin.

COOPERATION.--Four discharge measurements and temperature record furnished by the East Bay Municipal Utility District.

REVISIONS (WATER YEARS).--WSP 751: Drainage area. WSP 881: 1905-9 (yearly summaries only). WSP 1445: 1911, 1917(M), 1925(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	259	100	115	410	1,000	1,010	697	526	1,170	876	870	460
2	259	107	115	408	1,000	1,010	691	526	1,170	876	871	460
3	259	117	115	405	1,000	1,020	692	526	1,170	874	873	460
4	262	115	115	408	1,000	1,020	686	524	1,170	874	876	460
5	265	114	115	409	1,000	1,010	687	521	1,170	874	869	465
6	262	113	117	410	1,010	1,020	682	529	1,120	875	876	463
7	262	116	118	410	1,040	1,010	681	528	1,070	875	876	464
8	262	118	119	410	1,020	1,200	675	529	1,180	874	876	465
9	262	117	118	440	1,090	1,280	676	530	1,380	874	869	464
10	262	118	119	422	1,260	1,270	686	607	1,380	874	768	464
11	246	122	119	553	1,280	1,270	524	669	1,380	872	694	464
12	233	120	119	1,270	1,250	1,270	523	675	1,380	871	694	459
13	223	118	119	2,040	1,640	1,270	526	676	1,390	872	694	458
14	208	118	119	2,020	2,180	870	526	677	1,390	872	694	503
15	205	118	119	2,010	2,180	509	526	792	1,220	872	688	550
16	190	120	119	2,120	2,030	603	526	882	1,110	871	688	550
17	173	117	120	2,030	1,880	804	526	877	1,120	870	689	552
18	138	117	120	2,060	1,870	802	526	883	1,020	869	690	553
19	111	115	122	2,010	1,870	807	527	882	881	869	690	553
20	111	115	172	1,990	1,550	814	526	882	881	870	688	553
21	111	115	266	1,980	1,130	810	526	881	878	873	694	545
22	111	115	368	1,980	1,150	811	526	866	879	872	688	546
23	111	115	408	1,990	1,080	854	525	855	879	873	688	548
24	111	115	409	1,980	1,010	898	525	867	880	873	688	545
25	104	116	405	1,990	1,010	897	526	960	878	872	688	544
26	97	117	408	1,820	937	897	526	1,060	877	871	688	544
27	97	116	410	1,470	833	897	526	1,060	876	870	694	544
28	98	116	410	1,470	912	897	526	1,070	875	870	694	544
29	98	116	410	1,260	------	897	526	1,070	874	869	694	545
30	99	115	410	1,040	------	820	526	1,070	875	870	694	538
31	100	------	410	1,010	------	696	------	1,120	------	872	564	------
TOTAL	5,589	3,471	6,728	40,225	36,212	29,243	17,267	24,120	32,523	27,039	23,007	15,263
MEAN	180	116	217	1,298	1,293	943	576	778	1,084	872	742	509
MAX	265	122	410	2,120	2,180	1,280	697	1,120	1,390	876	876	553
MIN	97	100	115	405	833	509	523	521	874	869	564	458
AC-FT	11,090	6,880	13,340	79,790	71,830	58,000	34,250	47,840	64,510	53,630	45,630	30,270
MEAN a	215	453	457	1,214	1,560	1,402	1,070	1,606	1,453	405	279	293
AC-FT a	13,230	26,970	28,080	74,670	86,620	86,180	63,650	98,770	86,470	24,890	17,150	17,410

CAL YR 1972 TOTAL 120,647 MEAN 330 MAX 561 MIN 97 AC-FT 239,300 MEAN a 364 AC-FT a 264,600
WTR YR 1973 TOTAL 260,687 MEAN 714 MAX 2,180 MIN 97 AC-FT 517,100 MEAN a 862 AC-FT a 624,100

a Adjusted for change in contents of and evaporation from Camanche Reservoir.

11325000 WOODBRIDGE CANAL AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'07", long 121°18'00", in NE¼SE¼ sec.34, T.4 N., R.6 E., San Joaquin County, on right bank at Woodbridge, at point of diversion from Woodbridge Reservoir.

PERIOD OF RECORD.--April 1926 to current year.

GAGE.--Water-stage recorder and gate-opening recorder. Datum of gage is 32.18 ft above mean sea level (levels by East Bay Municipal Utility District). Prior to Mar. 15, 1931, water-stage recorder at site 0.2 mile downstream at different datum.

AVERAGE DISCHARGE.--47 years, 138 cfs (99,980 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 482 cfs July 8, 1953; no flow at times in each year.

REMARKS.--Records good. Discharge computed from records of gate openings and effective head as shown by recorder. Canal diverts from Woodbridge Reservoir on Mokelumne River for irrigation south and west of Woodbridge. See schematic diagram of Mokelumne River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105					0	50	297	330	374	363	263
2	104					0	49	307	329	368	363	250
3	102					0	56	314	329	363	363	242
4	102					0	60	316	330	353	363	233
5	106					0	61	312	333	350	356	228
6	121					0	65	294	356	353	359	226
7	123					0	73	297	365	365	363	225
8	123					0	71	299	367	367	359	221
9	127					0	75	297	364	381	359	216
10	121					0	90	294	355	383	360	218
11	84					0	119	291	358	380	359	233
12	60					0	152	291	362	380	346	232
13	57					0	158	286	365	378	342	231
14	54					0	158	283	367	373	339	233
15	54					0	157	299	366	371	336	229
16	54					0	162	309	363	377	343	210
17	54					0	189	301	358	384	343	192
18	54					0	193	306	359	385	331	180
19	24					0	195	315	365	375	327	177
20	0					0	197	319	362	366	322	175
21	0					0	210	319	378	358	318	178
22	0					0	210	320	378	351	317	175
23	0					27	225	316	383	355	316	169
24	0					27	242	316	375	354	318	162
25	0					24	249	315	376	360	304	158
26	0					29	252	309	379	363	287	157
27	0					49	270	302	379	363	287	154
28	0					51	278	296	378	355	287	154
29	0				------	50	287	304	375	358	282	154
30	0				------	50	295	310	374	364	286	152
31	0	------			------	51	------	321	------	364	281	------
TOTAL	1,629	0	0	0	0	358	4,848	9,455	10,858	11,371	10,279	6,027
MEAN	52.5	0	0	0	0	11.5	162	305	362	367	332	201
MAX	127	0	0	0	0	51	295	321	383	385	363	263
MIN	0	0	0	0	0	0	49	283	329	350	281	152
AC-FT	3,230	0	0	0	0	710	9,620	18,750	21,540	22,550	20,390	11,950

CAL YR 1972 TOTAL 52,810.00 MEAN 144 MAX 348 MIN 0 AC-FT 104,700
WTR YR 1973 TOTAL 54,825.00 MEAN 150 MAX 385 MIN 0 AC-FT 108,700

11325500 MOKELUMNE RIVER AT WOODBRIDGE, CALIF.

LOCATION.--Lat 38°09'31", long 121°18'09", in NW¼NE¼ sec.34, T.4 N., R.6 E., San Joaquin County, on right bank at Woodbridge, 0.4 mile downstream from county highway bridge, and 0.5 mile downstream from dam and canal intake of Woodbridge Irrigation District.

DRAINAGE AREA.--661 sq mi.

PERIOD OF RECORD.--May 1924 to current year (low-water records only 1924-25).

GAGE.--Water-stage recorder. Datum of gage is 14.9 ft above mean sea level (levels by East Bay Municipal Utility District). May 1924 to July 1928, 0.4 mile upstream and 100 ft downstream from bridge at datum 4 ft higher; July 1928 to March 1931, 0.4 mile upstream and 400 ft downstream from bridge at same datum; March 1931 to July 25, 1968, 125 ft downstream at same datum.

AVERAGE DISCHARGE.--44 years (1929-73), since start of diversion through East Bay Municipal Utility District aqueduct, 606 cfs (439,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,000 cfs Feb. 16 (gage height, 14.79 ft); minimum daily, 46 cfs Oct. 10.
Period of record: Maximum discharge, 27,000 cfs Nov. 22, 1950 (gage height, 29.58 ft), from rating curve extended above 6,200 cfs on basis of contracted-opening measurement of maximum flow; minimum daily, 1.4 cfs Sept. 19, 20, 22, 1927.

REMARKS.--Records good. Concerning regulation and diversions see REMARKS for Mokelumne River below Camanche Dam; between Woodbridge and Camanche Dam there are many additional diversions for irrigation, including Woodbridge Canal (see sta 11325000). Nearest diversion is 0.5 mile upstream. See schematic diagram of Mokelumne River basin. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--One discharge measurement furnished by East Bay Municipal Utility District.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	55	69	347	999	886	578	145	683	310	307	164
2	58	54	69	347	982	940	576	138	707	323	310	132
3	58	54	70	348	972	947	574	113	719	306	320	131
4	57	75	70	348	966	965	569	99	722	322	297	133
5	58	73	70	348	958	948	569	124	733	296	317	158
6	56	71	72	348	962	949	564	130	670	308	333	154
7	48	71	73	348	983	949	550	134	571	305	330	151
8	47	71	72	355	989	995	550	133	566	307	331	148
9	47	71	71	387	970	1,170	545	134	785	302	304	151
10	46	80	71	400	1,080	1,180	519	158	859	290	273	157
11	117	120	84	378	1,180	1,180	336	233	873	293	190	149
12	114	95	67	579	1,210	1,180	317	253	859	298	194	148
13	101	91	78	1,290	1,180	1,170	313	291	844	289	219	153
14	102	101	73	1,700	1,690	1,150	317	268	826	294	206	168
15	95	91	73	1,750	1,970	429	314	236	821	329	211	212
16	92	99	73	1,820	1,990	254	312	429	599	324	184	241
17	88	87	81	1,940	1,870	615	255	447	579	301	237	307
18	79	75	80	1,890	1,770	700	263	454	583	305	207	295
19	237	73	79	1,910	1,760	728	259	442	400	310	198	313
20	472	72	56	1,860	1,760	736	254	440	344	319	210	307
21	157	71	107	1,840	1,360	734	238	454	319	331	209	301
22	111	71	193	1,830	1,130	728	248	449	309	348	214	306
23	83	70	286	1,830	1,120	720	246	431	310	341	224	324
24	73	70	324	1,830	1,020	766	163	432	328	322	221	374
25	70	70	333	1,850	961	780	167	446	333	318	257	350
26	61	70	336	1,850	960	778	177	622	316	316	262	339
27	58	70	341	1,640	896	758	172	638	283	321	263	341
28	55	70	345	1,440	845	761	161	643	294	333	260	338
29	55	70	346	1,420	------	756	155	620	299	334	264	341
30	54	70	347	1,180	------	769	153	636	301	336	264	332
31	55	------	347	1,040	------	611	------	628	------	313	263	------
TOTAL	2,862	2,281	4,756	36,443	34,533	26,232	10,414	10,800	16,835	9,744	7,879	7,118
MEAN	92.3	76.0	153	1,176	1,233	846	347	348	561	314	254	237
MAX	472	120	347	1,940	1,990	1,180	578	643	873	348	333	374
MIN	46	54	56	347	845	254	153	99	283	289	184	131
AC-FT	5,680	4,520	9,430	72,280	68,500	52,030	20,660	21,420	33,390	19,330	15,630	14,120

CAL YR 1972 TOTAL 30,095 MEAN 82.2 MAX 472 MIN 11 AC-FT 59,690
WTR YR 1973 TOTAL 169,897 MEAN 465 MAX 1,990 MIN 46 AC-FT 337,000

11327000 SUTTER CREEK NEAR SUTTER CREEK, CALIF.

LOCATION.--Lat 38°23'45", long 120°46'49", in SE¼SE¼ sec.5, T.6 N., R.11 E., Amador County, on left bank 1.3 miles east of town of Sutter Creek.

DRAINAGE AREA.--48.1 sq mi.

PERIOD OF RECORD.--October 1935 to December 1941, March 1960 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (from topographic map). Prior to Oct. 29, 1937, nonrecording gage 15 ft downstream at datum 4.00 ft lower. Oct. 29, 1937, to Dec. 7, 1938, nonrecording gage at present site at datum 4.00 ft lower.

AVERAGE DISCHARGE.--19 years (1935-41, 1960-73), 31.9 cfs (23,110 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs Jan. 12 (gage height, 3.66 ft); no flow many days.
Period of record: Maximum discharge, 5,770 cfs Jan. 31, 1963 (gage height, 6.27 ft), from rating curve extended above 1,200 cfs on basis of slope-area measurement at gage height 4.77 ft; no flow at times in each year except 1938 and 1941.

REMARKS.--Small diversion above station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.3	4.4	12	85	121	66	21	11	3.0		
2	0	1.3	4.2	11	73	99	61	21	12	2.9		
3	0	1.3	4.3	12	68	106	55	20	10	2.8		
4	0	8.4	6.6	11	83	155	51	21	9.3	2.3		
5	0	6.1	7.0	9.9	72	118	48	25	8.4	1.8		
6	0	3.4	7.6	9.6	77	115	46	22	7.9	1.7		
7	0	3.8	9.4	9.0	304	116	42	20	7.6	1.6		
8	0	5.3	8.6	11	186	122	41	19	7.3	1.5		
9	0	3.8	6.5	137	135	103	39	18	6.8	1.5		
10	0	3.8	6.9	158	378	100	37	17	6.6	1.4		
11	0	15	6.0	288	545	129	35	16	6.7	1.4		
12	0	12	6.5	671	664	100	34	16	6.6	1.3		
13	0	7.4	6.1	195	310	89	40	16	6.6	1.3		
14	0	36	5.8	106	297	80	41	15	6.8	1.3		
15	0	21	6.2	83	236	73	35	15	6.9	1.4		
16	0	33	6.7	476	172	68	34	14	6.8	1.5		
17	.10	17	119	259	138	64	41	14	6.8	1.5		
18	1.1	11	73	312	116	61	52	13	6.2	1.4		
19	1.1	8.2	87	226	100	59	38	12	5.6	1.4		
20	.80	7.0	46	133	87	117	34	12	5.2	1.4		
21	.80	6.2	28	103	78	108	31	12	4.9	1.5		
22	.90	6.1	45	82	71	123	30	12	4.7	1.4		
23	.80	5.6	35	69	66	112	29	12	4.9	1.3		
24	.80	5.2	28	60	62	98	27	12	4.8	1.2		
25	.80	5.2	22	62	57	87	26	13	4.5	1.0		
26	.70	4.8	18	56	85	84	25	12	4.1	.90		
27	.70	4.8	16	47	161	80	24	12	4.0	.60		
28	.80	4.4	16	42	226	79	23	11	4.4	.70		
29	.80	4.4	15	53	------	69	23	10	3.7	.60		
30	.90	4.4	13	140	------	67	22	9.5	3.2	.40		
31	1.0	------	13	108	------	75	------	10	------	.10		------
TOTAL	12.10	257.2	676.8	3,951.5	4,932	2,977	1,130	472.5	194.3	44.10	0	0
MEAN	.39	8.57	21.8	127	176	96.0	37.7	15.2	6.48	1.42	0	0
MAX	1.1	36	119	671	664	155	66	25	12	3.0	0	0
MIN	0	1.3	4.2	9.0	57	59	22	9.5	3.2	.10	0	0
AC-FT	24	510	1,340	7,840	9,780	5,900	2,240	937	385	87	0	0

CAL YR 1972 TOTAL 3,919.50 MEAN 10.7 MAX 224 MIN 0 AC-FT 7,770
WTR YR 1973 TOTAL 14,647.50 MEAN 40.1 MAX 671 MIN 0 AC-FT 29,050

11329500 DRY CREEK NEAR GALT, CALIF.

LOCATION (revised).--Lat 38°14'53", long 121°13'33", in NE¼NE¼ sec.32, T.5 N., R.7 E., San Joaquin County, on left bank of main channel 35 ft downstream from county road bridge, 2 miles downstream from Coyote Creek, and 4 miles east of Galt.

DRAINAGE AREA.--329 sq mi.

PERIOD OF RECORD.--October 1926 to September 1933, October 1944 to current year. Monthly figures only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 52.83 ft above mean sea level (levels by East Bay Municipal Utility District). Dec. 4, 1926, to Sept. 30, 1933, at site 4 miles downstream at different datum. Oct. 1, 1944, to Sept. 30, 1945, at site across channel at datum 3.00 ft higher. Oct. 1, 1945, to June 15, 1966, across channel at same datum.

AVERAGE DISCHARGE.--36 years, 114 cfs (82,590 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,500 cfs Feb. 12 (gage height, 14.09 ft); no flow for several months.
Period of record: Maximum discharge, 24,000 cfs Apr. 3, 1958 (gage height, 15.28 ft); no flow for many days in each year.

REMARKS.--Records good. Many small diversions above station for irrigation. Total storage of many small reservoirs, 1,000 acre-ft and total number of acres irrigated, approximately 500.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	26	519	1,220	296	57	16		0	3.0
2		0	0	24	407	650	256	49	16		0	2.0
3		0	0	21	348	582	234	54	15		0	1.0
4		0	0	18	474	1,390	215	51	8.8		0	.50
5		0	0	15	442	758	201	53	4.1		0	0
6		0	0	13	441	821	186	59	2.4		0	0
7		0	0	12	1,650	1,110	179	53	.48		0	0
8		0	0	11	1,420	1,800	163	47	2.4		0	0
9		0	1.8	306	661	1,040	152	48	.35		0	0
10		0	3.7	1,500	2,240	600	151	45	0		0	0
11		0	2.2	664	3,280	679	142	35	.13		0	0
12		0	2.4	3,460	4,760	536	129	31	1.6		0	0
13		0	1.3	1,570	2,420	462	142	31	2.5		0	0
14		0	.88	645	1,570	407	266	34	2.0		0	0
15		16	.51	432	1,750	361	168	20	1.7		0	0
16		60	.23	2,480	1,050	334	133	18	.02		0	0
17		93	.99	3,350	699	315	123	14	0		0	.65
18		47	115	2,380	552	298	177	7.9	0		0	.92
19		24	148	2,500	472	280	153	3.5	0		0	.05
20		15	171	964	408	779	130	7.8	0		0	0
21		12	89	584	352	548	115	4.1	0		0	0
22		7.2	76	447	307	866	107	3.4	0		0	0
23		4.4	139	356	266	577	89	5.3	0		0	0
24		1.1	102	298	246	471	90	6.8	0		0	0
25		.13	97	365	231	387	89	12	0		0	0
26		0	67	426	258	337	79	14	0		0	0
27		0	52	325	875	314	70	19	0		0	0
28		0	51	266	3,120	309	65	20	0		0	0
29		0	43	235	------	271	62	22	0		6.6	0
30		0	34	945	------	285	60	20	0		5.0	0
31		------	29	699	------	327	------	18	------		3.7	------
TOTAL	0	279.83	1,227.01	25,337	31,218	19,114	4,422	862.8	73.48	0	15.3	8.12
MEAN	0	9.33	39.6	817	1,115	617	147	27.8	2.45	0	.49	.27
MAX	0	93	171	3,460	4,760	1,800	296	59	16	0	6.6	3.0
MIN	0	0	0	11	231	271	60	3.4	0	0	0	0
AC-FT	0	555	2,430	50,260	61,920	37,910	8,770	1,710	146	0	30	16

CAL YR 1972 TOTAL 8,502.35 MEAN 23.2 MAX 964 MIN 0 AC-FT 16,860
WTR YR 1973 TOTAL 82,557.54 MEAN 226 MAX 4,760 MIN 0 AC-FT 163,800

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-10	0630	11.87	2,250	2-12	0800	14.09	5,500
1-12	1430	13.64	4,360	2-28	1100	13.70	4,600
1-17	0200	13.70	4,600	3-8	1200	12.33	2,560
2-7	1630	11.39	2,220				

11333000 CAMP CREEK NEAR SOMERSET, CALIF.

LOCATION.--Lat 38°39'26", long 120°39'46", in SW¼SW¼ sec.4, T.9 N., R.12 E., El Dorado County, 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.

PERIOD OF RECORD.--February to May 1924 (published as "near Pleasant Valley"), October 1954 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,820 ft (from topographic map). Feb. 1 to May 31, 1924, nonrecording gage at site 0.2 mile upstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion from Jenkinson Lake).--19 years (1954-73), 78.9 cfs (57,160 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 869 cfs Jan. 12 (gage height, 6.35 ft); minimum daily, 2.3 cfs Nov. 3.
Period of record: Maximum discharge, 6,040 cfs Dec. 23, 1964 (gage height, 12.50 ft); minimum, 0.5 cfs Aug. 1-3, 1961.

REMARKS.--Records good except those for July and August, which are poor. Flow partly regulated since January 1955 by Jenkinson Lake (usable capacity, 40,570 acre-ft). Water is released from Jenkinson Lake through Camino conduit for irrigation and domestic supply in North Fork Cosumnes and South Fork American River basins. Some water is released from Jenkinson Lake down Camp Creek for irrigation downstream from station.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	4.1	3.0	4.4	32	35	136	152	26	3.3	21	11
2	6.0	2.6	2.9	4.3	27	43	123	139	19	9.8	22	5.4
3	6.1	2.3	3.0	4.3	27	49	110	134	12	12	22	5.1
4	5.7	15	6.2	4.0	33	44	105	136	8.3	12	22	4.9
5	5.6	7.6	5.4	3.6	29	44	104	130	6.4	11	21	4.9
6	5.5	4.3	4.4	3.8	32	40	107	110	6.0	11	21	4.9
7	5.2	3.9	4.4	3.2	87	39	116	105	6.6	11	21	4.8
8	5.3	5.6	4.2	4.4	68	39	122	107	6.4	11	21	4.8
9	5.8	4.2	3.5	12	60	36	131	113	6.3	10	21	4.6
10	8.5	3.7	3.8	22	123	45	144	117	6.4	9.9	21	4.4
11	7.4	7.9	3.4	75	147	171	154	127	6.3	9.4	21	4.4
12	6.9	7.0	3.5	554	143	183	167	137	6.2	8.9	20	4.5
13	6.8	4.7	3.3	202	105	173	207	138	6.2	8.7	20	4.5
14	6.6	9.8	3.3	46	84	155	204	136	6.5	8.6	20	4.4
15	9.7	9.7	3.5	31	68	139	190	143	5.8	8.6	22	4.4
16	8.6	12	3.8	100	56	132	183	141	5.4	8.6	31	4.5
17	7.8	7.9	51	99	47	127	175	144	5.3	8.7	30	4.5
18	10	5.5	42	94	40	117	181	134	5.1	8.7	29	4.6
19	8.9	5.3	50	79	34	111	167	109	4.9	8.6	28	4.6
20	7.3	5.1	32	51	30	144	152	92	4.6	8.5	27	6.3
21	6.6	4.5	22	40	28	135	142	77	4.4	9.5	26	8.3
22	6.2	4.2	21	32	26	119	138	64	4.2	11	25	6.4
23	6.0	3.9	17	26	24	112	140	55	4.2	11	25	6.5
24	5.8	3.6	12	22	24	107	149	51	4.7	9.9	23	7.2
25	5.4	3.5	8.8	24	22	106	164	52	4.1	9.3	18	7.0
26	5.2	3.4	7.0	21	35	109	184	42	4.0	9.8	15	5.8
27	4.8	3.4	6.2	18	65	120	206	31	3.8	9.9	14	5.2
28	4.8	3.1	6.8	17	42	122	218	26	3.8	9.9	13	5.0
29	4.6	3.1	5.8	19	------	116	214	23	3.5	9.9	13	4.8
30	4.5	3.0	5.1	32	------	116	184	22	3.4	14	13	4.6
31	4.6	------	4.7	35	------	136	------	24	------	17	12	------
TOTAL	198.1	163.9	353.0	1,683.0	1,538	3,164	4,717	3,011	199.8	309.5	658	162.3
MEAN	6.39	5.46	11.4	54.3	54.9	102	157	97.1	6.66	9.98	21.2	5.41
MAX	10	15	51	554	147	183	218	152	26	17	31	11
MIN	4.5	2.3	2.9	3.2	22	35	104	22	3.4	3.3	12	4.4
AC-FT	393	325	700	3,340	3,050	6,280	9,360	5,970	396	614	1,310	322
(a)	-1,234	+256	+877	+8,634	+6,949	+3,422	+110	-175	-2,398	-5,550	-6,867	-3,792
(b)	1,098	767	1,349	1,401	1,767	1,849	1,335	3,084	4,070	5,111	5,603	3,600
(c)	67	21	25	6	56	47	150	248	291	356	300	176
MEAN d	5.27	23.0	48.0	218	213	189	184	148	39.6	8.64	5.63	5.14
AC-FT d	324	1,369	2,951	13,381	11,822	11,598	10,955	9,127	2,359	531	346	306

CAL YR 1972 TOTAL 9,658.8 MEAN 26.4 MAX 243 MIN 2.3 AC-FT 19,160 MEAN d 55.2 AC-FT d 40,090
WTR YR 1973 TOTAL 16,157.6 MEAN 44.3 MAX 554 MIN 2.3 AC-FT 32,050 MEAN d 89.9 AC-FT d 65,060

a Change in contents, in acre-feet, in Jenkinson Lake, furnished by Bureau of Reclamation.
b Diversion, in acre-feet, from Jenkinson Lake, furnished by Bureau of Reclamation.
c Evaporation, in acre-feet, from Jenkinson Lake, furnished by Bureau of Reclamation.
d Adjusted for change in contents, evaporation, and diversion from Jenkinson Lake.
NOTE.--No gage-height record July 17 to Aug. 27.

11333500 NORTH FORK COSUMNES RIVER NEAR EL DORADO, CALIF.

LOCATION.--Lat 38°35'20", long 120°50'38", in NE¼SW¼ sec.35, T.9 N., R.10 E., El Dorado County, 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.

PERIOD OF RECORD.--August 1911 to December 1941, October 1948 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 840 ft (from topographic map). Prior to October 1933, nonrecording gage at site 1.5 miles upstream at different datum. October 1933 to December 1941, water-stage recorder at site 1,000 ft upstream at different datum.

AVERAGE DISCHARGE.--55 years, 201 cfs (145,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,050 cfs Jan. 12 (gage height, 9.32 ft); minimum daily, 13 cfs July 18.
Period of record: Maximum discharge, 15,800 cfs Dec. 23, 1955 (gage height, 14.8 ft), from rating curve extended above 7,500 cfs on basis of slope-area measurement of maximum flow; no flow for part of 1924, 1926, 1931, 1933-34.

REMARKS.--Records good except those for summer months, which are fair. Flow partly regulated since January 1955 by Jenkinson Lake (usable capacity, 40,570 acre-ft). Camino conduit above the station diverts water out of the basin (see REMARKS for sta 11333000 Camp Creek near Somerset). Numerous small diversions above station for irrigation and domestic use.

REVISIONS (WATER YEARS).--WSP 1315-A: 1914(M), 1925(M), 1928(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	17	24	79	346	615	426	468	192	40	51	27
2	20	18	23	75	298	536	395	438	169	33	51	26
3	20	15	24	74	288	541	368	432	148	49	45	28
4	19	76	37	70	351	697	347	434	132	45	44	30
5	19	84	46	51	329	552	346	420	122	48	44	31
6	18	42	37	55	327	543	359	369	116	42	45	31
7	18	30	42	55	749	507	383	339	109	22	51	30
8	19	35	40	64	618	505	399	341	101	21	45	30
9	20	34	29	227	494	454	424	348	96	22	43	33
10	26	31	28	346	1,070	440	459	349	89	29	43	34
11	24	72	29	1,070	1,190	688	482	364	80	35	43	35
12	23	67	29	3,760	1,160	612	502	386	74	24	38	37
13	22	41	26	1,330	788	560	548	395	68	25	43	37
14	22	59	25	645	776	520	536	387	66	27	41	37
15	21	101	27	495	648	476	499	400	61	25	45	37
16	28	145	27	1,990	518	447	488	393	55	22	52	38
17	26	90	189	1,400	448	434	481	416	52	14	50	39
18	29	55	325	1,330	399	414	503	388	49	13	41	39
19	34	47	324	957	364	398	473	343	44	14	42	40
20	26	44	238	607	332	566	443	314	40	20	44	44
21	24	38	173	514	309	537	415	283	39	30	43	49
22	22	35	233	422	288	525	404	254	41	35	43	52
23	22	32	240	355	276	467	414	244	38	34	43	53
24	21	30	198	311	276	426	440	235	36	33	35	55
25	19	28	155	330	291	407	467	235	34	32	28	54
26	17	27	129	293	340	405	502	218	44	40	28	49
27	17	26	113	257	620	419	547	200	32	41	29	47
28	17	25	117	240	1,040	421	568	191	21	42	31	46
29	16	25	102	247	------	398	561	188	30	54	31	46
30	16	24	91	519	------	386	519	185	51	55	29	45
31	16	------	86	411	------	456	------	177	------	51	28	------
TOTAL	661	1,393	3,206	18,579	14,933	15,352	13,698	10,134	2,229	1,017	1,269	1,179
MEAN	21.3	46.4	103	599	533	495	457	327	74.3	32.8	40.9	39.3
MAX	34	145	325	3,760	1,190	697	568	468	192	55	52	55
MIN	16	15	23	51	276	386	346	177	21	13	28	26
AC-FT	1,310	2,760	6,360	36,850	29,620	30,450	27,170	20,100	4,420	2,020	2,520	2,340

CAL YR 1972 TOTAL 39,261.8 MEAN 107 MAX 579 MIN 7.2 AC-FT 77,880
WTR YR 1973 TOTAL 83,650.0 MEAN 229 MAX 3,760 MIN 13 AC-FT 165,900

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0500	9.32	5,050	1-18	1730	6.97	2,040
1-16	1530	8.48	3,790				

11334300 SOUTH FORK COSUMNES RIVER NEAR RIVER PINES, CALIF.

LOCATION.--Lat 38°33'25", long 120°47'32", in SE¼SW¼ sec.8, T.8 N., R.11 E., Amador County, on left bank 2.4 miles upstream from mouth, and 2.7 miles west of River Pines.

DRAINAGE AREA.--64.3 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,220 ft (from topographic map).

AVERAGE DISCHARGE.--16 years, 45.0 cfs (32,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs Jan. 12 (gage height, 5.94 ft); no flow many days. Period of record: Maximum discharge, 5,540 cfs Feb. 1, 1963 (gage height, 10.90 ft), from rating curve extended above 1,900 cfs on basis of slope-area measurement at gage height 9.90 ft; no flow at times in most years.

REMARKS.--No storage or known diversion above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.6	4.8	16	126	220	104	31	17	2.8	.50	.10
2	0	1.6	4.7	15	105	179	97	31	16	3.1	.40	.10
3	0	2.0	4.8	15	101	204	91	30	15	3.0	.40	0
4	.10	14	8.6	13	134	272	85	31	13	2.8	.20	0
5	.80	13	10	11	127	207	81	36	12	2.5	.20	0
6	.70	6.3	9.2	12	130	207	77	32	11	2.3	.20	0
7	1.0	5.2	10	9.2	463	203	74	29	11	2.3	.30	0
8	1.0	8.7	9.5	13	320	197	70	28	10	2.3	.30	0
9	.50	7.0	5.8	137	222	173	67	27	9.6	2.1	.30	0
10	.90	5.6	7.3	200	721	178	65	25	9.3	2.0	.30	0
11	1.3	14	6.9	586	728	241	60	24	9.4	1.8	.30	0
12	1.3	15	6.7	1,300	680	187	57	23	9.1	1.6	.20	0
13	.90	9.2	6.4	345	574	164	66	22	8.7	1.5	.20	0
14	.80	35	6.1	175	440	149	65	21	9.4	1.5	.10	0
15	.70	30	6.8	127	304	134	59	20	9.4	1.6	.10	0
16	1.3	41	7.6	860	238	122	57	20	9.4	1.6	.10	0
17	1.7	24	103	422	198	113	60	20	9.1	1.6	0	0
18	2.0	15	96	566	171	106	64	19	8.4	2.0	0	0
19	1.5	12	130	374	147	103	57	18	7.8	1.7	0	0
20	1.5	10	74	209	130	202	52	17	7.3	1.9	0	.10
21	1.3	9.0	47	163	116	172	48	17	6.2	1.7	0	.40
22	1.3	8.5	73	129	105	169	45	17	5.9	1.8	0	1.1
23	1.3	7.5	59	104	97	148	42	16	6.2	1.4	0	1.2
24	1.2	7.1	47	89	94	137	40	17	6.6	1.5	0	1.7
25	1.1	6.6	35	93	90	128	39	19	6.0	1.3	0	1.7
26	1.2	6.1	29	84	133	123	37	18	5.5	1.3	0	1.6
27	1.2	5.8	25	72	329	121	36	17	4.8	1.1	0	1.2
28	1.3	5.5	25	66	409	117	34	16	5.9	.90	0	.90
29	1.3	5.2	22	76	------	107	34	15	4.7	.80	.10	.70
30	1.2	5.1	19	219	------	105	33	14	3.8	.70	.10	.50
31	1.2	------	18	156	------	115	------	15	------	.60	.10	------
TOTAL	31.60	336.6	917.2	6,656.2	7,432	5,003	1,796	685	267.5	55.10	4.40	11.30
MEAN	1.02	11.2	29.6	215	265	161	59.9	22.1	8.92	1.78	.14	.38
MAX	2.0	41	130	1,300	728	272	104	36	17	3.1	.50	1.7
MIN	0	1.6	4.7	9.2	90	103	33	14	3.8	.60	0	0
AC-FT	63	668	1,820	13,200	14,740	9,920	3,560	1,360	531	109	8.7	22

CAL YR 1972 TOTAL 6,281.40 MEAN 17.2 MAX 284 MIN 0 AC-FT 12,460
WTR YR 1973 TOTAL 23,195.90 MEAN 63.6 MAX 1,300 MIN 0 AC-FT 46,010

11335000 COSUMNES RIVER AT MICHIGAN BAR, CALIF.

LOCATION.--Lat 38°30'01", long 121°02'39", in NW¼SE¼ sec.36, T.8 N., R.8 E., Sacramento County, 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 of Cosumnes River.

DRAINAGE AREA.--536 sq mi.

PERIOD OF RECORD.--October 1907 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 168.09 ft above mean sea level. Prior to July 10, 1930, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--66 years, 483 cfs (349,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,000 cfs Jan. 16 (gage height, 9.39 ft); minimum daily, 17 cfs Oct. 8, 9.
Period of record: Maximum discharge, 42,000 cfs Dec. 23, 1955 (gage height, 14.59 ft); no flow at times in many years.
Flood in March 1907 reached a stage of 16.3 ft (discharge unknown).

REMARKS.--Records good. Flow partly regulated since January 1955 by Jenkinson Lake (usable capacity, 40,570 acre-ft). Camino conduit above the station diverts water out of the basin (see REMARKS for sta 11333000). Numerous small diversions above station for irrigation and domestic use. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 331: 1911-12. WSP 1315-A: 1908-9, 1911(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	24	55	194	1,090	2,040	990	960	390	64	68	34
2	25	24	55	185	902	1,680	884	884	380	64	68	33
3	24	27	54	182	857	1,690	812	884	315	66	66	29
4	23	68	58	176	1,120	2,320	776	884	291	64	58	26
5	23	158	92	139	1,020	1,690	758	875	259	62	58	26
6	21	114	92	134	1,090	1,740	767	749	243	60	61	25
7	19	73	90	139	2,320	1,620	812	692	224	58	61	25
8	17	64	101	160	2,030	1,740	830	692	210	56	64	24
9	17	80	88	1,200	1,520	1,400	884	732	194	55	60	24
10	22	73	66	1,620	3,690	1,280	950	740	179	52	60	24
11	23	134	66	3,070	4,480	1,870	1,000	785	170	52	58	24
12	34	141	73	9,390	3,960	1,540	1,030	848	160	50	56	24
13	34	109	69	3,600	2,710	1,390	1,130	884	150	48	49	25
14	32	116	62	1,850	2,690	1,270	1,190	866	143	45	48	25
15	31	307	68	1,430	2,250	1,100	1,030	902	139	45	48	25
16	32	437	68	8,020	1,700	1,070	990	884	130	48	44	24
17	42	275	154	4,880	1,440	1,020	1,010	950	124	46	44	25
18	44	160	839	4,560	1,250	990	1,100	884	122	45	44	26
19	46	124	848	3,280	1,120	950	990	884	114	42	45	25
20	52	109	668	1,910	1,010	1,780	911	740	107	42	48	28
21	41	97	446	1,570	920	1,640	857	692	101	54	46	30
22	39	86	536	1,250	857	1,780	830	618	92	60	46	35
23	36	75	684	1,030	794	1,280	839	548	88	61	48	41
24	34	71	566	875	785	1,120	911	530	88	58	48	41
25	33	68	428	1,000	830	1,040	980	524	88	56	39	44
26	30	62	338	960	987	1,000	990	488	82	56	33	42
27	28	60	299	767	2,250	1,020	1,140	422	77	62	34	39
28	27	58	311	692	3,790	1,020	1,210	400	73	60	36	35
29	26	58	271	660	------	940	1,190	395	71	64	40	34
30	24	56	224	1,760	------	902	1,080	390	69	71	39	32
31	24	------	214	1,380	------	1,080	------	370	------	69	37	------
TOTAL	936	3,308	7,983	58,063	49,462	43,002	28,871	22,096	4,873	1,735	1,554	894
MEAN	30.2	110	258	1,873	1,767	1,387	962	713	162	56.0	50.1	29.8
MAX	52	437	848	9,390	4,480	2,320	1,210	960	390	71	68	44
MIN	17	24	54	134	785	902	758	370	69	42	33	24
AC-FT	1,860	6,560	15,830	115,200	98,110	85,290	57,270	43,830	9,670	3,440	3,080	1,770

CAL YR 1972 TOTAL 90,017.3 MEAN 246 MAX 1,810 MIN 6.1 AC-FT 178,500
WTR YR 1973 TOTAL 222,777.0 MEAN 610 MAX 9,390 MIN 17 AC-FT 441,900

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0400	8.81	12,200	2-10	0800	6.92	5,180
1-16	1700	9.39	15,000	2-28	0200	7.32	6,340

11335700 DEER CREEK NEAR SLOUGHHOUSE, CALIF.

LOCATION.--Lat 38°33'06", long 121°06'30", in NW¼NW¼ sec.16, T.8 N., R.8 E., Sacramento County, on right bank 0.2 mile upstream from Scott Road, 0.4 mile upstream from Little Deer Creek, and 5.9 miles northeast of Sloughhouse.

DRAINAGE AREA.--46.0 sq mi.

PERIOD OF RECORD.--November 1959 to September 1966, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 27.3 cfs (19,780 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,600 cfs Jan. 16 (gage height, 11.34 ft); no flow for several months.
Period of record: Maximum discharge, 6,560 cfs Oct. 13, 1962 (gage height, 12.86 ft, from floodmarks), from rating curve extended above 2,200 cfs; no flow for several months in each year.

REMARKS.--No known regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS.--WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.3	15	74	220	38	9.1	.40			
2		0	1.4	13	53	56	32	8.2	1.5			
3		0	1.5	10	76	141	29	7.5	1.8			
4		0	1.6	9.8	192	231	26	7.3	1.4			
5		0	2.0	8.8	68	78	22	9.8	.70			
6		.30	3.1	9.2	98	221	21	9.7	.40			
7		1.7	8.2	8.8	283	156	20	7.2	.20			
8		1.0	25	15	137	315	16	6.1	0			
9		1.3	11	645	70	117	15	5.6	0			
10		2.2	6.7	362	457	75	16	5.1	0			
11		50	4.8	1,080	723	139	14	4.6	0			
12		23	4.0	1,430	450	58	14	4.7	0			
13		7.4	3.5	339	274	47	15	3.5	0			
14		37	3.7	161	252	40	29	2.8	0			
15		30	3.5	112	191	35	17	2.4	0			
16		230	3.4	1,790	161	32	14	2.2	0			
17		71	23	468	141	30	17	1.9	0			
18		21	44	716	110	29	38	1.5	0			
19		10	87	283	89	27	19	1.2	0			
20		6.5	43	139	81	164	14	1.0	0			
21		4.7	29	109	69	147	11	1.2	0			
22		3.7	57	65	64	160	9.9	1.6	0			
23		3.0	40	50	58	60	10	1.6	0			
24		2.5	81	44	55	48	12	1.4	0			
25		2.1	40	123	50	42	10	1.3	0			
26		1.8	30	144	74	39	9.5	1.7	0			
27		1.6	24	56	252	39	9.8	1.6	0			
28		1.5	40	48	601	39	9.1	1.3	0			
29		1.4	27	44	------	32	9.6	1.1	0			
30		1.3	18	233	------	31	10	.80	0			
31		------	18	135	------	53	------	.40	------			------
TOTAL	0	516.00	685.7	8,665.6	5,203	2,901	526.9	115.40	6.40	0	0	0
MEAN	0	17.2	22.1	280	186	93.6	17.6	3.72	.21	0	0	0
MAX	0	230	87	1,790	723	315	38	9.8	1.8	0	0	0
MIN	0	0	1.3	8.8	50	27	9.1	.40	0	0	0	0
AC-FT	0	1,020	1,360	17,190	10,320	5,750	1,050	229	13	0	0	0

CAL YR 1972 TOTAL 2,949.90 MEAN 8.06 MAX 336 MIN 0 AC-FT 5,850
WTR YR 1973 TOTAL 18,620.00 MEAN 51.0 MAX 1,790 MIN 0 AC-FT 36,930

11336000 COSUMNES RIVER AT McCONNELL, CALIF.

LOCATION.--Lat 38°21'29", long 121°20'34", in NE¼NE¼ sec.20, T.6 N., R.6 E., Sacramento County, 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.

PERIOD OF RECORD.--October 1941 to current year. Monthly figures only for some periods, published in WSP 1315-A. Gage heights only during high-water periods 1931-40, in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 3.34 ft below mean sea level.

AVERAGE DISCHARGE.--32 years, 547 cfs (396,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,800 cfs Jan. 17 (gage height, 45.35 ft); no flow for several months.
Period of record (1943 to current year): Maximum discharge, 54,000 cfs Dec. 23, 1955 (gage height, 46.26 ft), from rating curve extended above 36,000 cfs; no flow for parts of each year.
Flood of Feb. 23, 24, 1936, reached a stage of 45.94 ft (discharge unknown).

REMARKS.--Records good except those for the summer months, which are poor. Diversions for irrigation of 2,100 acres between stations at Michigan Bar and at McConnell.

REVISIONS (WATER YEARS).--WSP 1315-A: 1947(M). WSP 1930: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	7.3	34	175	1,440	3,650	1,130	971	344	1.0	0	
2	0	5.2	33	156	1,130	2,170	1,020	872	353	2.5	0	
3	0	.88	32	146	989	1,820	920	851	294	0	0	
4	0	11	32	142	1,400	3,180	850	853	264	0	0	
5	0	51	38	126	1,410	2,460	817	891	228	0	0	
6	0	109	69	104	1,160	2,010	816	777	212	0	.09	
7	0	65	63	109	2,050	2,560	842	707	192	0	0	
8	0	42	67	108	2,830	2,710	880	701	173	0	0	
9	0	36	71	487	1,810	2,570	904	719	153	0	4.2	
10	0	47	59	3,130	3,240	1,660	968	738	139	0	2.9	
11	0	75	47	2,030	5,890	2,060	1,010	762	131	0	0	
12	0	117	45	8,800	6,440	1,890	1,060	813	113	0	0	
13	.01	104	49	8,880	3,770	1,610	1,100	860	104	0	0	
14	0	85	45	3,160	2,780	1,460	1,240	859	95	0	0	
15	0	133	41	1,790	3,460	1,320	1,110	863	93	0	0	
16	0	390	45	4,210	2,230	1,220	1,050	846	84	0	0	
17	0	691	47	11,400	1,770	1,150	992	886	76	0	0	
18	9.9	336	476	5,770	1,530	1,100	1,100	873	73	0	0	
19	162	172	717	6,790	1,360	1,040	1,060	804	62	0	0	
20	115	117	929	3,040	1,220	1,660	972	736	59	0	0	
21	17	87	541	1,980	1,130	1,740	896	675	54	0	0	
22	13	74	411	1,620	1,060	2,280	850	599	47	0	0	
23	9.7	61	688	1,300	994	1,630	845	545	33	0	0	
24	7.7	54	568	1,120	952	1,340	881	527	42	0	0	
25	5.6	47	543	1,090	970	1,210	951	510	51	0	0	
26	4.7	43	380	1,250	966	1,140	1,000	501	43	0	0	
27	2.2	40	297	1,040	2,000	1,120	1,090	434	33	0	0	
28	0	39	272	860	5,850	1,140	1,150	394	10	0	0	
29	0	37	275	810	------	1,070	1,160	378	1.0	0	0	
30	0	35	229	2,050	------	990	1,090	365	2.0	0	0	
31	4.6	------	192	1,850	------	1,100	------	357	------	0	0	------
TOTAL	351.41	3,111.38	7,335	75,523	61,831	54,060	29,754	21,667	3,558.0	3.5	7.19	0
MEAN	11.3	104	237	2,436	2,208	1,744	992	699	119	.11	.23	0
MAX	162	691	929	11,400	6,440	3,650	1,240	971	353	2.5	4.2	0
MIN	0	.88	32	104	952	990	816	357	1.0	0	0	0
AC-FT	697	6,170	14,550	149,800	122,600	107,200	59,020	42,980	7,060	6.9	14	0

CAL YR 1972 TOTAL 77,770.91 MEAN 212 MAX 2,290 MIN 0 AC-FT 154,300
WTR YR 1973 TOTAL 257,201.48 MEAN 705 MAX 11,400 MIN 0 AC-FT 510,200

PEAK DISCHARGE (BASE, 3,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	2100	44.75	13,300	2-12	0430	41.96	7,130
1-17	0730	45.35	15,800	2-28	1630	41.78	6,900
1-19	1000	42.78	8,250				

11336580 MORRISON CREEK NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°29'55", long 121°27'06", in SW¼SE¼ sec.32, T.8 N., R.5 E., Sacramento County, on right bank 750 ft upstream from Florin Road, 1.6 miles upstream from Elder Creek, and 2 miles south of Sacramento city limits.

DRAINAGE AREA.--53.4 sq mi.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.60 ft above mean sea level. Prior to June 29, 1960, at site 650 ft downstream at datum 1.55 ft higher. June 29, 1960, to Sept. 12, 1965, at site 475 ft upstream at datum 2.71 ft higher.

AVERAGE DISCHARGE.--14 years, 18.6 cfs (13,480 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,380 cfs Feb. 27 (gage height, 7.66 ft); minimum daily, 3.6 cfs Oct. 22.
Period of record: Maximum discharge, 1,610 cfs Jan. 26, 1969 (gage height, 8.53 ft); no flow at times in 1960, 1962, 1965.

REMARKS.--Records fair except those for period of indefinite stage-discharge relation, which are poor. No regulation or diversion above station. Summer flow is sustained by waste water from domestic and industrial use.

REVISIONS.--WRD Calif. 1972: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	6.9	6.9	5.8	23	94	6.7	7.3	7.6	4.4	7.7	4.3
2	7.0	6.3	6.6	7.9	20	44	8.1	7.4	4.6	6.1	7.1	4.0
3	7.5	13	7.6	8.7	34	69	8.2	7.7	4.8	6.1	7.3	6.1
4	7.2	25	7.4	8.5	121	137	8.6	8.0	7.5	5.1	5.2	6.4
5	7.2	8.2	18	8.7	45	55	8.5	4.4	8.2	6.8	4.4	6.1
6	7.5	4.9	14	8.5	99	70	8.5	4.3	8.3	6.8	6.4	5.9
7	5.6	17	11	8.3	94	77	5.6	6.9	7.9	5.0	7.2	6.1
8	5.2	7.5	8.0	59	50	359	5.0	7.7	8.8	4.4	7.1	4.4
9	14	7.2	6.4	262	71	110	7.4	7.9	6.0	7.8	6.8	4.0
10	6.4	88	8.3	220	350	45	8.7	7.7	4.7	7.8	7.1	6.0
11	65	121	9.5	344	456	33	9.1	8.2	7.0	8.3	4.7	6.2
12	20	30	8.8	592	153	26	8.6	5.4	7.9	7.6	3.9	6.4
13	12	55	8.6	200	68	18	9.5	4.8	7.9	7.8	6.5	5.8
14	9.8	77	8.4	72	91	15	9.6	7.6	8.2	5.8	7.7	6.0
15	7.8	111	8.2	55	94	13	6.3	7.9	9.9	5.8	8.6	4.6
16	8.0	133	33	592	43	12	6.9	8.5	6.4	7.3	7.0	4.0
17	8.2	58	49	404	27	9.2	6.2	7.7	4.8	7.8	7.2	6.0
18	7.8	24	26	724	19	8.8	6.4	8.1	8.5	7.8	4.7	6.2
19	7.8	15	30	375	17	40	6.2	4.6	11	7.6	4.0	6.0
20	7.5	12	20	139	19	45	3.8	4.1	11	7.6	6.4	6.2
21	4.4	10	13	101	22	56	4.2	7.6	11	5.6	7.0	6.0
22	3.6	8.7	9.2	64	18	46	4.6	6.9	10	4.6	6.9	4.5
23	5.8	6.1	8.2	41	16	21	7.5	7.8	5.8	7.4	6.8	20
24	6.8	5.3	12	31	27	12	7.5	7.3	5.0	8.4	7.0	6.2
25	7.8	5.1	8.7	49	13	9.4	8.1	7.3	8.3	8.6	4.5	6.2
26	7.2	4.6	9.2	46	79	11	8.3	7.4	8.6	8.3	4.0	6.4
27	7.2	7.1	9.5	32	420	11	7.4	4.3	7.9	7.6	6.0	6.1
28	5.8	7.3	9.6	27	606	11	4.5	5.2	8.2	5.3	6.2	6.0
29	5.4	7.4	9.1	30	------	10	4.3	7.2	8.2	4.5	5.9	4.6
30	6.5	7.3	6.9	33	------	19	6.7	7.7	5.4	6.9	5.8	4.2
31	7.0	------	5.5	27	------	10	------	7.4	------	8.5	6.0	------
TOTAL	294.4	888.9	396.6	4,575.4	3,095	1,496.4	211.0	212.3	229.4	209.4	193.1	180.9
MEAN	9.50	29.6	12.8	148	111	48.3	7.03	6.85	7.65	6.75	6.23	6.03
MAX	65	133	49	724	606	359	9.6	8.5	11	8.6	8.6	20
MIN	3.6	4.6	5.5	5.8	13	8.8	3.8	4.1	4.6	4.4	3.9	4.0
AC-FT	584	1,760	787	9,080	6,140	2,970	419	421	455	415	383	359

CAL YR 1972 TOTAL 3,895.7 MEAN 10.6 MAX 133 MIN 2.7 AC-FT 7,730
WTR YR 1973 TOTAL 11,982.8 MEAN 32.8 MAX 724 MIN 3.6 AC-FT 23,770

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-11	0200	3.97	305	2-10	0030	5.06	626
11-15	2130	4.24	353	2-10	1200	4.01	368
1-9	1200	5.48	605	2-11	0930	4.85	571
1-12	0700	5.52	746	2-26	1630	3.77	316
1-17	0100	6.03	889	2-27	1830	7.66	1,380
1-18	1030	7.33	1,280	3-8	1200	4.49	482

NOTE.--Stage-discharge relation indefinite Aug. 16 to Sept. 30.

11337000 CONTRA COSTA CANAL NEAR OAKLEY, CALIF.

LOCATION.--Lat 37°59'44", long 121°42'03", in NW¼NE¼ sec.25, T.2 N., R.2 E., Contra Costa County, at pumping plant No. 1, 0.7 mile east of Oakley, and 2.6 miles northwest of Knightsen.

PERIOD OF RECORD.--February 1950 to current year.

GAGE.--Recording flowmeters on pumps. Prior to Jan. 1, 1953, water-stage recorder at site 3.2 miles downstream at datum 121.72 ft above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--23 years, 92.3 cfs (66,870 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 255 cfs June 23, 1972; minimum daily, 4.0 cfs Jan. 20, 1970.

REMARKS.--Water is diverted from Sacramento-San Joaquin Delta by way of Old River, Rock Slough, and a dredged channel. A series of four pumping plants lift the water 115 ft into the canal. Water is used for municipal, agricultural, and industrial purposes. The canal is a part of the Central Valley project.

COOPERATION.--Records of daily discharge furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	129	88	66	64	70	71	64	130	194	219	253	203
2	149	89	69	61	71	66	68	128	170	219	250	201
3	131	94	63	68	66	67	66	125	175	219	252	172
4	148	96	65	65	67	69	70	119	175	212	227	194
5	119	96	66	68	63	61	74	124	177	229	221	203
6	126	96	70	64	54	63	82	188	173	221	190	194
7	124	90	70	69	68	63	75	168	189	213	224	197
8	125	86	69	61	72	67	81	184	196	213	219	191
9	122	86	64	57	63	64	88	193	198	224	218	182
10	122	84	66	56	60	62	94	191	197	238	212	188
11	140	82	66	60	55	62	93	198	194	251	214	188
12	113	85	71	53	63	64	96	198	189	250	214	190
13	112	80	71	57	60	67	90	204	188	249	214	197
14	102	79	72	58	64	70	78	202	188	249	217	199
15	111	77	71	60	66	81	79	204	186	247	218	190
16	106	73	68	56	62	68	79	204	181	246	215	179
17	96	71	62	59	64	62	82	205	176	240	213	171
18	106	62	70	56	63	60	83	210	173	243	212	168
19	108	63	74	64	64	64	86	214	194	229	211	158
20	104	66	71	65	62	65	80	216	198	234	210	152
21	106	65	76	64	63	63	82	220	199	220	210	145
22	108	66	76	63	67	68	86	218	204	225	219	137
23	114	57	73	61	68	66	79	218	199	228	228	132
24	109	60	63	65	67	62	48	213	197	229	219	130
25	103	58	62	65	64	62	78	211	202	230	214	132
26	98	57	59	66	63	75	78	196	214	238	219	130
27	93	60	66	65	57	68	90	197	217	236	203	126
28	93	64	63	66	66	74	101	202	227	235	208	134
29	94	64	63	72	------	74	120	207	226	240	205	142
30	86	61	61	72	------	68	140	204	221	240	203	92
31	84	------	59	70	------	63	------	202	------	251	205	------
TOTAL	3,481	2,255	2,085	1,950	1,792	2,059	2,510	5,893	5,817	7,217	6,737	5,017
MEAN	112	75.2	67.3	62.9	64.0	66.4	83.7	190	194	233	217	167
MAX	149	96	76	72	72	81	140	220	227	251	253	203
MIN	84	57	59	53	54	60	48	119	170	212	190	92
AC-FT	6,900	4,470	4,140	3,870	3,550	4,080	4,980	11,690	11,540	14,310	13,360	9,950

CAL YR 1972 TOTAL 51,206 MEAN 140 MAX 255 MIN 56 AC-FT 101,600
WTR YR 1973 TOTAL 46,813 MEAN 128 MAX 253 MIN 48 AC-FT 92,850

11337500 MARSH CREEK NEAR BYRON, CALIF.

LOCATION.--Lat 37°52'24", long 121°43'34", in Los Meganos Grant, Contra Costa County, on right bank 40 ft downstream from highway bridge on Marsh Creek Road, 1.2 miles upstream from Marsh Creek Dam, and 5.0 miles west of Byron.

DRAINAGE AREA.--42.6 sq mi.

PERIOD OF RECORD.--February 1953 to current year.

GAGE.--Water-stage recorder and concrete control (control ineffective since 1972 due to gravel fill). Datum of gage is 177.87 ft above mean sea level.

AVERAGE DISCHARGE.--20 years, 8.65 cfs (6,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 954 cfs Jan. 18 (gage height, 7.22 ft); no flow for long periods. Period of record: Maximum discharge, 3,880 cfs Jan. 31, 1963 (gage height, 11.62 ft), from rating curve extended above 880 cfs on basis of slope-area measurement at gage height 10.90 ft; maximum gage height, 12.98 ft Dec. 23, 1955; no flow for long periods in each year.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1635: 1955.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.76	2.3	22	79	24	5.8	.90			
2		0	.76	2.3	20	64	21	5.6	.83			
3		0	.72	2.2	22	82	19	5.8	.66			
4		0	.81	2.0	33	79	18	5.6	.42			
5		0	1.2	1.9	28	60	18	5.2	.20			
6		0	4.8	1.9	209	117	17	5.0	.06			
7		0	3.5	1.8	129	84	15	5.6	0			
8		0	2.9	8.9	74	90	15	5.4	0			
9		0	1.9	224	63	70	15	5.6	0			
10		0	1.4	94	196	66	14	5.6	0			
11		0	1.3	84	169	71	12	5.4	0			
12		0	1.1	175	137	57	12	5.1	0			
13		0	1.1	91	115	52	13	4.4	0			
14		59	1.0	50	114	45	13	4.5	0			
15		37	1.0	34	90	41	12	5.3	0			
16		80	1.1	257	75	39	12	5.4	0			
17		25	3.4	170	66	37	11	4.7	0			
18		13	8.7	397	57	34	9.9	4.8	0			
19		8.8	8.5	156	51	43	9.6	3.9	0			
20		5.8	8.6	84	47	67	8.9	2.8	0			
21		3.8	7.0	77	43	58	8.1	3.2	0			
22		3.0	8.2	49	39	49	7.9	3.0	0			
23		2.3	8.6	37	36	39	7.6	2.7	0			
24		1.9	6.5	30	37	35	7.2	3.0	0			
25		1.5	5.4	31	33	34	6.8	2.4	0			
26		1.3	4.7	27	54	33	6.5	1.8	0			
27		1.2	4.6	23	189	31	6.2	2.6	0			
28		.99	4.1	20	144	28	5.9	1.9	0			
29		.85	3.3	22	------	26	6.4	.86	0			
30		.76	3.0	40	------	27	5.8	.90	0			
31		------	2.7	25	------	31	------	.97	------			------
TOTAL	0	246.20	112.65	2,220.3	2,292	1,668	357.8	124.83	3.07	0	0	0
MEAN	0	8.21	3.63	71.6	81.9	53.8	11.9	4.03	.10	0	0	0
MAX	0	80	8.7	397	209	117	24	5.8	.90	0	0	0
MIN	0	0	.72	1.8	20	26	5.8	.86	0	0	0	0
AC-FT	0	488	223	4,400	4,550	3,310	710	248	6.1	0	0	0

CAL YR 1972 TOTAL 441.47 MEAN 1.21 MAX 80 MIN 0 AC-FT 876
WTR YR 1973 TOTAL 7,024.85 MEAN 19.2 MAX 397 MIN 0 AC-FT 13,930

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0300	4.42	140	2-6	1415	5.72	436
1-9	1245	5.90	475	2-10	0215	5.91	478
1-12	1200	5.20	285	2-27	1945	6.29	597
1-16	1130	6.46	656	3-6	1300	4.86	217
1-18	1245	7.22	954	3-20	0115	4.43	142

11341400 SACRAMENTO RIVER NEAR MT SHASTA, CALIF.

LOCATION.--Lat 41°15'56", long 122°18'32", in SE¼SE¼ sec.33, T.40 N., R.4 W., Siskiyou County, on left bank 200 ft upstream from Stink Creek, 0.3 mile upstream from Southern Pacific Railroad bridge, and 3.3 miles south of town of Mt Shasta.

DRAINAGE AREA.--135 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (from topographic map). Prior to July 1, 1966, water-stage recorder at site 500 ft upstream at datum 4.26 ft higher.

AVERAGE DISCHARGE (adjusted for change in contents in Lake Siskiyou).--14 years, 245 cfs (177,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,790 cfs Jan. 16 (gage height, 4.90 ft); minimum daily, 14 cfs Dec. 8-16.
Period of record: Maximum discharge, 12,200 cfs Dec. 22, 1964 (gage height, 12.6 ft, from floodmarks, present site and datum), from slope-area measurement of maximum flow; minimum, 37 cfs Sept. 6, 1962. Maximum discharge since construction of Box Canyon Dam in 1968, 4,070 cfs Jan. 23, 1970 (gage height, 7.14 ft); minimum daily, 14 cfs Dec. 8-16, 1972.

REMARKS.--Records good. Flow regulated by Box Canyon Dam 2 miles upstream beginning December 1968 (capacity, 26,100 acre-ft). See schematic diagram of Pit and McCloud River basins. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	35	140	119	167	1,090	267	680	409	71	55	44
2	55	53	20	118	152	682	240	682	354	57	51	43
3	57	84	19	117	158	462	224	734	272	67	42	44
4	55	83	18	117	214	452	204	807	299	74	42	46
5	53	82	17	116	246	447	195	740	288	72	42	47
6	55	82	16	115	320	448	217	740	257	74	42	49
7	55	85	15	113	434	431	251	579	236	76	42	54
8	55	83	14	114	720	409	252	606	234	81	42	48
9	57	84	14	115	698	254	269	757	233	85	43	47
10	74	84	14	115	487	185	471	779	218	86	43	47
11	127	86	14	120	474	187	756	748	164	86	43	49
12	155	84	14	138	466	165	827	690	163	78	43	48
13	150	94	14	186	462	159	826	841	165	64	43	49
14	152	111	14	330	307	156	810	1,200	167	55	43	50
15	152	173	14	390	282	166	625	1,290	160	55	42	50
16	150	244	14	1,420	256	202	438	1,270	134	55	42	51
17	150	309	19	840	122	229	439	1,250	122	55	42	52
18	135	294	33	627	121	227	493	1,230	116	55	42	53
19	125	291	51	458	119	231	528	1,140	100	55	41	60
20	125	229	46	356	267	243	486	1,010	100	56	41	112
21	123	128	97	304	439	267	457	799	105	58	42	86
22	123	183	177	261	309	264	459	559	106	56	42	61
23	123	288	140	235	195	255	468	530	106	56	42	65
24	123	365	134	221	270	234	523	626	104	55	42	72
25	123	764	126	208	353	235	689	628	103	56	43	73
26	123	1,020	122	192	731	236	930	539	100	55	42	67
27	123	998	123	184	1,100	237	1,130	536	97	55	42	65
28	122	511	123	178	1,140	236	1,110	415	96	56	42	64
29	121	94	121	183	------	256	1,030	243	94	56	42	63
30	121	394	120	182	------	272	834	333	95	55	42	63
31	86	------	119	174	------	270	------	434	------	55	50	------
TOTAL	3,303	7,415	1,922	8,346	11,009	9,587	16,448	23,415	5,197	1,970	1,337	1,722
MEAN	107	247	62.0	269	393	309	548	755	173	63.5	43.1	57.4
MAX	155	1,020	177	1,420	1,140	1,090	1,130	1,290	409	86	55	112
MIN	53	35	14	113	119	156	195	243	94	55	41	43
AC-FT	6,550	14,710	3,810	16,550	21,840	19,020	32,620	46,440	10,310	3,910	2,650	3,420
MEAN a	71.7	135	195	290	383	282	578	762	172	62.3	44.4	57.5
AC-FT a	4,410	8,050	12,020	17,820	21,250	17,350	34,420	46,870	10,230	3,830	2,730	3,420
(b)	23,400	16,740	24,950	26,220	25,630	23,960	25,760	26,190	26,110	26,020	26,110	26,110

CAL YR 1972 TOTAL 79,633 MEAN 218 MAX 1,070 MIN 14 AC-FT 158,000 MEAN a 219 AC-FT a 159,200
WTR YR 1973 TOTAL 91,671 MEAN 251 MAX 1,420 MIN 14 AC-FT 181,800 MEAN a 252 AC-FT a 182,400

a Adjusted for change in contents in Lake Siskiyou.
b Contents, in acre-feet, at end of month in Lake Siskiyou.

11342000 SACRAMENTO RIVER AT DELTA, CALIF.

LOCATION.--Lat 40°56'23", long 122°24'58", in SW¼NW¼ sec.35, T.36 N., R.5 W., Shasta County, Bureau of Reclamation property, 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.

PERIOD OF RECORD.--October 1944 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,075.00 ft above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE.--29 years, 1,156 cfs (837,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,900 cfs Jan. 16 (gage height, 13.54 ft); minimum daily, 190 cfs Sept. 11, 13.
Period of record: Maximum discharge, 38,800 cfs Dec. 22, 1964 (gage height, 20.10 ft), from rating curve extended above 19,000 cfs on basis of slope-area measurement at gage heights, 19.50 ft in gage well, 20.0 ft, from floodmarks; minimum, 141 cfs Sept. 3-5, 1950.

REMARKS.--Records excellent. Some regulation from Box Canyon Dam near the town of Mt Shasta. Some minor diversions for irrigation above station. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1395: 1951(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	222	951	814	1,150	5,960	1,360	2,030	1,150	341	227	198
2	210	207	430	772	1,080	4,730	1,280	2,040	1,060	305	226	195
3	207	395	430	736	1,050	3,760	1,230	2,090	934	305	216	194
4	207	545	406	694	2,410	3,170	1,230	2,190	928	307	211	193
5	207	372	376	660	5,090	2,760	1,300	1,980	898	304	210	193
6	203	334	380	635	3,390	3,190	1,480	2,010	880	299	210	195
7	207	386	358	610	3,270	2,930	1,590	1,950	820	302	211	198
8	205	380	324	605	3,280	2,640	1,520	1,850	796	298	210	198
9	232	426	320	660	3,470	2,370	1,580	2,040	760	303	208	194
10	496	565	327	694	4,610	2,210	1,760	2,060	718	298	208	191
11	820	1,050	327	1,330	4,060	2,150	2,220	2,070	635	294	207	190
12	655	665	330	2,290	3,310	1,950	2,440	2,090	605	296	205	191
13	422	1,420	302	1,480	2,790	1,790	2,510	2,320	585	278	204	190
14	434	2,090	293	2,030	3,140	1,640	2,240	2,880	565	262	203	192
15	605	2,270	296	3,390	2,750	1,530	2,110	3,140	545	259	201	193
16	555	4,410	327	13,100	2,540	1,520	1,800	3,130	516	258	200	194
17	466	2,180	736	6,930	2,030	1,560	1,830	3,100	480	259	200	195
18	406	1,470	1,450	8,490	1,810	1,440	1,760	3,060	462	257	200	196
19	362	1,280	2,420	5,040	1,640	1,550	1,730	2,760	439	253	199	249
20	348	1,110	2,040	3,310	1,560	1,850	1,650	2,420	414	257	199	338
21	330	880	2,440	2,560	1,730	1,960	1,570	2,100	410	265	197	298
22	324	736	5,010	2,130	1,610	1,860	1,650	1,750	406	257	198	251
23	314	832	2,920	1,840	1,390	1,780	1,820	1,640	406	251	199	356
24	305	808	2,340	1,660	4,960	1,730	1,920	1,810	398	247	203	298
25	299	998	1,800	1,510	10,000	1,760	2,130	1,730	390	242	206	276
26	299	1,500	1,450	1,360	7,660	1,760	2,570	1,430	383	238	204	249
27	296	1,510	1,340	1,240	7,020	1,700	3,050	1,360	372	235	201	237
28	296	1,230	1,170	1,170	6,220	1,600	3,000	1,330	366	234	201	231
29	293	555	1,040	1,180	------	1,500	2,670	1,180	358	235	198	229
30	290	1,130	946	1,200	------	1,550	2,320	1,120	348	233	196	227
31	290	------	874	1,230	------	1,440	------	1,250	------	230	197	------
TOTAL	10,793	31,956	34,153	71,350	95,020	69,340	57,320	63,910	18,027	8,402	6,355	6,729
MEAN	348	1,065	1,102	2,302	3,394	2,237	1,911	2,062	601	271	205	224
MAX	820	4,410	5,010	13,100	10,000	5,960	3,050	3,140	1,150	341	227	356
MIN	203	207	293	605	1,050	1,440	1,230	1,120	348	230	196	190
AC-FT	21,410	63,380	67,740	141,500	188,500	137,500	113,700	126,800	35,760	16,670	12,610	13,350

CAL YR 1972 TOTAL 341,131 MEAN 932 MAX 6,860 MIN 192 AC-FT 676,600
WTR YR 1973 TOTAL 473,355 MEAN 1,297 MAX 13,100 MIN 190 AC-FT 938,900

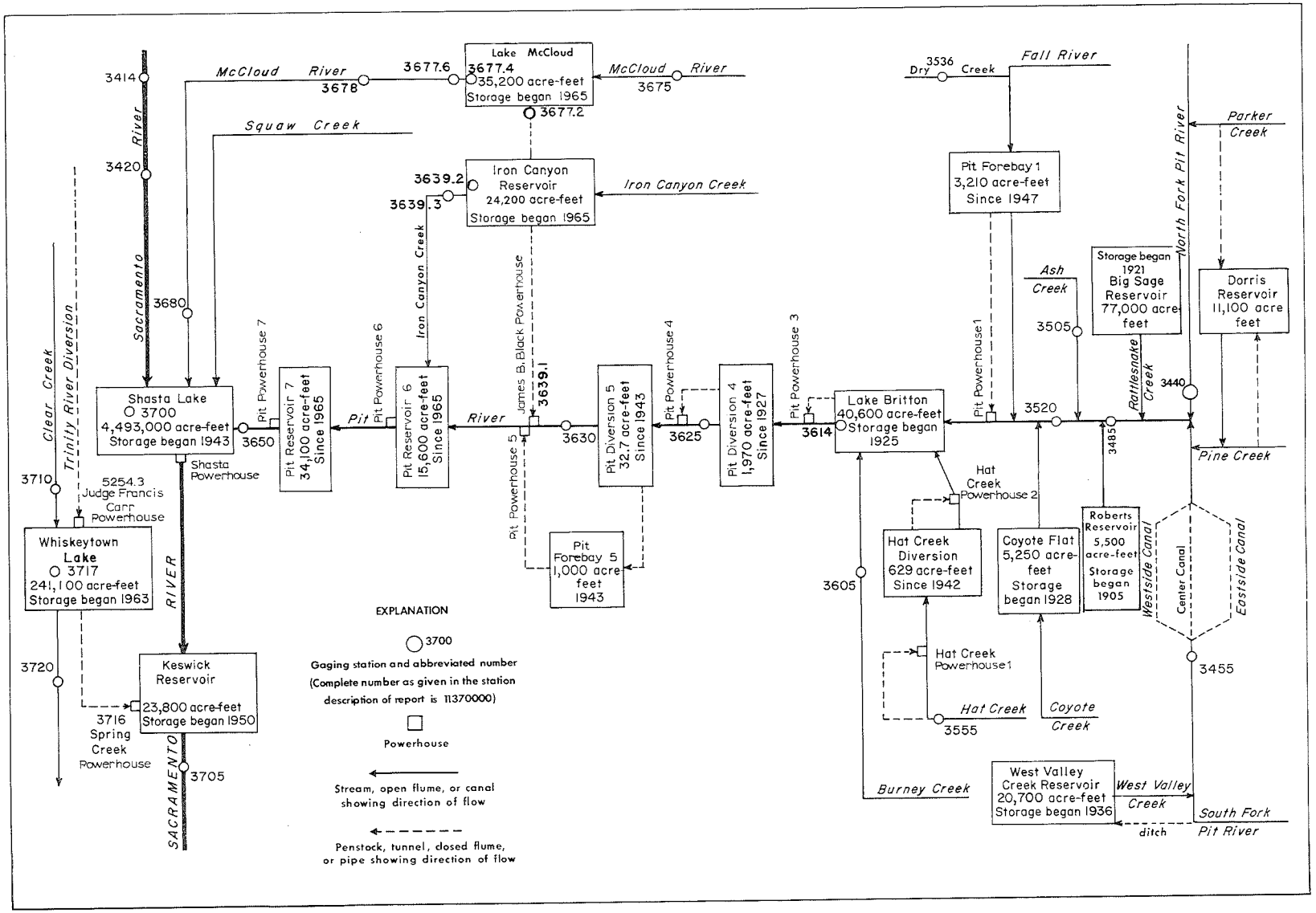

FIGURE 10.--Schematic diagram showing diversions and storage in Pit and McCloud river basins.

11344000 NORTH FORK PIT RIVER AT ALTURAS, CALIF.

LOCATION.--Lat 41°28'56", long 120°32'16", in SE¼NW¼ sec.13, T.42 N., R.12 E., Modoc County, on right bank 10 ft downstream from Estes Street bridge in Alturas, and 1.2 miles upstream from confluence of North and South Forks.

DRAINAGE AREA.--212 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--November 1928 to September 1931, October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,345.00 ft above mean sea level.

EXTREMES.--Current year: Maximum discharge, 646 cfs Jan. 16 (gage height, 7.61 ft); minimum daily, 0.21 cfs Sept. 14, 29, 30.
Period of record: Maximum discharge, 1,800 cfs Feb. 29, 1972 (gage height, 11.90 ft), from rating curve extended above 550 cfs on basis of estimate of peak discharge by flow over dam computation; minimum daily, 0.21 cfs Sept. 14, 29, 30, 1973.

REMARKS.--Records good except those for the winter period, which are fair. Flow is regulated by many small irrigation ponds. Diversions above gage for irrigation of about 7,100 acres. See schematic diagram of Pit and McCloud River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	22	36	40	60	103	148	30	4.4	.39	.42
2	9.8	18	20	33	41	53	121	139	17	4.6	.39	.30
3	9.8	19	16	30	43	53	144	118	10	4.4	.39	.30
4	9.1	23	9.5	28	46	51	131	148	12	3.8	.39	.27
5	8.5	27	5.8	27	50	53	139	189	9.1	3.6	.39	.24
6	7.8	30	5.4	27	63	50	150	159	7.8	2.6	.39	.24
7	7.2	24	4.7	27	107	51	156	133	9.1	.90	.42	.27
8	5.8	33	4.4	28	148	47	145	131	7.5	.52	.42	.24
9	15	32	3.8	31	150	44	169	127	3.6	.48	.42	.24
10	21	34	3.4	53	169	48	186	122	.90	.45	.42	.24
11	15	42	3.7	50	164	87	224	108	2.6	.42	.45	.24
12	15	33	5.0	182	147	94	258	107	2.8	.39	.45	.24
13	24	27	7.0	283	117	76	254	113	2.4	.39	.45	.24
14	27	29	10	144	137	59	264	83	1.8	.36	.48	.21
15	26	29	15	94	189	59	276	40	1.4	.39	.52	.24
16	26	28	24	334	120	78	224	120	1.4	.45	.52	.24
17	29	27	60	202	105	84	302	111	1.6	.45	.52	.24
18	28	25	90	108	79	79	246	77	3.1	.52	.52	.27
19	35	25	175	92	62	72	202	68	4.1	.52	.52	.27
20	28	26	149	67	62	69	172	51	4.1	.52	.48	.30
21	37	27	102	55	60	68	152	46	3.1	.52	.58	.30
22	49	24	131	48	56	70	157	26	1.8	.52	.52	.27
23	30	20	97	44	54	61	180	20	2.1	.52	.52	.27
24	20	22	87	42	55	59	180	32	2.8	.48	.48	.30
25	7.8	23	74	40	52	64	180	55	3.6	.48	.48	.33
26	4.4	26	69	39	48	69	206	56	3.4	.45	.45	.27
27	4.1	28	65	38	53	71	236	38	3.1	.48	.36	.24
28	3.1	24	57	38	58	67	236	20	4.9	.45	.33	.24
29	7.2	26	44	38	------	69	203	3.4	4.9	.45	.36	.21
30	12	38	42	39	------	79	170	15	3.8	.42	.52	.21
31	12	------	38	39	------	99	------	35	------	.42	.42	------
TOTAL	545.6	801	1,439.7	2,336	2,475	2,043	5,766	2,638.4	165.80	35.35	13.95	7.89
MEAN	17.6	26.7	46.4	75.4	88.4	65.9	192	85.1	5.53	1.14	.45	.26
MAX	49	42	175	334	189	99	302	189	30	4.6	.58	.42
MIN	3.1	12	3.4	27	40	44	103	3.4	.90	.36	.33	.21
AC-FT	1,080	1,590	2,860	4,630	4,910	4,050	11,440	5,230	329	70	28	16

CAL YR 1972 TOTAL 37,353.00 MEAN 102 MAX 1,280 MIN .42 AC-FT 74,090
WTR YR 1973 TOTAL 18,267.69 MEAN 50.0 MAX 334 MIN .21 AC-FT 36,230

11345500 SOUTH FORK PIT RIVER NEAR LIKELY, CALIF.

LOCATION.--Lat 41°13'51", long 120°26'10", in NE¼SE¼ sec.11, T.39 N., R.13 E., Modoc County, on left bank 400 ft downstream from highway bridge, 1.4 miles downstream from West Valley Creek, and 3.5 miles east of Likely.

DRAINAGE AREA.--247 sq mi.

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,508 ft above mean sea level. Prior to Oct. 1, 1931, at site 1,000 ft downstream at different datum.

AVERAGE DISCHARGE.--45 years, 78.3 cfs (56,730 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 546 cfs May 17 (gage height, 4.37 ft); maximum gage height, 4.55 ft Jan. 9 (backwater from ice); minimum daily discharge, 12 cfs Dec. 14.
Period of record: Maximum discharge, 1,620 cfs June 2, 1971 (gage height, 6.05 ft); minimum, 0.2 cfs Feb. 3, 1941.

REMARKS.--Records good except those for Dec. 4 to Feb. 2, which are fair. Flow regulated by West Valley Creek Reservoir beginning in May 1937 (usable capacity, 21,700 acre-ft). Diversions for irrigation of about 3,800 acres above station. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1965: 1932, 1938(M), 1952(M). WRD Calif. 1971: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	37	40	38	36	63	61	180	270	84	152	98
2	40	39	38	38	35	60	70	160	245	88	148	98
3	36	40	39	37	34	47	69	164	230	104	148	100
4	35	61	38	34	32	44	53	169	207	102	146	100
5	34	70	36	30	34	43	52	165	196	89	144	97
6	33	49	33	27	35	44	57	145	178	97	144	98
7	33	47	30	25	39	40	56	150	161	95	146	97
8	34	56	27	30	49	40	53	174	148	83	144	98
9	38	45	24	49	52	39	57	195	137	82	150	98
10	38	53	21	38	61	44	63	217	126	79	163	97
11	33	52	18	40	63	63	66	238	122	76	158	97
12	36	43	16	90	51	56	76	298	114	82	158	97
13	50	44	14	73	45	52	89	365	119	82	159	98
14	42	43	12	62	42	47	119	442	124	77	159	97
15	52	47	14	52	40	56	121	484	122	90	167	95
16	61	42	20	56	39	72	95	510	122	117	178	94
17	63	38	30	51	38	58	111	533	112	115	176	95
18	60	39	85	50	37	46	95	515	102	127	175	95
19	53	43	125	41	38	42	84	515	89	159	173	95
20	49	41	95	38	42	49	70	488	79	154	171	90
21	44	38	80	36	46	60	66	454	70	152	171	65
22	40	35	90	60	47	72	69	398	69	152	173	61
23	39	33	72	55	47	58	80	359	58	156	171	62
24	39	49	69	51	50	48	92	342	63	158	173	67
25	39	46	58	47	47	45	111	416	84	158	175	74
26	38	53	51	45	43	44	148	402	108	154	176	49
27	38	58	53	46	52	44	174	347	97	154	154	25
28	38	49	48	47	66	47	188	309	98	154	109	22
29	37	43	46	43	------	47	197	284	94	150	107	20
30	38	39	45	40	------	54	189	261	88	150	100	20
31	32	------	42	38	------	66	------	265	------	148	100	------
TOTAL	1,284	1,372	1,409	1,407	1,240	1,590	2,831	9,944	3,832	3,668	4,768	2,399
MEAN	41.4	45.7	45.5	45.4	44.3	51.3	94.4	321	128	118	154	80.0
MAX	63	70	125	90	66	72	197	533	270	159	178	100
MIN	32	33	12	25	32	39	52	145	58	76	100	20
AC-FT	2,550	2,720	2,790	2,790	2,460	3,150	5,620	19,720	7,600	7,280	9,460	4,760

CAL YR 1972 TOTAL 46,129 MEAN 126 MAX 386 MIN 12 AC-FT 91,500
WTR YR 1973 TOTAL 35,744 MEAN 97.9 MAX 533 MIN 12 AC-FT 70,900

11348500 PIT RIVER NEAR CANBY, CALIF.

LOCATION.--Lat 41°24'22", long 120°55'36", in NW¼SW¼ sec.10, T.41 N., R.9 E., Modoc County, 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.

PERIOD OF RECORD.--January 1904 to December 1905, May 1929 to current year (1929-31 incomplete).

GAGE.--Water-stage recorder. Datum of gage is 4,266 ft above mean sea level. January 1904, to December 1905, nonrecording gage and May 6, 1929, to Sept. 30, 1931, water-stage recorder, at site 100 ft upstream at different datum.

AVERAGE DISCHARGE.--43 years (1905, 1931-73), 249 cfs (180,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,170 cfs Jan. 17 (gage height, 4.86 ft); minimum daily, 11 cfs July 22.
Period of record: Maximum discharge observed, 13,000 cfs Mar. 8, 1904 (gage height, 15.0 ft, site and datum then in use); minimum, 0.1 cfs Apr. 29, Aug. 5, Sept. 18, 1934, Aug. 18-21, 1935.

REMARKS.--Records good. Flow regulated by many small reservoirs (total capacity now, about 144,000 acre-ft). Diversions for irrigation of about 39,000 acres above station. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1904, 1935(M), 1936, 1937(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	84	142	85	103	301	300	375	266	112	38	78
2	133	87	121	76	107	297	318	420	260	62	36	66
3	105	95	100	71	121	259	332	370	218	17	43	73
4	119	119	86	67	153	236	380	196	216	17	45	69
5	97	159	72	65	188	212	360	216	217	27	40	66
6	128	188	75	64	275	207	340	385	202	32	36	62
7	85	199	62	65	375	196	355	470	189	38	32	60
8	81	170	53	66	465	189	360	430	111	23	24	62
9	73	166	51	72	528	179	340	365	102	34	24	64
10	72	168	49	92	547	182	370	322	93	32	24	62
11	87	179	48	108	529	228	390	430	55	24	29	62
12	86	176	49	159	537	365	380	345	40	22	45	58
13	133	163	50	370	495	400	390	360	66	18	47	55
14	100	154	51	694	430	365	435	380	66	15	51	51
15	119	161	53	516	455	292	455	430	69	18	55	49
16	122	151	62	748	460	275	548	480	115	18	64	47
17	133	144	85	1,040	358	350	486	425	109	22	62	55
18	133	134	142	754	312	369	523	385	51	17	47	64
19	145	128	278	400	256	332	537	355	78	15	40	66
20	175	133	511	296	231	283	486	330	69	13	38	73
21	163	145	599	228	226	250	420	345	47	12	42	83
22	147	147	578	168	232	250	370	355	34	11	100	116
23	156	132	479	128	242	271	296	368	32	43	96	96
24	136	122	395	120	265	292	283	379	22	139	64	97
25	111	118	332	118	281	275	292	394	29	169	49	124
26	114	120	258	110	260	254	318	377	47	99	43	104
27	85	123	220	102	249	247	370	493	40	60	45	95
28	79	133	165	100	300	247	405	539	13	29	64	115
29	80	138	132	104	------	231	425	416	15	43	69	108
30	80	133	118	106	------	231	405	406	80	31	69	92
31	82	------	104	106	------	254	------	328	------	34	73	------
TOTAL	3,522	4,269	5,520	7,198	8,980	8,319	11,669	11,869	2,951	1,246	1,534	2,272
MEAN	114	142	178	232	321	268	389	383	98.4	40.2	49.5	75.7
MAX	175	199	599	1,040	547	400	548	539	266	169	100	124
MIN	72	84	48	64	103	179	283	196	13	11	24	47
AC-FT	6,990	8,470	10,950	14,280	17,810	16,500	23,150	23,540	5,850	2,470	3,040	4,510

CAL YR 1972 TOTAL 142,068 MEAN 388 MAX 4,220 MIN 20 AC-FT 281,800
WTR YR 1973 TOTAL 69,349 MEAN 190 MAX 1,040 MIN 11 AC-FT 137,600

11350500 ASH CREEK AT ADIN, CALIF.

LOCATION.--Lat 41°11'54", long 120°56'32", in SE¼SW¼ sec.21, T.39 N., R.9 E., Modoc County, on left bank 300 ft upstream from highway bridge at Adin, and 0.4 mile upstream from Butte Creek.

DRAINAGE AREA.--258 sq mi.

PERIOD OF RECORD.--March 1904 to December 1905, October 1928 to November 1932, October 1957 to current year. Records of daily discharge for Oct. 19-31, 1928, are in error and should not be used.

GAGE.--Water-stage recorder. Altitude of gage is 4,190 ft (estimated on basis of bench mark 300 ft downstream). Prior to Sept. 12, 1957, water-stage recorder or nonrecording gage at sites within 1 mile of present site, at different datums.

AVERAGE DISCHARGE.--21 years (1904-5, 1928-32, 1957-73), 75.8 cfs (54,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 952 cfs Jan. 16 (gage height, 9.73 ft); minimum daily, 9.8 cfs Aug. 23.
Period of record: Maximum discharge, 2,950 cfs Jan. 24, 1970 (gage height, 14.69 ft in gage well, 15.24 ft, from floodmarks); no flow for part of Aug. 26, 1962.

REMARKS.--Small diversions above station for irrigation. Flow regulated by many small reservoirs (total capacity, 4,732 acre-ft). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1966: 1958(M), 1960(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	37	38	41	62	166	96	85	28	15	20	11
2	32	37	38	43	62	145	94	78	23	16	20	12
3	29	38	40	39	63	135	90	75	20	15	20	13
4	28	80	39	30	67	126	92	82	18	14	19	14
5	27	63	30	28	111	108	93	90	18	14	19	13
6	27	44	28	32	149	104	95	79	18	16	20	13
7	28	52	27	29	232	97	103	74	17	16	20	14
8	29	62	26	31	151	93	110	67	17	16	20	14
9	35	47	25	41	131	93	110	63	16	18	20	15
10	37	49	25	44	152	118	109	60	16	14	20	15
11	38	57	26	52	142	235	109	56	17	14	20	15
12	35	50	28	105	175	187	109	53	16	16	20	15
13	33	44	32	183	135	173	108	39	17	19	20	16
14	31	43	37	117	145	140	121	39	16	17	20	17
15	49	44	38	137	137	136	134	37	13	16	20	18
16	49	44	44	579	120	139	129	41	17	17	20	18
17	47	42	48	207	113	127	141	37	18	18	20	18
18	51	41	185	162	103	108	131	33	19	17	20	18
19	40	47	253	107	93	105	122	32	17	21	20	22
20	37	61	149	79	92	104	114	28	15	27	20	32
21	35	51	109	83	96	100	106	28	15	22	20	23
22	35	46	309	65	101	103	104	26	15	22	15	23
23	34	41	137	68	109	107	103	24	16	21	9.8	29
24	34	41	215	69	124	97	104	28	17	21	13	30
25	34	40	86	70	132	100	106	44	15	21	18	33
26	35	41	71	61	137	98	105	36	15	20	22	24
27	35	41	61	59	138	99	108	31	15	21	22	21
28	35	41	59	61	165	93	110	23	14	21	20	19
29	36	39	45	62	------	91	102	18	15	21	17	20
30	35	39	49	69	------	99	92	20	15	21	14	20
31	36	------	47	71	------	108	------	25	------	21	11	------
TOTAL	1,096	1,402	2,344	2,824	3,437	3,734	3,250	1,451	508	578	579.8	565
MEAN	35.4	46.7	75.6	91.1	123	120	108	46.8	16.9	18.6	18.7	18.8
MAX	51	80	309	579	232	235	141	90	28	31	22	33
MIN	27	37	25	28	62	91	90	18	13	14	9.8	11
AC-FT	2,170	2,780	4,650	5,600	6,820	7,410	6,450	2,880	1,010	1,150	1,150	1,120

CAL YR 1972 TOTAL 35,997.1 MEAN 98.4 MAX 1,850 MIN 9.5 AC-FT 71,400
WTR YR 1973 TOTAL 21,768.8 MEAN 59.6 MAX 579 MIN 9.8 AC-FT 43,180

11352000 PIT RIVER NEAR BIEBER, CALIF.

LOCATION.--Lat 41°00'55", long 121°09'13", in NE¼SW¼ sec.27, T.37 N., R.7 E., Modoc County, 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.

PERIOD OF RECORD.--January 1904 to September 1908, December 1913 to August 1914, September 1921 to September 1926, November 1928 to September 1931, October 1951 to current year. Yearly figures only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 4,080.4 ft above mean sea level. Prior to November 1928, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--35 years (1903-8, 1921-26, 1928-31, 1951-73), 523 cfs (378,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,430 cfs Jan. 16 (gage height, 7.20 ft); no flow Aug. 22 to Sept. 2.
Period of record: Maximum discharge, 33,800 cfs Mar. 19, 1907 (gage height, 16.7 ft), from rating curve extended above 11,000 cfs; no flow at times in some years.

REMARKS.--Records good except those for the winter months, which are fair. Flow regulated by many small reservoirs (total capacity now, 204,000 acre-ft). Diversions for irrigation of 33,000 acres between stations near Canby and near Bieber. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1285: 1907, 1930. WSP 1315-A: 1914(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	126	199	225	280	921	450	426	410	1.1	.91	0
2	145	134	199	212	290	886	470	362	334	1.0	1.0	0
3	153	175	202	190	300	795	478	272	292	1.6	1.5	7.2
4	140	288	191	168	320	694	478	194	285	20	16	10
5	149	298	165	158	362	615	535	161	158	30	10	5.6
6	147	275	140	152	540	545	545	111	173	12	6.8	3.0
7	147	320	118	158	994	500	520	264	134	4.0	4.0	1.9
8	126	309	98	150	1,580	466	510	500	96	2.5	1.3	1.3
9	117	302	86	160	1,620	438	520	555	126	7.6	.83	1.1
10	108	272	81	175	1,480	450	510	510	67	12	.60	1.6
11	109	269	87	200	1,530	595	520	446	103	12	.91	2.3
12	99	272	93	265	1,370	718	550	342	113	6.0	1.9	1.2
13	91	265	100	450	1,320	900	555	316	76	3.3	6.4	1.0
14	126	256	106	860	1,240	844	555	285	38	1.9	8.4	1.2
15	124	243	112	300	1,100	774	600	358	14	1.3	14	2.8
16	158	240	122	2,900	949	640	646	430	6.4	1.1	20	1.8
17	170	237	150	2,600	900	585	742	402	4.0	1.8	3.0	1.2
18	214	219	180	2,200	730	610	742	382	3.3	5.6	.76	.83
19	199	211	290	1,600	615	625	724	386	4.0	11	.40	.76
20	170	211	380	1,050	540	590	748	370	5.6	36	.16	1.0
21	156	214	700	640	478	540	676	386	1.9	24	.03	1.1
22	168	222	1,300	510	474	490	605	398	2.1	14	0	2.1
23	165	234	1,380	350	482	462	535	211	3.6	7.6	0	2.5
24	151	222	1,360	320	510	466	466	253	6.8	4.8	0	2.8
25	168	211	1,110	330	625	495	430	410	4.4	3.0	0	6.0
26	173	199	802	310	754	510	426	490	2.8	2.3	0	13
27	138	194	630	250	760	490	434	394	1.9	1.8	0	28
28	136	191	495	260	823	466	466	259	1.5	1.5	0	14
29	126	194	345	250	------	442	495	459	1.6	1.3	0	15
30	145	199	280	260	------	434	446	550	1.1	1.2	0	18
31	126	------	220	270	------	438	------	630	------	1.0	0	------
TOTAL	4,552	7,002	11,721	17,923	22,966	18,424	16,377	11,512	2,470.0	234.3	98.90	148.29
MEAN	147	233	378	578	820	594	546	371	82.3	7.56	3.19	4.94
MAX	214	320	1,380	2,900	1,620	921	748	630	410	36	20	28
MIN	91	126	81	150	280	434	426	111	1.1	1.0	0	0
AC-FT	9,030	13,890	23,250	35,550	45,550	36,540	32,480	22,830	4,900	465	196	294

CAL YR 1972 TOTAL 212,638.90 MEAN 581 MAX 8,480 MIN 1.1 AC-FT 421,800
WTR YR 1973 TOTAL 113,428.49 MEAN 311 MAX 2,900 MIN 0 AC-FT 225,000

NOTE.--No gage height record Jan. 5-23.

11352900 BEAVER CREEK NEAR HAT CREEK, CALIF.

LOCATION.--Lat 40°49'47", long 121°14'54", in NE¼NE¼ sec.12, T.34 N., R.6 E., Lassen County, Lassen National Forest, on right bank at culvert on Forest Service Road 35N10, 13.6 miles east of town of Hat Creek, and 15 miles south of Pittville.

DRAINAGE AREA.--23.2 sq mi.

PERIOD OF RECORD.--November 1969 to May 1973 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder and precipitation gage. Altitude of gage is 4,980 ft (from topographic map).

EXTREMES.--Maximum discharge during period October 1972 to May 1973, 59 cfs Jan. 16 (gage height, 2.14 ft), from rating curve extended as explained below; minimum daily, 0.21 cfs Dec. 9, 10.
Period of record: Maximum discharge, 349 cfs Jan. 23, 1970 (gage height, 5.89 ft), from rating curve extended above 15 cfs on basis of theoretical computation of culvert flow; minimum daily, 0.21 cfs Jan. 5, 1971, Dec. 9, 10, 1972.

REMARKS.--Records good except those for the winter period, which are poor. No known diversions above station. Flow of stream is sustained by springs.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.29	.29	.65	2.4	9.8	2.5	.88				
2	.34	.28	.29	.66	2.3	5.8	2.1	.76				
3	.34	.33	.28	.50	3.0	3.9	2.3	.66				
4	.28	.66	.27	.43	3.8	3.0	3.4	1.3				
5	.28	.48	.26	.37	4.7	2.7	6.4	3.1				
6	.28	.30	.25	.33	6.2	2.8	11	1.7				
7	.28	.34	.23	.30	8.0	2.2	7.3	.93				
8	.28	.45	.22	.31	9.4	3.4	6.4	.65				
9	.34	.39	.21	.35	11	5.5	6.7	.50				
10	.29	.54	.21	.40	12	13	6.7	--				
11	.35	.42	.22	.55	14	13	5.8	--				
12	.29	.32	.22	3.2	15	4.4	5.0	--				
13	.28	.28	.23	2.1	10	2.3	6.4	--				
14	.30	.29	.24	3.7	7.0	1.7	6.8	--				
15	.32	.28	.25	7.4	5.2	2.3	7.3	--				
16	.32	.38	.26	25	4.0	3.6	5.1	--				
17	.37	.38	.26	18	2.8	3.2	7.5	--				
18	.39	.32	.27	12	2.0	2.2	6.2	--				
19	.33	.34	.64	7.9	1.7	2.2	4.1	--				
20	.28	.29	1.9	6.0	1.8	2.3	3.2	--				
21	.28	.30	2.1	4.0	2.0	2.2	2.7	--				
22	.28	.29	2.1	2.6	2.2	5.5	2.5	--				
23	.28	.32	2.1	2.7	2.6	3.4	2.4	--				
24	.28	.32	2.1	3.7	3.1	3.8	2.0	--				
25	.28	.28	1.6	4.0	4.0	4.4	1.7	--				
26	.28	.28	1.4	2.5	10	4.4	1.6	--				
27	.29	.28	1.2	1.8	12	3.0	1.8	--				
28	.29	.27	1.1	2.2	18	2.3	1.6	--				
29	.30	.26	1.0	2.9	------	1.8	1.3	--				
30	.31	.29	.86	3.7	------	2.8	1.1	--				
31	.30	------	.75	3.1	------	3.0	------	--	------			------
TOTAL	9.45	10.25	23.31	123.35	180.2	125.9	130.9	--				
MEAN	.30	.34	.75	3.98	6.44	4.06	4.36	--				
MAX	.39	.66	2.1	25	18	13	11	--				
MIN	.28	.26	.21	.30	1.7	1.7	1.1	--				
AC-FT	19	20	46	245	357	250	260	--				
(a)	--	2.10	1.88	3.38	1.56	1.48	.61	--				

CAL YR 1972 TOTAL 358.80 MEAN .98 MAX 41 MIN .21 AC-FT 712

a Precipitation, in inches (some precipitation falling as snow may not be included).

11355500 HAT CREEK NEAR HAT CREEK, CALIF.

LOCATION.--Lat 40°41'12", long 121°25'25", in NE¼SE¼ sec.28, T.33 N., R.5 E., Shasta County, on right bank 0.8 mile northeast of Old Station Post Office, and 8 miles southeast of Hat Creek Post Office.

DRAINAGE AREA.--162 sq mi, hydrologic drainage boundary uncertain owing to ground-water exchange.

PERIOD OF RECORD.--July 1926 to September 1929, April 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,300 ft (from topographic map). July 1926 to April 1928 at site 0.5 mile upstream at different datum. May 1928 to July 1965 at site 80 ft upstream at datum 2.76 ft higher.

AVERAGE DISCHARGE.--46 years, 138 cfs (99,980 acre-ft per year).

EXRREMES.--Current year: Maximum discharge, 353 cfs May 25 (gage height, 4.07 ft); minimum daily, 135 cfs Aug. 31, Sept. 2, 5, 6.
Period of record: Maximum discharge, 3,320 cfs Dec. 11, 1937 (gage height, 7.75 ft in gage well, affected by drawdown, site and datum then in use), from rating curve extended above 610 cfs on basis of slope-area measurement of maximum flow; minimum, 67 cfs Sept. 7, 1934.

REMARKS.--Records excellent. Diversions for irrigations of 260 acres above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS (WATER YEARS).--WSP 1395: 1938. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	152	150	144	146	147	147	168	253	163	150	136
2	152	152	149	144	147	147	147	171	237	152	150	135
3	150	153	152	146	147	146	147	174	228	153	150	136
4	150	166	147	141	146	146	148	177	223	149	150	136
5	150	157	142	140	146	146	149	170	223	149	150	135
6	150	154	142	140	148	146	150	166	227	150	149	135
7	150	154	142	140	147	143	150	171	227	150	150	144
8	152	153	141	141	146	144	150	177	228	149	148	146
9	157	152	141	142	147	144	150	183	225	149	140	145
10	159	153	140	142	147	149	150	193	217	154	140	145
11	163	153	140	146	147	147	153	203	208	158	139	145
12	164	152	140	157	146	146	155	212	204	157	137	145
13	159	152	141	162	144	146	157	228	202	157	138	145
14	162	152	141	157	144	144	154	240	196	156	144	144
15	166	152	141	158	144	144	155	251	190	157	150	143
16	163	153	143	163	144	144	155	262	186	157	150	143
17	162	150	144	152	144	144	158	279	184	162	149	143
18	160	152	155	152	144	144	155	281	179	160	149	144
19	159	152	166	147	144	144	153	294	177	156	148	152
20	158	150	162	147	144	144	152	279	181	145	148	147
21	158	150	158	149	144	144	153	262	186	148	147	147
22	157	149	177	148	143	143	154	256	186	151	147	150
23	157	148	167	148	144	142	157	253	186	147	147	148
24	157	149	160	149	148	146	160	287	181	146	148	147
25	157	149	154	149	144	148	163	316	181	144	148	145
26	157	150	155	148	147	148	171	262	180	144	147	145
27	157	149	155	147	148	148	175	247	179	143	146	145
28	157	149	150	148	147	148	171	253	177	138	142	144
29	155	149	144	148	------	147	171	258	176	139	138	144
30	153	148	146	148	------	148	170	266	172	148	136	144
31	154	------	147	148	------	148	------	271	------	150	135	------
TOTAL	4,857	4,554	4,632	4,591	4,077	4,515	4,680	7,210	5,999	4,681	4,510	4,303
MEAN	157	152	149	148	146	146	156	233	200	151	145	143
MAX	166	166	177	163	148	149	175	316	253	163	150	152
MIN	150	148	140	140	143	142	147	166	172	138	135	135
AC-FT	9,630	9,030	9,190	9,110	8,090	8,960	9,280	14,300	11,900	9,280	8,950	8,540

CAL YR 1972 TOTAL 60,197 MEAN 164 MAX 232 MIN 140 AC-FT 119,400
WTR YR 1973 TOTAL 58,609 MEAN 161 MAX 316 MIN 135 AC-FT 116,300

PEAK DISCHARGE (BASE, 220 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
5-17	1700	3.94	326	5-25	0330	4.07	353
5-19	2300	3.90	318	5-31	2000	3.74	287

11360500 BURNEY CREEK NEAR BURNEY, CALIF.

LOCATION.--Lat 40°52'16", long 121°40'57", in SE¼SW¼ sec.19, T.35 N., R.3 E., Shasta County, on right bank 300 ft upstream from road bridge, 0.8 mile southwest of Burney, and 4.5 miles upstream from Goose Creek.

DRAINAGE AREA.--88.8 sq mi.

PERIOD OF RECORD.--August 1911 to August 1913 (published as "at Burney"), March 1921 to September 1922, April 1958 to September 1964, October 1965 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 3,180 ft (from topographic map). August 1911 to August 1913 and March 1921 to September 1922, nonrecording gage or water-stage recorder at different site and datum.

AVERAGE DISCHARGE.--17 years (1911-13, 1921-22, 1958-64, 1965-73), 66.2 cfs (47,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 725 cfs Jan. 16 (gage height, 9.95 ft); minimum daily, 8.5 cfs Aug. 1.
Period of record: Maximum discharge, 4,910 cfs Jan. 23, 1970 (gage height, 15.89 ft), from rating curve extended above 2,500 cfs on basis of contracted-opening measurement of maximum flow; minimum, 3.4 cfs Aug. 4, 1961.

REMARKS.--Small diversions upstream for irrigation. Slight regulation probably caused by logging operations.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1971: 1970.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	24	40	70	188	92	142	84	15	8.5	13
2	18	18	24	39	64	161	77	137	74	15	8.8	14
3	18	25	25	36	63	146	81	142	67	15	11	14
4	18	98	23	30	70	131	94	141	57	14	11	14
5	18	56	23	31	88	109	102	138	47	14	12	14
6	17	36	20	29	82	118	113	130	43	13	12	14
7	18	37	17	26	92	109	126	130	40	14	12	14
8	18	35	15	26	88	103	123	127	38	15	13	15
9	22	32	14	30	97	99	124	124	35	15	13	14
10	27	36	18	32	129	132	133	120	33	14	13	13
11	40	42	23	37	112	155	143	116	32	14	12	12
12	37	33	25	96	115	139	150	122	30	15	13	11
13	29	35	27	185	94	122	158	133	29	15	13	11
14	35	51	30	127	96	108	146	131	29	14	13	11
15	39	41	32	186	89	103	156	132	27	14	12	11
16	33	44	35	598	86	103	155	131	25	14	11	11
17	30	35	40	374	83	109	234	132	27	13	12	11
18	27	34	50	328	81	99	186	130	26	15	12	11
19	26	36	70	205	78	99	163	122	26	14	11	13
20	24	35	63	166	75	102	142	114	25	12	11	22
21	23	34	58	142	73	99	140	103	22	13	12	16
22	22	28	120	119	72	98	147	93	20	12	12	15
23	21	28	88	102	71	94	154	88	20	12	13	30
24	19	27	70	96	95	99	156	154	22	11	14	27
25	19	26	76	92	129	90	159	248	20	11	14	22
26	19	26	67	82	135	90	166	159	20	11	14	18
27	20	25	61	76	162	93	182	120	19	11	14	18
28	21	25	56	75	172	89	186	102	19	13	13	17
29	23	24	52	76	------	86	176	87	19	12	13	17
30	21	24	49	72	------	84	156	80	16	8.9	13	17
31	20	------	44	76	------	88	------	78	------	9.2	13	------
TOTAL	741	1,045	1,339	3,629	2,661	3,445	4,320	3,906	991	408.1	379.3	460
MEAN	23.9	34.8	43.2	117	95.0	111	144	126	33.0	13.2	12.2	15.3
MAX	40	98	120	598	172	188	234	248	84	15	14	30
MIN	17	18	14	26	63	84	77	78	16	8.9	8.5	11
AC-FT	1,470	2,070	2,660	7,200	5,280	6,830	8,570	7,750	1,970	809	752	912

CAL YR 1972 TOTAL 23,671.6 MEAN 64.7 MAX 491 MIN 7.4 AC-FT 46,950
WTR YR 1973 TOTAL 23,324.4 MEAN 63.9 MAX 598 MIN 8.5 AC-FT 46,260

RESERVOIRS IN PIT AND McCLOUD RIVER BASINS, CALIF.

11361400 LAKE BRITTON NEAR BURNEY.--Lat 41°01'20", long 121°40'32", in SW¼SW¼ sec.30, T.37 N., R.3 E., Shasta County, Shasta National Forest, at control house on right bank 200 ft upstream from dam on Pit River, 1.1 miles downstream from Clark Creek, 1.3 miles northwest of Burney Falls, and 9 miles north of Burney. Drainage area, 4,606 sq mi. Period of record, October 1965 to current year. Gage is a remote telemark read once daily. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 13,940 acre-ft Oct. 1, Sept. 26 (elevation, 2,756.60 ft); minimum, 909 acre-ft Feb. 1 (elevation, 2,744.95 ft). Extremes for period of record: Maximum contents, 20,445 acre-ft Jan. 25, 1970 (elevation, 2,761.55 ft); minimum, 719 acre-ft Feb. 1, 1968 (elevation, 2,744.75 ft).

Reservoir is formed by gravity-type concrete dam. Storage began July 15, 1925. Maximum storage, 40,600 acre-ft. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

11363920 IRON CANYON RESERVOIR NEAR BIG BEND.--Lat 41°02'41", long 121°58'52", in SW¼SE¼ sec.21, T.37 N., R.1 W., Shasta County, Shasta National Forest, in control house on left bank 500 ft upstream from Iron Canyon Dam on Iron Canyon Creek, 3.7 miles northwest of Big Bend. Drainage area, 11.1 sq mi. Period of record, December 1965 to current year. Gage is a water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 17,540 acre-ft June 17 (elevation, 2,650.30 ft); minimum, 3,297 acre-ft Apr. 29, 30 (elevation, 2,593.00 ft). Extremes for period of record: Maximum contents, 22,800 acre-ft July 24, 1968 (elevation, 2,662.07 ft); normal minimum since initial operation of reservoir, 2,860 acre-ft May 23, 24, 29, June 2, June 7, 9, 14, 23, 24, 1966 (elevation, 2,590.00 ft). Reservoir drained for inspection Feb. 10, 1971. Contents reduced to 195 acre-ft (elevation, 2,540.00 ft).

Reservoir is formed by a rockfill dam completed in 1965. Capacity is 24,200 acre-ft between elevations 2,525.00 ft (invert of sluice pipe) and 2,665.00 ft (crest of spillway). No dead storage. Water is diverted from Lake McCloud through a tunnel to Iron Canyon Reservoir and thence into the Pit River via a powerplant. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

11367740 LAKE McCLOUD NEAR McCLOUD.--Lat 41°08'06", long 122°04'26", in SE¼SW¼ sec.22, T.38 N., R.2 W., Shasta County, Shasta National Forest, on McCloud Dam near spillway on McCloud River, 200 ft downstream from Panther Creek, and 8.8 miles southeast of McCloud. Drainage area, 403 sq mi. Period of record, October 1965 to current year. Gage is a water-stage recorder. Datum of gage is at mean sea level (levels by Pacific Gas and Electric Co.). Extremes for current year: Maximum contents, 34,153 acre-ft Mar. 2, 3 (elevation, 2,677.90 ft); minimum, 17,376 acre-ft Oct. 1, 7 (elevation, 2,637.90 ft). Extremes for period of record: Maximum contents, 35,652 acre-ft Jan. 21, 1970 (elevation, 2,680.80 ft); minimum since storage pool first filled, 15,700 acre-ft Jan. 22, 1967 (elevation, 2,632.60 ft).

Reservoir is formed by a rockfill dam completed in 1965. Capacity, 36,548 acre-ft between elevations 2,571.30 ft (invert of sluice pipe) and 2,682.50 ft (top of radial gates). No dead storage. Water is diverted from Lake McCloud through a diversion tunnel to Iron Canyon Reservoir and thence into the Pit River. Record of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. See schematic diagram of Pit and McCloud River basins.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	LAKE BRITTON			IRON CANYON RESERVOIR			LAKE McCLOUD		
Sept. 30.....	2,754.60	11,467	--	2,620.30	8,018	--	2,637.80	17,343	--
Oct. 31.....	2,750.95	7,202	-4,265	2,626.10	9,504	+1,486	2,642.80	19,063	+1,720
Nov. 30.....	2,747.95	3,939	-3,263	2,619.80	7,896	-1,608	2,644.90	19,816	+753
Dec. 31.....	2,747.60	3,573	-366	2,623.00	8,691	+795	2,657.00	24,524	+4,708
CAL YR 1972....	--	--	+722	--	--	+3,439	--	--	+7,970
Jan. 31.....	2,746.40	2,344	-1,229	2,596.50	3,634	-5,057	2,658.50	25,152	+628
Feb. 28.....	2,752.45	8,916	+6,572	2,595.10	3,454	-180	2,677.10	33,747	+8,595
Mar. 31.....	2,747.85	3,834	-5,082	2,614.80	6,756	+3,302	2,662.40	26,830	-6,917
Apr. 30.....	2,746.70	2,648	-1,186	2,593.00	3,297	-3,459	2,667.20	28,982	+2,152
May 31.....	2,753.65	10,327	+7,679	2,625.70	9,397	+6,100	2,670.50	30,518	+1,536
June 30.....	2,753.35	9,971	-356	2,648.40	16,781	+7,384	2,674.40	32,400	+1,882
July 31.....	2,755.55	11,407	+1,436	2,631.40	10,992	-5,789	2,662.00	26,655	-5,745
Aug. 31.....	2,752.00	8,396	-3,011	2,630.50	10,730	-262	2,653.20	22,978	-3,677
Sept. 30.....	2,756.40	13,689	+5,293	2,625.00	9,211	-1,519	2,645.00	19,853	-3,125
WTR YR 1973....	--	--	+2,222	--	--	+1,193	--	--	+2,510

11362500 PIT RIVER BELOW PIT NO. 4 DAM, CALIF.

LOCATION.--Lat 40°58'25", long 121°46'42", unsurveyed, T.36 N., R.2 E., Shasta County, Shasta National Forest, on right bank 0.6 mile downstream from Ruling Creek, 1.3 miles downstream from Pit No. 4 Dam, and 2.7 miles downstream from Pit No. 3 powerhouse.

DRAINAGE AREA.--4,647 sq mi, exluding Goose Lake basin.

PERIOD OF RECORD.--May 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "near Pecks Bridge" April to October 1922, and as "at Lindsay Flat" November 1922 to June 1927.

GAGE.--Water-stage recorder. Altitude of gage is 2,358 ft (from river-profile map). Prior to November 1922, water-stage recorder at site at Pecks Bridge 7.4 miles upstream at different datum. November 1922 to June 20, 1927, at site at Lindsay Flat 1.8 miles upstream at different datum.

AVERAGE DISCHARGE.--63 years (1910-73), 2,774 cfs (2,010,000 acre-ft per year), including diversion to Pit No. 4 powerplant. Period 1910-22 extrapolated on basis of records for Pit River at Big Bend.

EXTREMES.--Current year: Maximum discharge, 5,340 cfs Jan. 19 (gage height, 9.39 ft); minimum daily, 59 cfs Jan. 9, 10.
Period of record: Maximum discharge, 31,000 cfs Jan. 25, 1970 (gage height, 18.04 ft), from rating curve extended above 17,000 cfs; minimum daily, 234 cfs Sept. 13, 1953. Minimum daily discharge since diversion to Pit No. 4 powerplant in 1955, 22 cfs Dec. 2-4, 1969.

REMARKS.--Flow regulated by many small reservoirs and powerplants (total usable reservoir capacity, 253,000 acre-ft). Many diversions above station; diversion to Pit No. 4 powerplant began June 9, 1955. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1935(M). WSP 1315-A: 1928(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	89	81	61	63	66	97	165	155	158	159	157
2	104	132	63	62	64	68	104	167	160	158	158	157
3	103	101	63	62	64	82	105	156	161	158	157	158
4	104	83	64	63	66	102	104	156	160	155	156	158
5	108	84	68	63	67	63	105	156	158	154	157	159
6	104	80	62	62	64	64	107	155	157	155	158	157
7	106	82	63	64	67	64	106	157	158	161	153	159
8	105	83	62	61	65	65	106	166	159	159	154	158
9	104	84	61	59	64	65	111	156	159	158	155	159
10	104	85	62	59	196	65	104	157	155	155	156	158
11	105	84	62	61	1,060	65	107	156	159	157	155	158
12	104	83	62	61	1,010	66	107	160	160	155	155	159
13	118	85	63	60	912	64	106	164	160	155	155	159
14	103	84	62	62	572	64	105	161	155	156	154	159
15	105	82	62	77	387	65	106	163	157	157	156	159
16	105	84	61	119	216	64	105	160	156	153	156	152
17	103	82	63	1,510	109	64	107	163	154	155	156	159
18	105	82	65	3,640	63	66	108	165	154	155	155	162
19	104	84	66	3,140	63	65	106	164	154	154	156	160
20	104	83	63	1,700	63	66	104	164	153	155	156	160
21	104	82	68	600	64	64	105	164	160	154	155	203
22	105	83	75	139	67	64	105	158	165	152	154	430
23	104	82	65	90	64	65	105	153	157	154	159	444
24	114	81	66	68	65	64	105	155	158	160	157	513
25	103	84	66	67	64	64	105	154	154	160	157	621
26	93	83	60	65	63	65	109	155	155	159	157	505
27	103	81	61	64	63	62	108	154	156	159	156	588
28	104	83	61	63	63	62	149	152	158	161	155	496
29	115	85	62	64	------	61	156	151	157	157	157	610
30	105	86	64	65	------	62	156	156	156	157	157	462
31	113	------	62	66	------	62	------	153	------	156	158	------
TOTAL	3,270	2,566	1,988	12,397	5,748	2,048	3,313	4,916	4,720	4,852	4,839	8,039
MEAN	105	85.5	64.1	400	205	66.1	110	159	157	157	156	268
MAX	118	132	81	3,640	1,060	102	156	167	165	161	159	621
MIN	93	80	60	59	63	61	97	151	153	152	153	152
AC-FT	6,490	5,090	3,940	24,590	11,400	4,060	6,570	9,750	9,360	9,620	9,600	15,950
MEAN a	2,270	2,526	2,767	3,132	2,952	3,003	2,853	2,770	2,300	1,637	1,675	2,169
AC-FT a	139,600	150,300	170,100	192,600	169,800	184,700	169,800	170,400	136,900	100,700	103,000	129,000

CAL YR 1972 TOTAL 133,170 MEAN 364 MAX 7,710 MIN 59 AC-FT 264,100 MEAN a 3,627 AC-FT a 2,633,000
WTR YR 1973 TOTAL 58,696 MEAN 161 MAX 3,640 MIN 59 AC-FT 116,400 MEAN a 2,509 AC-FT a 1,816,000

a Adjusted for diversion to Pit No. 4 powerplant.

11363000 PIT RIVER AT BIG BEND, CALIF.

LOCATION.--Lat 41°01'10", long 121°54'36", in NW¼SW¼ sec.31, T.37 N., R.1 E., Shasta County, on left bank at Big Bend, 0.4 mile downstream from Nelson Creek, and 1.5 miles upstream from Kosk Creek.

DRAINAGE AREA.--4,710 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Published as "at Henderson" 1910-23.

GAGE.--Water-stage recorder. Datum of gage is 1,674.47 ft above mean sea level. Prior to Dec. 28, 1912, nonrecording gage and Dec. 28 1912, to June 21, 1924, water-stage recorder at same site at datum 7.69 ft higher.

AVERAGE DISCHARGE (prior to diversion to Pit No. 5 powerplant).--33 years (1910-43), 2,931 cfs (2,122,000 acre-ft per year); 30 years (1943-73), 577 cfs (418,000 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discnarge, 6,170 cfs Jan. 19 (gage height, 10.65 ft); minimum daily, 53 cfs Dec. 11, 14, 15.
Period of record: Maximum discharge, 49,000 cfs Jan. 25, 1970 (gage height, 18.17 ft in gage well, 19.0 ft, from floodmarks), from rating curve extended above 17,000 cfs, partly affected by gate operation at Pit No. 4 Dam; minimum daily, 34 cfs Mar. 29, 1955.

REMARKS.--Flow regulated by many reservoirs and powerplants (total usable reservoir capacity, about 253,000 acre-ft). Many diversions above station; diversion to Pit No. 5 powerhouse began May, 1, 1944. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1345: 1911, 1914(M), 1916(M), 1917, 1928, 1935-36(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	104	80	89	154	384	168	172	161	130	127	115
2	122	90	58	86	145	825	161	202	162	134	124	117
3	118	136	62	85	144	837	158	199	159	135	125	113
4	122	131	57	82	206	820	158	207	173	138	120	117
5	122	101	58	79	232	753	159	203	158	136	122	117
6	119	97	59	77	203	601	162	201	151	139	129	122
7	116	95	58	74	213	287	163	197	152	128	123	126
8	114	97	55	76	201	250	161	195	154	134	125	118
9	126	102	55	79	325	239	163	191	151	135	124	112
10	142	111	55	84	834	276	165	192	148	134	119	117
11	157	117	53	119	1,770	264	168	185	149	130	118	124
12	132	104	54	199	1,760	246	170	186	149	130	116	125
13	127	123	55	233	1,560	234	177	181	149	129	124	121
14	131	147	53	181	1,230	224	168	181	144	128	123	120
15	128	122	53	232	1,050	445	167	180	148	130	127	112
16	124	117	54	1,020	811	415	168	176	143	130	119	112
17	126	107	70	2,290	710	215	174	175	138	125	123	118
18	126	117	94	4,630	621	203	166	174	147	131	122	125
19	121	127	125	4,070	321	209	159	177	148	128	116	130
20	120	119	106	2,610	218	218	154	172	146	127	119	149
21	122	109	220	1,420	211	213	149	167	141	122	119	130
22	123	108	453	827	204	202	147	169	137	123	127	121
23	121	109	525	567	200	197	148	167	134	126	121	127
24	120	102	726	222	247	193	146	193	133	127	124	224
25	124	103	680	202	311	190	148	180	142	128	115	131
26	123	96	494	186	304	187	151	174	138	128	118	131
27	123	102	146	174	347	183	152	167	137	127	118	117
28	121	96	117	167	336	178	151	167	135	120	124	119
29	120	94	104	163	------	174	147	163	141	118	118	114
30	126	94	98	167	------	181	141	156	135	126	119	113
31	118	------	94	166	------	176	------	160	------	130	123	------
TOTAL	3,851	3,277	4,971	20,656	14,868	10,019	4,769	5,609	4,403	4,006	3,771	3,737
MEAN	124	109	160	666	531	323	159	181	147	129	122	125
MAX	157	147	726	4,630	1,770	837	177	207	173	139	129	224
MIN	114	90	53	74	144	174	141	156	133	118	115	112
AC-FT	7,640	6,500	9,860	40,970	29,490	19,870	9,460	11,130	8,730	7,950	7,480	7,410

CAL YR 1972 TOTAL 188,401 MEAN 515 MAX 8,690 MIN 53 AC-FT 373,700
WTR YR 1973 TOTAL 83,937 MEAN 230 MAX 4,630 MIN 53 AC-FT 166,500

11363910 JAMES B. BLACK POWERPLANT NEAR BIG BEND, CALIF.

LOCATION.--Lat 40°59'12", long 121°58'35", in SW¼SE¼ sec.9, T.36 N., R.1 W., Shasta County, at powerplant on right bank of Pit River, 5.8 miles downstream from Big Bend.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Recorded output from powerplant turbines.

EXTREMES.--Period of record: Maximum daily discharge, 2,420 cfs July 15, 1966; no flow for several days in each year.

REMARKS.--Water is diverted from Lake McCloud (see sta 11367740) at SE¼SW¼ sec.22, T.38 N., R.2 W., to Iron Canyon Reservoir (see sta 11363920), and then into the penstock for James B. Black powerplant. Records are combined flow of diversion from McCloud River at McCloud Dam plus Iron Canyon Creek.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	349	497	389	1,310	1,910	1,330	1,360	1,280	767	1,120	483
2	864	826	583	968	1,210	1,610	1,150	1,300	129	941	878	801
3	685	949	902	876	812	1,590	1,170	1,350	67	689	982	279
4	714	571	653	1,130	521	1,570	1,100	1,360	997	794	393	985
5	686	637	795	1,090	425	1,550	1,180	1,350	1,050	832	797	722
6	850	881	765	583	433	1,550	1,450	1,350	510	1,140	1,020	823
7	87	359	728	866	720	1,540	1,670	1,270	931	144	1,210	649
8	69	479	936	853	1,080	1,530	1,380	1,320	679	472	737	760
9	955	892	602	1,220	559	1,520	1,210	1,300	464	1,030	887	671
10	620	507	489	883	1,430	1,530	1,300	1,210	0	1,580	989	963
11	780	869	718	675	1,580	1,520	1,580	1,440	585	1,030	524	1,200
12	836	476	660	696	441	1,510	1,320	930	930	1,020	636	799
13	630	754	696	1,270	938	1,500	1,320	1,060	1,070	790	1,060	555
14	624	1,130	251	960	1,090	1,480	1,340	1,350	1,000	320	823	615
15	622	783	621	766	1,430	1,470	1,340	1,190	1,140	833	837	452
16	747	748	661	707	1,310	1,470	1,340	1,280	388	912	891	884
17	780	1,070	632	1,320	1,370	1,450	1,340	1,420	464	1,260	791	797
18	639	157	415	1,990	941	1,430	1,350	1,080	1,420	1,340	884	1,100
19	721	974	1,180	2,000	1,060	1,430	1,350	1,090	1,030	982	449	419
20	937	903	593	2,010	1,140	1,430	1,340	1,150	734	902	522	724
21	291	361	1,120	2,000	1,140	1,430	1,340	1,290	1,160	836	776	643
22	389	860	596	1,730	1,080	1,400	1,340	1,220	268	629	834	564
23	546	1,040	1,050	1,430	1,560	1,390	1,340	1,290	837	808	953	688
24	645	764	788	1,360	1,190	1,380	1,330	764	807	1,280	932	516
25	590	393	990	1,450	1,800	1,370	1,340	1,230	983	1,410	561	1,930
26	942	680	699	1,140	2,020	1,100	1,330	981	937	1,050	644	1,150
27	643	929	1,290	1,420	1,940	958	1,340	994	1,230	620	1,060	875
28	20	807	950	662	1,850	952	1,280	1,020	794	975	555	766
29	0	736	1,200	1,690	------	957	1,470	834	574	706	1,040	807
30	0	1,250	662	1,560	------	1,230	1,380	604	355	831	707	496
31	0	------	1,120	1,220	------	808	------	1,000	------	680	967	------
TOTAL	17,121	22,134	23,842	36,914	32,380	43,565	40,050	36,387	23,213	27,603	25,459	23,116
MEAN	552	738	769	1,191	1,156	1,405	1,335	1,174	774	890	821	771
MAX	955	1,250	1,290	2,010	2,020	1,910	1,670	1,440	1,420	1,580	1,210	1,930
MIN	0	157	251	389	425	808	1,100	604	0	144	393	279
AC-FT	33,960	43,900	47,290	73,220	64,230	86,410	79,440	72,170	46,040	54,750	50,500	45,850

CAL YR 1972 TOTAL 324,327.00 MEAN 886 MAX 1,970 MIN 0 AC-FT 643,300
WTR YR 1973 TOTAL 351,784.00 MEAN 964 MAX 2,020 MIN 0 AC-FT 697,800

11363930 IRON CANYON CREEK BELOW IRON CANYON DAM, NEAR BIG BEND, CALIF.

LOCATION.--Lat 41°02'27", long 121°59'02", in NW¼NW¼ sec.28, T.37 N., R.1 W., Shasta County, on left bank 0.2 mile downstream from Iron Canyon Dam, and 4.2 miles west of Big Bend.

DRAINAGE AREA.--11.6 sq mi.

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder, 60° sharp-crested V-notch weir, and concrete control. Datum of gage is 2,461.52 ft above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--7 years, 4.92 cfs (3,560 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 14 cfs Dec. 22 (gage height, 1.66 ft); minimum daily, 2.7 cfs Nov. 15, May 15, Sept. 30.
Period of record: Maximum discharge recorded, 391 cfs Feb. 1, 1971 (gage height, 3.10 ft), from rating curve extended above 65 cfs on basis of computation of flow over weir (flow was a result of sluicing at dam); no flow July 15-18, 1967.

REMARKS.--Flow is regulated by Iron Canyon Dam (see sta 11363920). There is inter-basin diversion from Lake McCloud (see sta 11367790) to Iron Canyon Reservoir (see sta 11363920) and then into a tunnel to James B. Black powerplant on the Pit River (see sta 11363910). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.2	3.2	3.1	3.1	3.1	3.2	3.5	3.5	3.5	3.5	3.4
2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.4
3	3.2	3.2	3.2	3.1	3.2	3.1	3.1	3.5	3.5	3.6	3.5	3.4
4	3.2	3.1	3.2	3.1	3.5	3.1	3.1	3.6	3.5	3.5	3.5	3.4
5	3.2	3.1	3.3	2.8	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.4
6	3.2	3.1	3.3	3.2	3.1	3.1	3.1	3.5	3.5	3.6	3.5	3.4
7	3.2	3.2	3.3	3.1	3.1	3.1	3.1	3.5	3.5	3.5	2.8	3.4
8	3.2	3.1	3.2	3.1	3.1	3.1	3.1	3.5	3.5	3.5	3.5	3.4
9	3.2	3.1	3.1	3.1	3.2	3.1	3.2	3.5	3.5	3.6	3.5	3.4
10	3.2	2.8	3.2	3.1	3.7	3.2	3.2	3.6	3.5	3.5	3.5	3.4
11	3.2	3.1	3.1	3.1	3.1	3.1	2.9	3.5	3.5	3.5	3.5	3.4
12	3.2	3.2	3.1	3.2	3.1	3.1	3.2	3.5	3.5	3.5	3.5	3.4
13	3.1	3.2	3.1	3.6	3.1	3.2	3.3	3.5	3.5	3.5	3.5	3.4
14	3.1	3.1	3.1	3.2	3.1	3.1	3.3	3.5	3.5	3.5	3.5	3.4
15	3.2	2.7	3.1	3.2	2.9	3.1	3.4	2.7	3.5	3.5	3.5	3.4
16	3.2	3.2	3.1	5.0	3.1	3.1	3.4	3.5	3.5	3.5	3.5	3.4
17	3.1	3.1	3.1	3.3	3.1	3.1	3.4	3.5	3.6	3.6	3.5	3.4
18	3.2	3.2	3.1	3.9	3.1	3.1	3.4	3.5	3.5	3.5	3.4	3.4
19	3.2	3.2	3.1	3.1	3.1	3.2	3.5	3.5	3.5	3.6	3.4	3.4
20	3.2	3.1	3.1	3.1	3.1	3.1	3.5	3.5	4.5	3.5	3.4	3.4
21	3.2	3.1	3.6	3.1	3.1	3.1	3.5	3.5	3.1	3.5	3.4	3.4
22	3.2	3.1	3.5	3.1	3.1	3.2	3.5	3.5	3.5	3.6	3.4	3.4
23	3.1	3.2	3.1	3.1	3.1	3.1	3.5	3.6	3.6	3.5	3.4	3.4
24	3.2	3.1	3.1	3.2	3.2	3.1	3.5	3.6	3.5	4.4	3.4	3.3
25	3.2	3.2	3.2	3.2	3.1	3.1	3.5	3.5	3.5	3.5	3.4	3.3
26	3.2	3.1	3.2	3.3	3.2	3.1	3.5	3.5	3.5	3.6	3.4	3.3
27	3.2	3.2	3.1	3.1	3.1	3.2	3.5	3.5	3.6	3.5	3.4	3.3
28	3.2	3.2	3.1	3.1	3.2	3.1	3.5	3.5	3.5	3.5	3.4	3.3
29	3.2	3.2	3.1	3.1	------	3.1	3.5	3.5	3.6	3.5	3.4	3.3
30	2.9	3.2	3.2	3.1	------	3.1	3.5	3.5	3.6	3.6	3.4	2.7
31	3.4	------	3.1	3.1	------	3.2	------	3.0	------	3.6	3.4	------
TOTAL	98.7	93.8	98.5	100.0	88.1	96.7	99.6	107.6	106.1	110.3	106.4	100.7
MEAN	3.18	3.13	3.18	3.23	3.15	3.12	3.32	3.47	3.54	3.56	3.43	3.36
MAX	3.4	3.2	3.6	5.0	3.7	3.2	3.5	3.6	4.5	4.4	3.5	3.4
MIN	2.9	2.7	3.1	2.8	2.9	3.1	2.9	2.7	3.1	3.5	2.8	2.7
AC-FT	196	186	195	198	175	192	198	213	210	219	211	200

CAL YR 1972 TOTAL 1,139.3 MEAN 3.11 MAX 4.3 MIN 1.0 AC-FT 2,260
WTR YR 1973 TOTAL 1,206.5 MEAN 3.31 MAX 5.0 MIN 2.7 AC-FT 2,390

11365000 PIT RIVER NEAR MONTGOMERY CREEK, CALIF.

LOCATION.--Lat 40°50'36", long 122°00'58", in NW¼SE¼ sec.31, T.35 N., R.1 W., Shasta County, Shasta National Forest, on right bank 0.5 mile upstream from Potem Creek, 1.9 miles downstream from Pit No. 7 dam and powerhouse, and 5.0 miles west of town of Montgomery Creek.

DRAINAGE AREA.--4,951 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--October 1944 to current year (monthly discharge only December 1964 to May 1965). Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 1,036 ft above mean sea level (levels by Pacific Gas and Electric Co.). October 1944 to Feb. 17, 1963, at site 1.9 miles upstream at different datum. Feb. 17, 1963, to May 21, 1965, at site 2.7 miles upstream at different datum.

AVERAGE DISCHARGE (prior to diversion from McCloud River).--21 years (1944-65), 3,759 cfs (2,721,000 acre-ft per year); 8 years (1965-73), 5,350 cfs (3,876,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,500 cfs Jan. 16 (gage height, 28.24 ft); minimum daily, 538 cfs Aug. 4.
Period of record: Maximum discharge, 73,000 cfs Jan. 24, 1970 (gage height, 32.36 ft); minimum daily, 42 cfs July 22, 1967.

REMARKS.--Flow regulated by many reservoirs and powerplants (total usable reservoir capacity, 337,000 acre-ft). Many diversions above station for irrigation. Diversion from McCloud River to Pit River began December 1965 (see sta 11367720). See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co. under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,530	2,620	3,380	2,600	8,440	8,460	8,040	4,860	5,160	1,440	3,730	1,590
2	5,100	3,520	3,260	5,000	8,440	8,670	5,450	4,370	3,770	4,520	3,710	2,090
3	3,710	3,780	3,910	2,710	8,270	8,650	3,540	4,920	4,440	4,080	4,260	3,680
4	4,840	5,620	3,240	4,240	7,960	8,580	4,040	6,740	3,170	4,280	538	3,640
5	4,520	4,890	4,080	4,790	5,210	8,460	4,120	7,940	4,180	4,280	2,100	3,710
6	4,620	4,130	2,520	3,020	4,060	8,460	5,360	7,340	3,480	4,580	3,610	3,100
7	1,470	3,320	3,130	3,090	4,170	7,870	4,620	4,330	3,490	1,570	4,530	2,130
8	1,730	4,540	4,580	3,650	4,270	6,640	5,390	4,170	3,680	1,200	3,410	3,790
9	4,100	4,330	3,660	5,470	5,570	7,550	6,630	3,800	2,560	4,550	3,380	4,210
10	4,700	4,870	3,680	4,380	8,400	7,520	7,710	5,030	3,020	5,210	3,700	4,830
11	5,110	4,960	3,390	6,750	9,500	7,800	7,720	5,800	3,310	4,060	2,710	4,840
12	3,950	3,550	4,430	8,170	8,660	6,960	5,750	6,790	3,810	3,550	2,340	4,600
13	4,050	4,690	3,730	8,170	8,720	7,140	6,890	6,240	3,820	4,040	4,140	3,160
14	3,430	3,900	3,290	8,170	8,740	7,030	6,690	4,050	3,460	1,150	4,000	3,930
15	3,060	4,300	4,270	3,350	8,590	7,530	6,420	4,290	4,370	2,320	4,950	1,040
16	3,840	3,740	3,170	12,500	8,540	7,280	6,580	4,070	797	4,390	5,050	2,470
17	5,170	4,130	3,860	11,800	8,080	6,380	5,480	6,230	1,540	4,160	5,140	3,170
18	3,950	3,840	4,790	15,100	7,080	6,420	6,990	3,010	5,070	4,620	2,900	3,820
19	4,650	5,800	6,730	13,000	6,760	7,110	5,000	4,120	5,370	3,980	1,710	2,140
20	3,590	4,380	5,240	10,500	6,110	7,520	5,460	6,190	4,990	4,000	1,620	2,850
21	3,380	3,430	6,600	9,400	6,260	6,350	5,200	4,840	3,730	2,510	3,240	2,350
22	3,020	4,190	9,040	8,800	5,710	6,440	6,300	4,790	3,370	1,520	4,050	3,070
23	3,110	4,860	8,430	8,570	7,250	6,900	6,310	5,540	1,790	4,700	4,100	3,300
24	4,230	3,970	7,950	7,590	6,820	6,410	5,930	3,610	741	3,500	4,290	3,300
25	7,400	3,160	6,810	6,820	8,400	6,620	6,880	5,700	5,120	4,520	1,800	3,410
26	7,560	3,440	5,560	6,420	8,410	5,990	6,320	5,950	3,380	3,220	2,050	3,740
27	1,180	3,800	6,240	6,890	8,410	6,480	6,390	5,740	4,090	4,080	5,700	3,420
28	1,940	3,380	4,860	4,280	8,450	7,060	5,140	5,360	4,060	2,240	4,280	3,280
29	1,820	3,290	5,630	6,710	------	8,410	6,560	4,540	4,920	2,000	2,910	3,060
30	1,350	4,050	4,360	5,820	------	8,400	6,570	3,710	1,110	3,350	3,340	2,650
31	1,220	------	6,810	6,880	------	8,290	------	4,530	------	4,010	4,140	------
TOTAL	114,330	122,480	150,630	214,640	205,280	229,380	179,880	158,600	105,798	107,630	107,428	96,370
MEAN	3,688	4,083	4,859	6,924	7,331	7,399	5,996	5,116	3,527	3,472	3,465	3,212
MAX	7,560	5,800	9,040	15,100	9,500	8,670	8,040	7,940	5,370	5,210	5,700	4,840
MIN	1,180	2,620	2,520	2,600	4,060	5,990	3,940	3,010	741	1,150	538	1,040
AC-FT	226,800	242,900	298,800	425,700	407,200	455,000	356,800	314,600	209,900	213,500	213,100	191,100

CAL YR 1972 TOTAL 1,829,641 MEAN 4,999 MAX 17,100 MIN 344 AC-FT 3,629,000
WTR YR 1973 TOTAL 1,792,446 MEAN 4,911 MAX 15,100 MIN 538 AC-FT 3,555,000

11367500 McCLOUD RIVER NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°11'18", long 122°03'52", in NW¼NE¼ sec.34, T.39 N., R.2 W., Siskiyou County, on right bank 0.4 mile downstream from Angel Creek, and 6 miles southeast of McCloud.

DRAINAGE AREA.--358 sq mi.

PERIOD OF RECORD.--April 1931 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,711.2 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--42 years, 922 cfs (668,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,910 cfs Jan. 16 (gage height, 2.82 ft); minimum daily, 753 cfs Dec. 8.
Period of record: Maximum discharge, 11,800 cfs Dec. 21, 1955 (gage heights, 9.42 ft in gage well, 10.7 ft, from floodmarks), from rating curve extended above 8,800 cfs on basis of slope-area measurement of maximum flow; minimum, 524 cfs Nov. 23, 24, 1932.

REMARKS.--Two small diversions above station for irrigation, and one 22-inch pipe line for town of McCloud and millpond. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 843: 1936(M). WSP 1445: 1940(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	788	775	775	820	845	1,650	1,010	1,240	1,060	902	852	818
2	788	775	775	814	840	1,540	1,000	1,230	1,040	898	850	814
3	787	791	776	808	841	1,390	1,000	1,230	1,020	894	847	817
4	786	798	774	798	866	1,290	1,010	1,240	1,010	893	846	815
5	783	786	769	792	889	1,220	1,030	1,210	1,000	890	845	814
6	782	781	770	790	920	1,200	1,060	1,200	999	887	843	814
7	783	786	768	787	926	1,150	1,090	1,210	995	885	841	814
8	783	782	753	785	925	1,110	1,090	1,210	988	884	840	811
9	794	785	755	796	932	1,100	1,110	1,210	982	882	841	807
10	829	788	763	791	992	1,110	1,140	1,200	977	882	839	807
11	887	796	760	796	989	1,160	1,170	1,200	970	882	839	807
12	836	792	763	818	972	1,110	1,200	1,210	965	881	839	807
13	810	811	761	899	946	1,090	1,240	1,230	959	879	836	807
14	808	828	757	922	948	1,060	1,220	1,270	952	876	834	805
15	811	832	758	917	936	1,050	1,220	1,280	940	875	833	802
16	804	863	762	1,630	923	1,050	1,230	1,300	939	873	832	801
17	801	838	773	1,480	916	1,060	1,270	1,300	934	873	830	801
18	795	826	787	1,240	909	1,040	1,250	1,300	928	872	827	801
19	793	818	813	1,120	904	1,040	1,210	1,290	926	873	826	824
20	788	810	833	1,040	897	1,050	1,180	1,250	926	871	826	823
21	788	802	869	1,000	897	1,040	1,170	1,210	923	871	826	803
22	788	798	1,300	962	897	1,020	1,180	1,180	920	869	826	806
23	784	794	1,160	936	896	1,010	1,210	1,170	916	865	826	810
24	781	790	1,050	923	1,010	1,010	1,210	1,210	914	862	826	808
25	781	788	966	910	1,360	1,020	1,230	1,230	914	862	826	801
26	781	782	919	889	1,350	1,030	1,260	1,140	919	862	825	801
27	781	781	900	878	1,320	1,030	1,300	1,110	916	860	820	798
28	781	781	876	872	1,350	1,030	1,320	1,090	915	860	820	794
29	778	778	854	872	------	1,010	1,300	1,090	915	857	820	794
30	775	775	841	865	------	1,020	1,260	1,090	911	855	820	794
31	775	------	829	854	------	1,010	------	1,080	------	853	820	------
TOTAL	24,629	23,930	26,009	28,804	27,396	34,700	35,170	37,410	28,673	27,128	25,821	24,218
MEAN	794	798	839	929	978	1,119	1,172	1,207	956	875	833	807
MAX	887	863	1,300	1,630	1,360	1,650	1,320	1,300	1,060	902	852	824
MIN	775	775	753	785	840	1,010	1,000	1,080	911	853	820	794
AC-FT	48,850	47,470	51,590	57,130	54,340	68,830	69,760	74,200	56,870	53,810	51,220	48,040

CAL YR 1972 TOTAL 330,110 MEAN 902 MAX 2,080 MIN 753 AC-FT 654,800
WTR YR 1973 TOTAL 343,888 MEAN 942 MAX 1,650 MIN 753 AC-FT 682,100

PEAK DISCHARGE (BASE, 1,500 CFS).--Jan. 16 (1645) 1,910 cfs (2.82 ft); Mar. 1 (1615) 1,800 cfs (2.71 ft).

11367720 McCLOUD-IRON CANYON DIVERSION TUNNEL NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°08'06", long 122°04'26", in SE¼SW¼ sec.22, T.38 N., R.2 W., Shasta County, Shasta National Forest, on left bank of Lake McCloud, 8.8 miles southeast of McCloud.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--None. Water-stage recorders on Lake McCloud and Iron Canyon Reservoir used to compute record.

AVERAGE DISCHARGE.--7 years, 1,080 cfs (782,500 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,890 cfs May 20-22, June 1-3, 10, 1967; no flow for several days in 1965-68, 1971.

REMARKS.--Water is diverted from Lake McCloud (see sta 11367740) to Iron Canyon Reservoir (see sta 11363920) and thence into James B. Black powerplant (see sta 11363910) on the Pit River. Diversion began Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	652	717	825	950	1,370	1,590	1,230	1,490	1,190	884	979	792
2	702	745	785	929	1,350	1,590	1,230	1,490	1,090	896	963	808
3	719	781	808	954	1,260	1,590	1,230	1,490	996	889	959	751
4	734	763	788	976	1,140	1,590	1,230	1,490	1,010	887	889	783
5	740	757	796	996	1,040	1,590	1,230	1,480	1,020	887	875	787
6	763	783	794	942	963	1,590	1,280	1,480	999	923	894	796
7	652	728	785	938	950	1,590	1,350	1,480	985	887	933	787
8	556	698	811	926	985	1,580	1,370	1,480	966	864	924	798
9	662	736	781	970	950	1,580	1,370	1,470	931	896	901	790
10	680	711	738	952	1,010	1,580	1,380	1,450	857	966	914	832
11	734	753	745	923	1,090	1,570	1,440	1,470	845	976	864	882
12	765	724	736	899	1,020	1,570	1,440	1,430	864	982	845	871
13	757	753	730	959	1,020	1,560	1,450	1,390	889	968	875	836
14	745	828	652	974	1,040	1,550	1,450	1,380	901	918	866	821
15	732	843	662	962	1,100	1,550	1,450	1,400	931	921	864	769
16	747	861	680	1,000	1,120	1,540	1,460	1,420	885	921	868	804
17	765	913	687	1,070	1,150	1,530	1,460	1,460	856	960	864	821
18	757	811	666	1,190	1,130	1,520	1,470	1,430	913	1,020	859	863
19	757	848	779	1,290	1,130	1,510	1,470	1,390	929	1,010	811	806
20	792	868	777	1,370	1,140	1,500	1,470	1,400	913	1,010	779	819
21	713	798	852	1,460	1,140	1,500	1,460	1,410	941	981	783	810
22	671	817	871	1,500	1,140	1,480	1,460	1,390	887	949	794	798
23	662	736	936	1,490	1,190	1,470	1,460	1,380	887	952	815	767
24	664	843	947	1,470	1,210	1,460	1,460	1,340	885	982	834	785
25	680	757	978	1,480	1,320	1,450	1,460	1,340	901	1,050	800	821
26	736	767	962	1,420	1,430	1,400	1,460	1,330	911	1,030	777	861
27	732	796	1,020	1,420	1,520	1,340	1,470	1,300	941	1,020	819	852
28	715	808	1,020	1,310	1,580	1,290	1,480	1,280	933	987	788	863
29	678	802	1,050	1,370	------	1,250	1,510	1,240	942	973	815	815
30	736	877	1,000	1,400	------	1,250	1,510	1,180	892	971	804	783
31	715	------	1,020	1,400	------	1,210	------	1,170	------	968	834	------
TOTAL	22,113	23,622	25,681	35,890	32,488	46,370	42,190	43,330	28,090	29,528	26,589	24,371
MEAN	713	787	828	1,158	1,160	1,496	1,406	1,398	936	953	858	812
MAX	792	913	1,050	1,500	1,580	1,590	1,510	1,490	1,190	1,050	979	882
MIN	556	698	652	899	950	1,210	1,230	1,170	845	864	777	751
AC-FT	43,860	46,850	50,940	71,190	64,440	91,970	83,680	85,950	55,720	58,570	52,740	48,340

CAL YR 1972 TOTAL 356,017 MEAN 973 MAX 1,490 MIN 466 AC-FT 706,200
WTR YR 1973 TOTAL 380,262 MEAN 1,042 MAX 1,590 MIN 556 AC-FT 754,200

11367760 McCLOUD RIVER BELOW McCLOUD DAM, NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°07'44", long 122°04'08", in SW¼NE¼ sec.27, T.38 N., R.2 W., Shasta County, Shasta National Forest, on left bank 0.1 mile downstream from Lizard Creek, 0.6 mile downstream from McCloud Dam, and 9 miles southeast of McCloud.

DRAINAGE AREA.--404 sq mi.

PERIOD OF RECORD.--April 1966 to current year (low flow only).

GAGE.--Water-stage recorder. Datum of gage is 2,401.76 ft above mean sea level (levels by Pacific Gas and Electric Co.).

REMARKS.--Flow regulated by Lake McCloud (see sta 11367740) since November 1965. Most of McCloud River runoff is diverted from reservoir through tunnel to Iron Canyon Reservoir (see sta 11363920) in Pit River basin. This station records fishwater release. Flow is computed up to 400 cfs. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	208	197	125	108	1,030	87	60	168	193	180	187
2	209	212	198	128	108	612	94	68	170	193	180	189
3	209	199	195	130	108	409	97	73	172	190	178	189
4	209	190	198	130	81	237	94	78	176	190	180	190
5	209	199	201	133	57	115	100	83	174	191	180	191
6	209	205	200	135	55	57	100	86	178	191	179	191
7	209	206	199	137	47	53	98	89	176	190	178	190
8	208	205	200	138	39	50	96	94	179	190	179	190
9	209	203	203	135	38	49	94	96	180	191	182	189
10	212	201	201	137	42	48	82	99	179	193	181	189
11	190	180	201	131	42	47	39	102	181	186	180	192
12	191	185	199	86	41	53	39	102	181	180	181	189
13	206	170	201	71	40	55	39	103	182	180	179	188
14	214	142	205	72	40	64	39	100	179	178	181	188
15	214	136	205	74	40	61	39	100	181	180	181	190
16	213	73	180	125	40	62	39	121	182	180	182	193
17	212	123	162	145	39	68	38	134	182	180	182	195
18	207	146	142	75	39	76	38	137	184	179	180	195
19	205	150	110	71	39	78	44	140	184	178	180	181
20	205	161	100	60	53	78	55	144	188	178	180	175
21	205	168	84	56	53	78	62	150	184	181	180	187
22	206	176	79	60	53	79	65	151	185	177	178	193
23	208	181	74	59	69	75	61	154	185	179	178	193
24	208	185	72	49	49	72	61	150	185	179	178	193
25	208	189	71	58	63	69	56	153	185	178	178	192
26	208	192	70	73	57	67	47	158	185	179	176	192
27	208	192	70	81	55	66	38	162	186	179	176	191
28	208	194	90	89	58	69	38	164	191	180	180	193
29	208	196	102	91	------	74	41	167	192	180	181	197
30	208	195	111	96	------	76	52	167	192	180	183	196
31	208	------	118	103	------	84	------	167	------	179	183	------
TOTAL	6,430	5,362	4,638	3,053	1,553	4,111	1,872	3,752	5,446	5,682	5,574	5,708
MEAN	207	179	150	98.5	55.5	133	62.4	121	182	183	180	190
MAX	214	212	205	145	108	1,030	100	167	192	193	183	197
MIN	190	73	70	49	38	47	38	60	168	177	176	175
AC-FT	12,750	10,640	9,200	6,060	3,080	8,150	3,710	7,440	10,800	11,270	11,060	11,320

CAL YR 1972 TOTAL 50,572.0 MEAN 138 MAX 215 MIN 8.0 AC-FT 100,300
WTR YR 1973 TOTAL 53,181.0 MEAN 146 MAX 1,030 MIN 38 AC-FT 105,500

11367800 McCLOUD RIVER AT AH-DI-NA, NEAR McCLOUD, CALIF.

LOCATION.--Lat 41°06'39", long 122°05'42", in NE¼SW¼ sec.33, T.38 N., R.2 W., Shasta County, Shasta National Forest, on right bank at Ah-Di-Na, 1.8 miles downstream from Squirrel Creek, 3.9 miles downstream from McCloud Dam, and 9.6 miles south of McCloud.

DRAINAGE AREA.--427 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,160 ft (from topographic map).

AVERAGE DISCHARGE (adjusted for diversion to Iron Canyon Reservoir and change in contents in Lake McCloud).--9 years, 1,322 cfs (957,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,970 cfs Mar. 1 (gage height, 5.34 ft); minimum daily, 171 cfs Jan. 4, 6.
Period of record: Maximum discharge prior to construction of McCloud Dam, 9,660 cfs Dec. 22, 1964 (gage height, 9.43 ft in gage well, from floodmarks), from rating curve extended above 2,500 cfs; minimum daily, 86 cfs Oct. 1-26, 1964. Maximum discharge since construction of McCloud Dam in 1965, 17,500 cfs Jan. 23, 1970 (gage height, 12.94 ft), from rating curve extended above 2,500 cfs; minimum daily, 41 cfs Dec. 18-20, 1971 (caused by valve malfunction at dam).
Flood of Dec. 21, 1955, reached a stage of 12.5 ft (discharge, 16,800 cfs, from rating curve extended above 3,000 cfs).

REMARKS.--Flow regulated by Lake McCloud 3.9 miles upstream (see sta 11367740) since November 1965. Diversion to Iron Canyon Reservoir (see sta 11363920) through McCloud River diversion tunnel (see sta 11367720) started Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	216	220	176	184	1,600	189	189	220	225	201	207
2	216	220	220	177	181	1,320	190	189	221	225	201	209
3	216	225	219	175	179	830	191	190	220	223	200	209
4	216	214	219	171	206	569	191	194	223	222	201	209
5	216	216	221	174	390	389	196	191	221	222	201	210
6	216	219	220	171	318	304	195	191	224	223	201	210
7	216	223	219	175	283	271	190	189	222	221	199	210
8	216	221	219	176	262	250	190	191	221	221	200	210
9	222	221	221	172	266	234	192	191	223	221	203	210
10	243	223	219	175	363	238	195	192	221	222	202	210
11	271	219	219	175	365	250	209	193	223	212	201	210
12	225	217	216	188	330	236	221	192	223	205	202	209
13	228	226	218	274	289	218	231	195	223	205	199	209
14	234	218	222	281	282	202	220	193	220	201	202	209
15	236	234	222	342	266	190	211	192	220	204	202	208
16	233	242	198	1,440	237	193	205	210	223	204	202	208
17	231	212	185	843	212	190	204	221	221	203	203	208
18	223	219	188	649	194	194	195	223	223	202	201	207
19	219	219	186	487	179	192	187	221	222	200	201	210
20	217	219	185	357	184	190	192	221	225	200	201	199
21	216	217	245	288	180	192	190	224	222	205	201	205
22	217	219	703	248	176	192	194	221	221	199	198	214
23	219	219	404	219	189	192	194	220	220	201	198	216
24	218	218	302	189	325	193	195	220	220	201	199	217
25	217	219	241	181	763	195	196	217	220	200	199	214
26	217	221	204	183	609	190	194	220	219	201	197	212
27	217	219	185	184	553	192	192	221	219	201	197	210
28	216	220	181	183	552	191	195	220	224	201	199	211
29	216	221	180	183	------	191	188	222	226	202	200	215
30	216	219	178	183	------	190	191	221	226	202	203	215
31	216	------	178	183	------	190	------	219	------	201	202	------
TOTAL	6,889	6,615	7,237	9,004	8,517	10,168	5,923	6,393	6,656	6,475	6,216	6,300
MEAN	222	221	233	290	304	328	197	206	222	209	201	210
MAX	271	242	703	1,440	763	1,600	231	224	226	225	203	217
MIN	210	212	178	171	176	190	187	189	219	199	197	199
AC-FT	13,660	13,120	14,350	17,860	16,890	20,170	11,750	12,680	13,200	12,840	12,330	12,500
MEAN a	963	1,020	1,138	1,458	1,619	1,711	1,640	1,629	1,190	1,068	998	970
AC-FT a	59,240	60,720	70,000	89,680	89,920	105,200	97,580	100,200	70,800	65,660	61,390	57,720

CAL YR 1972 TOTAL 73,241 MEAN 200 MAX 999 MIN 42 AC-FT 145,300 MEAN a 1,184 AC-FT a 859,400
WTR YR 1973 TOTAL 86,393 MEAN 237 MAX 1,600 MIN 171 AC-FT 171,400 MEAN a 1,282 AC-FT a 928,100

a Adjusted for diversion to Iron Canyon Reservoir and change in contents in McCloud Reservoir.

11368000 McCLOUD RIVER ABOVE SHASTA LAKE, CALIF.

LOCATION.--Lat 40°57'30", long 122°13'07", unsurveyed, T.36 N., R.3 W., Shasta County, on right bank just upstream from Shasta Lake, 0.2 mile downstream from Big Bollibokka Creek, and 11.3 miles east of Lamoine.

DRAINAGE AREA.--604 sq mi.

PERIOD OF RECORD.--October 1945 to current year. Prior to 1950, published as "above Shasta Reservoir."

GAGE.--Water-stage recorder. Datum of gage is 1,100.00 ft above mean sea level (levels by Bureau of Reclamation).

AVERAGE DISCHARGE (prior to regulation by Lake McCloud and diversion to Pit River basin).--20 years (1945-65), 1,699 cfs (1,230,000 acre-ft per year); 8 years (1965-73), 800 cfs (579,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,100 cfs Jan. 16 (gage height, 19.05 ft); minimum daily, 267 cfs Aug. 29.
Period of record: Maximum discharge 45,200 cfs Dec. 22, 1955 (gage height, 28.20 ft), from rating curve extended above 15,000 cfs on basis of slope-area measurement of maximum flow; minimum daily, 109 cfs Dec. 16-20, 1971.

REMARKS.--Flow partially regulated by Lake McCloud (see sta 11367740) since Nov. 3, 1965. Diversions to Iron Canyon Reservoir (see sta 11363920) began Dec. 1, 1965. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1953(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	308	416	589	772	5,880	784	569	426	342	279	271
2	301	309	412	567	744	4,840	761	560	420	343	277	273
3	292	395	425	543	729	3,210	733	554	417	340	275	274
4	294	454	408	514	1,320	2,410	722	551	411	334	277	274
5	294	367	396	493	3,970	1,920	718	538	405	331	278	276
6	291	348	403	478	2,660	1,790	729	530	402	332	278	278
7	292	368	391	461	2,130	1,660	734	521	400	327	275	275
8	294	361	378	462	1,950	1,530	724	498	394	320	272	277
9	327	378	372	474	1,840	1,410	715	508	393	318	273	278
10	449	437	368	490	2,910	1,400	720	502	392	317	274	276
11	827	638	361	719	3,150	1,380	735	496	390	317	274	276
12	460	513	375	1,500	2,650	1,280	752	491	389	303	273	273
13	383	655	366	2,450	2,270	1,180	779	490	387	301	275	271
14	386	1,030	366	2,060	2,260	1,080	749	493	385	299	271	272
15	412	937	367	1,910	2,170	1,010	728	489	380	301	274	272
16	397	1,760	372	8,740	1,830	966	711	492	379	301	272	273
17	380	1,060	491	5,200	1,560	978	708	508	378	298	275	273
18	357	849	693	5,690	1,370	912	678	502	374	293	272	274
19	339	841	1,130	3,860	1,230	936	649	495	367	289	272	315
20	332	755	1,090	2,480	1,130	1,030	633	487	364	288	270	380
21	325	657	1,260	1,870	1,060	1,130	621	476	361	294	270	293
22	321	584	3,640	1,490	1,000	1,110	612	465	355	287	271	290
23	318	534	2,320	1,250	968	1,060	611	458	355	288	270	336
24	315	498	1,740	1,110	1,910	1,020	607	487	355	288	271	318
25	313	468	1,320	1,000	4,760	1,010	607	476	351	285	277	308
26	313	452	1,060	913	3,710	986	610	456	348	284	273	294
27	308	440	931	849	3,480	957	621	450	346	282	270	285
28	308	431	811	800	3,550	911	620	437	344	282	271	285
29	306	422	727	793	------	871	602	434	348	283	267	285
30	304	417	672	779	------	863	587	433	345	281	271	285
31	304	------	628	801	------	823	------	435	------	279	269	------
TOTAL	10,855	17,666	24,689	51,335	59,083	47,543	20,560	15,281	11,361	9,427	8,466	8,610
MEAN	350	589	796	1,656	2,110	1,534	685	493	379	304	273	287
MAX	827	1,760	3,640	8,740	4,760	5,880	784	569	426	343	279	380
MIN	291	308	361	461	729	823	587	433	344	279	267	271
AC-FT	21,530	35,040	48,970	101,800	117,200	94,300	40,780	30,310	22,530	18,700	16,790	17,080

CAL YR 1972 TOTAL 211,254 MEAN 577 MAX 4,470 MIN 160 AC-FT 419,000
WTR YR 1973 TOTAL 284,876 MEAN 780 MAX 8,740 MIN 267 AC-FT 565,100

11370000 SHASTA LAKE NEAR REDDING, CALIF.

LOCATION.--Lat 40°43'08", long 122°25'12", in SE¼NW¼ sec.15, T.33 N., R.5 W., Shasta County, in Shasta Dam on Sacramento River near right bank, 2 miles downstream from Squaw Creek, and 9.5 miles north of Redding.

DRAINAGE AREA.--6,421 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--November 1942 to current year. Prior to 1950, published as Shasta Reservoir near Redding.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Prior to July 10, 1944, nonrecording gage at various sites near dam at same datum.

EXTREMES.--Current year: Maximum contents, 4,370,000 acre-ft May 27, 28 (elevation, 1,060.80 ft); minimum, 3,130,000 acre-ft Dec. 16 (elevation, 1,013.38 ft).
Period of record: Maximum contents, 4,550,300 acre-ft May 19, 1967 (elevation, 1,066.94 ft); minimum since reservoir first filled, 2,144,900 acre-ft Nov. 22, 1961 (elevation, 965.54 ft).

REMARKS.--Reservoir is formed by concrete gravity-type dam completed in 1949; regulation began Dec. 30, 1943. Usable capacity, 4,436,000 acre-ft between elevations 737.75 ft (bottom of lowest set of river outlets) and 1,067.0 ft (top of flashboard gates on drum-type spillway gates) above mean sea level. Dead storage, 115,700 acre-ft. Installation of flashboard gates on top of drum gates completed Nov. 12, 1964. Gates increased elevation to 1,067.0 ft, total capacity, 4,552,000 acre-ft. All water passes down the Sacramento River, most of which is through powerplant at dam. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

960	2,047,000	1,010	3,052,000
970	2,226,000	1,020	3,287,000
980	2,416,000	1,030	3,534,000
990	2,617,000	1,050	4,063,000
1,000	2,828,000	1,067	4,552,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,263	3,277	3,223	3,287	3,286	3,519	4,002	4,299	4,365	4,162	3,803	3,489
2	3,264	3,275	3,211	3,279	3,284	3,540	4,011	4,300	4,362	4,154	3,793	3,481
3	3,263	3,278	3,206	3,266	3,283	3,554	4,017	4,304	4,359	4,147	3,785	3,472
4	3,264	3,281	3,198	3,256	3,304	3,563	4,023	4,308	4,353	4,139	3,769	3,467
5	3,264	3,284	3,193	3,247	3,338	3,569	4,029	4,315	4,348	4,132	3,757	3,464
6	3,264	3,286	3,186	3,235	3,353	3,587	4,038	4,320	4,342	4,124	3,748	3,460
7	3,260	3,286	3,180	3,224	3,361	3,600	4,044	4,322	4,337	4,110	3,740	3,455
8	3,254	3,288	3,174	3,216	3,366	3,609	4,052	4,321	4,333	4,094	3,730	3,446
9	3,255	3,289	3,167	3,216	3,373	3,618	4,063	4,320	4,327	4,084	3,720	3,438
10	3,260	3,296	3,159	3,215	3,398	3,629	4,076	4,322	4,321	4,075	3,712	3,433
11	3,270	3,304	3,151	3,230	3,414	3,639	4,091	4,323	4,316	4,064	3,700	3,430
12	3,274	3,306	3,149	3,259	3,415	3,645	4,103	4,330	4,312	4,050	3,688	3,427
13	3,276	3,321	3,146	3,284	3,403	3,655	4,116	4,339	4,306	4,038	3,680	3,421
14	3,277	3,338	3,138	3,300	3,395	3,666	4,128	4,345	4,298	4,021	3,671	3,417
15	3,280	3,352	3,134	3,315	3,385	3,680	4,140	4,350	4,292	4,006	3,664	3,408
16	3,282	3,376	3,130	3,438	3,378	3,692	4,152	4,353	4,280	3,996	3,656	3,401
17	3,286	3,381	3,133	3,474	3,370	3,708	4,161	4,359	4,269	3,985	3,648	3,395
18	3,288	3,382	3,140	3,524	3,365	3,722	4,173	4,360	4,265	3,975	3,637	3,391
19	3,290	3,383	3,157	3,524	3,361	3,745	4,182	4,360	4,261	3,964	3,624	3,386
20	3,289	3,379	3,168	3,502	3,358	3,769	4,192	4,364	4,257	3,953	3,610	3,380
21	3,288	3,369	3,189	3,469	3,357	3,795	4,200	4,366	4,251	3,941	3,598	3,372
22	3,288	3,356	3,228	3,427	3,352	3,817	4,212	4,366	4,249	3,925	3,588	3,368
23	3,288	3,344	3,253	3,379	3,347	3,839	4,224	4,366	4,232	3,915	3,579	3,364
24	3,288	3,329	3,275	3,344	3,362	3,858	4,235	4,366	4,218	3,902	3,571	3,357
25	3,293	3,313	3,289	3,327	3,405	3,878	4,247	4,367	4,214	3,891	3,557	3,351
26	3,300	3,298	3,298	3,311	3,442	3,895	4,257	4,369	4,207	3,877	3,543	3,345
27	3,298	3,285	3,307	3,305	3,473	3,913	4,269	4,370	4,201	3,866	3,536	3,339
28	3,295	3,269	3,310	3,296	3,494	3,930	4,279	4,370	4,193	3,852	3,528	3,332
29	3,290	3,252	3,310	3,293	------	3,948	4,290	4,369	4,187	3,837	3,516	3,324
30	3,286	3,237	3,304	3,288	------	3,968	4,298	4,366	4,174	3,824	3,508	3,317
31	3,280	------	3,300	3,286	------	3,986	------	4,365	------	3,813	3,500	------
MAX	3,300	3,383	3,310	3,524	3,494	3,986	4,298	4,370	4,365	4,162	3,803	3,489
MIN	3,254	3,237	3,130	3,215	3,283	3,519	4,002	4,299	4,174	3,813	3,500	3,317
(a)	1,019.71	1,017.92	1,020.56	1,019.95	1,028.43	1,047.18	1,058.30	1,060.64	1,053.97	1,040.77	1,028.67	1,021.23
(b)	+13.0	-43.0	+63.0	-14.0	+208.0	+492.0	+312.0	+67.0	-191.0	-361.0	-313.0	-183.0
(c)	5,370	2,120	1,010	1,550	2,370	4,380	8,570	12,440	13,890	15,770	13,480	9,130

CAL YR 1972 b +94.0
WTR YR 1973 b +50.0

a Elevation, in feet, at end of month.
b Change in contents, in thousands of acre-feet.
c Evaporation, in acre-feet.

11370500 SACRAMENTO RIVER AT KESWICK, CALIF.

LOCATION.--Lat 40°36'04", long 122°26'36", in SW¼NW¼ sec.28, T.32 N., R.5 W., Shasta County, 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.--6,468 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 479.81 ft above mean sea level. 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. Aug. 20, 1960, to July 3, 1973, auxiliary water-stage recorder at city of Redding pumping plant 2.1 miles downstream.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation in Shasta Lake and transbasin diversion into Keswick Reservoir).--35 years, 8,541 cfs (6,188,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 41,200 cfs Jan. 19 (gage height, 25.37 ft); minimum daily, 5,060 cfs Nov. 7.
Period of record: Maximum discharge, 186,000 cfs Feb. 23, 1940 (gage height, 47.2 ft, site and datum then in use), from rating curve extended above 75,000 cfs on basis of peak discharge at Kennet plus 4,000 cfs estimated inflow; minimum observed, 2,730 cfs Aug. 22, 1939. Maximum discharge since construction of Shasta Dam in 1944, 78,900 cfs Jan. 24, 1970 (gage height, 32.22 ft); minimum, 154 cfs May 15, 1948.

REMARKS.--Records good. Flow regulated by Shasta Dam beginning Dec. 30, 1943 (see sta 11370000). Diurnal fluctuations from Shasta powerplant re-regulated by Keswick Reservoir (capacity, 4,170 acre-ft between normal operation elevations 579.0 and 586.0 ft) and powerplant. No diversion for irrigation between Shasta Dam and station at Keswick. Since December 1963, water is released from Whiskeytown Lake (see sta 11371700) at lat 40°37'03", long 122°31'31", through a tunnel to Spring Creek powerplant (see sta 11371600) and then into Keswick Reservoir. See schematic diagram of Pit and McCloud River basins. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,640	6,040	12,000	12,000	14,100	19,300	6,100	7,930	9,470	10,900	11,500	10,000
2	6,610	6,040	11,000	12,000	14,100	18,600	6,080	7,010	9,430	10,900	11,500	9,580
3	6,590	6,040	10,000	12,000	14,000	18,500	6,080	7,060	9,420	11,400	11,400	9,130
4	6,150	6,020	9,070	12,000	12,300	18,300	6,070	7,930	9,420	11,400	11,400	9,150
5	6,090	5,950	8,650	12,000	13,000	16,800	6,070	7,970	9,440	11,300	11,000	9,150
6	6,090	5,160	8,640	11,500	14,300	15,400	6,090	7,960	9,440	11,400	11,000	9,140
7	6,100	5,060	8,630	11,000	16,200	15,200	6,060	8,000	9,420	11,800	11,600	9,090
8	6,100	5,310	8,620	10,500	16,300	15,300	6,070	7,980	9,430	11,800	11,000	9,110
9	6,100	6,220	8,630	10,100	18,000	14,300	6,060	7,970	9,420	11,800	11,000	9,130
10	6,110	6,200	8,630	10,200	18,600	14,200	6,070	7,980	9,440	11,800	11,000	9,160
11	6,100	6,270	8,610	10,400	24,400	14,200	6,060	8,890	9,450	11,900	10,900	9,160
12	6,090	6,180	7,700	10,400	27,100	14,100	6,070	8,960	9,470	12,300	10,300	9,140
13	6,090	6,300	7,640	13,900	30,500	12,100	6,090	8,880	9,920	12,300	11,000	9,140
14	6,070	6,890	7,660	13,900	30,300	10,000	6,080	8,920	10,400	12,300	11,000	8,960
15	6,070	8,640	7,680	14,000	27,700	8,210	6,090	9,000	10,400	12,300	11,000	8,960
16	6,090	7,190	7,670	11,500	24,400	7,120	6,090	10,400	10,400	12,300	11,000	8,980
17	6,080	11,100	7,740	27,100	22,000	6,100	6,050	10,400	10,400	12,300	11,000	8,990
18	6,080	13,100	7,770	34,800	18,500	6,020	6,040	10,300	10,400	12,300	11,000	8,990
19	6,090	13,000	7,720	40,600	16,800	5,240	6,040	10,300	10,400	12,300	11,000	9,040
20	6,070	13,000	7,680	40,400	15,300	5,180	6,050	10,300	10,400	12,300	11,000	9,020
21	6,080	13,000	7,740	40,400	14,000	5,240	6,060	10,300	10,400	12,300	11,000	9,030
22	6,080	13,800	7,760	40,100	14,000	5,220	6,050	10,400	10,400	12,300	11,000	9,040
23	6,060	13,900	7,730	40,200	14,100	5,150	6,020	10,300	11,100	12,300	11,000	9,060
24	6,060	13,900	7,720	32,600	14,100	5,180	6,040	10,400	10,400	12,300	11,000	9,060
25	6,070	13,800	7,700	21,400	12,100	5,200	6,970	10,400	10,400	12,300	11,000	9,060
26	6,070	13,800	7,700	19,800	12,200	5,150	7,020	10,400	10,400	12,300	11,100	9,070
27	6,060	13,800	7,730	14,500	14,300	5,230	7,040	10,400	10,400	12,300	11,000	9,110
28	6,060	13,900	8,690	14,100	18,800	6,060	7,060	10,300	10,900	12,300	11,000	9,100
29	6,050	13,800	10,100	14,100	------	6,100	7,960	10,400	10,900	12,300	11,000	9,130
30	6,040	12,900	12,000	14,100	------	6,120	7,970	10,400	10,900	12,300	10,100	9,170
31	6,040	------	12,100	14,100	------	6,100	------	10,300	------	12,300	10,100	------
TOTAL	190,080	286,310	268,710	595,700	501,500	314,920	189,600	288,140	302,170	372,400	340,300	273,850
MEAN	6,132	9,544	8,668	19,220	17,910	10,160	6,320	9,295	10,070	12,010	10,980	9,128
MAX	6,640	13,900	12,100	40,600	30,500	19,300	7,970	10,400	11,100	12,300	11,500	10,000
MIN	6,040	5,060	7,640	10,100	12,100	5,150	6,020	7,010	9,420	10,900	10,100	8,960
AC-FT	377,000	567,900	533,000	1,182M	994,700	624,600	376,100	571,500	599,400	738,700	675,000	543,200
MEAN a	4,758	7,635	8,661	17,264	18,931	14,746	9,412	7,820	4,573	3,799	3,631	3,859
AC-FT a	292,600	454,300	532,500	1,062M	1,051M	906,700	560,100	480,800	272,100	233,600	223,300	229,600

CAL YR 1972 TOTAL 3,346,160 MEAN 9,143 MAX 15,300 MIN 5,060 AC-FT 6,637,000 MEAN a 7,557 AC-FT a 5,486,000
WTR YR 1973 TOTAL 3,923,680 MEAN 10,750 MAX 40,600 MIN 5,060 AC-FT 7,783,000 MEAN a 8,700 AC-FT a 6,299,000

a Adjusted for change in contents and evaporation in Shasta Lake and transbasin diversion into Keswick Reservoir.

SACRAMENTO RIVER BASIN

11371000 CLEAR CREEK AT FRENCH GULCH, CALIF.

LOCATION.--Lat 40°41'42", long 122°38'08", (unsurveyed), Shasta County, on right bank 1,200 ft downstream from French Gulch, 0.3 mile south of town of French Gulch, and 15 miles northwest of Redding.

DRAINAGE AREA.--115 sq mi.

PERIOD OF RECORD.--July 1950 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,320.60 ft above mean sea level. Prior to Dec. 28, 1959, water-stage recorder at datum 3.00 ft higher.

AVERAGE DISCHARGE.--23 years, 215 cfs (155,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,400 cfs Jan. 16 (gage height, 9.79 ft); minimum daily, 9.5 cfs Sept. 11.
Period of record: Maximum discharge, 7,600 cfs Dec. 22, 1964 (gage height, 13.70 ft), from rating curve extended above 3,200 cfs; minimum, 3.9 cfs Sept. 6-8, 1955.

REMARKS.--Records good. No large diversion above station. See schematic diagram of Pit and McCloud River basins.

REVISIONS.--WSP 1285: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	97	192	347	1,470	384	198	87	30	13	11
2	14	27	95	182	332	1,230	361	191	79	29	13	11
3	13	33	101	172	325	1,080	343	187	75	29	12	11
4	12	115	97	161	622	938	334	184	72	26	12	11
5	13	94	91	151	1,310	827	338	177	70	25	12	11
6	13	64	91	143	1,090	913	351	170	68	24	12	12
7	12	75	85	136	1,040	917	354	164	65	24	13	12
8	13	86	70	135	1,010	882	339	160	62	23	12	12
9	20	130	58	151	927	830	332	155	60	22	12	11
10	30	210	56	162	1,290	788	333	151	59	21	12	9.7
11	105	520	58	515	1,200	740	336	146	58	21	12	9.5
12	82	165	56	937	1,020	666	332	142	58	20	11	9.9
13	67	320	57	1,160	856	601	338	138	57	20	9.8	10
14	58	800	59	988	865	541	315	136	57	18	9.8	11
15	110	1,620	68	845	894	496	300	132	57	17	9.8	12
16	138	840	75	2,630	796	467	293	127	56	17	10	11
17	90	520	173	1,930	698	447	282	121	56	18	9.8	11
18	60	330	332	2,720	618	419	270	116	55	18	9.9	12
19	46	290	670	1,830	556	477	258	112	50	18	10	16
20	39	250	638	1,210	504	666	246	109	45	19	10	31
21	35	216	548	898	464	669	237	106	41	21	11	21
22	33	189	752	692	435	621	230	104	40	20	11	23
23	32	166	587	572	410	584	231	103	40	18	12	33
24	29	148	507	505	1,210	559	229	113	39	17	12	26
25	28	134	412	455	2,270	558	227	111	38	16	13	23
26	28	122	348	405	2,100	548	228	102	36	15	14	19
27	28	118	323	368	2,050	523	233	96	34	14	13	18
28	27	114	287	342	1,800	482	230	90	32	14	13	17
29	27	107	255	355	------	443	220	85	31	13	12	16
30	26	101	230	364	------	448	208	84	31	13	12	16
31	26	------	209	364	------	414	------	89	------	13	11	------
TOTAL	1,269	7,930	7,485	21,670	27,039	21,244	8,712	4,099	1,608	613	359.1	457.1
MEAN	40.9	264	241	699	966	685	290	132	53.6	19.8	11.6	15.2
MAX	138	1,620	752	2,720	2,270	1,470	384	198	87	30	14	33
MIN	12	26	56	135	325	414	208	84	31	13	9.8	9.5
AC-FT	2,520	15,730	14,850	42,980	53,630	42,140	17,280	8,130	3,190	1,220	712	907

CAL YR 1972 TOTAL 53,774.3 MEAN 147 MAX 1,620 MIN 5.3 AC-FT 106,700
WTR YR 1973 TOTAL 102,485.2 MEAN 281 MAX 2,720 MIN 9.5 AC-FT 203,300

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-15	unknown	8.66	2,490	1-18	1100	9.62	3,260
1-16	1200	9.79	3,400	2-25	0230	8.58	2,440

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CALIF.

LOCATION.--Lat 40°38'49", long 122°37'34", (unsurveyed), Shasta County, at powerplant 1.6 miles downstream from Mill Creek, and 3.8 miles south of French Gulch.

PERIOD OF RECORD.--April 1963 to current year.

GAGE.--Recorded powerplant output.

AVERAGE DISCHARGE.--10 years, 1,700 cfs (1,232,000 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 3,910 cfs Feb. 11, 1970; no flow for several days in 1963, 1966, 1969, 1972.

REMARKS.--Water is diverted from Trinity River at NW¼SE¼ sec.8, T.33 N., R.8 W., through a tunnel to powerplant and then into Whiskeytown Lake (see sta 11371700). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,260	1,390	338	374	828	371	2,830	427	2,250	2,530	2,490	2,520
2	1,490	852	369	379	831	320	2,840	350	1,940	2,530	2,480	2,540
3	1,490	755	375	456	883	270	2,840	383	1,730	2,510	2,490	2,520
4	1,390	743	328	403	1,320	264	2,840	350	1,740	2,520	2,490	2,480
5	1,390	775	337	390	1,340	320	2,850	346	1,730	2,520	2,480	2,480
6	1,390	777	329	388	1,320	319	2,880	354	2,210	2,630	2,480	1,880
7	1,390	775	330	393	1,370	422	1,840	420	2,300	2,520	2,480	1,820
8	1,490	776	350	398	1,420	675	1,820	356	2,310	2,520	2,480	1,870
9	1,490	777	351	392	1,840	1,240	1,880	351	2,310	2,520	2,480	1,820
10	1,480	777	351	385	2,320	2,590	133	1,040	2,550	2,520	2,490	1,880
11	1,590	779	352	398	1,400	3,080	808	3,280	2,550	2,520	2,460	1,850
12	1,580	301	861	776	1,400	3,080	1,770	3,280	2,560	2,530	2,510	1,880
13	1,390	365	833	595	1,400	2,760	1,840	3,310	2,550	2,530	2,500	1,910
14	1,390	302	834	457	1,400	1,730	1,840	3,300	2,550	2,530	2,570	1,910
15	1,390	432	838	452	1,410	1,900	1,840	3,300	2,550	2,510	2,530	1,810
16	1,300	534	839	598	1,400	1,790	1,760	3,300	2,550	2,510	2,420	1,770
17	1,300	385	840	965	1,400	2,570	2,400	3,290	2,550	2,520	2,500	1,670
18	1,300	372	843	759	1,400	2,560	2,290	3,290	2,550	2,490	2,500	1,700
19	1,300	375	880	695	1,380	2,560	2,290	3,290	2,520	2,400	2,530	1,820
20	1,300	374	993	468	1,380	2,570	2,290	3,290	2,530	2,600	2,530	1,770
21	1,300	367	1,090	425	1,250	2,690	2,290	3,290	2,530	2,410	2,580	1,760
22	1,300	366	1,090	426	1,260	2,690	2,300	3,290	2,530	2,420	2,540	1,950
23	1,310	364	1,010	357	1,260	2,580	2,330	3,250	2,490	2,480	2,460	1,980
24	1,390	368	1,010	356	1,260	2,580	2,330	3,290	2,530	2,420	2,490	1,770
25	1,490	371	1,010	366	1,290	2,580	2,320	3,290	2,530	2,460	2,280	1,490
26	1,490	368	857	357	1,480	2,600	2,310	3,290	2,530	2,460	148	1,760
27	1,490	369	877	363	734	2,680	2,130	3,290	2,500	2,500	2,400	1,770
28	1,490	367	865	356	370	2,680	2,300	3,290	2,540	2,500	2,580	1,770
29	1,490	367	850	364	------	2,680	2,320	3,290	2,530	2,500	2,520	1,760
30	1,490	336	858	357	------	2,680	2,270	3,290	2,530	2,560	2,550	1,760
31	1,390	------	374	815	------	2,680	------	3,290	------	2,490	2,560	------
TOTAL	45,730	16,259	21,462	14,663	36,346	60,511	64,781	73,457	71,770	77,660	74,998	57,670
MEAN	1,475	542	692	473	1,298	1,952	2,159	2,370	2,392	2,505	2,419	1,922
MAX	3,260	1,390	1,090	965	2,320	3,080	2,880	3,310	2,560	2,630	2,580	2,540
MIN	1,300	301	328	356	370	264	133	346	1,730	2,400	148	1,490
AC-FT	90,710	32,250	42,570	29,080	72,090	120,000	128,500	145,700	142,400	154,000	148,800	114,400

CAL YR 1972 TOTAL 571,404.00 MEAN 1,561 MAX 3,360 MIN .0 AC-FT 1,133,000
WTR YR 1973 TOTAL 615,307.00 MEAN 1,686 MAX 3,310 MIN 133 AC-FT 1,220,000

11371600 SPRING CREEK POWERPLANT AT KESWICK, CALIF.

LOCATION.--Lat 40°37'41", long 122°27'59", in NE¼SE¼ sec.18, T.32 N., R.5 W., Shasta County, at powerplant on Spring Creek, 0.4 mile northwest of Keswick, and 4.9 miles northwest of Redding.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Discharge computed from powerplant output.

EXTREMES.--Period of record: Maximum daily discharge, 4,700 cfs Jan. 21, 1971; minimum daily, 10 cfs Dec. 15, 1963.

REMARKS.--Water is released from Whiskeytown Lake (see sta 11371700) at lat 40°37'03", long 122°31'31", through a tunnel to powerplant and then into Keswick Reservoir. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,580	1,390	402	588	1,370	2,990	3,030	769	2,580	2,690	2,500	2,560
2	1,810	865	393	569	1,420	4,510	1,780	826	2,260	2,830	2,500	2,680
3	1,800	845	404	681	1,680	4,480	1,760	652	2,120	3,510	2,500	2,640
4	1,530	839	439	588	1,940	4,360	1,760	821	2,100	3,520	2,510	2,650
5	1,520	873	449	689	3,840	2,880	1,760	823	1,570	3,520	2,520	2,640
6	1,370	878	441	688	3,850	4,340	1,900	796	1,570	3,090	2,500	2,640
7	1,360	844	482	656	3,840	4,350	1,890	721	2,390	2,710	2,490	2,640
8	1,380	840	439	636	3,840	4,380	1,860	729	2,410	2,690	2,490	2,650
9	1,370	852	441	687	3,670	4,370	1,850	727	2,400	2,150	2,490	2,660
10	1,450	854	455	641	3,890	4,390	1,940	1,240	2,640	2,200	2,500	2,660
11	1,600	851	439	631	4,530	4,380	1,890	2,500	2,600	2,180	2,720	2,660
12	1,870	877	950	1,400	4,340	4,380	1,900	3,190	2,620	2,040	2,600	2,660
13	1,670	870	961	2,070	3,950	4,390	1,890	4,030	2,610	2,040	2,600	2,660
14	1,670	851	1,000	2,290	3,010	3,280	1,890	4,180	2,680	2,030	2,560	2,660
15	1,660	1,700	964	2,120	2,800	3,140	1,890	4,190	2,680	2,260	2,560	2,670
16	1,660	3,160	963	3,200	2,780	1,850	1,890	4,200	2,680	2,480	2,470	2,650
17	1,780	3,590	968	4,220	2,780	3,050	2,370	3,900	2,720	2,470	2,560	2,460
18	1,770	3,960	974	4,280	2,780	3,040	2,340	3,900	2,720	2,960	2,560	2,490
19	1,760	2,660	1,100	4,280	2,360	3,020	2,900	3,760	2,690	2,780	2,560	2,490
20	1,680	1,960	1,860	4,290	2,530	3,040	2,890	3,760	2,690	2,780	2,560	1,680
21	1,680	1,960	2,010	4,310	2,590	3,030	2,740	3,640	2,680	2,700	2,650	1,850
22	1,680	998	2,060	2,220	1,280	3,030	2,730	3,640	2,680	2,650	2,560	2,620
23	1,680	793	2,270	1,450	1,270	3,020	2,610	3,640	2,720	2,330	2,560	2,640
24	1,590	789	2,280	1,520	1,890	3,050	2,630	3,640	2,690	2,490	2,570	1,760
25	1,610	698	2,280	1,260	2,550	3,040	2,800	3,640	2,680	2,340	2,570	1,630
26	1,590	327	1,640	1,560	2,550	3,050	2,790	3,640	2,750	2,480	2,550	1,780
27	1,560	328	1,650	1,620	2,070	3,040	2,780	3,640	2,710	2,460	2,000	1,640
28	1,570	401	1,080	1,560	2,080	3,040	2,790	3,640	2,690	2,440	2,080	1,620
29	1,570	401	1,060	1,060	------	3,040	2,840	3,640	2,690	2,590	2,160	1,660
30	1,560	403	1,060	1,180	------	3,030	2,790	3,640	2,690	2,700	2,150	1,720
31	1,470	------	587	1,500	------	3,030	------	3,640	------	2,500	2,150	------
TOTAL	51,850	36,657	32,501	54,444	77,480	108,020	68,880	85,754	75,710	80,610	76,750	70,420
MEAN	1,673	1,222	1,048	1,756	2,767	3,485	2,296	2,766	2,524	2,600	2,476	2,347
MAX	3,580	3,960	2,280	4,310	4,530	4,510	3,030	4,200	2,750	3,520	2,720	2,680
MIN	1,360	327	393	569	1,270	1,850	1,760	652	1,570	2,030	2,000	1,620
AC-FT	102,800	72,710	64,470	108,000	153,700	214,300	136,600	170,100	150,200	159,900	152,200	139,700

CAL YR 1972 TOTAL 670,617 MEAN 1,832 MAX 3,960 MIN 327 AC-FT 1,330,000
WTR YR 1973 TOTAL 819,076 MEAN 2,244 MAX 4,530 MIN 327 AC-FT 1,625,000

11371700 WHISKEYTOWN LAKE NEAR IGO, CALIF.

LOCATION.--Lat 40°37'03", long 122°31'31", (unsurveyed), Shasta County, at outlet works to Spring Creek powerplant on Clear Creek, 1.8 miles downstream from Whiskey Creek, and 7.8 miles northeast of Igo.

DRAINAGE AREA.--200 sq mi.

PERIOD OF RECORD.--May 1963 to current year. Prior to October 1964 published as Whiskeytown Reservoir near Igo.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 240,300 acre-ft May 12 (elevation, 1,209.75 ft); minimum, 190,100 acre-ft Mar. 15 (elevation, 1,193.09 ft).
Period of record: Maximum contents, 251,200 acre-ft Jan. 27, 1970 (elevation, 1,213.11 ft); minimum since reservoir was first filled, 159,000 acre-ft Oct. 25, 1970 (elevation, 1,181.48 ft).

REMARKS.--Reservoir is formed by earthfill and rockfill dam. Storage began in May 1963. Capacity, 241,100 acre-ft between elevations 1,100.00 ft (minimum operating level) and 1,210.00 ft (crest of spillway). No dead storage. Transbasin water enters the reservoir through Judge Francis Carr powerplant (see sta 11525430) and is released through Spring Creek Tunnel to Spring Creek powerplant (see sta 11371600) and Keswick Reservoir. Records, including extremes, represent contents at 2400 hours. See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,015	714	1,080	15,100
1,020	994	1,100	27,500
1,030	1,800	1,120	46,700
1,040	3,060	1,140	74,000
1,050	4,900	1,180	155,300
1,060	7,420	1,220	274,400

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	217,000	213,700	203,100	202,100	203,500	224,000	212,900	237,800	237,000	238,200	238,200	238,800
2	216,500	213,700	203,300	202,300	203,500	219,900	216,200	237,600	236,800	237,900	238,300	238,700
3	215,900	213,800	203,500	202,400	203,200	215,400	219,600	237,800	236,400	236,200	238,400	238,600
4	215,700	213,800	203,500	202,500	205,900	210,600	223,000	237,400	235,900	234,500	238,400	238,300
5	215,600	213,600	203,500	202,300	205,900	208,300	226,500	237,100	236,600	232,700	238,500	238,200
6	215,700	213,500	203,400	202,100	204,900	204,300	229,900	236,900	238,200	231,800	238,500	236,900
7	215,800	213,600	203,300	202,000	204,500	200,000	231,100	236,900	238,300	231,700	238,700	235,300
8	216,100	213,600	203,200	202,100	203,500	195,900	232,200	236,800	238,500	231,500	238,800	233,900
9	216,700	213,800	203,000	202,400	203,700	192,600	233,600	236,600	238,500	232,500	238,800	232,300
10	217,700	214,300	202,900	202,700	206,300	191,800	231,300	236,700	238,500	233,100	239,000	230,800
11	218,400	215,300	202,700	205,200	205,400	192,400	230,200	239,100	238,700	234,000	238,600	229,300
12	218,300	214,600	202,700	207,300	203,500	192,600	231,100	240,300	239,000	235,100	238,700	227,900
13	218,000	216,700	202,600	207,900	201,600	191,900	232,300	239,900	239,200	236,200	238,600	226,500
14	217,800	219,100	202,400	207,100	202,100	190,700	233,400	239,100	239,200	237,400	238,800	225,100
15	218,300	220,800	202,400	207,600	202,700	190,100	234,400	238,300	239,200	238,000	238,900	223,500
16	218,100	221,900	202,500	214,300	202,700	191,800	235,400	237,500	239,200	238,300	238,900	221,800
17	217,400	218,000	202,800	214,500	202,500	192,600	236,600	237,300	239,200	238,500	238,900	220,400
18	216,800	212,500	204,200	218,200	202,000	193,300	237,600	237,000	239,100	238,000	238,800	218,900
19	216,100	209,000	205,600	217,100	201,800	194,900	237,400	236,900	239,100	237,400	238,900	218,000
20	215,600	206,600	205,500	213,500	201,400	197,000	237,200	236,800	239,100	237,300	239,000	218,300
21	215,000	204,100	205,400	208,800	200,600	199,400	237,300	236,800	239,100	236,900	239,000	218,200
22	214,500	203,300	205,700	207,500	202,000	201,400	237,400	236,800	239,000	236,700	239,100	217,200
23	213,900	202,900	204,900	207,200	203,400	202,800	237,500	236,800	238,900	237,000	239,000	216,200
24	213,700	202,400	203,400	206,700	207,700	204,100	238,200	237,100	238,900	237,100	239,000	216,400
25	213,600	202,100	202,900	206,500	212,600	205,300	238,200	237,100	238,800	237,400	238,600	216,100
26	213,600	202,400	201,800	205,500	217,400	206,500	237,900	237,100	238,700	237,500	233,900	216,200
27	213,600	202,700	201,300	204,300	221,600	207,600	238,000	237,100	238,500	237,700	234,700	216,600
28	213,600	202,900	201,500	203,000	224,100	208,800	238,000	237,100	238,500	238,000	236,000	217,000
29	213,600	203,000	201,800	203,300	------	209,700	238,000	237,100	238,400	238,000	236,800	217,300
30	213,600	203,100	202,000	203,100	------	210,800	237,800	237,100	238,200	238,000	237,800	217,500
31	213,600	------	202,000	203,200	------	211,800	------	237,100	------	238,100	238,700	------
MAX	218,400	221,900	205,700	218,200	224,100	224,000	238,200	240,300	239,200	238,500	239,100	238,800
MIN	213,600	202,100	201,300	202,000	200,600	190,100	212,900	236,600	235,900	231,500	233,900	216,100
(a)	1,201.17	1,197.62	1,197.26	1,197.67	1,204.60	1,200.55	1,208.98	1,208.76	1,209.11	1,209.06	1,209.26	1,202.44
(b)	-3,500	-10,500	-1,100	+1,200	+20,900	-12,300	+26,000	-700	+1,100	-100	+600	-21,200
(c)	540	150	70	100	160	410	1,100	1,550	1,800	2,240	2,020	1,220

CAL YR 1972 b -2,300
WTR YR 1973 b +400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11372000 CLEAR CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°30'48", long 122°31'23", (unsurveyed), Shasta County, on left bank at highway bridge on Redding-Igo Road 1.0 mile northeast of Igo, 8.3 miles southwest of Redding, and 10.4 miles upstream from mouth.

DRAINAGE AREA.--228 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 672.99 ft above mean sea level.

AVERAGE DISCHARGE (adjusted for change in contents and diversions).--33 years, 442 cfs (320,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,060 cfs Jan. 16 (gage height, 7.08 ft); minimum daily, 46 cfs July 26; Sept. 18-20.
Period of record: Maximum discharge, 24,500 cfs Dec. 21, 1955 (gage height, 13.75 ft); minimum, 8.6 cfs Sept. 4, 6, 7, 1950. Maximum discharge since construction of Whiskeytown Dam in 1963, 9,940 cfs Dec. 22, 1964 (gage height, 9.23 ft); minimum daily, 37 cfs many days in August and September 1966.

REMARKS.--Records good. Flow regulated by Whiskeytown Lake since May 1963 (see sta 11371700). Transbasin diversion from Trinity River through Judge Francis Carr powerplant to Whiskeytown Lake began in April 1963 (see sta 11525430). Diversions from Whiskeytown Lake to Spring Creek powerplant (see sta 11371600) began in December 1963. See schematic diagram of Pit and McCloud River basins. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1345: Drainage area. WSP 1395: 1941(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	82	110	97	172	277	121	67	55	48	47	47
2	48	104	110	74	153	231	114	66	53	49	47	47
3	48	125	117	72	145	224	109	65	52	51	47	47
4	48	115	114	70	369	203	105	65	52	49	47	47
5	48	105	112	69	440	185	103	64	52	47	47	47
6	48	104	114	68	303	375	100	64	51	47	47	47
7	48	107	112	67	419	337	96	63	51	47	47	47
8	48	105	111	68	358	270	94	62	50	47	47	47
9	51	120	111	97	296	223	92	60	52	47	47	47
10	51	139	110	142	499	210	91	59	51	47	47	47
11	55	268	110	736	557	189	88	59	50	47	47	47
12	52	125	110	496	368	171	87	59	50	47	47	47
13	50	230	110	441	285	157	88	60	53	47	47	47
14	51	321	110	247	522	144	85	57	61	47	47	47
15	62	406	110	376	426	135	84	57	55	47	47	47
16	58	371	119	1,790	295	129	81	57	51	47	47	47
17	52	186	229	476	236	124	80	56	55	47	47	47
18	51	157	241	822	201	118	79	55	51	47	47	46
19	50	145	229	421	177	152	77	55	50	47	47	46
20	50	134	180	280	161	285	75	55	49	47	47	46
21	50	129	178	224	148	395	74	55	49	47	47	47
22	50	124	303	185	138	327	73	53	49	47	47	49
23	50	121	236	162	130	245	74	54	49	47	48	52
24	50	118	199	159	162	208	71	61	49	47	48	48
25	50	116	173	152	172	185	70	59	49	47	49	48
26	50	114	158	138	207	167	69	56	50	46	47	47
27	50	113	159	128	258	153	68	55	48	47	47	47
28	51	112	148	122	270	141	67	54	48	47	47	47
29	52	111	141	146	------	132	69	53	48	47	47	47
30	52	110	137	169	------	147	68	53	49	47	47	47
31	51	------	132	193	------	131	------	55	------	47	48	------
TOTAL	1,573	4,617	4,633	8,687	7,867	6,370	2,552	1,813	1,532	1,465	1,462	1,416
MEAN	50.7	154	149	280	281	205	85.1	58.5	51.1	47.3	47.2	47.2
MAX	62	406	303	1,790	557	395	121	67	61	51	49	52
MIN	48	82	110	67	130	118	67	53	48	46	47	46
AC-FT	3,120	9,160	9,190	17,230	15,600	12,630	5,060	3,600	3,040	2,910	2,900	2,810
MEAN a	199	660	487	1,585	2,130	1,546	677	469	231	178	145	137
AC-FT a	12,250	39,270	29,960	97,450	118,270	95,050	40,260	28,850	13,740	10,950	8,920	8,130

CAL YR 1972 TOTAL 29,553 MEAN 80.7 MAX 406 MIN 46 AC-FT 58,620 MEAN a 363 AC-FT a 263,900
WTR YR 1973 TOTAL 43,987 MEAN 121 MAX 1,790 MIN 46 AC-FT 87,250 MEAN a 695 AC-FT a 503,100

a Adjusted for change in contents and evaporation in Whiskeytown Lake, diversion from Trinity River through Judge Francis Carr powerplant, and diversion to Spring Creek powerplant.

11374000 COW CREEK NEAR MILLVILLE, CALIF.

LOCATION.--Lat 40°30'19", long 122°13'56", in NE¼NW¼ sec.32, T.31 N., R.3 W., Shasta County, on right bank 2.9 miles upstream from mouth, 4.2 miles southwest of Millville, and 4.3 miles downstream from Little Cow Creek.

DRAINAGE AREA.--425 sq mi.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 408.3 ft above mean sea level.

AVERAGE DISCHARGE.--24 years, 681 cfs (493,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,000 cfs Jan. 16 (gage height, 12.92 ft); minimum daily, 22 cfs Aug. 16.
Period of record: Maximum discharge, 45,200 cfs Dec. 27, 1951 (gage height, 21.55 ft); minimum daily, 0.80 cfs Aug. 13, 1966.
Flood of 1937 or 1940 reached a stage of 23.8 ft, from floodmarks. Probable backwater effect from high flows on the Sacramento River.

REMARKS.--Records good. Numerous small diversions above station for irrigation. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	117	908	520	1,510	2,940	778	580	381	75	26	40
2	75	119	522	466	1,180	2,040	670	550	306	75	30	42
3	69	203	357	423	1,040	2,830	618	536	275	74	35	39
4	61	1,930	399	381	2,960	2,400	590	536	257	72	31	36
5	64	668	390	350	3,400	1,700	585	518	235	70	28	33
6	62	325	435	330	2,310	3,200	590	500	206	59	29	35
7	62	511	455	310	4,310	2,100	585	492	185	62	27	36
8	66	637	389	320	2,270	1,500	574	487	177	56	28	42
9	111	324	316	6,800	2,940	1,120	568	475	168	64	33	41
10	166	810	312	3,700	4,250	1,600	580	455	153	58	36	38
11	194	2,460	250	9,800	2,530	2,190	590	450	153	54	37	35
12	278	665	258	5,800	3,260	1,300	612	444	154	56	33	31
13	192	927	252	3,600	1,950	1,120	640	448	153	52	30	36
14	187	4,210	250	2,550	4,000	922	634	472	148	55	24	36
15	318	1,600	250	4,400	2,560	830	618	468	146	51	28	38
16	339	2,090	255	13,600	1,760	766	612	469	144	53	22	37
17	347	783	6,700	6,020	1,410	877	949	464	147	54	25	40
18	227	584	5,200	7,430	1,160	717	758	449	143	55	32	44
19	174	1,200	4,700	3,330	989	690	676	443	124	52	36	47
20	155	726	2,590	2,180	869	3,040	618	421	113	49	34	113
21	141	475	2,050	1,980	776	3,320	580	389	107	49	32	110
22	135	350	3,930	1,500	707	2,190	568	360	101	46	33	90
23	129	284	2,520	1,230	656	1,480	580	335	100	49	32	149
24	121	251	2,590	1,090	1,170	1,170	582	512	115	55	35	167
25	115	237	1,720	1,630	1,430	1,020	591	1,090	106	47	40	143
26	115	218	1,160	1,360	2,800	921	622	604	93	48	44	110
27	116	202	1,130	1,040	5,690	830	659	488	87	42	48	95
28	115	194	1,070	911	3,470	765	690	424	77	39	45	89
29	115	188	785	1,400	------	700	679	375	74	34	38	84
30	114	184	672	2,630	------	907	623	341	77	40	37	85
31	116	------	596	2,410	------	1,120	------	339	------	34	40	------
TOTAL	4,560	23,472	43,411	89,491	63,357	48,305	19,019	14,914	4,705	1,679	1,028	1,961
MEAN	147	782	1,400	2,887	2,263	1,558	634	481	157	54.2	33.2	65.4
MAX	347	4,210	6,700	13,600	5,690	3,320	949	1,090	381	75	48	167
MIN	61	117	250	310	656	690	568	335	74	34	22	31
AC-FT	9,040	46,560	86,110	177,500	125,700	95,810	37,720	29,580	9,330	3,330	2,040	3,890

CAL YR 1972 TOTAL 191,748 MEAN 524 MAX 6,700 MIN 14 AC-FT 380,300
WTR YR 1973 TOTAL 315,902 MEAN 865 MAX 13,600 MIN 22 AC-FT 626,600

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	unknown	9.97	10,000	1-18	0945	10.23	10,700
1-11	do	11.49	14,300	2-27	1915	10.26	10,800
1-16	0930	12.92	19,000				

11374400 MIDDLE FORK COTTONWOOD CREEK NEAR ONO, CALIF.

LOCATION.--Lat 40°22'03", long 122°34'19", in SW¼NW¼ sec.17, T.29 N., R.6 W., Shasta County, on right bank 700 ft downstream from Poverty Gulch, 4.6 miles upstream from North Fork Cottonwood Creek, and 7.8 miles southeast of Ono.

DRAINAGE AREA.--244 sq mi.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 610 ft (from topographic map). Prior to Nov. 1, 1969, at site 4.2 miles downstream at different datum.

AVERAGE DISCHARGE.--17 years, 252 cfs (182,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,300 cfs Jan. 16 (gage height, 6.50 ft); minimum daily, 8.2 cfs Sept. 8.
Period of record: Maximum discharge, 13,500 cfs Dec. 22, 1964 (gage height, 19.08 ft, from floodmarks in gage well, site and datum then in use), from rating curve extended above 7,800 cfs on basis of slope-area measurement of maximum flow; minimum daily, 1.2 cfs Aug. 28, 1964.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	22	69	270	390	1,240	498	246	114	30	12	8.5
2	11	23	67	256	366	1,030	462	230	104	30	11	8.5
3	9.8	29	69	232	354	1,020	438	222	96	30	11	8.8
4	9.5	88	79	214	1,060	909	414	214	90	29	11	8.8
5	9.5	77	71	193	1,450	802	414	210	85	27	11	8.5
6	9.5	54	77	184	1,290	891	438	199	82	26	11	8.8
7	9.2	81	75	170	1,820	891	444	191	75	25	11	8.5
8	9.0	107	71	176	1,450	1,020	426	183	70	24	11	8.2
9	13	107	61	180	1,490	873	414	180	70	24	11	8.5
10	16	251	65	295	1,680	828	426	176	66	22	11	8.5
11	19	455	68	3,450	1,430	819	444	172	66	20	11	8.5
12	27	201	77	2,550	1,160	730	426	168	66	22	10	8.5
13	27	200	70	2,270	1,030	650	438	168	64	22	9.9	8.5
14	27	572	75	1,460	1,010	594	390	172	62	20	9.9	8.5
15	95	596	83	1,480	937	531	360	176	62	19	9.6	8.8
16	180	694	287	4,470	838	498	345	176	59	19	9.2	8.8
17	113	384	1,390	2,770	758	474	340	199	59	19	8.8	8.8
18	69	241	1,100	2,840	678	450	322	180	59	22	9.2	8.8
19	51	188	1,090	1,720	621	462	308	168	57	22	9.6	9.9
20	41	148	830	1,230	565	855	290	158	52	20	9.6	12
21	34	126	686	991	516	837	277	150	49	20	9.6	14
22	31	113	1,160	790	488	754	272	140	47	18	9.6	13
23	29	102	964	656	453	666	268	136	45	17	9.2	20
24	27	93	862	649	621	629	268	143	45	17	9.6	22
25	26	85	656	614	864	629	268	147	42	16	10	18
26	24	81	537	523	1,040	629	282	130	39	15	11	16
27	23	79	537	467	1,380	615	300	123	37	14	11	14
28	22	81	502	425	1,570	573	290	117	35	13	11	13
29	22	77	411	474	------	531	277	110	34	13	10	12
30	21	73	342	474	------	545	259	107	31	13	9.6	12
31	21	------	312	432	------	559	------	110	------	13	8.8	------
TOTAL	1,036.5	5,428	12,743	32,905	27,309	22,534	10,798	5,201	1,862	641	317.2	330.7
MEAN	33.4	181	411	1,061	975	727	360	168	62.1	20.7	10.2	11.0
MAX	180	694	1,390	4,470	1,820	1,240	498	246	114	30	12	22
MIN	9.0	22	61	170	354	450	259	107	31	13	8.8	8.2
AC-FT	2,060	10,770	25,280	65,270	54,170	44,700	21,420	10,320	3,690	1,270	629	656

CAL YR 1972 TOTAL 54,855.1 MEAN 150 MAX 1,390 MIN 6.0 AC-FT 108,800
WTR YR 1973 TOTAL 121,105.4 MEAN 332 MAX 4,470 MIN 8.2 AC-FT 240,200

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	0900	4.27	2,200	1-18	0630	5.47	4,290
12-18	2230	4.08	1,900	2-4	2230	4.15	2,010
1-11	1300	6.02	5,340	2-9	2200	5.20	3,800
1-16	1100	6.50	6,300	2-27	2330	4.22	2,120

11375700 NORTH FORK COTTONWOOD CREEK NEAR IGO, CALIF.

LOCATION.--Lat 40°26'32", long 122°32'57", in SE¼NW¼ sec.21, T.30 N., R.6 W., Shasta County, near right bank on downstream side of bridge on Gas Point Road, 1.2 miles downstream from Huling Creek, 4.4 miles south of Igo, and 4.5 miles upstream from Middle Fork.

DRAINAGE AREA.--88.7 sq mi.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 168 cfs (121,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,540 cfs Jan. 16 (gage height, 34.59 ft); minimum daily, 2.2 cfs Oct. 1, 7.
Period of record: Maximum discharge, 11,000 cfs Dec. 22, 1964 (gage height, 39.45 ft in gage well, 41.7 ft, from floodmarks), from rating curve extended above 4,400 cfs on basis of slope-area measurement of maximum flow; minimum daily, 0.80 cfs July 23-25, 1968, Aug. 27-29, Sept. 1, 1972.
Flood of Dec. 21, 1955, reached a peak discharge of 14,300 cfs by slope-area measurement at site 1.2 miles upstream (above Huling Creek) adjusted for intervening drainage area.

REMARKS.--Some storage for irrigation above station in Rainbow Lake (capacity, 4,800 acre-ft). Some flow diverted upstream to Clear Creek basin by Happy Valley Irrigation Canal.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WRD Calif. 1966: 1960(M), 1961(M), 1963(M), 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	19	72	122	289	814	400	203	52	21	11	4.2
2	3.1	18	69	114	270	714	378	201	48	21	10	4.5
3	2.7	45	86	106	268	755	355	198	45	20	10	4.8
4	2.5	53	79	102	757	673	341	192	46	19	10	4.8
5	3.1	30	66	98	753	600	341	183	41	19	11	4.8
6	2.7	26	73	90	755	934	344	180	38	18	11	3.9
7	2.2	40	66	87	969	776	344	177	36	17	11	3.0
8	3.0	34	66	98	750	786	336	170	33	17	12	3.0
9	10	69	70	205	839	655	334	165	31	17	12	3.3
10	17	126	76	376	1,270	620	327	161	30	16	12	3.0
11	61	397	73	1,710	1,100	577	330	155	30	15	11	4.5
12	138	113	73	872	859	514	333	145	30	15	11	3.9
13	84	318	73	729	737	489	341	142	30	14	11	2.8
14	42	607	76	519	1,050	468	313	141	33	14	8.9	2.8
15	64	914	76	742	823	441	299	142	40	14	8.3	3.0
16	61	822	170	2,360	694	423	275	138	40	15	7.8	3.3
17	37	441	555	1,340	617	407	249	133	39	15	7.8	3.6
18	30	353	421	1,820	539	376	236	127	38	15	7.9	4.2
19	27	302	312	936	475	444	228	122	38	14	7.9	5.8
20	25	218	225	717	454	782	222	120	36	15	8.7	12
21	24	155	220	600	422	1,010	188	110	34	15	20	8.0
22	23	133	331	499	395	632	142	60	32	14	20	9.9
23	23	115	275	437	373	537	139	56	32	14	21	29
24	22	107	265	436	598	505	133	71	32	13	21	15
25	18	98	220	370	738	494	132	65	29	13	21	13
26	19	90	200	313	856	510	135	57	28	12	21	12
27	19	88	230	286	935	507	148	54	25	12	12	11
28	18	82	195	267	874	479	172	54	23	11	11	9.9
29	19	79	160	336	------	449	193	51	21	11	9.2	9.9
30	19	75	150	343	------	477	190	51	21	11	6.5	9.9
31	19	------	126	322	------	434	------	52	------	11	4.5	------
TOTAL	840.5	5,967	5,149	17,352	19,459	18,282	7,898	3,876	1,031	468	367.5	212.8
MEAN	27.1	199	166	560	695	590	263	125	34.4	15.1	11.9	7.09
MAX	138	914	555	2,360	1,270	1,010	400	203	52	21	21	29
MIN	2.2	18	66	87	268	376	132	51	21	11	4.5	2.8
AC-FT	1,670	11,840	10,210	34,420	38,600	36,260	15,670	7,690	2,040	928	729	422

CAL YR 1972 TOTAL 29,291.90 MEAN 80.0 MAX 914 MIN .80 AC-FT 58,100
WTR YR 1973 TOTAL 80,902.80 MEAN 222 MAX 2,360 MIN 2.2 AC-FT 160,500

11375810 COTTONWOOD CREEK NEAR OLINDA, CALIF.

LOCATION.--Lat 40°23'06", long 122°28'31", in SE¼NW¼ sec.7, T.29 N., R.5 W., Shasta County, on left bank 1.0 mile downstream from Dutch Gulch, and 5.5 miles southwest of Olinda.

DRAINAGE AREA.--395 sq mi.

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 515 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 10,700 cfs Jan. 16 (gage height, 14.95 ft); minimum daily, 4.3 cfs Sept. 11.
Period of record: Maximum discharge, 10,700 cfs Jan. 16, 1973 (gage height, 14.95 ft); no flow Aug. 30, Sept. 7, 8, 1972.

REMARKS.--Records good. Numerous pumping diversions above station. Records of water temperatures for the period February to September 1973 are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	42	170	372	776	2,280	920	449	171	44	20	11
2	12	45	167	341	724	1,920	838	436	154	46	19	11
3	10	55	181	310	694	1,980	796	424	143	46	17	11
4	4.5	141	213	277	2,180	1,770	766	416	138	43	18	7.8
5	5.5	118	177	253	2,610	1,560	754	400	126	41	18	8.5
6	7.1	92	189	241	2,360	2,080	784	388	118	39	18	7.1
7	14	114	189	217	3,640	1,890	790	368	112	39	20	8.5
8	31	167	163	221	2,580	2,210	766	360	104	39	21	7.1
9	17	144	126	406	2,500	1,690	760	352	99	37	22	9.2
10	27	495	144	958	3,190	1,600	766	340	94	34	22	5.7
11	72	1,070	126	6,990	2,540	1,520	790	332	94	31	24	4.3
12	122	440	151	4,070	2,200	1,360	796	316	96	31	24	5.7
13	114	525	144	3,470	1,930	1,240	814	313	96	32	22	8.5
14	87	1,450	144	2,370	2,390	1,160	742	316	88	32	20	8.5
15	118	1,870	147	2,460	1,890	1,050	686	302	99	34	16	9.9
16	297	1,970	453	7,570	1,620	997	655	309	96	34	16	11
17	170	1,030	2,720	4,380	1,440	948	635	320	94	34	16	9.2
18	118	716	1,920	5,370	1,270	878	600	306	94	35	15	7.1
19	92	578	1,890	3,050	1,150	899	570	288	91	37	15	9.9
20	77	460	1,260	2,280	1,060	2,140	544	274	88	34	15	16
21	67	346	1,110	1,900	990	2,310	508	260	83	34	17	18
22	59	301	1,800	1,460	932	1,620	449	221	78	32	25	22
23	55	261	1,330	1,230	866	1,330	444	209	76	29	27	48
24	51	241	1,230	1,230	1,280	1,240	440	231	76	28	25	41
25	48	221	898	1,190	1,650	1,200	436	234	71	27	27	29
26	45	209	730	958	2,120	1,200	449	206	68	25	27	24
27	45	201	751	860	2,610	1,180	467	194	64	24	24	22
28	45	197	709	776	2,740	1,080	476	182	56	21	17	20
29	45	185	562	925	------	1,010	480	171	48	20	15	20
30	42	174	495	997	------	1,060	454	166	46	18	13	20
31	42	------	420	873	------	1,030	------	168	------	19	12	------
TOTAL	1,952.1	13,858	20,709	58,005	51,932	45,432	19,375	9,251	2,861	1,019	607	441.0
MEAN	63.0	462	668	1,871	1,855	1,466	646	298	95.4	32.9	19.6	14.7
MAX	297	1,970	2,720	7,570	3,640	2,310	920	449	171	46	27	48
MIN	4.5	42	126	217	694	878	436	166	46	18	12	4.3
AC-FT	3,870	27,490	41,080	115,100	103,000	90,110	38,430	18,350	5,670	2,020	1,200	875

CAL YR 1972 TOTAL 91,047.98 MEAN 249 MAX 2,720 MIN 0 AC-FT 180,600
WTR YR 1973 TOTAL 225,442.10 MEAN 618 MAX 7,570 MIN 4.3 AC-FT 447,200

PEAK DISCHARGE (BASE, 3,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-15	2130	12.28	6,810	2-7	0600	10.72	4,800
12-17	0900	10.68	4,680	2-9	2400	12.99	7,810
12-18	1800	10.00	3,800	2-14	1600	9.55	3,400
1-11	1230	14.63	10,200	2-28	0100	9.56	3,410
1-16	0800	14.95	10,700	3-20	1030	9.31	3,110
1-18	0800	14.06	9,340	3-21	1530	10.00	3,940
2-4	2100	10.00	3,940				

11375820 SOUTH FORK COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°18'59", long 122°26'52", in SW¼SE¼ sec.32, T.29 N., R.5 W., Tehama County, on right bank 15 ft downstream from highway bridge, 0.7 mile upstream from Dry Fork, and 10.3 miles southwest of Cottonwood.

DRAINAGE AREA.--217 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 525 ft (from topographic map). October 1962 to Dec. 22, 1964, at site 85 ft upstream at different datum.

AVERAGE DISCHARGE.--11 years, 221 cfs (160,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,450 cfs Jan. 16 (gage height, 8.60 ft); no flow many days. Period of record: Maximum discharge, 14,000 cfs Jan. 23, 1970 (gage height, 12.15 ft); no flow many days in each year.

REMARKS.--Small diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	60	161	308	688	361	305	188	36	1.1	
2	0	0	58	147	317	568	344	287	169	34	1.0	
3	0	0	60	140	333	515	333	282	157	30	.80	
4	0	0	66	130	887	482	325	275	150	28	.50	
5	0	0	71	123	724	452	331	261	145	24	.40	
6	0	0	65	118	818	484	360	250	137	21	.20	
7	0	0	62	113	2,050	444	381	241	120	20	.20	
8	0	0	49	108	947	439	378	239	116	20	.10	
9	0	0	41	118	837	412	381	233	113	15	0	
10	0	0	29	162	1,210	406	394	231	111	10	0	
11	0	45	31	1,650	822	426	422	227	108	8.7	0	
12	10	3.5	37	1,880	632	413	433	229	105	7.8	0	
13	2.1	263	45	2,000	593	395	426	241	102	8.9	0	
14	1.0	468	43	1,000	557	384	397	258	96	8.2	0	
15	4.0	713	43	604	516	371	369	266	94	7.2	0	
16	29	573	56	3,950	455	363	354	266	90	6.7	0	
17	13	200	1,140	1,980	437	362	352	275	84	6.5	0	
18	4.6	138	900	2,680	425	355	341	263	81	6.2	0	
19	1.6	113	1,280	1,160	418	371	321	250	76	7.3	0	
20	0	95	722	797	406	888	305	231	69	7.6	0	
21	0	83	456	647	394	493	291	215	64	7.4	0	
22	0	78	860	549	384	413	280	207	61	6.2	0	
23	0	73	650	490	376	379	291	200	59	5.5	0	
24	0	66	462	452	584	367	302	199	60	4.5	0	
25	0	62	345	430	694	362	311	200	58	3.8	0	
26	0	58	290	382	726	365	329	186	52	3.2	0	
27	0	64	254	346	954	372	361	176	47	2.5	0	
28	0	71	245	317	1,040	369	371	166	44	1.9	0	
29	0	66	214	323	------	354	354	165	38	1.3	0	
30	0	64	196	342	------	355	325	166	36	1.2	0	
31	0	------	179	310	------	375	------	172	------	1.2	0	------
TOTAL	65.3	3,296.5	9,010	23,609	18,844	13,422	10,523	7,162	2,830	351.8	4.30	0
MEAN	2.11	110	291	762	673	433	351	231	94.3	11.3	.14	0
MAX	29	713	1,280	3,950	2,050	888	433	305	188	36	1.1	0
MIN	0	0	29	108	308	354	280	165	36	1.2	0	0
AC-FT	130	6,540	17,870	46,830	37,380	26,620	20,870	14,210	5,610	698	8.5	0

CAL YR 1972 TOTAL 44,994.40 MEAN 123 MAX 2,550 MIN 0 AC-FT 89,250
WTR YR 1973 TOTAL 89,117.90 MEAN 244 MAX 3,950 MIN 0 AC-FT 176,800

11376000 COTTONWOOD CREEK NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'14", long 122°14'15", in NE¼NE¼ sec.7, T.29 N., R.3 W., Shasta County, on left bank 2.2 miles east of Cottonwood, and 2.5 miles upstream from mouth.

DRAINAGE AREA.--927 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 364.0 ft above mean sea level (levels by Corps of Engineers). Prior to July 26, 1963, at site 100 ft downstream on right bank at datum 3.59 ft higher. July 26, 1963, to Sept. 13, 1972, at site 350 ft downstream on right bank. Sept. 21, 1967, to Jan. 14, 1968, supplementary gage at a site 1,550 ft downstream on right bank at datum 2.35 ft higher.

AVERAGE DISCHARGE.--33 years, 842 cfs (610,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 27,400 cfs Jan. 16 (gage height, 15.43 ft); minimum daily, 54 cfs Oct. 7, 9.
Period of record: Maximum discharge, 60,000 cfs Dec. 22, 1964 (gage height, 19.64 ft); minimum, 15 cfs for several days in September 1945.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Small diversions for irrigation above station. At times during irrigation season, Cottonwood Creek receives water above station from Sacramento River by way of Anderson-Cottonwood Canal. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1345: 1943, 1944(M), 1946-47, 1949(M), 1951-52. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	81	321	835	1,470	4,120	1,600	850	395	134	74	83
2	150	92	297	775	1,340	3,340	1,440	810	385	122	71	77
3	150	160	297	733	1,260	3,190	1,340	770	365	116	69	79
4	118	305	330	692	3,510	3,100	1,260	750	340	111	67	75
5	66	245	317	646	5,450	2,720	1,220	735	325	108	68	70
6	68	185	309	616	4,230	3,370	1,390	710	310	95	73	72
7	54	240	305	586	11,000	3,090	1,450	680	285	86	80	85
8	63	325	268	562	5,510	3,430	1,410	665	282	81	85	79
9	54	278	226	1,060	4,060	2,720	1,350	640	267	78	92	77
10	80	461	215	1,810	6,930	2,510	1,350	615	242	79	100	77
11	160	1,160	215	15,900	5,150	2,470	360	600	242	80	87	77
12	255	634	232	10,400	4,280	2,280	1,400	580	231	83	86	79
13	225	653	222	7,780	3,560	2,070	1,470	565	235	87	85	89
14	188	3,330	212	4,390	3,970	1,900	1,390	560	231	85	72	93
15	245	2,490	226	3,420	3,640	1,770	1,300	570	225	91	69	98
16	590	5,530	264	16,100	2,870	1,660	1,220	585	228	92	72	94
17	360	1,800	4,720	8,550	2,480	1,580	1,160	620	225	93	79	89
18	235	1,170	3,980	13,600	2,210	1,460	1,080	650	228	97	74	85
19	172	914	4,590	5,980	2,000	1,410	1,020	610	222	110	77	95
20	135	754	2,830	4,060	1,800	4,550	985	570	215	117	74	92
21	114	610	2,200	3,380	1,660	3,640	940	530	205	113	69	99
22	102	538	3,380	2,740	1,530	3,070	890	510	184	108	74	114
23	94	476	2,780	2,320	1,450	2,310	850	480	184	103	79	142
24	90	440	2,370	2,090	2,130	2,090	840	490	181	98	77	132
25	85	410	1,780	2,230	2,760	2,000	850	515	181	94	91	119
26	82	388	1,460	1,840	3,150	1,940	860	510	180	89	91	110
27	80	379	1,340	1,600	4,660	1,900	880	485	172	85	89	104
28	78	375	1,390	1,460	5,800	1,790	910	465	162	81	83	101
29	76	352	1,140	1,530	------	1,680	940	440	154	75	81	98
30	76	348	1,010	2,250	------	1,680	900	415	142	69	83	96
31	74	------	906	1,670	------	1,830	------	400	------	68	85	------
TOTAL	4,474	25,123	40,132	121,605	99,860	76,670	34,055	18,375	7,223	2,928	2,456	2,780
MEAN	144	837	1,295	3,923	3,566	2,473	1,135	593	241	94.5	79.2	92.7
MAX	590	5,530	4,720	16,100	11,000	4,550	1,600	850	395	134	100	142
MIN	54	81	212	562	1,260	1,410	360	400	142	68	67	70
AC-FT	8,870	49,830	79,600	241,200	198,100	152,100	67,550	36,450	14,330	5,810	4,870	5,510

CAL YR 1972 TOTAL 171,396 MEAN 468 MAX 5,530 MIN 48 AC-FT 340,000
WTR YR 1973 TOTAL 435,681 MEAN 1,194 MAX 16,100 MIN 54 AC-FT 864,200

PEAK DISCHARGE (BASE, 7,100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0100	13.08	14,800	2-4	2300	11.55	8,840
12-17	1300	11.24	7,940	2-7	0830	13.44	16,400
1-11	1600	15.22	26,100	2-10	0330	12.64	13,000
1-16	1230	15.43	27,400	2-28	0400	11.14	7,820
1-18	1130	15.04	25,000				

NOTE.--No gage-height record Oct. 9 to Nov. 9, Apr. 10 to June 7.

11376550 BATTLE CREEK BELOW COLEMAN FISH HATCHERY, NEAR COTTONWOOD, CALIF.

LOCATION.--Lat 40°23'54", long 122°08'43", in SW¼NE¼ sec.1, T.29 N., R.3 W., Shasta County, U.S. Fish and Wildlife service land, on right bank 3.7 miles downstream from Spring Branch, 5.7 miles upstream from mouth, and 7.0 miles east of Cottonwood.

DRAINAGE AREA.--357 sq mi.

PERIOD OF RECORD.--October 1961 to current year. October 1940 to September 1961 at site 0.6 mile upstream published as "near Cottonwood"; low flow records not equivalent owing to Coleman Fish Hatchery diversion.

GAGE.--Water-stage recorder. Altitude of gage is 415 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 513 cfs (371,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,400 cfs Jan. 16 (gage height, 7.41 ft); minimum daily, 215 cfs Aug. 7.

Period of record: Maximum discharge, 24,300 cfs Jan. 24, 1970 (gage height, 14.75 ft), from rating curve extended above 4,200 cfs on basis of slope-area measurement of peak flow; minimum since 1961, 52 cfs Aug. 8, 1962.

Maximum stage known, 15.8 ft Dec. 11, 1937, from floodmarks at former site and datum (discharge, 35,000 cfs, by slope-area measurement).

REMARKS.--Records good. Flow regulated by four small powerplants, several small reservoirs, and Coleman Fish Hatchery. Coleman Fish Hatchery diverts 50 to 90 cfs which is returned above the station. Ten cfs diverted at times above station for irrigation. Maximum flows considered equivalent to former station Battle Creek near Cottonwood. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	321	334	413	570	1,430	650	692	681	354	240	227
2	301	319	334	409	544	1,100	610	673	608	349	240	222
3	296	325	401	407	535	1,400	590	677	575	340	236	220
4	303	387	482	392	868	1,170	590	678	553	338	231	218
5	316	396	355	377	846	947	605	652	530	336	235	236
6	310	354	359	381	962	1,060	630	629	523	334	235	232
7	310	435	397	371	1,550	914	650	635	520	332	215	236
8	315	432	364	375	935	897	630	642	513	330	225	240
9	329	372	324	1,350	1,250	795	640	651	515	328	242	236
10	338	534	323	1,220	1,550	865	645	651	504	322	248	245
11	378	706	321	2,180	1,040	947	665	663	489	317	248	250
12	438	451	316	1,680	1,290	805	675	686	476	314	248	254
13	377	489	324	1,330	850	760	670	727	466	311	245	258
14	402	1,300	323	855	1,210	720	645	801	443	309	250	240
15	537	664	320	977	863	700	660	805	442	309	245	241
16	504	1,030	356	3,510	735	685	630	851	425	319	245	232
17	559	522	1,970	1,690	682	710	730	880	422	327	245	236
18	420	452	1,370	2,160	641	670	675	888	411	336	247	236
19	399	494	1,240	1,190	613	660	620	925	401	340	244	236
20	371	427	765	884	591	820	595	868	374	336	240	250
21	357	391	627	852	571	881	580	801	358	332	236	254
22	347	382	767	726	555	800	595	768	356	330	227	253
23	342	367	621	654	543	715	620	741	356	325	227	261
24	335	367	643	625	837	685	647	950	354	320	227	270
25	342	360	523	769	874	675	660	1,080	352	306	227	282
26	334	354	481	687	1,090	675	690	793	354	285	236	279
27	339	348	505	593	2,130	675	734	699	358	274	232	265
28	335	352	523	567	1,560	655	757	665	358	257	227	256
29	333	333	456	663	------	625	772	682	362	256	227	254
30	329	336	441	841	------	650	730	697	358	240	222	252
31	321	------	426	646	------	725	------	703	------	240	227	------
TOTAL	11,219	14,000	16,991	29,774	26,285	25,816	19,590	23,253	13,437	9,746	7,319	7,371
MEAN	362	467	548	960	939	833	653	750	448	314	236	246
MAX	559	1,300	1,970	3,510	2,130	1,430	772	1,080	681	354	250	282
MIN	296	319	316	371	535	625	580	629	352	240	215	218
AC-FT	22,250	27,770	33,700	59,060	52,140	51,210	38,860	46,120	26,650	19,330	14,520	14,620

CAL YR 1972 TOTAL 158,076 MEAN 432 MAX 1,970 MIN 228 AC-FT 313,500
WTR YR 1973 TOTAL 204,801 MEAN 561 MAX 3,510 MIN 215 AC-FT 406,200

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	0915	6.21	3,730	1-18	1115	6.02	3,500
1-9	1815	5.27	2,650	2-10	0330	5.13	2,510
1-11	1515	6.13	3,640	2-27	1815	6.96	4,720
1-16	0900	7.41	5,400				

11377100 SACRAMENTO RIVER ABOVE BEND BRIDGE, NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°17'19", long 122°11'08", in NW¼NE¼ sec.15, T.28 N., R.3 W., Tehama County, on left bank 2.7 miles upstream from Bend Bridge, and 8.1 miles northeast of Red Bluff.

DRAINAGE AREA.--8,900 sq mi, excluding Goose Lake basin.

PERIOD OF RECORD.--1879-88 annual observed maximums only, published in WSP 1315-A. January 1892 to current year. Monthly discharges only for some periods and yearly estimates for some incomplete years, published in WSP 1315-A. Published as "at Red Bluff" 1894-96, as "at Jellys Ferry" 1895-1902, and as "near Red Bluff" 1903-68.

GAGE.--Water-stage recorder. Datum of gage is 285.77 ft above mean sea level. Prior to January 1902, nonrecording gage at site 6.1 miles upstream at different datum. January 1902 to December 1919, nonrecording gage at several sites about 10 miles downstream at different datum. December 1919 to September 1968, water-stage recorder at site 10.1 miles downstream at different datum.

AVERAGE DISCHARGE.--82 years, 11,690 cfs (8,469,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 82,300 cfs Jan. 16 (gage height, 24.00 ft); minimum daily, 6,560 cfs Oct. 8.
Period of record: Maximum discharge, 291,000 cfs Feb. 28, 1940 (gage height, 38.9 ft, site and datum then in use), from rating curve extended above 170,000 cfs on basis of velocity-area studies; minimum (1892 to current year), 2,000 cfs Mar. 29, 1944.

REMARKS.--Records excellent. Flow regulated by Shasta Lake since Dec. 30, 1943 (see sta 11370000). Diversions, in addition to those on tributaries, for irrigation of 22,000 acres between stations at Keswick and above Bend Bridge. Transbasin diversions from Trinity River to Whiskeytown Lake via Judge Francis Carr powerplant (see sta 11525430) started in April 1963. Records of chemical analyses and water temperatures at or near this gaging station for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 861: 1904, 1907, 1909, 1914-15, 1927-28. WSP 1315-A: 1914(M), 1916(M), 1918(M). WSP 1931: Drainage area. WRD Calif. 1969: 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,160	6,800	13,300	14,000	20,400	32,000	10,100	10,200	11,700	11,600	12,300	10,500
2	7,070	6,840	12,400	13,900	19,500	29,000	9,750	9,640	11,000	11,700	11,900	10,100
3	7,080	6,920	11,900	13,900	19,100	29,300	9,520	9,260	10,900	11,900	11,900	9,620
4	6,830	8,880	12,100	13,600	21,400	29,700	9,280	9,750	10,800	12,000	11,900	9,480
5	6,590	7,730	10,100	13,500	29,800	25,900	9,180	9,980	10,700	12,000	11,600	9,480
6	6,590	6,920	10,000	13,000	25,800	25,500	9,180	9,870	10,600	12,000	11,400	9,500
7	6,590	6,600	10,200	12,500	39,300	24,900	9,280	9,870	10,600	12,300	11,400	9,440
8	6,560	7,220	9,980	12,000	31,000	24,300	9,200	9,870	10,600	12,500	11,400	9,480
9	6,650	7,120	9,540	18,500	29,900	21,800	9,110	9,850	10,500	12,600	11,400	9,460
10	6,810	8,100	9,540	22,300	36,400	21,300	8,990	9,770	10,400	12,500	11,400	9,480
11	6,920	12,400	9,490	45,600	36,400	22,400	9,050	10,200	10,400	12,500	11,400	9,500
12	7,070	8,840	8,970	42,100	39,100	20,400	9,140	10,700	10,400	12,800	10,700	9,510
13	7,010	8,720	8,520	34,500	39,700	18,200	9,140	10,700	10,700	13,000	11,400	9,530
14	6,950	20,200	8,540	25,700	44,700	15,600	9,140	10,800	11,200	13,000	11,400	9,410
15	7,320	13,500	8,550	23,700	42,100	13,300	8,920	10,800	11,400	13,000	11,400	9,320
16	7,750	20,300	8,700	58,900	34,400	11,800	8,880	11,800	11,400	13,000	11,400	9,280
17	7,790	13,500	25,200	43,600	31,200	11,000	9,340	12,400	11,300	13,000	11,400	9,300
18	7,380	15,900	21,900	64,000	27,300	10,200	9,070	12,400	11,300	13,000	11,400	9,320
19	7,160	16,300	24,800	57,000	23,400	9,640	8,840	12,400	11,300	13,000	11,500	9,390
20	7,050	15,900	16,700	49,600	21,800	16,300	8,680	12,300	11,300	13,000	11,400	9,590
21	6,950	15,000	13,600	48,000	19,800	15,900	8,540	12,100	11,300	13,000	11,500	9,590
22	6,950	15,400	18,200	46,300	18,900	15,300	8,430	12,000	11,200	13,000	11,400	9,640
23	6,910	15,600	15,500	45,000	18,800	11,800	8,410	11,900	11,800	13,000	11,400	9,750
24	6,870	15,500	15,000	40,300	20,400	10,700	8,340	12,300	11,300	13,000	11,500	9,780
25	6,870	15,300	12,500	32,100	20,700	10,200	8,920	14,400	11,200	13,000	11,500	9,730
26	6,850	15,200	11,300	26,400	20,200	9,890	9,430	12,700	11,200	13,000	11,500	9,660
27	6,840	15,200	11,000	21,500	30,400	9,720	9,560	12,300	11,300	13,000	11,600	9,620
28	6,830	15,300	12,000	18,900	34,300	9,890	9,680	12,100	11,600	13,000	11,600	9,600
29	6,810	15,300	12,200	19,400	------	10,000	10,100	11,900	11,600	13,000	11,600	9,590
30	6,780	14,500	13,700	23,500	------	10,000	10,400	11,700	11,600	12,900	11,000	9,590
31	6,800	------	14,300	21,000	------	11,100	------	11,800	------	12,900	10,500	------
TOTAL	215,790	370,990	399,730	934,300	796,200	537,040	275,600	347,760	332,600	393,200	355,100	287,240
MEAN	6,961	12,370	12,890	30,140	28,440	17,320	9,187	11,220	11,090	12,680	11,450	9,575
MAX	7,790	20,300	25,200	64,000	44,700	32,000	10,400	14,400	11,800	13,000	12,300	10,500
MIN	6,560	6,600	8,520	12,000	18,800	9,640	8,340	9,260	10,400	11,600	10,500	9,280
AC-FT	428,000	735,900	792,900	1,853M	1,579M	1,065M	546,700	689,800	659,700	779,900	704,300	569,700

CAL YR 1972 TOTAL 3,961,540 MEAN 10,820 MAX 25,200 MIN 6,560 AC-FT 7,858,000
WTR YR 1973 TOTAL 5,245,550 MEAN 14,370 MAX 64,000 MIN 6,560 AC-FT 10,400,000

11378800 RED BANK CREEK NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°05'25", long 122°24'45", in NE¼SE¼ sec.22, T.26 N., R.5 W., Tehama County, on road bridge near bank 0.1 mile downstream from unnamed tributary, 1.8 miles southeast of town of Red Bank, and 11 miles southwest of Red Bluff.

DRAINAGE AREA.--93.5 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 470 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 46.3 cfs (33,540 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,600 cfs Jan. 16 (gage height, 10.00 ft); no flow for several months.
Period of record: Maximum discharge, 9,730 cfs Jan. 5, 1965 (gage height, 10.06 ft); no flow for several months in each year.

REMARKS.--Some small storage ponds and possibly some diversions for irrigation upstream.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	21	57	95	287	93	15	3.4			
2		0	19	57	93	231	83	14	3.3			
3		0	19	55	97	215	75	13	3.1			
4		0	20	54	590	189	69	12	2.9			
5		2.0	16	53	287	165	64	11	2.8			
6		1.7	18	53	442	244	60	11	2.8			
7		1.8	17	52	1,600	191	54	9.4	2.6			
8		2.3	11	54	350	145	50	8.6	2.3			
9		2.3	7.7	120	401	132	46	8.1	2.2			
10		18	8.3	231	661	133	43	8.0	2.1			
11		136	6.0	2,240	499	133	40	7.9	2.0			
12		47	7.3	818	361	131	38	7.6	2.1			
13		716	9.4	474	400	133	37	6.9	2.1			
14		657	15	201	410	135	36	6.3	1.9			
15		1,200	23	179	329	140	32	5.4	1.8			
16		578	88	2,260	244	145	30	5.0	1.7			
17		186	555	473	204	150	29	4.6	1.4			
18		116	279	2,010	175	155	26	4.4	1.1			
19		87	209	364	157	266	24	4.0	.70			
20		70	131	211	142	1,330	24	3.5	.30			
21		59	107	164	130	547	23	4.0	0			
22		53	115	129	121	305	22	4.0	0			
23		47	97	110	113	224	21	3.5	0			
24		42	88	105	423	198	20	4.9	0			
25		38	78	111	288	178	19	4.9	0			
26		34	73	89	364	160	18	4.9	0			
27		31	75	83	540	144	18	4.0	0			
28		28	72	81	430	129	18	3.4	0			
29		25	65	144	------	120	17	3.3	0			
30		23	62	142	------	117	15	3.3	0			
31		------	59	104	------	108	------	3.3	------			------
TOTAL	0	4,201.1	2,370.7	11,278	9,946	6,880	1,144	209.2	42.60	0	0	0
MEAN	0	140	76.5	364	355	222	38.1	6.75	1.42	0	0	0
MAX	0	1,200	555	2,260	1,600	1,330	93	15	3.4	0	0	0
MIN	0	0	6.0	52	93	108	15	3.3	0	0	0	0
AC-FT	0	8,330	4,700	22,370	19,730	13,650	2,270	415	84	0	0	0

CAL YR 1972 TOTAL 7,063.90 MEAN 19.3 MAX 1,200 MIN 0 AC-FT 14,010
WTR YR 1973 TOTAL 36,071.60 MEAN 98.8 MAX 2,260 MIN 0 AC-FT 71,550

11379000 ANTELOPE CREEK NEAR RED BLUFF, CALIF.

LOCATION.--Lat 40°12'14", long 122°07'02", in Rio De Los Berrendos Grant, Tehama County, on right bank 1.8 miles upstream from diversion dam of Los Molinos Mutual Water Co., 6.5 miles east of Red Bluff, and 9.7 miles upstream from mouth.

DRAINAGE AREA.--123 sq mi.

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (from topographic map). Prior to Sept. 18, 1954, at site 0.6 mile downstream at different datum. Sept. 18, 1954, to July 9, 1969, at datum 2.00 ft higher.

AVERAGE DISCHARGE.--33 years, 149 cfs (108,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,920 cfs Jan. 16 (gage height, 12.69 ft); minimum daily, 39 cfs Aug. 20-22, Sept. 11.
Period of record: Maximum discharge, 17,200 cfs Jan. 23, 1970 (gage height, 17.95 ft), from rating curve extended above 6,000 cfs on basis of slope-area measurement at gage height, 15.96 ft (present datum); minimum, 8.2 cfs Oct. 27, 1961.
Flood of December 1937 reached a stage of about 22 ft, from floodmarks, at former site and datum.

REMARKS.--Records good. No diversion above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1949(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	46	57	86	246	738	155	230	130	50	41	41
2	45	46	56	82	208	579	141	212	116	49	41	41
3	44	48	56	80	194	548	134	195	107	49	41	40
4	43	61	63	75	494	555	129	190	100	47	41	40
5	43	59	58	70	577	432	135	175	94	47	41	40
6	42	53	59	68	618	604	150	167	91	47	41	41
7	42	68	59	66	934	455	180	167	86	47	41	41
8	42	101	54	67	543	388	174	172	83	46	41	40
9	45	71	52	911	595	302	181	176	79	45	41	40
10	52	153	50	780	976	339	190	178	77	45	41	40
11	64	331	49	1,110	589	396	202	184	73	45	41	39
12	96	145	49	987	480	303	210	193	70	45	41	40
13	61	192	53	712	369	260	218	209	69	45	41	40
14	74	972	53	407	518	228	198	231	68	44	40	40
15	189	361	52	488	417	203	206	230	66	44	40	40
16	153	757	55	2,870	316	186	189	240	65	44	40	40
17	127	246	784	1,190	264	183	200	246	64	45	40	40
18	81	157	542	1,650	226	170	203	242	62	45	40	40
19	67	162	526	806	198	166	184	260	61	44	40	41
20	59	128	282	491	178	213	169	239	59	44	39	45
21	54	109	196	391	163	214	166	208	57	44	39	44
22	52	100	190	303	151	229	171	189	55	45	39	43
23	51	86	165	242	142	194	183	176	55	44	40	46
24	49	77	157	209	403	174	199	184	56	44	40	47
25	48	71	133	247	466	165	213	218	54	43	41	46
26	47	67	117	252	607	159	234	182	53	43	47	44
27	47	64	112	205	1,480	152	260	156	52	43	44	42
28	47	61	133	182	1,150	145	282	144	51	43	43	42
29	46	59	111	229	------	138	279	143	51	43	41	42
30	46	58	102	387	------	135	263	138	50	43	41	42
31	46	------	94	298	------	166	------	129	------	42	41	------
TOTAL	1,946	4,909	4,519	15,941	13,502	9,119	5,798	6,003	2,154	1,394	1,268	1,247
MEAN	62.8	164	146	514	482	294	193	194	71.8	45.0	40.9	41.6
MAX	189	972	784	2,870	1,480	738	282	260	130	50	47	47
MIN	42	46	49	66	142	135	129	129	50	42	39	39
AC-FT	3,860	9,740	8,960	31,620	26,780	18,090	11,500	11,910	4,270	2,760	2,520	2,470

CAL YR 1972 TOTAL 35,410 MEAN 96.7 MAX 972 MIN 34 AC-FT 70,240
WTR YR 1973 TOTAL 67,800 MEAN 186 MAX 2,870 MIN 39 AC-FT 134,500

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1645	9.85	2,200	1-18	1100	10.79	2,940
1-16	0830	12.69	4,920	2-27	1830	11.56	3,660

11379500 ELDER CREEK NEAR PASKENTA, CALIF.

LOCATION.--Lat 40°01'29", long 122°30'31", in SE¼NW¼ sec.14, T.25 N., R.6 W., Tehama County, on left bank 2.5 miles downstream from South Fork Elder Creek, 8.2 miles northwest of Flournoy, and 10 miles north of Paskenta.

DRAINAGE AREA.--92.9 sq mi.

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 718.1 ft above mean sea level. Prior to Aug. 13, 1965, water-stage recorder at site 300 ft downstream at datum 5.13 ft lower.

AVERAGE DISCHARGE.--25 years, 99.8 cfs (72,310 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,020 cfs Jan. 16 (gage height, 8.55 ft); minimum daily, 2.0 cfs Oct. 7.
Period of record: Maximum discharge, 11,700 cfs Feb. 24, 1958 (gage height, 13.90 ft, site and datum then in use), from rating curve extended above 3,500 cfs on basis of slope-area measurements at gage heights 10.97 and 13.90 ft; no flow at times in some years.

REMARKS.--Records fair. No regulation or large diversion above station.

REVISIONS (WATER YEARS).--WSP 1515: 1956. WSP 1931: Drainage area. WRD Calif. 1970: 1967(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	8.2	42	112	160	562	194	153	42	12	4.0	2.9
2	2.9	8.2	40	100	147	449	181	145	35	12	3.8	2.8
3	2.3	13	40	88	152	414	172	144	33	11	3.7	2.8
4	2.2	33	53	79	708	357	168	139	31	10	3.6	2.8
5	2.4	18	41	70	511	314	180	128	29	9.5	3.4	2.8
6	2.1	15	43	65	728	332	210	123	28	9.3	3.6	3.0
7	2.0	21	42	61	1,120	290	223	121	27	9.4	3.8	2.9
8	2.3	25	33	65	584	270	210	118	25	9.1	4.0	2.6
9	4.0	28	29	80	701	248	220	114	24	8.5	3.9	2.3
10	7.8	155	28	115	864	243	243	110	23	8.1	3.6	2.4
11	7.4	317	28	1,320	691	241	270	107	23	7.7	3.3	2.5
12	23	74	29	971	496	218	270	108	23	7.6	3.2	2.8
13	14	930	28	866	495	203	264	111	23	7.3	3.1	2.8
14	12	637	28	505	499	188	215	112	24	6.8	2.9	2.8
15	188	1,080	29	450	427	178	197	107	24	6.6	2.8	3.0
16	109	550	188	2,020	345	174	188	101	23	6.8	2.7	3.1
17	116	197	837	835	302	171	190	95	22	7.3	2.5	3.1
18	53	127	460	1,760	271	163	177	87	22	7.3	2.4	3.3
19	32	96	360	664	247	371	164	80	20	6.9	2.3	3.6
20	23	78	300	433	225	895	150	73	18	7.0	2.5	4.2
21	18	62	350	354	209	524	141	67	17	7.3	2.7	4.6
22	16	50	550	287	197	360	141	62	17	7.0	3.0	4.6
23	14	55	440	245	188	291	161	58	17	6.4	3.3	6.5
24	12	46	295	234	972	267	174	59	18	5.9	3.7	6.0
25	11	46	260	244	776	260	186	56	16	5.6	4.0	5.4
26	10	55	240	200	749	251	211	51	15	5.1	3.8	4.4
27	9.6	60	215	179	886	251	240	47	14	4.8	3.6	3.8
28	9.1	50	185	165	783	228	230	43	13	4.6	3.7	3.6
29	8.5	49	160	190	------	211	204	40	13	4.6	3.4	3.6
30	8.2	45	145	225	------	221	175	39	13	4.6	3.1	3.4
31	8.1	------	128	182	------	213	------	39	------	4.4	3.1	------
TOTAL	733.1	4,928.4	5,646	13,164	14,433	9,358	5,949	2,837	672	230.5	102.5	104.4
MEAN	23.6	164	182	425	515	302	198	91.5	22.4	7.44	3.31	3.48
MAX	188	1,080	837	2,020	1,120	895	270	153	42	12	4.0	6.5
MIN	2.0	8.2	28	61	147	163	141	39	13	4.4	2.3	2.3
AC-FT	1,450	9,780	11,200	26,110	28,630	18,560	11,800	5,630	1,330	457	203	207

CAL YR 1972 TOTAL 19,302.91 MEAN 52.7 MAX 1,080 MIN .11 AC-FT 38,290
WTR YR 1973 TOTAL 58,157.90 MEAN 159 MAX 2,020 MIN 2.0 AC-FT 115,400

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-10	2400	4.99	1,200	1-18	0815	8.41	3,880
11-13	2300	7.66	3,140	2-4	1600	5.62	1,580
11-15	1915	7.61	3,100	2-7	0200	6.16	1,940
12-17	0845	5.17	1,310	2-9	2200	6.63	2,280
1-11	1145	6.44	2,140	2-24	0845	6.03	1,850
1-16	0815	8.55	4,020	3-20	0130	5.59	1,560

11381500 MILL CREEK NEAR LOS MOLINOS, CALIF.

LOCATION.--Lat 40°03'17", long 122°01'23", in NE¼NW¼ sec.6, T.25 N., R.1 W., Tehama County, on right bank 4.5 miles northeast of Los Molinos, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--131 sq mi.

PERIOD OF RECORD.--September 1909 to August 1913 (fragmentary), October 1928 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 385 ft (from topographic map). Prior to September 1913, nonrecording gage at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE.--45 years (1928-73), 300 cfs (217,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,610 cfs Jan. 16 (gage height, 9.22 ft); minimum daily, 104 cfs Sept. 10-18.
Period of record (1928 to current year): Maximum discharge, 36,400 cfs Dec. 11, 1937 (gage height, 23.4 ft, from floodmarks), from rating curve extended above 14,000 cfs on basis of step-backwater computation and slope-area measurement of maximum flow; minimum, 49 cfs Dec. 13, 1932.

REMARKS.--Records good. No storage or large diversion above station. Records of chemical analyses obtained near this station for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1315-A: 1929(M). WSP 1931: Drainage area. WRD Calif. 1969: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	115	133	180	297	886	305	484	499	198	129	109
2	110	116	133	174	268	691	275	469	446	190	127	109
3	107	117	134	169	271	634	260	470	419	185	125	109
4	106	214	151	159	629	580	261	474	398	180	124	109
5	107	205	133	152	670	470	278	411	379	175	124	106
6	108	150	138	150	761	651	316	398	391	168	124	106
7	106	200	139	144	958	483	360	421	379	165	124	106
8	118	206	129	148	594	430	347	449	385	162	122	106
9	118	168	127	1,060	707	364	355	463	388	160	122	106
10	148	303	111	702	1,180	400	379	465	376	158	122	104
11	189	434	115	1,280	737	500	411	485	351	155	120	104
12	221	225	131	1,350	604	400	452	527	335	152	119	104
13	150	249	128	1,070	480	354	466	600	323	150	118	104
14	166	1,080	124	657	614	320	411	676	303	146	117	104
15	258	453	127	933	495	295	423	664	286	145	115	104
16	223	981	137	3,490	401	282	390	719	269	146	113	104
17	204	322	1,180	1,670	352	286	417	722	255	147	113	104
18	165	252	773	2,270	315	266	416	732	244	144	113	104
19	148	286	904	1,000	287	264	375	760	238	143	113	128
20	139	235	514	616	268	305	348	676	233	141	113	152
21	132	201	387	500	253	311	334	589	233	140	113	123
22	129	184	605	400	244	306	346	553	236	146	113	114
23	127	168	463	338	237	275	387	535	233	141	117	125
24	124	159	388	307	572	260	436	624	228	140	119	132
25	119	154	308	351	624	260	462	736	220	138	116	137
26	119	150	265	324	866	266	526	564	220	135	123	119
27	119	150	252	287	2,110	279	595	488	218	133	117	114
28	117	143	246	266	1,510	273	612	496	215	132	114	111
29	117	138	217	308	------	259	617	514	212	131	112	109
30	115	135	201	408	------	259	542	528	208	131	111	109
31	115	------	191	341	------	363	------	514	------	129	109	------
TOTAL	4,334	7,893	8,984	21,204	17,304	11,972	12,102	17,206	9,120	4,706	3,661	3,375
MEAN	140	263	290	684	618	386	403	555	304	152	118	113
MAX	258	1,080	1,180	3,490	2,110	886	617	760	499	198	129	152
MIN	106	115	111	144	237	259	260	398	208	129	109	104
AC-FT	8,600	15,660	17,820	42,060	34,320	23,750	24,000	34,130	18,090	9,330	7,260	6,690

CAL YR 1972 TOTAL 89,660 MEAN 245 MAX 1,180 MIN 99 AC-FT 177,800
WTR YR 1973 TOTAL 121,861 MEAN 334 MAX 3,490 MIN 104 AC-FT 241,700

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-14	0600	6.53	2,470	1-16	0630	9.22	5,610
11-16	0230	6.56	2,490	1-18	1000	8.51	4,650
1-9	1430	6.48	2,420	2-27	1730	8.26	4,330

11382000 THOMES CREEK AT PASKENTA, CALIF.

LOCATION.--Lat 39°52'57", long 122°33'03", in SW¼NW¼ sec.4, T.23 N., R.6 W., Tehama County, on left bank 0.2 mile upstream from Digger Creek, and 0.3 mile upstream from highway bridge at Paskenta.

DRAINAGE AREA.--194 sq mi.

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to 1943, published as Thomas Creek at Paskenta.

GAGE.--Water-stage recorder. Datum of gage is 731.1 ft above mean sea level. Prior to Oct. 1, 1930, nonrecording gage at site 0.3 mile downstream at different datum. Oct. 1, 1930, to Dec. 28, 1938, water-stage recorder at site 1,300 ft upstream and Dec. 29, 1938, to June 20, 1942, at site 1,000 ft upstream at different datum. June 21, 1942, to Sept. 30, 1959, at present site at datum 1.75 ft higher.

AVERAGE DISCHARGE.--53 years, 285 cfs (206,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,740 cfs Jan. 16 (gage height, 8.89 ft); minimum daily, 3.0 cfs Sept. 9.
Period of record: Maximum discharge, 37,800 cfs Dec. 22, 1964 (gage height, 15.32 ft, in gage well, 16.4 ft, from floodmarks), from rating curve extended above 14,000 cfs on basis of slope-area measurement of peak flow; no flow at times in many years.

REMARKS.--Records fair. No storage or large diversions above station. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1345: 1923, 1924-28(M), 1938, 1940(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	19	175	227	334	1,070	546	602	184	28	6.9	4.8
2	23	20	169	217	326	1,060	481	594	152	26	6.6	3.7
3	21	24	166	206	330	986	436	562	139	25	6.0	3.7
4	19	178	214	197	649	810	442	530	126	23	6.0	3.7
5	18	143	173	184	650	650	554	454	118	22	6.0	4.2
6	16	101	169	178	882	594	834	442	112	21	6.3	4.5
7	16	102	157	170	1,130	509	930	442	105	21	6.9	4.2
8	16	105	95	172	906	474	834	430	98	19	6.6	3.6
9	17	93	78	186	1,130	448	958	418	93	19	6.6	3.0
10	22	134	84	204	822	516	958	418	88	17	6.3	3.2
11	30	228	76	1,930	720	660	1,210	412	82	16	5.7	3.7
12	52	130	88	3,010	670	554	1,200	442	80	16	6.0	3.9
13	42	399	78	3,180	660	509	972	495	76	16	5.7	4.5
14	44	462	78	1,410	680	430	780	530	75	15	5.1	4.8
15	211	758	80	1,340	680	375	730	523	74	15	5.1	4.5
16	209	529	380	4,990	650	412	690	509	71	15	4.5	4.5
17	128	225	3,420	2,370	586	424	700	495	69	15	4.2	4.8
18	94	172	2,220	2,220	481	380	640	448	69	14	4.5	4.8
19	69	160	2,050	1,130	436	520	570	395	64	15	4.2	5.4
20	54	140	1,410	958	412	858	530	342	57	14	4.2	5.7
21	44	122	1,360	846	418	610	481	307	42	15	4.2	6.0
22	37	128	2,290	578	400	488	502	286	40	15	4.5	8.5
23	32	124	1,150	488	385	460	594	276	40	13	5.1	11
24	29	124	810	509	1,050	454	670	273	40	12	5.4	12
25	26	124	509	509	1,100	516	710	276	39	10	5.4	15
26	24	173	375	474	1,240	562	790	225	36	9.4	5.1	12
27	24	239	355	442	1,370	650	918	191	33	9.0	5.7	9.8
28	23	202	338	390	1,100	594	822	178	31	9.0	5.1	8.5
29	22	202	286	406	------	516	780	172	31	8.5	4.8	7.7
30	21	186	262	390	------	578	700	173	30	8.1	4.8	7.3
31	20	------	246	380	------	690	------	173	------	7.3	4.8	------
TOTAL	1,429	5,746	19,341	29,891	20,197	18,357	21,962	12,013	2,294	488.3	168.3	183.0
MEAN	46.1	192	624	964	721	592	732	388	76.5	15.8	5.43	6.10
MAX	211	758	3,420	4,990	1,370	1,070	1,210	602	184	28	6.9	15
MIN	16	19	76	170	326	375	436	172	30	7.3	4.2	3.0
AC-FT	2,830	11,400	38,360	59,290	40,060	36,410	43,560	23,830	4,550	969	334	363

CAL YR 1972 TOTAL 91,566.7 MEAN 250 MAX 3,420 MIN 2.7 AC-FT 181,600
WTR YR 1973 TOTAL 132,069.6 MEAN 362 MAX 4,990 MIN 3.0 AC-FT 262,000

PEAK DISCHARGE (BASE, 1,800 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	0900	8.40	5,560	1-16	0800	8.89	7,740
12-18	2030	7.87	4,660	1-18	0630	6.88	3,720
12-22	0500	7.06	3,480	2-7	0200	6.07	1,950
1-12	2400	7.88	5,220	2-9	2130	6.28	2,130

11383500 DEER CREEK NEAR VINA, CALIF.

LOCATION.--Lat 40°00'51", long 121°56'50", in NW¼NE¼ sec.23, T.25 N., R.1 W., Tehama County, on left bank 0.5 mile upstream from diversion dam, and 7.9 miles northeast of Vina.

DRAINAGE AREA.--208 sq mi.

PERIOD OF RECORD.--October 1911 to December 1915, March 1920 to December 1937, January 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 479.5 ft above mean sea level (river-profile survey). Prior to Oct. 9, 1928, nonrecording gage at site 0.8 mile downstream at different datum. Oct. 9, 1928, to Jan. 19, 1939, water-stage recorder at present site at datum 2.64 ft higher.

AVERAGE DISCHARGE.--55 years, 314 cfs (227,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,310 cfs Jan. 16 (gage height, 9.74 ft); minimum daily, 92 cfs Oct. 6, 7.
Period of record: Maximum discharge, 23,800 cfs Dec. 10, 1937 (gage height, 19.2 ft, present datum, from floodmarks), from rating curve extended above 9,200 cfs on basis of velocity-area studies; minimum, 43 cfs Dec. 13, 1932.

REMARKS.--Records excellent. No storage or large diversions above station.

REVISIONS (WATER YEARS).--WSP 1315-A: 1940-42(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	98	124	190	392	1,340	420	532	291	128	105	97
2	94	101	122	182	360	1,050	387	507	263	126	103	96
3	93	102	120	178	363	926	369	497	243	125	103	96
4	93	138	139	164	766	810	378	500	228	124	103	96
5	94	196	124	153	855	682	404	481	217	122	102	96
6	92	129	127	150	896	902	445	451	207	122	102	96
7	92	166	125	142	1,120	745	490	445	198	122	102	95
8	94	192	118	150	810	650	465	448	190	122	101	95
9	100	143	113	967	873	574	481	445	184	120	101	94
10	116	211	106	630	1,530	556	507	442	179	119	101	94
11	141	415	105	1,130	1,050	626	535	442	177	119	102	95
12	170	209	119	1,440	855	542	574	445	173	118	101	95
13	118	284	116	1,190	670	497	586	456	170	119	101	95
14	119	1,040	114	775	780	454	532	478	168	118	100	94
15	201	524	118	904	638	423	552	474	166	118	99	94
16	176	1,020	130	4,580	546	404	528	521	164	118	98	95
17	149	354	810	2,120	487	409	549	487	160	118	98	95
18	129	246	671	3,280	445	381	556	471	156	114	98	95
19	114	246	804	1,560	409	384	507	514	152	113	97	96
20	109	220	549	944	378	507	474	462	146	112	97	119
21	105	190	426	740	357	494	454	428	142	113	97	114
22	104	172	630	574	336	456	459	401	141	116	97	102
23	104	158	524	481	321	415	490	378	135	113	97	112
24	102	149	436	439	779	392	518	378	139	112	99	116
25	98	143	357	454	870	395	532	442	137	109	101	112
26	100	139	303	406	1,160	401	563	390	133	108	107	103
27	100	139	280	369	2,400	415	610	345	132	107	107	99
28	100	132	263	342	2,090	398	630	321	130	106	103	98
29	98	130	228	406	------	375	626	300	128	105	99	98
30	98	127	214	500	------	369	578	288	128	105	98	98
31	98	------	203	434	------	459	------	283	------	105	98	------
TOTAL	3,495	7,513	8,618	25,974	22,536	17,431	15,199	13,452	5,177	3,596	3,117	2,980
MEAN	113	250	278	838	805	562	507	434	173	116	101	99.3
MAX	201	1,040	810	4,580	2,400	1,340	630	532	291	128	107	119
MIN	92	98	105	142	321	369	369	283	128	105	97	94
AC-FT	6,930	14,900	17,090	51,520	44,700	34,570	30,150	26,680	10,270	7,130	6,180	5,910

CAL YR 1972 TOTAL 87,516 MEAN 239 MAX 1,200 MIN 86 AC-FT 173,600
WTR YR 1973 TOTAL 129,088 MEAN 354 MAX 4,580 MIN 92 AC-FT 256,000

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0030	6.30	2,550	1-18	0930	9.13	6,300
1-16	0830	9.74	7,310	2-27	2200	7.53	4,080

11384000 BIG CHICO CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°46'35", long 121°45'10", in Arroyo Chico Grant, Butte County, 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.

DRAINAGE AREA.--72.4 sq mi.

PERIOD OF RECORD.--May 1930 to current year. Prior to October 1952, published as Chico Creek near Chico.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft (from topographic map). Prior to Oct. 1, 1955, at site 0.6 mile downstream at different datum.

AVERAGE DISCHARGE.--43 years, 144 cfs (104,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,200 cfs Jan. 16 (gage height, 10.87 ft); minimum daily, 21 cfs Aug. 14-16.
Period of record: Maximum discharge, 9,580 cfs Jan. 5, 1965 (gage height, 15.36 ft); minimum, 10 cfs Dec. 11, 1932, Aug. 15, 1939, Sept. 18, 1947.

REMARKS.--Records good. No storage or large diversion above station. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1965: 1964(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	27	39	57	267	1,150	196	73	46	31	22	29
2	27	26	38	54	233	785	177	72	44	31	22	28
3	27	29	38	52	224	640	162	69	42	30	22	27
4	26	39	47	50	435	573	152	70	41	30	22	26
5	26	45	43	47	736	487	147	73	40	30	22	27
6	25	37	46	46	726	658	141	68	38	29	22	27
7	25	51	44	44	1,170	566	135	65	38	26	22	27
8	25	72	39	48	856	488	128	63	37	29	22	27
9	26	48	34	515	761	422	125	61	37	28	22	26
10	33	59	41	585	1,460	415	120	60	37	28	22	24
11	39	147	38	956	1,170	495	116	58	36	28	23	24
12	50	82	40	1,720	818	431	113	57	36	28	22	24
13	33	96	39	1,100	569	372	113	55	35	29	22	24
14	35	545	38	548	616	317	112	54	35	29	21	24
15	50	243	38	479	535	272	107	54	36	27	21	24
16	50	589	47	3,540	440	236	105	54	36	29	21	24
17	38	203	453	1,820	372	238	103	52	35	28	22	24
18	36	122	402	2,460	317	214	99	50	35	26	22	24
19	32	113	535	1,490	271	214	96	49	34	26	24	24
20	31	98	295	792	232	350	93	47	33	28	23	33
21	29	82	187	528	206	381	89	47	31	26	22	31
22	28	71	168	388	186	358	85	47	33	28	24	28
23	28	62	143	302	168	323	83	46	33	27	24	30
24	28	56	134	252	290	286	82	47	34	27	24	30
25	26	50	113	254	447	259	81	53	34	25	25	30
26	26	47	97	226	642	238	80	50	33	24	27	28
27	26	45	88	199	1,700	218	78	48	32	24	27	27
28	27	43	83	179	1,870	197	79	46	32	23	26	27
29	26	41	74	216	------	178	78	44	32	23	25	27
30	27	40	67	333	------	170	77	42	31	23	24	27
31	27	------	62	303	------	236	------	43	------	22	25	------
TOTAL	959	3,208	3,550	19,583	17,717	12,167	3,352	1,717	1,076	842	714	802
MEAN	30.9	107	115	632	633	392	112	55.4	35.9	27.2	23.0	26.7
MAX	50	589	535	3,540	1,870	1,150	196	73	46	31	27	33
MIN	25	26	34	44	168	170	77	42	31	22	21	24
AC-FT	1,900	6,360	7,040	38,840	35,140	24,130	6,650	3,410	2,130	1,670	1,420	1,590

CAL YR 1972 TOTAL 26,681 MEAN 72.9 MAX 589 MIN 18 AC-FT 52,920
WTR YR 1973 TOTAL 65,687 MEAN 180 MAX 3,540 MIN 21 AC-FT 130,300

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0500	6.72	1,960	2-10	0330	6.28	1,660
1-16	1200	10.87	5,200	2-27	2230	7.70	2,660
1-18	1100	8.74	3,490				

11384350 MUD CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°47'02", long 121°53'06", in SW¼SE¼ sec.5, T.22 N., R.1 E., Butte County, on left bank 0.1 mile upstream from bridge on State Highway 99E, and 5 miles northwest of Chico.

DRAINAGE AREA.--48.9 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 170 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 57.2 cfs (41,440 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,260 cfs Feb. 27 (gage height, 8.74 ft); no flow for several months. Period of record: Maximum discharge, 10,400 cfs Jan. 13, 1969 (gage height, 12.94 ft in gage well, 12.0 ft, from floodmarks); no flow for several months in each year.
Flood of Dec. 22, 1964, reached a stage of 13.23 ft (discharge, 9,880 cfs); maximum stage recorded since reconstruction of the channel, 13.55 ft Jan. 15, 1965 (backwater from debris).

REMARKS.--No storage or diversion above station. During periods of flood flows on Big Chico Creek, flood waters are diverted at Mud Creek diversion dam in sec.18, T.22 N., R.2 E., to Lindo channel and Mud Creek, however, most of the water is diverted to Mud Creek.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	2.3	6.8	97	353	44	7.2	3.5	0	.30	1.0
2	0	0	2.2	6.2	71	271	34	6.9	2.2	0	0	0
3	0	0	2.3	5.7	88	325	29	6.8	1.3	0	0	0
4	0	0	5.4	5.1	227	298	25	7.9	.90	0	0	0
5	0	0	5.0	4.7	173	206	23	7.9	.70	0	0	0
6	0	0	58	4.6	538	607	22	6.7	.40	0	0	0
7	0	4.9	19	4.2	869	291	21	6.4	.10	0	0	0
8	0	6.9	8.6	28	366	219	19	5.7	1.1	0	0	0
9	0	2.2	5.4	1,470	458	166	19	5.5	2.0	0	0	0
10	0	41	3.1	439	647	141	18	5.1	1.8	0	0	0
11	0	331	3.0	1,080	330	124	16	4.8	1.9	0	0	0
12	0	17	2.9	1,050	235	94	15	4.6	1.7	0	0	0
13	0	194	2.8	473	192	74	15	4.2	1.5	0	0	0
14	0	775	2.4	239	361	60	15	3.9	1.3	0	0	0
15	.60	322	2.4	413	233	49	14	3.6	.70	0	0	0
16	.80	516	83	2,580	179	43	14	3.5	0	0	0	0
17	3.1	67	989	523	150	44	13	3.1	0	0	0	0
18	.20	23	476	1,130	116	36	13	2.9	0	0	0	0
19	0	36	344	375	88	50	12	2.7	0	.10	0	0
20	0	16	167	229	69	174	11	2.7	.20	0	0	0
21	0	11	85	203	57	266	11	2.7	0	0	.10	0
22	0	8.3	44	141	46	179	10	2.5	0	0	.20	0
23	0	6.4	22	89	40	118	9.7	2.4	0	0	0	0
24	0	5.1	65	75	131	81	9.4	2.7	0	0	0	0
25	0	4.3	22	145	120	64	8.9	3.2	0	.30	0	0
26	0	3.7	16	88	677	54	8.6	2.7	0	.50	0	0
27	0	3.4	17	52	1,480	62	8.3	2.2	.10	.10	0	0
28	0	3.0	23	40	641	38	8.1	1.8	.20	.50	0	0
29	0	2.7	12	207	------	29	8.0	1.5	.40	.20	.10	0
30	0	2.5	9.7	262	------	28	7.6	1.4	0	0	1.8	.20
31	0	------	8.0	145	------	74	------	2.0	------	.30	2.3	------
TOTAL	4.70	2,402.4	2,507.5	11,513.3	8,679	4,618	481.6	127.2	22.00	2.00	4.80	1.20
MEAN	.15	80.1	80.9	371	310	149	16.1	4.10	.73	.065	.15	.040
MAX	3.1	775	989	2,580	1,480	607	44	7.9	3.5	.50	2.3	1.0
MIN	0	0	2.2	4.2	40	28	7.6	1.4	0	0	0	0
AC-FT	9.3	4,770	4,970	22,840	17,210	9,160	955	252	44	4.0	9.5	2.4

CAL YR 1972 TOTAL 6,078.80 MEAN 16.6 MAX 989 MIN 0 AC-FT 12,060
WTR YR 1973 TOTAL 30,363.70 MEAN 83.2 MAX 2,580 MIN 0 AC-FT 60,230

11384600 LITTLE STONY CREEK ABOVE EAST PARK RESERVOIR, NEAR LODOGA, CALIF.

LOCATION.--Lat 39°17'48", long 122°32'22", in NE¼SW¼ (revised) sec.28, T.17 N., R.6 W., Colusa County, on left bank 1.1 miles upstream from county bridge on Lodoga-Stonyford Road, 1.4 miles downstream from Frenzel Creek, and 2.8 miles southwest of Lodoga.

DRAINAGE AREA.--45.6 sq mi.

PERIOD OF RECORD.--September 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 65.1 cfs (47,160 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,100 cfs Jan. 16 (gage height, 8.84 ft); minimum daily, 0.51 cfs Oct. 4.
Period of record: Maximum discharge, 4,000 cfs Jan. 23, 1970 (gage height, 11.39 ft), from rating curve extended above 1,500 cfs; no flow for several days during August and September 1972.

REMARKS.--Records good. No known storage or diversions above station. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	2.4	9.0	38	108	376	84	43	12	3.9	.96	.76
2	.63	2.6	9.0	36	98	297	80	41	11	4.2	.86	.76
3	.53	2.9	10	34	106	278	76	39	11	3.7	.86	.76
4	.51	4.3	15	32	293	243	73	38	11	3.7	.86	.76
5	.56	3.9	11	30	361	211	72	36	10	3.2	.96	.68
6	.56	3.2	14	28	580	258	72	34	9.6	3.2	.96	.76
7	.52	4.2	12	27	878	248	70	32	9.1	3.2	.96	.86
8	.55	4.1	10	30	585	224	69	30	8.5	3.2	1.2	.76
9	.83	3.7	11	177	495	197	68	29	8.1	2.9	1.2	.68
10	1.2	9.7	10	152	623	181	68	27	7.9	2.9	1.2	.60
11	2.9	26	9.7	794	527	169	68	26	8.0	2.9	1.2	.60
12	3.9	9.8	9.9	802	430	151	68	24	7.8	2.7	1.1	.60
13	2.8	209	9.5	470	494	137	71	23	7.7	2.7	1.1	.63
14	4.3	219	9.3	310	415	124	67	22	8.0	2.5	.96	.65
15	20	211	9.5	259	326	113	65	22	8.0	2.5	.86	.66
16	9.4	155	61	1,180	268	106	63	21	7.5	2.5	.76	.74
17	7.0	45	416	677	226	101	63	20	7.1	2.5	.76	.76
18	5.0	27	285	1,180	194	95	60	19	6.9	2.5	.76	.76
19	3.5	22	269	586	170	119	58	18	6.5	2.3	.76	.76
20	3.0	18	137	341	152	154	55	17	6.0	2.3	.76	.81
21	2.6	16	92	246	138	139	53	17	5.4	2.3	.68	1.1
22	2.4	14	160	181	125	129	52	16	5.3	2.3	.76	1.3
23	2.6	13	115	148	116	119	51	16	5.7	2.1	.86	1.6
24	2.4	12	99	142	470	111	50	16	5.8	2.1	1.1	1.7
25	2.2	11	78	142	536	107	50	16	5.3	1.9	1.2	1.5
26	2.3	11	68	118	486	103	50	15	4.7	1.5	1.2	1.3
27	2.4	10	64	105	511	99	50	14	4.4	1.4	1.2	1.1
28	2.4	9.8	57	96	477	93	50	13	4.3	1.2	1.1	1.0
29	2.2	9.6	49	133	------	88	49	12	4.1	1.2	.96	.99
30	2.2	9.3	45	146	------	92	46	12	3.9	1.2	.86	.98
31	2.4	------	41	123	------	91	------	12	------	1.1	.76	------
TOTAL	94.47	1,098.5	2,194.9	8,763	10,188	4,953	1,871	720	220.6	77.8	29.72	26.92
MEAN	3.05	36.6	70.8	283	364	160	62.4	23.2	7.35	2.51	.96	.90
MAX	20	219	416	1,180	878	376	84	43	12	4.2	1.2	1.7
MIN	.51	2.4	9.0	27	98	88	46	12	3.9	1.1	.68	.60
AC-FT	187	2,180	4,350	17,380	20,210	9,820	3,710	1,430	438	154	59	53

CAL YR 1972 TOTAL 9,440.73 MEAN 25.8 MAX 416 MIN 0 AC-FT 18,730
WTR YR 1973 TOTAL 30,237.91 MEAN 82.8 MAX 1,180 MIN .51 AC-FT 59,980

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-11	1230	7.29	1,190	2-6	2300	7.14	1,210
1-16	0700	8.84	2,100				

RESERVOIRS IN STONY CREEK BASIN, CALIF.

11385100 EAST PARK RESERVOIR NEAR STONYFORD.--Lat 39°21'24", long 122°30'53", in SW¼NE¼ sec.3, T.17 N., R.6 W., Colusa County, near south side of spillway section on East Park Dam on Little Stony Creek, 1.9 miles southeast of Stonyford. Drainage area, 98.2 sq mi. Period of record, October 1969 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Extremes for current year: Maximum contents, 51,110 acre-ft Apr. 24-30, May 1-4 (elevation, 1,199.80 ft); minimum, 280 acre-ft Oct. 1-31 (elevation, 1,131.68 ft). Extremes for period of record: Maximum contents, 51,890 acre-ft Mar. 26, 1971 (elevation, 1,200.23 ft); minimum, 280 acre-ft Aug. 8 to Oct. 31, 1972 (elevation, 1,131.68 ft).

Reservoir is formed by a concrete arch-type dam. Storage began in 1910. Capacity, 48,211 acre-ft between elevations 1,131.68 ft (invert of sluice pipe) and 1,198.18 ft (crest of spillway). Capacity increased to 50,889 acre-ft with the addition of flashboards to an elevation of 1,199.68 ft. Dead storage, 279 acre-ft. Records of contents furnished by Bureau of Reclamation.

11386100 STONY GORGE RESERVOIR NEAR ELK CREEK.--Lat 39°35'09", long 122°31'54", in NE¼SE¼ sec.16, T.20 N., R.6 W., Glenn County, on south end of Stony Gorge Dam on Stony Creek, 1.3 miles southeast of Elk Creek. Drainage area, 301 sq mi. Period of record, October 1969 to current year. Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Bureau of Reclamation). Extremes for current year: Maximum contents, 52,220 acre-ft Apr. 9 (elevation, 842.40 ft); minimum, 5,670 acre-ft Sept. 30 (elevation, 785.20 ft). Extremes for period of record: Maximum contents, 54,630 acre-ft Mar. 26, 1971 (elevation, 844.20 ft); minimum, 3,810 acre-ft Nov. 6, 1971 (elevation, 779.20 ft).

Reservoir is formed by slab and buttress-type dam. Storage began in 1928. Capacity, 50,383 acre-ft between elevations, 728.0 ft (top of low intake) and 841.0 ft (crest of spillway). No dead storage. Records of contents furnished by Bureau of Reclamation.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
	EAST PARK RESERVOIR			STONY GORGE RESERVOIR		
Sept. 30	1,131.68	280	--	806.20	16,210	--
Oct. 31	1,131.68	280	0	809.86	18,780	+2,570
Nov. 30	1,163.64	8,880	+8,600	820.26	27,370	+8,590
Dec. 31	1,176.71	18,970	+10,090	837.26	45,660	+18,290
CAL YR 1972	--	--	+4,460	--	--	+29,580
Jan. 31	1,198.76	49,230	+30,260	837.22	45,610	-50
Feb. 28	1,198.96	49,590	+360	837.83	46,350	+740
Mar. 31	1,198.46	48,700	-890	840.80	50,120	+3,770
Apr. 30	1,199.80	51,110	+2,410	839.96	49,040	-1,080
May 31	1,199.60	50,740	-370	841.50	51,030	+1,990
June 30	1,198.80	49,310	-1,430	832.08	39,530	-11,500
July 31	1,186.08	29,660	-19,650	827.68	34,710	-4,820
Aug. 31	1,179.30	21,610	-8,050	809.80	18,740	-15,970
Sept. 30	1,173.76	16,240	-5,370	785.19	5,670	-13,070
WTR YR 1973	--	--	+15,960	--	--	-10,540

11387000 STONY CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°40'18", long 122°31'01", in SW¼SE¼ sec.15, T.21 N., R.6 W., Glenn County, on right bank 0.3 mile downstream from Grindstone Creek, and 6.5 miles northwest of Fruto.

DRAINAGE AREA.--597 sq mi.

PERIOD OF RECORD.--January 1901 to October 1912, October 1960 to current year.

GAGE.--Water-stage recorder and two crest-stage gages. Altitude of gage is 600 ft (from topographic map). Prior to Oct. 6, 1912, nonrecording gage at site 1.0 mile downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--24 years, 667 cfs (483,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 18,900 cfs Feb. 7 (gage height, 12.26 ft); minimum daily, 4.9 cfs Oct. 6.
Period of record: Maximum discharge, 40,200 cfs Dec. 23, 1964 (gage heights, 15.94 ft in gage well, 16.1 ft, from floodmarks); no flow July 5-13, Oct. 25, 26, 1901.

REMARKS.--Records fair. Many diversions above station for irrigation. Flow regulated by Stony Gorge Reservoir (see sta 11386100) 6.9 miles upstream since 1928 and by East Park Reservoir (see sta 11385100) since 1910 (combined usable capacity, 100,700 acre-ft). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	36	55	191	1,100	3,740	966	1,070	210	400	357	372
2	7.5	82	53	179	950	3,420	968	1,060	200	398	360	418
3	6.4	84	53	170	934	3,080	950	1,050	192	399	356	371
4	5.6	120	84	154	2,500	2,660	711	1,030	182	390	355	336
5	5.4	138	64	140	3,540	2,280	659	1,010	170	388	351	298
6	4.9	111	63	132	5,820	2,330	824	987	175	380	346	298
7	5.0	113	61	125	11,500	2,410	929	534	164	380	340	298
8	5.2	114	42	136	3,870	2,190	994	212	152	383	327	298
9	6.1	104	30	273	4,520	1,910	1,010	206	130	390	325	298
10	7.5	153	42	644	5,590	1,780	957	203	115	392	325	298
11	9.9	230	49	6,640	4,640	1,810	966	202	95	385	320	298
12	13	156	57	8,500	3,170	1,620	962	204	170	382	320	299
13	13	538	49	6,500	4,440	1,050	902	214	460	380	320	298
14	16	891	47	3,500	4,640	749	814	224	480	380	311	294
15	143	1,520	51	1,600	4,120	908	742	221	470	380	310	294
16	126	854	434	7,100	3,380	998	693	218	470	377	306	356
17	88	246	2,810	6,400	2,930	1,040	705	215	410	315	302	333
18	55	160	1,980	8,300	2,550	1,010	678	209	350	368	302	276
19	33	137	1,540	5,000	2,250	1,230	628	196	339	370	298	283
20	24	126	1,100	3,210	2,030	2,520	593	202	331	365	298	308
21	19	100	684	2,910	1,890	2,250	560	210	326	365	186	264
22	17	90	1,050	2,250	1,730	1,890	570	196	325	365	30	268
23	15	78	816	1,760	1,610	1,610	572	200	380	367	30	290
24	13	73	660	1,480	4,480	1,440	627	194	427	363	30	218
25	13	63	470	1,420	5,040	1,370	805	184	417	360	161	160
26	13	67	415	1,230	4,520	1,330	800	180	413	360	345	155
27	12	75	348	1,040	5,600	1,300	955	190	412	359	350	143
28	12	71	324	910	4,290	941	1,080	184	410	360	604	143
29	11	69	265	1,050	------	561	1,110	180	406	360	842	143
30	11	61	234	1,490	------	621	1,060	190	400	355	842	140
31	11	------	210	1,330	------	910	------	215	------	351	574	------
TOTAL	729.4	6,660	14,140	75,764	103,634	52,958	24,790	11,590	9,181	11,567	10,523	8,248
MEAN	23.5	222	456	2,444	3,701	1,708	826	374	306	373	339	275
MAX	143	1,520	2,810	8,500	11,500	3,740	1,110	1,070	480	400	842	418
MIN	4.9	36	30	125	934	561	560	180	95	315	30	140
AC-FT	1,450	13,210	28,050	150,300	205,600	105,000	49,170	22,990	18,210	22,940	20,870	16,360

CAL YR 1972 TOTAL 105,836.7 MEAN 289 MAX 2,810 MIN 4.6 AC-FT 209,900
WTR YR 1973 TOTAL 329,784.4 MEAN 904 MAX 11,500 MIN 4.9 AC-FT 654,100

11387800 NORTH FORK STONY CREEK NEAR NEWVILLE, CALIF.

LOCATION.--Lat 39°47'05", long 122°28'34", in SW¼SW¼ sec.6, T.22 N., R.5 W., Glenn County, on right bank 150 ft downstream from Bedford Creek, and 2.7 miles east of Newville.

DRAINAGE AREA.--63.4 sq mi.

PERIOD OF RECORD.--May 1963 to September 1973 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Datum of gage is 531.43 ft above mean sea level.

AVERAGE DISCHARGE.--10 years, 41.6 cfs (30,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,770 cfs Jan. 16 (gage height, 8.02 ft); no flow many days.
Period of record: Maximum discharge, 12,500 cfs Jan. 5, 1965 (gage height, 11.48 ft), from rating curve extended above 2,500 cfs on basis of slope-area measurements at gage heights 7.3 and 11.48 ft; no flow at times in each year.
Flood of Apr. 7, 1963, reached a stage of 7.3 ft, from floodmarks (discharge, 4,600 cfs by slope-area measurement).

REMARKS.--Records good except those during the summer months, which are poor. No regulation above station. Probably a few small diversions above the station for irrigation.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01	8.8	19	58	253	65	14	4.8	.53	.06	
2	0	.01	8.6	18	53	198	58	13	3.3	.39	.05	
3	0	.02	10	18	80	223	53	14	2.8	.49	.05	
4	0	.03	13	15	803	173	50	14	2.4	.55	.05	
5	0	.02	8.2	14	325	150	48	14	2.3	.40	.05	
6	0	.02	13	14	1,000	235	46	13	2.1	.37	.05	
7	0	.14	13	13	1,150	153	42	12	2.0	.37	.05	
8	0	.07	11	14	420	143	40	12	1.9	.31	.04	
9	0	.15	7.6	71	686	122	38	11	1.7	.28	.04	
10	0	3.4	7.4	177	580	113	36	10	1.6	.15	.04	
11	0	108	6.9	1,570	409	100	34	9.6	1.6	.09	.04	
12	0	14	7.3	740	322	88	32	9.2	1.8	.09	.03	
13	0	549	7.2	310	377	78	33	9.2	1.8	.09	.03	
14	0	547	7.3	162	366	69	33	9.2	2.1	.08	.03	
15	50	988	7.7	151	274	65	30	8.8	1.8	.08	.03	
16	11	392	267	1,570	184	63	30	8.4	1.9	.08	.03	
17	2.3	119	433	310	159	60	29	8.0	2.0	.08	.02	
18	1.7	69	365	1,490	136	56	26	7.3	1.8	.08	.02	
19	1.1	56	175	293	120	251	26	6.6	1.6	.08	.02	
20	.65	42	84	185	106	968	25	6.6	1.5	.07	.02	
21	.26	36	61	206	94	474	25	5.7	1.4	.07	.02	
22	.03	29	53	119	85	223	25	4.3	1.3	.07	.02	
23	.02	22	40	93	80	162	25	4.1	1.2	.07	.02	
24	.01	18	36	100	846	139	23	7.0	1.1	.07	.02	
25	.01	15	31	97	454	127	18	7.0	1.0	.07	.01	
26	.01	14	28	70	494	115	17	6.0	.98	.06	.01	
27	.01	12	30	60	709	104	16	5.7	.88	.06	.01	
28	.01	11	28	54	447	89	16	5.1	.67	.06	.01	
29	0	9.8	24	143	------	81	15	4.6	.58	.06	.01	
30	0	9.2	22	109	------	83	14	4.1	.57	.06	.01	
31	0	------	21	71	------	78	------	5.1	------	.06	0	------
TOTAL	67.11	3,063.87	1,835.0	8,276	10,817	5,236	968	268.6	52.48	5.37	.89	0
MEAN	2.16	102	59.2	267	386	169	32.3	8.66	1.75	.17	.029	0
MAX	50	988	433	1,570	1,150	968	65	14	4.8	.55	.06	0
MIN	0	.01	6.9	13	53	56	14	4.1	.57	.06	0	0
AC-FT	133	6,080	3,640	16,420	21,460	10,390	1,920	533	104	11	1.8	0

CAL YR 1972 TOTAL 5,485.22 MEAN 15.0 MAX 988 MIN 0 AC-FT 10,880
WTR YR 1973 TOTAL 30,590.32 MEAN 83.8 MAX 1,570 MIN 0 AC-FT 60,680

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-13	2330	5.57	2,330	2-7	0130	6.28	3,140
11-15	2000	5.96	2,760	2-9	2230	5.64	2,400
1-11	1000	6.00	2,800	2-24	1100	5.50	2,250
1-16	0700	8.02	5,770	3-20	0530	5.29	2,040
1-18	0700	7.01	4,120				

11387990 SOUTH DIVERSION CANAL NEAR ORLAND, CALIF.

LOCATION.--Lat 39°48'36", long 122°19'45", in SE¼NE¼ sec.32, T.23 N., R.4 W., Tehama County, on left bank 0.4 mile downstream from Black Butte Dam, and 8.2 miles northwest of Orland.

PERIOD OF RECORD.--July 1955 to current year. Prior to October 1961, published as an adjustment to Stony Creek at Black Butte damsite near Orland.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 372.64 ft above mean sea level. Prior to Oct. 23, 1956, at site 0.5 mile upstream at different datum. Oct. 23, 1956, to Sept. 30, 1960, at present site and datum. Oct. 1, 1960, to Sept. 30, 1961, at datum 1.00 ft lower.

AVERAGE DISCHARGE.--18 years, 108 cfs (78,250 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 320 cfs May 8, 1969; no flow at times in most years.

REMARKS.--Records good. Canal diverts from Black Butte Lake at right end of Black Butte Dam; water is used for irrigation. A pump with a capacity of 6 cfs diverted water at times above station and was included in the canal record prior to Mar. 1, 1970. Total diverted during the current year was 768 acre-ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	14	2.8	2.8	1.0	.70	1.5	205	270	264	248	206
2	102	15	2.8	2.8	1.0	.70	4.1	207	259	255	239	229
3	97	10	2.8	2.5	.90	.70	2.1	226	224	262	239	218
4	122	2.0	2.8	2.5	1.3	.70	1.5	216	222	289	259	233
5	104	14	2.8	2.4	1.0	.70	1.7	238	237	278	240	246
6	122	14	2.8	2.4	4.6	1.9	33	235	259	304	246	255
7	139	6.0	2.8	2.8	5.0	1.2	36	236	260	280	280	260
8	108	3.5	2.8	2.8	.60	1.5	30	239	288	237	301	251
9	107	3.5	2.8	3.7	1.2	1.5	31	220	292	250	270	206
10	42	3.5	2.8	3.6	.70	1.5	31	235	250	267	263	191
11	2.3	3.5	3.0	4.7	1.0	1.5	54	249	244	270	280	200
12	3.2	3.5	3.0	2.3	.60	1.5	84	233	252	272	233	193
13	3.2	4.3	3.0	1.1	.70	1.2	117	247	252	276	178	190
14	3.2	3.9	3.0	.20	.40	1.0	148	231	246	281	187	190
15	3.2	4.9	3.0	.20	.30	1.0	137	218	266	263	214	209
16	5.6	3.3	3.3	1.1	.60	1.0	124	247	281	263	207	206
17	1.3	2.8	3.7	.70	1.1	1.0	112	263	271	266	218	195
18	1.1	2.8	3.5	8.1	1.1	1.0	136	273	234	272	235	227
19	9.2	2.8	3.2	.50	1.1	1.2	153	294	225	257	243	221
20	20	2.8	2.5	.30	1.3	1.7	174	278	260	244	246	210
21	20	2.8	2.8	.30	1.3	1.9	194	254	285	244	247	206
22	20	2.8	2.8	.30	1.3	1.5	190	248	281	249	259	193
23	20	2.8	2.6	.20	1.3	1.3	216	251	263	251	257	144
24	20	2.8	2.4	.20	1.8	1.1	252	255	238	251	251	107
25	16	2.8	2.4	.40	1.3	1.1	287	250	234	270	233	127
26	17	2.8	2.5	.60	1.8	1.1	273	220	246	279	202	140
27	17	2.8	2.5	1.0	2.1	1.3	259	214	258	294	191	161
28	16	2.8	2.3	1.0	1.2	1.1	242	216	249	283	182	169
29	16	2.8	2.1	1.6	------	1.1	238	233	245	256	186	191
30	16	2.8	2.1	1.4	------	1.9	205	270	253	260	200	183
31	15	------	2.5	1.0	------	1.5	------	286	------	257	192	------
TOTAL	1,327.3	148.1	86.2	55.50	37.60	38.10	3,766.9	7,487	7,644	8,244	7,226	5,957
MEAN	42.8	4.94	2.78	1.79	1.34	1.23	126	242	255	266	233	199
MAX	139	15	3.7	8.1	5.0	1.9	287	294	292	304	301	260
MIN	1.1	2.0	2.1	.20	.30	.70	1.5	205	222	237	178	107
AC-FT	2,630	294	171	110	75	76	7,470	14,850	15,160	16,350	14,330	11,820

CAL YR 1972 TOTAL 32,545.30 MEAN 88.9 MAX 282 MIN 0 AC-FT 64,550
WTR YR 1973 TOTAL 42,017.70 MEAN 115 MAX 304 MIN .20 AC-FT 83,340

11387995 BLACK BUTTE LAKE NEAR ORLAND, CALIF.

LOCATION.--Lat 39°48'50", long 122°20'12", in SE¼SW¼ sec.29, T.23 N., R.4 W., Tehama County, in control tower in right abutment of main dam on Stony Creek, 8 miles northwest of Orland.

DRAINAGE AREA.--736 sq mi.

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1971, published as Black Butte Reservoir near Orland.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Corps of Engineers).

EXTREMES.--Current year: Maximum contents, 137,663 acre-ft Apr. 22 (elevation, 468.33 ft); minimum, 19,964 acre-ft Nov. 1 (elevation, 424.15 ft).
Period of record: Maximum contents, 149,700 acre-ft June 8, 9, 1967 (elevation, 471.19 ft); minimum since initial season of operation, 9,420 acre-ft Oct. 27, 1964 (elevation, 413.83 ft).

REMARKS.--Reservoir is formed by seven earthfill dams; storage began Oct. 28, 1963. Usable capacity, 150,000 acre-ft between elevations 414.6 ft (minimum operating level) and 473.5 ft (spillway crest) above mean sea level. Additional storage of 10,000 acre-ft is not available for release. South Diversion Canal (see sta 11397990) diverts at right end of dam. Water is released down Stony Creek for irrigation. Records, including extremes, represent total contents at 2400 hours.

COOPERATION.--Records of contents furnished by Corps of Engineers, not rounded to Geological Survey standards.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

413.0	8,811	450.0	73,660
415.0	10,300	460.0	105,925
420.0	14,950	470.0	144,621
430.0	28,788	480.0	191,348
440.0	48,072		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33,339	19,964	40,307	60,100	54,035	76,418	109,681	136,640	90,976	62,402	50,517	41,088
2	32,765	19,991	40,367	59,439	55,428	70,330	111,676	136,640	89,133	62,010	50,130	40,927
3	32,160	20,098	40,467	58,732	56,966	66,091	113,689	136,436	87,436	61,594	49,746	40,767
4	31,474	20,274	40,547	58,131	62,455	61,128	115,424	136,273	85,693	61,128	49,385	40,527
5	30,519	20,478	40,747	57,683	66,831	55,549	116,834	135,987	83,781	60,741	49,072	40,267
6	29,630	20,655	40,887	57,410	73,659	51,226	118,408	135,703	81,795	60,305	48,581	39,950
7	28,788	20,916	40,968	57,385	91,399	49,251	120,179	134,769	79,801	59,947	48,138	39,515
8	27,975	21,096	40,968	57,757	86,895	49,251	121,925	133,156	77,648	59,642	47,588	39,201
9	27,272	21,291	41,008	58,582	83,562	50,653	123,802	131,475	75,523	59,312	47,086	39,044
10	26,676	21,699	41,008	60,075	81,456	52,385	125,656	129,886	73,366	58,959	46,607	38,888
11	26,294	22,270	41,068	76,837	75,999	54,035	127,409	128,035	71,275	58,556	46,089	38,712
12	25,868	22,616	41,129	93,004	67,272	55,694	129,018	126,355	69,056	58,106	45,681	38,498
13	25,445	24,643	41,169	99,412	59,795	57,658	130,520	124,611	67,410	57,683	45,403	38,285
14	25,058	28,205	41,230	98,525	53,988	59,312	131,634	122,881	67,382	57,311	45,147	38,034
15	24,904	32,997	41,351	94,226	50,836	61,309	132,754	121,316	67,359	56,941	44,808	37,764
16	25,135	36,527	42,123	105,323	49,723	63,589	133,840	119,650	67,217	56,646	44,702	37,592
17	25,383	37,515	47,391	106,849	50,266	65,819	134,729	117,958	67,079	56,181	44,406	37,515
18	25,414	38,072	51,989	112,699	50,198	67,909	135,499	116,092	66,776	55,718	44,070	37,038
19	25,027	38,459	56,083	105,288	49,633	71,045	136,273	114,352	66,419	55,379	43,693	36,640
20	24,597	38,771	58,556	96,530	49,949	79,709	136,844	112,479	66,037	55,113	43,339	36,376
21	24,127	39,044	60,254	86,959	51,873	85,158	137,335	110,731	65,602	54,777	42,987	36,019
22	23,662	39,279	62,062	76,927	53,845	87,372	137,663	108,925	65,114	54,465	42,123	35,665
23	23,202	39,436	62,796	68,188	55,597	89,584	137,335	107,134	64,818	54,130	41,209	35,442
24	22,660	39,574	63,059	61,542	63,881	92,643	136,926	105,394	64,657	53,797	40,327	35,256
25	22,183	39,712	63,059	55,476	73,424	95,558	136,640	103,599	64,496	53,395	39,633	34,721
26	21,671	39,811	62,954	51,318	81,795	98,389	136,232	101,892	64,255	52,994	39,417	34,245
27	21,138	39,930	62,743	47,830	86,515	100,992	136,069	100,029	63,908	52,525	39,318	33,627
28	20,737	40,049	62,428	44,343	84,062	103,110	136,232	98,253	63,589	52,082	39,476	32,908
29	20,423	40,148	61,932	44,554	------	104,406	136,313	96,396	63,191	51,688	40,208	32,302
30	20,179	40,247	61,360	48,493	------	105,889	136,558	94,492	62,822	51,249	40,907	31,597
31	20,058	------	60,741	51,803	------	107,741	------	92,741	------	50,905	41,310	------
MAX	33,339	40,247	63,059	112,699	91,399	107,741	137,663	136,640	90,976	62,402	50,517	41,088
MIN	20,058	19,964	40,307	44,343	49,633	49,251	109,681	92,741	62,822	50,905	39,318	31,597
(a)	424.22	436.27	445.31	441.65	453.43	460.51	468.06	456.14	446.11	441.26	436.80	431.64
(b)	-13,750	+20,189	+20,494	-8,938	+32,259	+23,679	+28,817	-43,817	-29,919	-11,917	-9,595	-9,713
(c)	645	192	253	236	226	628	1,956	2,243	2,305	2,244	1,829	1,418

CAL YR 1972 b +36,448
WTR YR 1973 b -2,211

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11388000 STONY CREEK BELOW BLACK BUTTE DAM, NEAR ORLAND, CALIF.

LOCATION.--Lat 39°49'07", long 122°19'26", in NW¼SW¼ sec.28, T.23 N., R.4 W., Tehama County, on left bank 200 ft downstream from road bridge, 0.6 mile downstream from Black Butte Dam, and 8.1 miles northwest of Orland.

DRAINAGE AREA.--737 sq mi.

PERIOD OF RECORD.--July 1955 to current year. Prior to October 1962, published as Stony Creek at Black Butte damsite, near Orland.

GAGE.--Water-stage recorder and grouted rock control. Datum of gage is 366.02 ft above mean sea level (levels by Corps of Engineers). Prior to Dec. 12, 1960, water-stage recorder at site 0.6 mile upstream at different datum. Dec. 12, 1960, to Nov. 30, 1963, nonrecording gage at bridge 200 ft upstream at datum 4.04 ft higher.

AVERAGE DISCHARGE (adjusted for diversion to South Diversion Canal since 1956 and for change in contents and evaporation in Black Butte Lake since 1964).--18 years, 640 cfs (463,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,000 cfs Jan. 18 (gage height, 8.86 ft); no flow Oct. 17, Apr. 3-5. Period of record: Maximum discharge, 36,300 cfs Feb. 24, 1958 (gage height, 11.82 ft, site and datum then in use), from rating curve extended above 7,500 cfs on basis of slope-area measurement of maximum flow; no flow Dec. 8-10, 31, 1956, Jan. 1-10, 1957, Oct. 19 to Nov. 7, Nov. 13-15, 1962. Maximum discharge since construction of Black Butte Dam in 1964, 19,400 cfs Dec. 25, 1964 (gage height, 10.41 ft); no flow at times in each year.

REMARKS.--Records good. Many diversions above station for irrigation. Flow regulated by Black Butte Lake (see sta 11387995), East Park Reservoir, see sta 11385100, (usable capacity, 50,900 acre-ft), and Stony Gorge Reservoir, see sta 11386100, (usable capacity, 50,400 acre-ft). Prior to October 1956, figures of daily discharge included water diverted to South Diversion Canal, which diverts 0.6 mile above station. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	34	35	503	253	7,430	42	754	895	273	271	214
2	154	30	35	501	521	6,210	11	803	892	268	270	215
3	167	32	35	499	516	5,000	0	886	877	269	270	200
4	196	35	35	466	527	4,920	0	895	878	260	249	190
5	267	31	35	374	1,550	4,940	0	906	903	252	248	180
6	253	28	33	267	3,580	4,750	4.7	907	912	252	260	169
7	242	29	32	157	5,920	3,400	32	905	912	250	262	160
8	239	32	32	76	7,900	2,280	39	886	918	255	266	165
9	236	32	32	60	7,380	1,350	39	884	915	271	270	160
10	210	32	32	52	8,010	998	40	888	914	270	270	155
11	198	32	30	116	8,420	993	66	894	912	269	274	170
12	199	32	30	1,460	7,940	868	72	909	912	271	272	178
13	200	35	30	3,530	7,430	319	87	914	794	271	257	180
14	206	35	30	4,040	6,820	46	86	938	199	262	245	197
15	206	34	30	4,020	5,050	35	86	919	201	258	224	199
16	66	34	30	4,530	3,470	32	71	914	206	250	158	166
17	0	34	30	5,970	2,200	32	111	926	207	264	196	172
18	36	34	30	8,080	2,200	32	127	938	214	269	212	251
19	198	34	31	9,180	2,200	33	114	932	221	246	220	224
20	203	34	32	7,830	1,620	35	113	910	224	238	209	205
21	202	34	32	7,690	698	342	146	886	223	253	185	216
22	199	34	92	7,330	503	1,040	238	872	218	251	177	220
23	197	34	494	6,070	503	768	507	894	213	264	169	221
24	197	34	503	4,950	517	65	558	910	200	256	143	222
25	198	34	503	4,610	520	45	670	858	207	257	147	213
26	199	34	503	3,550	972	42	730	868	254	261	175	221
27	199	35	503	2,990	4,030	42	722	884	248	270	189	246
28	156	35	503	2,940	6,630	42	702	878	262	286	191	254
29	108	35	503	1,470	------	42	718	877	271	287	192	240
30	86	35	503	44	------	43	699	880	273	279	203	232
31	47	------	503	49	------	42	------	875	------	274	212	------
TOTAL	5,348	997	5,281	93,404	97,880	46,216	6,830.7	27,590	15,475	8,156	6,886	6,035
MEAN	173	33.2	170	3,013	3,496	1,491	228	890	516	263	222	201
MAX	267	35	503	9,180	8,420	7,430	730	938	918	287	274	254
MIN	0	28	30	44	253	32	0	754	199	238	143	155
AC-FT	10,610	1,980	10,470	185,300	194,100	91,670	13,550	54,720	30,690	16,180	13,660	11,970
MEAN a	2.20	381	510	2,874	4,082	1,888	870	455	307	372	329	260
AC-FT a	135	22,660	31,390	176,700	226,700	116,100	51,790	28,000	18,240	22,860	20,220	15,500

CAL YR 1972 TOTAL 53,358.0 MEAN 146 MAX 658 MIN 0 AC-FT 105,800 MEAN a 304 AC-FT a 220,600
WTR YR 1973 TOTAL 320,098.7 MEAN 877 MAX 9,180 MIN 0 AC-FT 634,900 MEAN a 1,009 AC-FT a 730,300

a Adjusted for diversion to South Diversion Canal near Orland and for change in contents and evaporation in Black Butte Lake.

11388500 STONY CREEK NEAR HAMILTON CITY, CALIF.

LOCATION.--Lat 39°43'25", long 122°02'47", in Capay Grant, Glenn County, on right bank 2.3 miles southwest of Hamilton City, 6 miles upstream from mouth, and 8 miles east of Orland.

DRAINAGE AREA.--772 sq mi.

PERIOD OF RECORD.--October 1940 to September 1973 (discontinued). Records for water year 1941 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 151.18 ft above mean sea level (levels by Bureau of Reclamation). Prior to February 1946, at site 3 miles upstream at different datum.

AVERAGE DISCHARGE.--33 years, 442 cfs (320,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,200 cfs Jan. 19 (gage height, 12.25 ft); no flow Dec. 12-16. Period of record: Maximum discharge, 39,900 cfs Feb. 25, 1958 (gage height, 18.31 ft); no flow at times in most years.

REMARKS.--Records fair. Flow regulated by East Park Reservoir since 1910 (see sta 11385100), by Stony Gorge Reservoir since 1928 (see sta 11386100), and by Black Butte Lake 18.6 miles upstream since October 1963 (see sta 11387995). Diversions for irrigation of about 20,000 acres, maximum potential, above station in the Bureau of Reclamation Orland project.

COOPERATION.--Four discharge measurements furnished by Bureau of Reclamation.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	25	6.8	470	556	7,200	58	566	734	138	111	66
2	23	17	4.2	470	876	6,220	58	626	790	157	120	71
3	32	8.5	2.8	470	900	4,780	56	671	783	138	120	69
4	23	6.0	3.0	462	932	4,770	52	734	790	135	109	54
5	32	3.2	2.4	360	1,290	4,780	45	741	776	120	109	49
6	52	1.3	3.8	270	3,400	4,950	42	734	804	138	116	52
7	60	3.1	3.3	178	6,320	3,780	38	741	776	142	102	79
8	65	2.4	2.2	88	7,950	2,920	35	748	734	122	96	69
9	70	.92	.34	100	7,580	1,840	52	755	741	138	118	75
10	124	3.4	.34	135	7,900	1,310	58	762	762	128	120	69
11	154	8.0	.05	439	8,400	1,220	52	769	748	109	118	62
12	130	4.0	0	955	8,100	1,160	49	762	734	111	128	49
13	127	11	0	2,970	7,320	596	45	741	769	128	140	43
14	138	53	0	3,740	6,860	245	51	727	329	116	125	58
15	150	40	0	3,780	5,040	157	56	699	138	94	111	73
16	116	105	0	4,520	3,860	128	47	664	122	122	88	71
17	32	48	.39	5,630	2,300	116	54	671	116	122	58	60
18	17	38	5.1	8,230	2,290	102	66	678	113	118	69	71
19	36	31	24	9,620	2,280	100	73	678	102	120	85	113
20	92	28	22	7,900	2,030	128	64	678	96	125	94	132
21	106	26	20	7,520	1,170	162	58	699	102	113	79	145
22	112	24	21	6,880	769	948	47	699	100	118	49	145
23	118	20	197	6,260	706	996	197	692	87	120	49	178
24	118	18	412	4,930	762	252	316	692	92	118	62	172
25	112	16	446	4,780	720	122	405	713	105	102	62	157
26	106	14	462	3,470	802	98	530	727	107	102	66	145
27	106	13	470	2,820	3,210	90	530	762	116	102	81	128
28	106	12	470	2,950	6,180	75	530	734	122	100	81	109
29	63	11	478	2,450	------	66	530	706	133	116	79	138
30	56	9.2	470	880	------	62	560	699	138	135	71	135
31	43	------	470	608	------	60	------	706	------	109	66	------
TOTAL	2,528.0	600.02	3,996.72	94,335	100,503	49,433	4,754	21,974	12,059	3,756	2,882	2,837
MEAN	81.5	20.0	129	3,043	3,589	1,595	158	709	402	121	93.0	94.6
MAX	154	105	478	9,620	8,400	7,200	560	769	804	157	140	178
MIN	9.0	.92	0	88	556	60	35	566	87	94	49	43
AC-FT	5,010	1,190	7,930	187,100	199,300	98,050	9,430	43,590	23,920	7,450	5,720	5,630

CAL YR 1972 TOTAL 17,739.91 MEAN 48.5 MAX 482 MIN 0 AC-FT 35,190
WTR YR 1973 TOTAL 299,657.74 MEAN 821 MAX 9,620 MIN 0 AC-FT 594,400

11389000 SACRAMENTO RIVER AT BUTTE CITY, CALIF.

LOCATION.--Lat 39°27'28", long 121°59'35", in SE¼NE¼ sec.32, T.19 N., R.1 W., Glenn County, on left bank 100 ft upstream from highway bridge, 0.5 mile south of Butte City, and at mile 115.8 upstream from Sacramento.

DRAINAGE AREA.--12,081 sq mi.

PERIOD OF RECORD.--April 1921 to September 1938 (low-water periods only), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.92 ft below mean sea level. Prior to December 1930, at site 0.5 mile upstream at same datum.

AVERAGE DISCHARGE.--35 years (1938-73), 13,070 cfs (9,469,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 98,500 cfs Jan. 19 (gage height, 91.41 ft); minimum daily, 6,190 cfs Oct. 8.
Period of record: Maximum discharge (1940 to current year), 170,000 cfs Feb. 7, 1942 (gage height, 96.87 ft); minimum recorded, 1,050 cfs July 15, 25, 26, 1931 (gage height, 67.49 ft).

REMARKS.--Records good. Natural flow affected by storage reservoirs, power developments, diversions for irrigation and return flow from irrigated areas. During floods, overbank flow into Butte basin occurs upstream from the left (east) bank levee. The combined overbank flow and tributary runoff then flows south on the east bank floodplain into the Butte Sink and Sutter Bypass. Maximum flood flows at the latitude of Butte City are as follows: Current year (Butte Creek at State Highway 162): Maximum discharge, 8,140 cfs Jan. 16 (gage height, 80.95 ft). Period of record: Maximum discharge, 17,200 cfs Jan. 24, 1970 (gage height, 82.0 ft). (Combined overbank flow): Maximum discharge, 8,350 cfs Jan. 19. Period of record: Maximum discharge, 74,300 cfs Jan. 25, 1970. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,190	7,340	15,400	16,300	28,600	64,100	15,200	10,200	11,200	8,870	9,920	8,470
2	7,210	7,250	14,500	16,000	26,200	52,300	14,000	10,000	10,800	8,930	9,450	8,490
3	7,140	7,340	13,700	15,800	25,000	44,200	13,300	9,700	10,300	8,760	9,120	8,280
4	7,080	7,490	13,500	15,600	25,300	45,100	13,000	9,200	9,980	9,000	9,040	7,840
5	6,720	9,330	13,300	15,400	34,600	43,000	12,700	9,300	9,770	9,060	9,070	7,550
6	6,240	8,660	12,100	15,100	38,400	39,200	12,700	9,700	9,520	9,440	8,870	7,540
7	6,200	7,800	11,600	14,700	50,800	47,200	12,900	9,500	9,400	9,220	8,670	7,570
8	6,190	7,450	11,600	14,100	71,600	38,100	12,800	9,350	9,220	9,410	8,660	7,590
9	6,250	8,010	11,300	15,800	55,300	34,200	12,500	9,350	9,140	9,540	8,660	7,630
10	6,480	8,100	10,800	38,100	56,600	30,500	12,400	9,340	9,020	9,590	8,690	7,730
11	7,030	10,400	10,700	38,300	65,500	30,600	12,400	9,260	8,860	9,500	8,800	7,770
12	7,500	15,400	10,600	64,200	60,300	29,900	12,400	9,500	8,770	9,440	8,740	7,790
13	7,590	11,000	10,600	71,000	58,800	27,600	12,300	10,100	8,690	9,600	8,250	7,790
14	7,610	19,400	9,840	55,300	57,100	24,600	12,200	10,400	8,870	9,870	8,600	7,840
15	7,730	27,800	9,730	44,200	63,000	21,700	11,900	10,600	8,930	9,900	8,660	8,010
16	8,930	27,600	9,740	48,200	58,600	19,300	11,600	10,700	8,970	9,930	8,640	8,070
17	9,190	26,900	14,400	84,200	45,800	17,600	11,300	11,300	9,000	9,950	8,580	8,160
18	8,880	17,900	36,500	81,000	39,600	16,500	11,200	12,000	8,940	9,880	8,670	8,280
19	8,210	18,300	36,100	94,200	34,900	15,500	11,100	12,200	8,920	9,940	8,730	8,310
20	7,800	18,500	33,000	85,300	31,500	17,500	10,600	12,200	8,760	9,970	8,860	8,490
21	7,690	17,500	22,700	70,100	28,700	25,300	10,000	12,000	8,760	10,000	8,900	8,670
22	7,670	16,600	19,400	64,500	26,000	26,400	9,760	11,900	8,640	10,100	8,920	8,860
23	7,620	16,700	23,700	60,200	24,800	22,300	9,490	11,700	8,600	10,000	8,950	9,030
24	7,520	16,700	20,200	56,600	24,600	18,300	9,260	11,600	9,100	10,000	9,040	9,250
25	7,480	16,500	19,200	52,000	32,000	16,200	9,150	12,300	8,740	10,000	9,090	9,400
26	7,490	16,300	16,500	43,300	29,500	15,300	9,300	13,600	8,590	9,980	9,120	9,380
27	7,500	16,200	15,100	36,400	39,600	14,800	9,800	12,400	8,490	9,940	9,230	9,280
28	7,410	16,100	14,600	30,900	64,200	14,300	10,000	11,900	8,480	9,910	9,370	9,180
29	7,420	16,200	15,100	28,200	------	14,200	10,000	11,600	8,750	9,900	9,380	9,130
30	7,350	16,100	15,000	33,000	------	14,000	10,100	11,400	8,750	10,000	9,380	9,080
31	7,280	------	16,000	32,600	------	14,600	------	11,200	------	9,950	8,970	------
TOTAL	229,600	436,870	506,510	1,350,6M	1,196,9M	854,400	345,360	335,500	273,960	299,580	277,030	250,460
MEAN	7,406	14,560	16,340	43,570	42,750	27,560	11,510	10,820	9,132	9,664	8,936	8,349
MAX	9,190	27,800	36,500	94,200	71,600	64,100	15,200	13,600	11,200	10,100	9,920	9,400
MIN	6,190	7,250	9,730	14,100	24,600	14,000	9,150	9,200	8,480	8,760	8,250	7,540
AC-FT	455,400	866,500	1,005M	2,679M	2,374M	1,695M	685,000	665,500	543,400	594,200	549,500	496,800

CAL YR 1972 TOTAL 4,016,750 MEAN 10,970 MAX 36,500 MIN 6,190 AC-FT 7,967,000
WTR YR 1973 TOTAL 6,356,770 MEAN 17,420 MAX 94,200 MIN 6,190 AC-FT 12,610,000

11389500 SACRAMENTO RIVER AT COLUSA, CALIF.

LOCATION.--Lat 39°12'51", long 121°59'57", at north end of Jimeno Grant, Colusa County, on right bank just downstream from highway bridge at Colusa, and at mile 89.4 upstream from Sacramento.

DRAINAGE AREA.--12,096 sq mi.

PERIOD OF RECORD.--April 1921 to October 1939 (low-water periods only), June 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2.95 ft below mean sea level. Prior to December 1930, water-stage recorder in center fender pier 50 ft upstream from bridge at same datum.

AVERAGE DISCHARGE.--33 years (1940-73), 11,320 cfs (8,201,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 42,300 cfs Jan. 20 (gage height, 65.51 ft); minimum daily, 5,980 cfs Oct. 9.
Period of record: Maximum discharge (1940 to current year), 49,000 cfs Feb. 8, 1942 (gage height, 69.20 ft); minimum discharge recorded, 820 cfs July 25, 26, 1931 (gage height, 34.79 ft).

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power development, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas.

REVISIONS (WATER YEARS).--WSP 1345: 1952.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,890	6,880	15,600	16,100	29,000	37,500	15,000	9,840	10,700	8,320	9,430	8,170
2	6,860	6,820	14,700	16,100	26,500	35,900	14,200	9,530	10,600	8,390	9,260	8,140
3	6,820	6,890	13,800	15,900	24,900	34,700	13,400	9,160	10,000	8,300	8,720	8,010
4	6,730	6,960	13,100	15,700	24,200	34,000	12,500	8,610	9,660	8,350	8,650	7,630
5	6,560	8,110	13,400	15,500	27,800	34,300	12,600	8,820	9,420	8,530	8,640	7,300
6	6,090	8,500	12,000	15,300	33,200	33,200	12,500	9,100	9,100	8,610	8,570	7,260
7	5,990	7,650	11,400	14,900	34,100	34,200	12,500	8,940	8,930	8,920	8,310	7,270
8	6,000	7,080	11,300	14,400	37,900	33,500	12,500	8,820	8,780	8,700	8,270	7,280
9	5,980	7,540	11,100	14,400	37,000	32,100	12,300	8,890	8,630	8,970	8,260	7,320
10	6,110	7,600	10,600	25,200	35,600	30,500	12,000	8,830	8,500	9,030	8,310	7,410
11	6,510	8,720	10,400	32,700	37,200	28,900	11,900	8,780	8,380	8,950	8,370	7,460
12	6,980	13,400	10,400	35,800	36,700	29,600	12,000	8,940	8,250	8,910	8,370	7,480
13	7,130	12,300	10,400	38,800	36,500	27,700	11,900	9,600	8,150	9,020	8,100	7,520
14	7,190	12,800	9,720	37,200	36,200	25,400	11,800	9,850	8,190	9,280	8,040	7,610
15	7,260	24,400	9,560	34,200	36,600	22,800	11,600	10,000	8,220	9,330	8,250	7,730
16	7,880	23,000	9,580	33,300	36,900	20,300	11,200	10,200	8,340	9,360	8,270	7,780
17	8,780	28,200	10,700	38,500	34,900	18,000	10,900	10,600	8,400	9,430	8,220	7,840
18	8,600	21,000	25,700	40,800	33,400	16,500	10,500	11,400	8,390	9,420	8,250	7,990
19	8,120	18,300	31,400	41,000	32,200	15,300	10,700	11,500	8,380	9,430	8,330	8,040
20	7,580	18,100	32,200	41,700	30,600	14,900	10,100	11,600	8,290	9,460	8,430	8,140
21	7,390	17,700	26,300	39,300	28,900	22,200	9,540	11,500	8,240	9,490	8,450	8,360
22	7,310	16,800	20,900	38,000	26,100	23,800	9,210	11,300	8,120	9,520	8,410	8,530
23	7,300	16,400	21,400	37,400	24,300	24,700	8,880	11,100	8,100	9,540	8,500	8,690
24	7,190	16,500	21,400	36,700	23,800	20,300	8,790	11,000	8,300	9,510	8,570	8,860
25	7,100	16,300	19,700	36,100	27,500	17,200	8,640	11,300	8,510	9,470	8,650	9,060
26	7,100	16,100	17,700	34,700	29,800	15,600	8,700	12,900	8,140	9,480	8,710	9,040
27	7,070	16,000	15,800	32,800	30,800	15,000	9,230	12,300	7,980	9,440	8,780	8,920
28	7,040	15,900	14,900	30,800	35,600	14,400	9,420	11,600	8,000	9,440	8,880	8,820
29	7,000	15,900	15,100	28,000	------	14,000	9,500	11,300	8,070	9,450	8,930	8,770
30	6,930	15,900	14,900	28,400	------	14,000	9,620	11,000	8,280	9,530	8,930	8,700
31	6,870	------	15,400	31,700	------	13,900	------	10,700	------	9,480	8,780	------
TOTAL	218,360	417,750	490,560	911,400	888,200	754,400	334,430	319,010	259,050	283,060	264,640	241,130
MEAN	7,044	13,930	15,820	29,400	31,720	24,340	11,150	10,290	8,635	9,131	8,537	8,038
MAX	8,780	28,200	32,200	41,700	37,900	37,500	15,000	12,900	10,700	9,540	9,430	9,060
MIN	5,980	6,820	9,560	14,400	23,800	13,900	8,640	8,610	7,980	8,300	8,040	7,260
AC-FT	433,100	828,600	973,000	1,808M	1,762M	1,496M	663,300	632,800	513,800	561,400	524,900	478,300

CAL YR 1972 TOTAL 3,828,990 MEAN 10,460 MAX 32,200 MIN 5,980 AC-FT 7,595,000
WTR YR 1973 TOTAL 5,381,990 MEAN 14,750 MAX 41,700 MIN 5,980 AC-FT 10,680,000

11389700 BUTTE CREEK AT BUTTE MEADOWS, CALIF.

LOCATION.--Lat 40°04'06", long 121°34'25", in SW¼NW¼ sec.31, T.26 N., R.4 E., Tehama County, on right bank 1.0 mile downstream from small tributary, 1.5 miles southwest of Butte Meadows, and 15 miles northeast of Forest Ranch.

DRAINAGE AREA.--44.4 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,260 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 132 cfs (95,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 668 cfs Jan. 16 (gage height, 3.98 ft); minimum daily, 49 cfs Dec. 9.
Period of record: Maximum discharge, 4,290 cfs Dec. 22, 1964 (gage height, 7.64 ft); minimum, 46 cfs Sept. 4, 1961.

REMARKS.--Records good. No storage or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	61	64	80	102	232	132	317	207	81	63	60
2	59	61	63	80	101	205	128	313	191	80	63	59
3	58	68	67	78	102	189	129	312	181	78	62	59
4	59	92	68	76	118	175	135	316	171	77	62	59
5	59	73	67	76	121	163	142	280	165	77	62	59
6	58	66	68	74	119	158	155	276	159	75	62	59
7	58	79	66	70	123	149	164	290	152	75	62	59
8	59	72	56	72	116	144	168	298	148	75	62	59
9	68	70	49	75	126	140	179	302	142	74	62	59
10	80	76	52	77	148	165	190	309	136	73	62	59
11	88	76	56	116	131	162	203	320	128	73	62	59
12	75	71	60	176	126	147	220	338	123	74	60	59
13	65	77	54	176	117	142	228	357	119	73	60	59
14	72	94	57	143	120	136	222	375	116	71	60	59
15	93	93	62	162	114	135	229	374	112	71	60	59
16	78	99	69	477	111	134	222	402	109	70	60	59
17	76	80	113	282	110	136	234	404	106	70	60	59
18	68	76	118	245	107	129	228	391	101	70	60	59
19	65	76	127	196	106	127	220	401	98	68	60	62
20	64	72	111	170	106	126	212	360	94	68	60	79
21	63	70	113	156	106	121	208	330	93	68	60	62
22	63	69	212	142	105	119	217	311	92	68	60	62
23	62	68	141	133	105	118	236	295	92	67	60	68
24	61	67	125	129	170	120	255	313	90	67	62	66
25	61	66	107	125	169	123	275	317	88	66	64	64
26	61	66	100	117	186	128	305	261	87	66	63	60
27	61	66	97	113	253	130	336	241	86	64	63	60
28	61	66	93	110	240	128	350	239	84	64	62	60
29	61	65	87	112	------	127	345	239	82	64	60	60
30	61	64	85	109	------	131	329	232	82	64	60	60
31	61	------	82	105	------	140	------	225	------	63	60	------
TOTAL	2,038	2,199	2,689	4,252	3,658	4,479	6,596	9,738	3,634	2,194	1,898	1,826
MEAN	65.7	73.3	86.7	137	131	144	220	314	121	70.8	61.2	60.9
MAX	93	99	212	477	253	232	350	404	207	81	64	79
MIN	58	61	49	70	101	118	128	225	82	63	60	59
AC-FT	4,040	4,360	5,330	8,430	7,260	8,880	13,080	19,320	7,210	4,350	3,760	3,620

CAL YR 1972 TOTAL 39,905 MEAN 109 MAX 427 MIN 49 AC-FT 79,150
WTR YR 1973 TOTAL 45,201 MEAN 124 MAX 477 MIN 49 AC-FT 89,660

PEAK DISCHARGE (BASE, 350 CFS).--Jan. 16 (1000) 668 cfs (3.98 ft); May 16 (2030) 462 cfs (3.61 ft).

11389950 LITTLE BUTTE CREEK AT MAGALIA, CALIF.

LOCATION.--Lat 39°48'38", long 121°35'00", in NW¼NE¼ sec.36, T.23 N., R.3 E., Butte County, on left bank 1,000 ft downstream from Magalia Dam, and 0.4 mile northwest of Magalia.

DRAINAGE AREA.--11.4 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,160 ft (from topographic map).

AVERAGE DISCHARGE (unadjusted).--5 years, 17.6 cfs (12,750 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 333 cfs Feb. 27 (gage height, 4.53 ft); minimum daily, 0.25 cfs Sept. 29, 30.
Period of record: Maximum discharge, 1,180 cfs Jan. 24, 1970 (gage height, 6.47 ft); minimum daily, 0.22 cfs Nov. 14, 1971, Apr. 17, 18, 23, 1972.

REMARKS.--Records fair. Flow regulated by Paradise Reservoir (capacity, 6,430 acre-ft) and Magalia Reservoir (capacity, 3,540 acre-ft). Diversion occurs above Magalia Reservoir through a 30-inch pipeline into Pacific Gas and Electric Co.'s Toadtown Canal when Magalia Reservoir is spilling. Diversion is made from Magalia Reservoir for the municipal supply of Paradise.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.34	.32	.29	43	123	43	.61	.28	.31	.40	.33
2	.41	.33	.36	.30	37	100	33	.55	.29	.29	.38	.36
3	.45	.36	.40	.28	37	90	29	.55	.29	.31	.35	.39
4	.45	.37	.43	.28	69	87	27	1.3	.31	.31	.31	.39
5	.44	.36	.42	.28	87	72	26	7.2	.32	.31	.33	.38
6	.42	.36	.43	.28	72	87	24	6.7	.32	.33	.34	.37
7	.43	.60	.44	.28	108	83	22	4.2	.32	.30	.34	.39
8	.44	.37	.42	.29	81	73	18	1.5	.32	.32	.34	.39
9	.43	.35	.42	4.3	76	62	18	.60	.33	.34	.32	.39
10	.42	.52	.43	.86	192	64	17	.45	.36	.36	.32	.38
11	.53	1.1	.45	2.6	159	84	14	.47	.34	.36	.32	.37
12	.39	.41	.42	15	108	62	14	.43	.30	.36	.32	.36
13	.40	.88	.37	27	86	52	14	.39	.31	.36	.33	.35
14	.44	2.5	.48	14	112	46	16	.42	.36	.36	.34	.34
15	.58	1.4	.43	17	103	41	16	.40	.39	.36	.34	.33
16	.39	.79	.67	124	75	40	15	.36	.39	.38	.34	.32
17	.44	.43	2.3	64	63	43	15	.38	.36	.40	.32	.31
18	.36	.54	1.1	88	55	39	13	.38	.36	.39	.30	.31
19	.37	.53	.68	61	50	39	10	.36	.36	.39	.32	.30
20	.37	.48	.43	97	45	58	8.1	.36	.36	.40	.34	.30
21	.34	.43	.36	90	42	59	5.3	.36	.36	.36	.31	.29
22	.34	.34	.54	70	39	53	3.6	.35	.34	.36	.29	.29
23	.36	.34	.33	57	36	46	3.2	.36	.34	.36	.30	.28
24	.31	.32	.33	50	57	41	2.3	.33	.36	.37	.31	.28
25	.34	.28	.30	57	68	38	1.3	.32	.34	.39	.32	.27
26	.35	.28	.28	49	85	35	.72	.33	.32	.41	.33	.27
27	.36	.29	.30	41	219	32	.58	.34	.30	.41	.34	.26
28	.40	.32	.29	36	224	30	.55	.32	.30	.38	.32	.26
29	.30	.31	.28	42	------	27	.59	.32	.32	.36	.32	.25
30	.31	.34	.28	67	------	30	.64	.31	.32	.37	.32	.25
31	.33	------	.29	53	------	54	------	.28	------	.38	.32	------
TOTAL	12.28	16.27	14.98	1,129.04	2,428	1,790	410.88	31.23	9.97	11.09	10.18	9.76
MEAN	.40	.54	.48	36.4	86.7	57.7	13.7	1.01	.33	.36	.33	.33
MAX	.58	2.5	2.3	124	224	123	43	7.2	.39	.41	.40	.39
MIN	.30	.28	.28	.28	36	27	.55	.28	.28	.29	.29	.25
AC-FT	24	32	30	2,240	4,820	3,550	815	62	20	22	20	19
(a)	346	196	311	229	180	202	461	969	1,172	1,512	1,366	725

CAL YR 1972 TOTAL 157.68 MEAN .43 MAX 2.5 MIN .22 AC-FT 313
WTR YR 1973 TOTAL 5,873.68 MEAN 16.1 MAX 224 MIN .25 AC-FT 11,650

a Diversion, in acre-feet, from Magalia Reservoir, furnished by Paradise Irrigation District.

11390000 BUTTE CREEK NEAR CHICO, CALIF.

LOCATION.--Lat 39°43'34", long 121°42'28", in NW¼NW¼ sec.36, T.22 N., R.2 E., Butte County, on right bank 0.7 mile downstream from Little Butte Creek, and 7.5 miles east of Chico.

DRAINAGE AREA.--147 sq mi.

PERIOD OF RECORD.--October 1930 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Altitude of gage is 320 ft (from topographic map). Prior to Aug. 13, 1944, water-stage recorder at site 0.4 mile upstream at different datum.

AVERAGE DISCHARGE (unadjusted).--43 years, 404 cfs (292,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,820 cfs Jan. 16 (gage height, 7.77 ft); minimum daily, 78 cfs Oct. 24.
Period of record: Maximum discharge, 21,200 cfs Dec. 22, 1964 (gage height, 14.12 ft), from rating curve extended above 8,900 cfs on basis of slope-area measurement at gage height 13.35 ft; minimum, 10 cfs Nov. 29, 1952.

REMARKS.--Records good. Flow slightly regulated by storage in Magalia Reservoir (capacity, 3,540 acre-ft) and since 1957 by Paradise Reservoir (capacity, 6,430 acre-ft). Diversions above station for irrigation and domestic use of about 7,000 acre-ft annually. Butte Creek receives water above station from West Branch Feather River by way of Toadtown Canal. Records of chemical analyses and water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1953(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141	140	154	247	617	1,850	719	630	520	204	161	121
2	130	133	164	242	560	1,510	635	616	485	201	157	119
3	141	124	160	246	555	1,340	595	610	448	198	152	119
4	139	210	203	218	876	1,220	582	631	425	198	152	119
5	136	255	176	214	1,140	1,070	596	585	403	196	151	118
6	133	187	190	214	1,110	1,350	615	559	386	193	151	127
7	132	200	186	200	1,670	1,180	633	562	368	193	151	118
8	133	247	152	222	1,260	1,040	612	569	352	193	150	119
9	143	182	134	898	1,220	926	621	559	340	192	151	119
10	182	195	153	925	2,270	937	623	564	333	190	150	117
11	224	347	147	1,320	1,780	1,170	636	567	314	187	148	122
12	250	241	145	2,410	1,380	954	658	575	300	186	147	123
13	186	245	145	1,620	1,120	844	673	600	287	193	143	135
14	198	876	130	961	1,280	755	638	629	279	189	141	139
15	246	461	121	925	1,130	693	632	621	277	188	140	134
16	228	872	166	4,770	953	659	611	640	271	186	139	134
17	124	430	812	2,560	841	678	617	619	268	187	138	134
18	95	310	702	3,220	756	625	615	617	263	186	133	134
19	91	312	923	2,020	691	636	582	628	258	183	131	134
20	88	275	584	1,350	640	857	554	602	248	180	132	181
21	87	239	450	1,110	606	887	536	578	242	188	128	199
22	86	216	602	907	572	827	536	555	240	186	124	147
23	84	199	515	763	546	747	558	525	240	182	120	179
24	78	188	455	687	839	692	583	520	233	177	125	137
25	80	178	384	696	1,060	666	607	550	219	174	126	113
26	85	174	345	637	1,260	649	650	540	234	170	136	103
27	126	200	326	572	2,770	642	690	520	222	173	137	102
28	135	181	307	530	2,740	610	708	500	212	172	115	119
29	134	147	289	601	------	579	703	487	203	172	130	112
30	134	132	269	783	------	582	665	480	207	170	122	113
31	137	------	258	689	------	800	------	495	------	164	121	------
TOTAL	4,306	8,096	9,747	32,757	32,242	27,975	18,683	17,733	9,077	5,751	4,302	3,890
MEAN	139	270	314	1,057	1,152	902	623	572	303	186	139	130
MAX	250	876	923	4,770	2,770	1,850	719	640	520	204	161	199
MIN	78	124	121	200	546	579	536	480	203	164	115	102
AC-FT	8,540	16,060	19,330	64,970	63,950	55,490	37,060	35,170	18,000	11,410	8,530	7,720
(a)	2,890	4,000	4,090	6,020	6,270	6,890	6,670	6,610	6,200	5,140	3,680	3,130

CAL YR 1972 TOTAL 104,291 MEAN 285 MAX 1,050 MIN 78 AC-FT 206,900
WTR YR 1973 TOTAL 174,559 MEAN 478 MAX 4,770 MIN 78 AC-FT 346,200

PEAK DISCHARGE (BASE, 2,700 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1030	7.77	6,820	2-27	2100	5.79	4,330
1-18	1030	6.03	4,620				

(a) Toadtown Canal diversion, in acre-feet, from West Branch Feather River, furnished by Pacific Gas and Electric Co.

11390210 CHEROKEE CANAL NEAR NELSON, CALIF.

LOCATION.--Lat 39°34'54", long 121°41'54", in SE¼SW¼ sec.13, T.20 N., R.2 E., Butte County, on right bank 25 ft upstream from county bridge, 4.1 miles northeast of Nelson, and 10.5 miles northwest of Oroville.

PERIOD OF RECORD.--August 1970 to current year.

GAGE.--Water-stage recorder. Datum of gage is 145.65 ft above mean sea level. Supplementary crest-stage gage on Gold Run Creek bypass channel 170 ft to left at same datum.

EXTREMES.--Current year: Maximum discharge, 6,030 cfs Feb. 27 (gage height, 13.67 ft); no flow many days.
Period of record: Maximum discharge, 6,030 cfs Feb. 27, 1973 (gage height, 13.67 ft); no flow many days each year.

REMARKS.--Records good. Low flow regulated by irrigation ponds on Gold Run Creek. Gold Run Creek receives water from West Branch Feather River via Upper Miocene Canal. Records of water temperatures and sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	23	34	52	166	264	108	24	18	9.3	1.6	0
2	6.2	23	34	52	135	190	89	24	20	9.3	.32	0
3	5.7	24	35	52	148	213	83	24	9.3	10	.50	0
4	5.7	30	39	50	274	215	81	23	12	8.6	1.6	0
5	6.8	28	45	49	209	140	77	22	13	9.3	1.8	0
6	4.8	11	109	49	702	567	75	23	13	10	3.0	0
7	4.8	13	86	49	757	222	71	23	10	10	1.6	0
8	5.7	29	59	115	295	187	69	23	9.3	11	.60	0
9	6.2	7.4	53	1,170	478	157	67	23	11	10	.75	0
10	8.0	22	54	509	1,300	145	65	21	11	8.6	1.3	0
11	22	156	44	1,940	522	138	63	22	12	7.9	1.6	0
12	31	40	34	1,560	264	119	63	23	13	7.9	1.8	0
13	41	54	34	521	212	81	63	24	12	4.6	1.1	0
14	46	585	32	248	563	69	61	25	12	6.7	.60	0
15	44	283	42	799	274	67	61	25	14	7.3	.24	0
16	47	586	61	2,050	196	73	61	23	14	7.9	.04	0
17	45	90	1,210	718	175	77	61	18	14	7.9	.04	0
18	42	55	656	1,590	151	69	59	22	13	5.6	.04	0
19	42	112	569	402	130	72	57	23	12	4.2	.01	0
20	42	78	182	250	115	146	55	25	11	5.1	0	0
21	42	57	130	273	79	224	53	24	9.3	5.6	0	0
22	41	59	112	184	69	183	47	23	9.3	6.7	0	.86
23	37	52	90	138	65	122	45	23	10	5.6	0	1.3
24	34	49	117	143	164	102	50	24	10	5.1	0	1.8
25	34	35	84	250	140	95	49	24	10	4.6	0	4.6
26	35	21	74	187	401	91	41	18	9.3	3.8	0	11
27	32	24	78	142	2,080	89	35	14	8.6	3.4	0	13
28	24	23	111	130	704	81	31	19	7.9	2.4	0	10
29	22	28	69	267	------	79	29	18	7.9	2.4	0	10
30	23	34	60	468	------	79	23	17	8.6	2.4	0	9.3
31	23	------	55	184	------	217	------	14	------	2.1	0	------
TOTAL	809.1	2,631.4	4,392	14,591	10,768	4,573	1,792	678	344.5	205.3	18.54	61.86
MEAN	26.1	87.7	142	471	385	148	59.7	21.9	11.5	6.62	.60	2.06
MAX	47	586	1,210	2,050	2,080	567	108	25	20	11	3.0	13
MIN	4.8	7.4	32	49	65	67	23	14	7.9	2.1	0	0
AC-FT	1,600	5,220	8,710	28,940	21,360	9,070	3,550	1,340	683	407	37	123

CAL YR 1972 TOTAL 13,354.73 MEAN 36.5 MAX 1,210 MIN 0 AC-FT 26,490
WTR YR 1973 TOTAL 40,864.70 MEAN 112 MAX 2,080 MIN 0 AC-FT 81,060

11390500 SACRAMENTO RIVER BELOW WILKINS SLOUGH, NEAR GRIMES, CALIF.

LOCATION.--Lat 39°00'36", long 121°49'25", in NW¼NE¼ sec.2, T.13 N., R.1 E., Colusa County, on right bank 1,200 ft downstream from Wilkins Slough, 5.8 miles southeast of Grimes, and at mile 62.9 upstream from Sacramento.

DRAINAGE AREA.--12,926 sq mi.

PERIOD OF RECORD.--August 1931 to September 1938 (low-water periods only), October 1938 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1965, published as "below Wilkins Slough."

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft below mean sea level.

AVERAGE DISCHARGE.--35 years (1938-73), 9,996 cfs (7,242,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 28,000 cfs Dec. 20 (gage height, 46.93 ft); minimum daily, 6,520 cfs Oct. 9.
Period of record: Maximum discharge (1938 to current year), 29,300 cfs Jan. 26, 1970 (gage height, 50.72 ft); maximum gage height, 52.75 ft Mar. 1, 1940; minimum discharge, 100 cfs Aug. 1, 1931 (gage height, 14.20 ft).

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and return flow from irrigated areas. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,480	7,360	15,700	15,800	25,400	27,000	14,900	8,200	9,530	7,170	8,280	8,170
2	7,370	7,340	15,000	16,000	24,700	26,800	14,800	7,960	9,530	7,220	8,280	7,990
3	7,330	7,340	14,200	15,800	24,200	26,600	14,000	7,620	9,140	7,230	7,860	7,950
4	7,250	7,430	13,300	15,600	23,800	26,400	13,400	7,140	8,710	7,150	7,690	7,740
5	7,190	7,800	13,300	15,400	24,500	26,500	13,100	7,050	8,440	7,340	7,670	7,450
6	6,850	8,890	12,600	15,200	26,200	26,300	12,800	7,360	8,070	7,400	7,650	7,320
7	6,570	8,450	11,700	14,900	26,300	26,400	12,700	7,320	7,800	7,700	7,450	7,340
8	6,530	7,830	11,500	14,500	26,900	26,400	12,700	7,180	7,660	7,560	7,320	7,300
9	6,520	7,820	11,400	14,200	27,000	26,000	12,500	7,110	7,480	7,720	7,330	7,370
10	6,580	8,130	11,000	20,100	26,600	25,700	12,200	7,120	7,290	7,760	7,410	7,470
11	6,830	8,620	10,700	27,400	26,900	25,300	12,100	7,170	7,190	7,740	7,490	7,570
12	7,260	11,200	10,600	27,000	26,800	25,400	12,000	7,260	7,040	7,690	7,540	7,690
13	7,540	13,100	10,500	27,300	26,800	25,100	12,000	7,810	6,930	7,710	7,480	7,770
14	7,660	11,700	10,200	27,200	26,700	24,500	11,900	8,320	6,880	7,910	7,160	7,870
15	7,730	21,300	9,830	26,600	26,800	23,200	11,700	8,590	6,960	8,030	7,300	8,050
16	7,980	23,200	9,780	26,100	26,900	20,900	11,400	8,780	7,010	8,090	7,430	8,170
17	8,910	26,400	10,000	26,800	26,600	18,600	11,100	9,010	7,080	8,180	7,520	8,300
18	9,110	22,900	19,500	27,600	26,300	17,100	10,700	9,870	7,160	8,260	7,540	8,450
19	8,910	18,600	27,600	27,500	26,000	16,100	10,700	10,300	7,170	8,250	7,650	8,560
20	8,400	18,000	27,700	27,700	25,700	15,500	10,100	10,400	7,200	8,330	7,800	8,600
21	8,050	17,700	25,900	27,400	25,400	20,000	9,450	10,500	7,050	8,350	7,830	8,760
22	7,920	17,000	21,800	27,100	24,700	23,700	8,960	10,300	6,980	8,390	7,830	8,870
23	7,860	16,400	20,700	27,000	24,000	24,800	8,550	10,200	6,920	8,480	7,920	9,100
24	7,790	16,400	21,900	26,800	23,600	21,500	8,180	10,100	6,970	8,440	7,980	9,310
25	7,670	16,300	19,900	26,700	24,700	18,200	7,980	10,200	7,380	8,350	8,070	9,450
26	7,610	16,100	18,400	26,500	26,400	16,400	7,590	10,900	7,140	8,300	8,190	9,470
27	7,580	16,000	16,400	26,100	26,200	15,600	7,780	11,400	7,000	8,280	8,290	9,310
28	7,570	15,900	15,200	25,700	26,600	14,900	8,000	10,800	6,940	8,270	8,450	9,160
29	7,510	15,800	14,900	25,100	------	14,500	8,040	10,400	6,920	8,330	8,570	9,100
30	7,460	15,800	14,800	24,900	------	14,400	8,060	10,000	7,100	8,350	8,630	9,020
31	7,410	------	15,000	25,800	------	14,300	------	9,720	------	8,350	8,610	------
TOTAL	234,430	416,810	481,010	717,800	722,700	674,100	329,390	276,090	224,670	246,330	242,220	248,680
MEAN	7,562	13,890	15,520	23,150	25,810	21,750	10,980	8,906	7,489	7,946	7,814	8,289
MAX	9,110	26,400	27,700	27,700	27,000	27,000	14,900	11,400	9,530	8,480	8,630	9,470
MIN	6,520	7,340	9,780	14,200	23,600	14,300	7,590	7,050	6,880	7,150	7,160	7,300
AC-FT	465,000	826,700	954,100	1,424M	1,433M	1,337M	653,300	547,600	445,600	488,600	480,400	493,300

CAL YR 1972 TOTAL 3,706,610 MEAN 10,130 MAX 27,700 MIN 6,170 AC-FT 7,352,000
WTR YR 1973 TOTAL 4,814,230 MEAN 13,190 MAX 27,700 MIN 6,520 AC-FT 9,549,000

11390655 SOUTH FORK WILLOW CREEK NEAR FRUTO, CALIF.

LOCATION.--Lat 39°32'28", long 122°23'19", in SW¼SE¼ sec.35, T.20 N., R.5 W., Glenn County, on right bank 150 ft downstream from county road bridge, and 4.5 miles southeast of Fruto.

DRAINAGE AREA.--38.9 sq mi.

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 375 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 6.19 cfs (4,480 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,620 cfs Feb. 7 (gage height, 12.58 ft), from rating curve extended above 1,000 cfs as explained below; no flow for several months.
Period of record: Maximum discharge, 3,620 cfs Feb. 7, 1973 (gage height, 12.58 ft), from rating curve extended above 1,000 cfs on basis of slope-area measurement of peak flow; no flow for several months each year.

REMARKS.--Records good. No known regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	18	98	27	4.8	.82			
2		0	0	0	17	78	24	4.4	.64			
3		0	0	0	24	76	23	4.4	.56			
4		0	0	0	59	61	22	4.6	.48			
5		0	0	0	40	54	21	4.6	.41			
6		0	0	0	640	153	20	4.2	.41			
7		0	0	0	750	78	18	4.0	.41			
8		0	0	0	157	63	17	4.0	.34			
9		0	0	13	230	54	17	3.9	.34			
10		0	0	52	184	49	16	3.5	.34			
11		0	0	485	268	42	15	3.3	.34			
12		0	0	101	143	38	15	3.2	.41			
13		0	0	33	232	35	16	3.0	.41			
14		30	0	17	234	33	15	2.7	.34			
15		64	0	12	161	31	14	2.4	.34			
16		34	0	367	99	29	13	2.1	.34			
17		1.8	67	65	79	28	13	2.0	.28			
18		.04	24	719	64	26	11	2.0	.18			
19		0	23	83	54	47	10	2.0	.14			
20		0	4.8	44	47	193	9.6	1.6	.08			
21		0	1.7	39	42	120	8.7	1.5	.04			
22		0	.91	26	37	63	8.4	1.4	.04			
23		0	.64	20	35	52	7.8	1.4	.05			
24		0	.34	19	167	47	6.6	1.4	.03			
25		0	.14	18	52	43	6.9	1.4	0			
26		0	.04	14	117	40	7.5	1.5	0			
27		0	.05	12	245	37	6.3	1.3	0			
28		0	.02	12	134	33	6.0	1.1	0			
29		0	0	50	------	32	5.8	.91	0			
30		0	0	46	------	32	5.0	.82	0			
31		------	0	21	------	30	------	.82	------			------
TOTAL	0	129.84	122.64	2,268	4,329	1,795	405.6	80.25	7.77	0	0	0
MEAN	0	4.33	3.96	73.2	155	57.9	13.5	2.59	.26	0	0	0
MAX	0	64	67	719	750	193	27	4.8	.82	0	0	0
MIN	0	0	0	0	17	26	5.0	.82	0	0	0	0
AC-FT	0	258	243	4,500	8,590	3,560	805	159	15	0	0	0

CAL YR 1972 TOTAL 252.48 MEAN .69 MAX 67 MIN 0 AC-FT 501
WTR YR 1973 TOTAL 9,138.10 MEAN 25.0 MAX 750 MIN 0 AC-FT 18,130

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-15	2115	5.71	342	2-14	2200	8.28	1,190
1-11	0830	8.75	1,380	2-24	1000	6.41	528
1-16	0730	9.71	1,800	2-26	1330	5.90	390
1-18	0600	11.30	2,720	2-27	1900	8.08	1,110
2-7	0100	12.58	3,620	3-6	1730	6.56	573
2-9	2000	7.30	825	3-20	0130	6.06	430
2-11	0230	7.26	811	3-21	1200	5.55	310
2-13	0330	6.29	492				

11390660 WALKER CREEK AT ARTOIS, CALIF.

LOCATION.--Lat 39°37'32", long 122°11'45", in SW¼SW¼ sec.34, T.21 N., R.3 W., Glenn County, on left bank 500 ft upstream from county road bridge, and 0.3 mile north of Artois.

DRAINAGE AREA.--60.4 sq mi.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 156.4 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--8 years, 23.2 cfs (16,810 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,660 cfs Feb. 7 (gage height, 11.69 ft), from rating curve extended as explained below; no flow Oct. 24 to Nov. 12.
Period of record: Maximum discharge, 5,660 cfs Feb. 7, 1973 (gage height, 11.69 ft), from rating curve extended above 1,800 cfs on basis of contracted-opening measurement at gage height 11.69 ft; no flow at times each year.

REMARKS.--Records fair. Several small storage ponds above station for irrigation.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966-68(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	0	1.8	5.2	46	81	18	14	4.4	15	10	8.3
2	3.1	0	1.7	4.6	36	91	11	15	9.4	19	4.6	11
3	4.8	0	1.6	4.2	31	55	7.2	9.3	9.3	14	4.8	6.7
4	4.8	0	1.5	3.7	114	94	5.6	8.4	6.2	12	6.7	9.3
5	7.6	0	1.3	3.5	114	43	5.0	16	3.3	13	8.8	6.8
6	11	0	1.3	3.2	548	578	4.9	11	2.7	13	13	9.7
7	9.7	0	1.2	2.9	2,410	279	4.5	6.2	3.2	11	14	15
8	11	0	1.1	3.1	228	66	6.7	6.0	4.3	15	7.2	20
9	8.9	0	1.3	256	108	41	6.7	12	2.6	18	14	15
10	8.5	0	.92	451	566	31	5.2	8.2	1.9	10	22	10
11	16	0	.68	1,140	225	24	4.3	6.4	3.3	11	14	10
12	9.2	0	.65	423	92	17	5.4	9.6	4.9	10	6.2	4.9
13	4.6	.57	.62	233	158	13	7.6	18	5.4	14	9.5	4.9
14	2.3	256	.55	89	82	10	8.6	12	8.3	22	12	8.6
15	1.5	166	.54	60	64	8.2	16	9.4	14	19	5.8	9.5
16	1.1	581	.94	701	43	7.1	18	12	13	15	4.4	8.5
17	1.0	123	100	192	34	6.9	11	7.6	11	9.2	6.1	14
18	.48	61	122	1,690	28	6.7	9.5	6.7	12	4.6	16	16
19	.26	42	294	232	21	7.3	13	14	11	4.4	24	17
20	.13	31	86	73	17	164	20	14	11	5.6	22	20
21	.04	19	55	89	15	197	14	6.6	7.8	4.9	16	24
22	.23	13	51	64	12	127	9.7	8.3	6.4	11	15	20
23	.06	9.9	37	42	11	38	8.1	9.2	10	15	18	14
24	0	6.8	27	35	83	26	4.1	17	18	13	20	19
25	0	5.5	21	107	77	22	5.0	14	11	8.8	21	9.7
26	0	4.6	14	57	140	17	11	13	8.6	14	16	6.1
27	0	4.0	10	38	500	14	15	19	6.4	14	6.4	6.0
28	0	3.0	8.8	30	210	14	9.9	11	3.1	19	4.2	5.5
29	0	2.4	9.7	70	------	12	12	10	2.6	9.5	4.9	7.7
30	0	2.0	7.1	481	------	9.3	12	5.9	9.5	11	11	14
31	0	------	6.2	82	------	38	------	3.9	------	12	12	------
TOTAL	108.30	1,330.77	866.50	6,665.4	6,013	2,137.5	289.0	333.7	224.6	387.0	369.6	351.2
MEAN	3.49	44.4	28.0	215	215	69.0	9.63	10.8	7.49	12.5	11.9	11.7
MAX	16	581	294	1,690	2,410	578	20	19	18	22	24	24
MIN	0	0	.54	2.9	11	6.7	4.1	3.9	1.9	4.4	4.2	4.9
AC-FT	215	2,640	1,720	13,220	11,930	4,240	573	662	445	768	733	697

CAL YR 1972 TOTAL 2,464.28 MEAN 6.73 MAX 581 MIN 0 AC-FT 4,890
WTR YR 1973 TOTAL 19,076.57 MEAN 52.3 MAX 2,410 MIN 0 AC-FT 37,840

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0330	8.16	1,460	1-30	0130	7.87	1,330
12-19	0300	6.63	612	2-7	0530	11.69	5,660
1-9	2100	7.83	1,240	2-10	0400	7.75	1,250
1-11	1330	9.31	2,540	3-6	2100	8.80	2,020
1-16	1300	9.02	2,240	3-21	1930	6.82	750
1-18	1030	11.23	4,930				

11390672 STONE CORRAL CREEK NEAR SITES, CALIF.

LOCATION.--Lat 39°17'18", long 122°18'00", in NW¼NW¼ sec.34, T.17 N., R.4 W., Colusa County, on left bank at road bridge, 2.4 miles southeast of Sites.

DRAINAGE AREA.--38.2 sq mi.

PERIOD OF RECORD.--March 1958 to September 1964, October 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (from topographic map).

AVERAGE DISCHARGE.--14 years (1958-64, 1965-73), 6.85 cfs (4,960 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,430 cfs Feb. 6 (gage height, 16.45 ft), from rating curve extended as explained below; no flow for several months.
Period of record: Maximum discharge, 5,430 cfs Feb. 6, 1973 (gage height, 16.45 ft), from rating curve extended above 1,200 cfs on basis of slope-conveyance study at gage height 13.0 ft and a slope-area measurement at 16.45 ft; no flow for several months in each year.
Flood of Apr. 2, 1958, reached a stage of 14.93 ft (discharge, 2,500 cfs).
Flood of Dec. 22, 1964, reached a stage of 13.0 ft, from floodmarks (discharge, 1,940 cfs from slope-conveyance study.

REMARKS.--No known diversion or regulation above station.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	20	84	19	2.4				
2		0	0	0	17	76	17	2.2				
3		0	0	0	21	97	16	2.5				
4		0	0	0	48	75	15	2.8				
5		0	0	0	37	62	14	2.8				
6		0	0	0	1,140	244	13	3.2				
7		0	0	0	884	97	12	3.4				
8		0	0	0	128	73	11	2.9				
9		0	0	22	235	62	11	2.6				
10		0	0	78	223	55	10	2.5				
11		0	0	528	153	49	8.8	2.1				
12		0	0	154	125	43	8.2	1.8				
13		0	0	47	305	39	8.6	1.6				
14		.50	0	25	224	35	9.7	1.0				
15		5.7	0	17	193	32	7.6	.70				
16		29	0	461	79	29	7.5	.50				
17		2.3	32	80	64	27	6.8	.40				
18		0	14	648	50	25	5.7	.20				
19		0	23	72	42	71	5.3	.20				
20		0	4.2	42	37	146	4.5	.10				
21		0	1.6	44	37	107	3.9	.10				
22		0	1.0	27	33	44	4.0	0				
23		0	.30	21	31	33	4.0	0				
24		0	.10	19	252	31	3.2	0				
25		0	0	21	93	29	2.7	0				
26		0	0	16	238	28	2.9	0				
27		0	0	13	328	26	2.8	0				
28		0	0	12	127	23	3.1	0				
29		0	0	115	------	21	2.8	0				
30		0	0	78	------	23	2.6	0				
31		------	0	28	------	21	------	0	------			------
TOTAL	0	37.50	76.20	2,568	5,164	1,807	242.7	36.00	0	0	0	0
MEAN	0	1.25	2.46	82.8	184	58.3	8.09	1.16	0	0	0	0
MAX	0	29	32	648	1,140	244	19	3.4	0	0	0	0
MIN	0	0	0	0	17	21	2.6	0	0	0	0	0
AC-FT	0	74	151	5,090	10,240	3,580	481	71	0	0	0	0

CAL YR 1972	TOTAL	113.70	MEAN	.31	MAX 32	MIN 0	AC-FT	226
WTR YR 1973	TOTAL	9,931.40	MEAN	27.2	MAX 1,140	MIN 0	AC-FT	19,700

11391000 SACRAMENTO RIVER AT KNIGHTS LANDING, CALIF.

LOCATION.--Lat 38°48'11", long 121°42'55", in NW¼NE¼ sec.14, T.11 N., R.2 E., Sutter County, on left bank just upstream from Southern Pacific Railroad bridge at Knights Landing, 13.1 miles upstream from Feather River, and at mile 34.0 upstream from Sacramento.

DRAINAGE AREA.--14,541 sq mi.

PERIOD OF RECORD.--April 1921 to October 1939 (low-water periods only), June 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.93 ft below mean sea level. April 1921 to Dec. 9, 1930, in fender pier of railroad bridge at same datum. Water-stage recorder for station at Verona was used as auxiliary gage for this station January 1941 to June 1945. Since Aug. 16, 1945, auxiliary water-stage recorder 6.0 miles downstream from base gage.

AVERAGE DISCHARGE.--33 years (1940-73), 10,730 cfs (7,774,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 29,700 cfs Jan. 18 (gage height, 38.46 ft); minimum daily, 6,600 cfs June 13, 14.
Period of record: Maximum discharge (1940 to current year), 30,800 cfs Jan. 26, 1970 (gage height, 40.86 ft); maximum gage height, 41.83 ft Feb. 8, 1942 (backwater from Feather River and Sutter Bypass); minimum discharge recorded, 250 cfs July 23, 1931 (gage height, 7.80 ft).

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, bypassing for flood control, diversions for irrigation, and considerable return flow from irrigated areas. Records of chemical analyses near this station for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,990	7,890	16,500	16,100	26,300	27,500	15,400	8,170	10,100	7,290	8,820	9,690
2	7,880	7,970	16,200	16,500	25,500	27,300	16,100	8,100	10,100	7,270	8,720	9,300
3	7,710	7,870	15,200	16,500	25,000	26,800	15,400	7,900	9,950	7,310	8,290	9,250
4	7,690	8,060	14,300	16,300	24,300	27,100	14,800	7,500	9,330	7,290	8,030	8,930
5	7,730	8,090	13,800	15,800	24,700	27,400	14,300	7,280	8,820	7,440	8,050	8,710
6	7,410	9,070	13,300	15,700	27,100	27,500	14,100	7,600	8,390	7,460	7,970	8,600
7	7,060	9,020	12,300	15,300	27,300	26,800	13,900	7,580	7,900	7,610	7,790	8,720
8	7,070	8,460	11,700	14,700	27,700	26,800	13,700	7,450	7,610	7,790	7,530	8,910
9	6,940	8,170	11,600	13,800	27,900	26,700	13,600	7,380	7,370	7,910	7,360	8,820
10	7,030	8,590	11,300	17,100	27,300	26,800	13,200	7,370	7,120	8,110	7,510	8,750
11	7,380	9,300	10,900	27,300	27,700	25,600	13,000	7,420	6,860	8,050	7,930	8,850
12	7,690	11,100	11,000	26,400	27,600	25,900	13,200	7,460	6,780	7,970	8,170	9,100
13	8,240	14,200	10,800	27,000	27,700	26,000	13,200	8,100	6,600	7,990	7,840	9,310
14	8,260	13,600	10,600	28,500	27,600	25,800	13,000	8,600	6,600	8,200	7,220	9,460
15	8,530	18,800	10,200	27,700	27,100	25,000	12,800	9,070	6,750	8,460	7,110	9,650
16	8,640	23,700	10,200	26,900	27,300	22,900	12,400	9,470	6,910	8,590	7,730	9,880
17	9,310	25,800	10,300	27,100	27,200	20,100	11,800	9,670	7,030	8,670	8,090	10,100
18	9,720	25,100	15,700	28,600	27,100	18,000	11,500	10,600	7,090	8,620	8,280	10,200
19	9,330	20,800	27,300	28,600	26,600	16,700	11,200	11,200	7,050	8,630	8,660	10,200
20	8,900	19,700	28,000	29,200	26,200	16,300	10,600	11,200	7,090	8,740	8,670	10,100
21	8,480	19,100	27,100	29,100	26,000	18,800	9,860	11,300	6,940	8,810	8,770	10,200
22	8,440	18,300	24,200	28,600	25,400	23,900	9,460	11,300	6,840	8,930	8,930	10,300
23	8,260	17,400	21,300	28,300	24,900	25,700	9,100	10,700	6,820	9,030	9,090	10,400
24	8,220	17,300	23,000	28,100	25,000	23,800	8,570	10,700	6,970	9,070	9,160	10,500
25	8,060	17,000	21,400	27,600	25,700	19,900	8,300	11,100	7,240	8,940	9,240	10,600
26	8,020	17,000	19,600	27,300	27,800	17,200	7,640	11,800	7,430	8,830	9,530	10,500
27	8,020	16,800	17,300	26,900	27,200	16,400	7,450	13,000	7,230	8,930	9,540	10,300
28	8,020	16,600	16,100	26,500	26,600	16,000	7,780	12,200	7,180	8,840	9,730	10,000
29	8,220	16,500	15,500	25,900	------	15,700	8,120	11,500	7,080	9,060	9,930	9,970
30	8,050	16,600	15,400	25,600	------	15,500	8,090	10,900	7,090	8,980	10,000	9,810
31	7,960	------	15,700	26,600	------	15,400	------	10,400	------	8,930	10,000	------
TOTAL	250,260	437,890	497,800	735,600	743,800	701,300	351,570	294,020	226,270	257,750	263,690	289,110
MEAN	8,073	14,600	16,060	23,730	26,560	22,620	11,720	9,485	7,542	8,315	8,506	9,637
MAX	9,720	25,800	28,000	29,200	27,900	27,500	16,100	13,000	10,100	9,070	10,000	10,600
MIN	6,940	7,870	10,200	13,800	24,300	15,400	7,450	7,280	6,600	7,270	7,110	8,600
AC-FT	496,400	868,600	987,400	1,459M	1,475M	1,391M	697,300	583,200	448,800	511,200	523,000	573,400

CAL YR 1972 TOTAL 3,893,310 MEAN 10,640 MAX 28,000 MIN 6,460 AC-FT 7,722,000
WTR YR 1973 TOTAL 5,049,060 MEAN 13,830 MAX 29,200 MIN 6,600 AC-FT 10,010,000

RESERVOIRS IN FEATHER RIVER BASIN, CALIF.

11391370 FRENCHMAN LAKE.--Lat 39°53'36", long 120°11'17", in NW¼NE¼ sec.33, T.24 N., R.16 E., Plumas County, in valve chamber at center of toe of Frenchman Dam on Little Last Chance Creek, 5.4 miles upstream from the confluence with Middle Fork Feather River, and 7.1 miles north of Chilcoot. Drainage area, 81.1 sq mi. Period of record, October 1966 to current year in reports of Geological Survey. November 1961 to September 1966 published in reports of California Department of Water Resources. Gage is a water-stage recorder in valve house at center of toe of Frenchman Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 50,626 acre-ft May 19 (elevation, 5,584.84 ft); minimum, 38,438 acre-ft Sept. 30 (elevation, 5,575.98 ft). Extremes for period 1966 to current year: Maximum contents, 59,093 acre-ft May 22, 1967 (elevation, 5,590.28 ft); minimum, 36,715 acre-ft Nov. 12, 1966 (elevation, 5,574.64 ft).

Reservoir is formed by rockfill dam completed in 1961. Capacity, 53,582 acre-ft between elevations 5,517 ft (invert of intake) and 5,588 ft (crest of spillway). Dead storage, 1,840 acre-ft. Records, including extremes, represent total contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

11391490 LAKE DAVIS.--Lat 39°53'03", long 120°28'31", in NW¼SW¼ sec.1, T.23 N., R.13 E., Plumas County, in control house on left abutment of Grizzly Valley Dam on Big Grizzly Creek, 5.3 miles north of Portola. Drainage area, 44.0 sq mi. Period of record, November 1966 to current year. Gage is a water-stage recorder in control house on Grizzly Valley Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 83,128 acre-ft May 19, 20 (elevation, 5,774.69 ft); minimum, 69,052 acre-ft Dec. 2 (elevation, 5,770.99 ft). Extremes for period of record: Maximum contents, 92,818 acre-ft May 13, 14, 1969 (elevation, 5,777.05 ft); minimum since reservoir first filled, 69,052 acre-ft Dec. 2, 1972 (elevation, 5,770.99 ft).

Reservoir is formed by earth- and rockfill dam completed in 1967. Capacity, 84,040 acre-ft between elevations 5,700 ft (top of low-level intake) and 5,775 ft (crest of spillway). Dead storage, 108 acre-ft. Records, including extremes, represent total contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

11401120 ANTELOPE LAKE.--Lat 40°10'48", long 120°36'25", in SE¼SE¼ sec.22, T.27 N., R.12 E., Plumas County, in control house at toe of Antelope Dam on Indian Creek, 1.3 miles south of Boulder Creek Guard Station, 12 miles northeast of Genesee, and 13.9 northeast of Taylorsville. Drainage area, 68.6 sq mi. Period of record, October 1966 to current year in reports of Geological Survey. November 1963 to September 1966 published in reports of California Department of Water Resources. Gage is a water-stage recorder in control house at toe of Antelope Dam. Datum of gage is at mean sea level. Extremes for current year: Maximum contents, 23,718 acre-ft Apr. 28 (elevation, 5,003.22 ft); minimum, 19,361 acre-ft Sept. 30 (elevation, 4,998.41 ft). Extremes for period 1966 to current year: Maximim contents, 25,010 acre-ft Jan. 23, 1970 (elevation, 5,004.55 ft); minimum since reservoir first filled, 400 acre-ft Oct. 13, 1971 (elevation, 4,951.50), caused by draining lake for removal of nongame fish. Normal minimum since reservoir first filled, 2,125 acre-ft Sept. 30, 1971 (elevation, 4,964.40 ft).

Reservoir is formed by a rockfill dam. Storage began November 1963. Capacity, 22,239 acre-ft between elevations 4,950 ft (lip of intake tower) and 5,002 ft (crest of spillway). Records, including extremes, represent contents at 2400 hours. Records of contents furnished by California Department of Water Resources.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
		FRENCHMAN LAKE			LAKE DAVIS			ANTELOPE LAKE	
Sept. 30.....	5,577.36	40,203	--	5,771.69	71,607	--	a 4,999.98	a 20,728	--
Oct. 31.....	5,577.23	40,035	-168	5,771.44	70,689	-918	4,999.93	20,684	-44
Nov. 30.....	5,577.47	40,346	+311	5,771.02	69,160	-1,529	5,000.14	20,870	+186
Dec. 31.....	5,577.97	40,999	+653	a 5,771.34	a 70,323	+1,163	5,000.99	21,636	+766
CAL YR 1972....	--	--	-5,711	--	--	-7,584	--	--	+18,319
Jan. 31.....	5,578.82	42,124	+1,125	5,772.09	73,090	+2,767	a 5,002.20	a 22,753	+1,117
Feb. 28.....	5,579.63	43,213	+1,089	5,772.48	74,552	+1,462	5,002.35	22,893	+140
Mar. 31.....	5,581.42	45,680	+2,467	5,772.40	74,251	-301	5,002.53	23,062	+169
Apr. 30.....	5,584.79	50,551	+4,871	5,774.27	81,460	+7,209	5,003.13	23,632	+570
May 31.....	5,583.31	48,376	-2,175	5,774.64	82,928	+1,468	5,002.55	23,081	-551
June 30.....	a 5,581.73	a 46,116	-2,260	5,773.93	80,122	-2,806	a 5,001.38	a 21,993	-1,088
July 31.....	5,578.77	42,057	-4,059	5,773.15	77,099	-3,023	a 5,000.42	a 21,121	-872
Aug. 31.....	5,576.60	39,225	-2,832	5,772.33	73,988	-3,111	4,999.29	20,120	-1,001
Sept. 30.....	5,575.98	38,438	-787	a 5,771.63	a 71,386	-2,602	4,998.41	19,361	-759
WTR YR 1973....	--	--	-1,765	--	--	-221	--	--	-1,367

a Estimated.

11391400 LITTLE LAST CHANCE CREEK BELOW FRENCHMAN DAM, NEAR CHILCOOT, CALIF.

LOCATION.--Lat 39°53'36", long 120°11'17", in SW¼NE¼ sec.33, T.24 N., R.16 E., Plumas County, Plumas National Forest, in valve house at toe of Frenchman Dam, 7.1 miles northwest of Chilcoot.

DRAINAGE AREA.--81.1 sq mi.

PERIOD OF RECORD.--October 1958 to current year. Prior to October 1969, published as Little Last Chance Creek near Chilcoot.

GAGE.--Water-stage recorder and steel-lipped Cipolletti weir. Datum of release gage is 5,480.00 ft. October 1958 to September 1967, at site 1.9 miles downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--15 years, 27.7 cfs (20,070 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 165 cfs May 2, 3 (includes flow over spillway); no flow Apr. 10. Period of record: Maximum discharge, 784 cfs Feb. 8, 1960 (gage height, 5.56 ft, previous site and datum), from rating curve extended above 310 cfs; no flow Oct. 23, 1959, July 24-27, 29, Aug. 4, 1961. Maximum discharge since construction of Frenchman Dam in 1961, 544 cfs May 23, 1967; no flow Apr. 10, 1973.

REMARKS.--Flow regulated by Frenchman Reservoir beginning Nov. 7, 1961 (usable capacity, 53,580 acre-ft). Records since October 1967 are combined flow of release from Frenchman Dam and flow over spillway.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	3.4	3.4	3.4	3.4	3.4	3.4	130	36	5.2	67	12
2	6.6	3.4	3.4	3.4	3.4	3.4	3.4	163	23	10	57	12
3	6.6	3.4	3.4	3.4	3.4	3.4	3.4	138	23	20	48	12
4	6.6	3.4	3.4	3.4	3.4	3.4	3.4	108	20	20	67	8.9
5	6.6	3.4	3.4	3.4	3.4	3.4	3.4	64	17	28	70	6.3
6	6.6	3.4	3.4	3.4	3.4	3.4	3.4	42	17	64	70	6.3
7	6.6	3.4	3.4	3.4	3.4	3.4	3.4	33	14	87	70	5.7
8	6.6	3.4	3.4	3.4	3.4	3.4	3.4	24	12	76	70	4.9
9	6.6	3.4	3.4	3.4	3.4	3.4	1.6	16	12	61	70	4.9
10	6.6	3.4	3.4	3.4	3.4	3.4	0	14	12	45	58	4.9
11	6.6	3.4	3.4	3.4	3.4	3.4	1.9	20	12	42	50	4.9
12	6.6	3.4	3.4	3.4	3.4	3.4	3.4	25	14	42	50	4.9
13	6.6	3.4	3.4	3.4	3.4	3.4	3.4	25	16	76	39	4.9
14	6.6	3.4	3.4	3.4	3.4	3.4	3.4	29	20	76	18	4.9
15	6.6	3.4	3.4	3.4	3.4	3.4	3.4	31	51	76	18	4.9
16	6.6	3.4	3.4	3.4	3.4	3.4	3.4	31	62	92	18	4.9
17	6.6	3.4	3.4	3.4	3.4	3.4	3.4	35	62	98	13	3.9
18	4.9	3.4	3.4	3.4	3.4	3.4	3.4	38	78	91	10	3.2
19	3.5	3.4	3.4	3.4	3.4	3.4	3.4	38	90	66	10	3.2
20	3.5	3.4	3.4	3.4	3.4	3.4	3.4	38	112	47	8.0	3.2
21	3.5	3.4	3.4	3.4	3.4	3.4	3.4	72	74	53	5.6	3.2
22	3.5	3.4	3.4	3.4	3.4	3.4	3.4	106	51	51	11	3.2
23	3.5	3.4	3.4	3.4	3.4	3.4	3.4	150	23	47	18	3.2
24	3.5	3.4	3.4	3.4	3.4	3.4	3.4	162	8.5	47	18	3.6
25	3.5	3.4	3.4	3.4	3.4	3.4	17	162	8.5	47	18	3.9
26	3.5	3.4	3.4	3.4	3.4	3.4	69	161	7.0	47	18	3.9
27	3.5	3.4	3.4	3.4	3.4	3.4	85	161	5.2	47	18	3.9
28	3.4	3.4	3.4	3.4	3.4	3.4	84	117	5.2	47	18	3.9
29	3.4	3.4	3.4	3.4	------	3.4	84	83	5.2	47	15	3.9
30	3.4	3.4	3.4	3.4	------	3.4	84	76	5.2	47	12	3.9
31	3.4	------	3.4	3.4	------	3.4	------	62	------	62	12	------
TOTAL	162.3	102.0	105.4	105.4	95.2	105.4	497.9	2,354	895.8	1,664.2	1,044.6	157.4
MEAN	5.24	3.40	3.40	3.40	3.40	3.40	16.6	75.9	29.9	53.7	33.7	5.25
MAX	6.7	3.4	3.4	3.4	3.4	3.4	85	163	112	98	70	12
MIN	3.4	3.4	3.4	3.4	3.4	3.4	0	14	5.2	5.2	5.6	3.2
AC-FT	322	202	209	209	189	209	988	4,670	1,780	3,300	2,070	312

CAL YR 1972 TOTAL 7,720.8 MEAN 21.1 MAX 155 MIN 1.9 AC-FT 15,310
WTR YR 1973 TOTAL 7,289.6 MEAN 20.0 MAX 163 MIN 0 AC-FT 14,460

11391500 BIG GRIZZLY CREEK AT GRIZZLY VALLEY DAM, NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°53'00", long 120°28'29", in NW¼SW¼ sec.1, T.23 N., R.13 E., Plumas County, at Grizzly Valley Dam on Big Grizzly Creek, 5.3 miles north of Portola.

DRAINAGE AREA.--44.0 sq mi.

PERIOD OF RECORD.--October 1925 to September 1932, October 1950 to September 1953, June 1954 to September 1967, October 1968 to current year. Prior to October 1952, published as Grizzly Creek near Portola, October 1952 to September 1953, June 1954 to September 1967, published as Big Grizzly Creek near Portola.

GAGE.--Water-stage recorder and Cippoletti weir. Altitude of gage is 5,700 ft (from topographic map). Supplementary water-stage recorder in control house on Grizzly Valley Dam and concrete spillway. Prior to October 1968 at different site and datum.

AVERAGE DISCHARGE (prior to regulation by Lake Davis).--22 years (1925-32, 1950-53, 1954-66), 38.2 cfs (27,680 acre-ft per year); 5 years (1967, 1968-73), 30.7 cfs (22,240 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 75 cfs Mar. 2-15, Apr. 27 to May 1; minimum daily, 14 cfs Oct. 27.

Period of record: Maximum discharge, 4,080 cfs Feb. 1, 1963 (gage height, 8.03 ft, site and datum then in use), from rating curve extended above 600 cfs on basis of slope-area measurement of peak flow; maximum gage height, 9.54 ft, former site and datum, Mar. 26, 1928; no flow Jan. 22 or 23, 1962. Maximum discharge since construction of Grizzly Valley Dam in 1966, 253 cfs May 13, 1969 (includes flow through spillway); no flow many days in September and October 1969.

REMARKS.--Flow regulated by Lake Davis completed in December 1966 (usable capacity, 84,050 acre-ft). Diversions for irrigation of about 400 acres above station and domestic water supply via Grizzly Valley pipeline.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1315-A: 1930(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	15	33	15	15	52	24	75	24	15	15	48
2	15	15	15	15	15	75	24	51	24	15	15	15
3	15	15	15	15	15	75	24	24	24	15	15	15
4	15	15	15	15	15	75	24	24	24	15	15	15
5	15	15	15	15	15	75	24	24	24	15	15	15
6	15	15	15	15	15	75	24	24	24	15	15	15
7	15	15	15	15	15	75	24	24	24	15	15	15
8	15	15	15	15	15	75	24	24	24	15	15	15
9	15	15	15	15	15	75	24	24	24	15	15	15
10	15	15	15	15	15	75	24	24	24	15	15	15
11	15	15	15	15	15	75	24	24	24	15	15	15
12	15	15	15	15	15	75	24	24	24	15	15	15
13	15	15	15	15	15	75	24	24	24	15	15	15
14	15	15	15	15	15	75	24	24	24	15	15	15
15	15	48	15	15	15	75	24	24	18	15	15	15
16	15	70	15	15	15	50	24	24	15	15	15	15
17	15	70	15	15	15	24	24	24	15	15	15	15
18	15	70	15	15	15	24	24	24	15	15	15	15
19	15	70	15	15	15	24	24	24	15	15	15	15
20	15	70	15	15	15	24	24	24	15	15	15	15
21	15	70	15	15	15	24	24	24	15	15	15	15
22	15	70	15	15	15	24	24	24	15	15	15	15
23	15	70	15	15	15	24	24	24	15	15	15	15
24	15	70	15	15	15	24	24	24	15	15	15	15
25	15	70	15	15	15	24	24	24	15	15	15	15
26	15	70	15	15	15	24	61	24	15	15	15	15
27	14	70	15	15	15	24	75	24	15	15	15	15
28	15	70	15	15	15	24	75	24	15	15	15	15
29	15	70	15	15	------	24	75	24	15	15	15	15
30	15	70	15	15	------	24	75	24	15	15	15	15
31	15	------	15	15	------	24	------	24	------	15	57	------
TOTAL	464	1,308	483	465	420	1,512	961	822	579	465	507	483
MEAN	15.0	43.6	15.6	15.0	15.0	48.8	32.0	26.5	19.3	15.0	16.4	16.1
MAX	15	70	33	15	15	75	75	75	24	15	57	48
MIN	14	15	15	15	15	24	24	24	15	15	15	15
AC-FT	920	2,590	958	922	833	3,000	1,910	1,630	1,150	922	1,010	958
(a)	37	41	50	48	43	44	47	63	56	76	86	74

CAL YR 1972 TOTAL 9,600.0 MEAN 26.2 MAX 230 MIN 8.0 AC-FT 19,040
WTR YR 1973 TOTAL 8,469.0 MEAN 23.2 MAX 75 MIN 14 AC-FT 16,800

a Diversion, in acre-feet, to Grizzly Valley pipeline.

11392100 MIDDLE FORK FEATHER RIVER NEAR PORTOLA, CALIF.

LOCATION.--Lat 39°49'07", long 120°26'37", in SW¼NW¼ sec.29, T.23 N., R.14 E., Plumas County, on right bank 0.8 mile downstream from Big Grizzly Creek, and 1.5 miles northeast of Portola.

DRAINAGE AREA.--586 sq mi.

PERIOD OF RECORD.--October 1968 to current year. November 1955 to September 1968 in bulletins of California Department of Water Resources.

GAGE.--Water-stage recorder. Altitude of gage is 4,860 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,660 cfs Jan. 18 (gage height, 6.88 ft); minimum daily, 4.3 cfs Aug. 8.
Period of record: Maximum discharge, 7,640 cfs Jan. 21, 1969 (gage height, 10.18 ft); minimum daily, 3.1 cfs Sept. 11, 12, 1969.

REMARKS.--Flow partly regulated by Frenchman Lake (see sta 11391370) and Lake Davis (see sta 11391490). Records of chemical analyses and suspended-sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	50	100	79	175	1,940	281	245	126	27	12	73
2	33	52	59	86	143	1,730	273	240	126	28	12	16
3	32	56	58	79	143	1,410	259	197	139	29	14	15
4	32	73	63	77	144	1,040	240	180	144	28	16	15
5	32	86	59	73	151	783	225	190	152	27	16	15
6	32	105	54	61	166	658	217	215	158	23	16	14
7	32	128	43	57	184	583	223	220	151	20	13	15
8	32	115	35	55	204	544	272	220	136	20	4.3	15
9	33	96	36	56	237	523	250	199	118	18	14	15
10	35	93	38	58	259	510	268	186	103	18	15	14
11	37	93	53	61	294	600	275	172	91	18	15	11
12	37	94	75	75	371	724	284	160	82	17	13	11
13	41	98	69	126	424	610	295	152	75	18	10	11
14	43	107	74	706	388	466	308	145	69	16	10	11
15	44	131	83	1,140	358	407	316	138	61	15	10	11
16	45	180	80	1,040	340	359	324	141	49	14	9.7	13
17	49	186	73	1,330	333	303	325	140	44	16	9.4	15
18	54	178	73	1,860	325	293	310	142	47	17	9.7	15
19	60	168	118	880	300	286	292	154	60	17	10	15
20	60	157	180	1,080	287	279	265	153	52	17	10	16
21	58	149	311	737	279	268	218	150	49	16	11	15
22	56	144	757	482	292	254	182	144	41	16	12	14
23	52	139	468	377	329	237	199	142	46	19	15	15
24	48	134	475	302	391	222	203	120	41	20	16	15
25	44	134	312	219	580	211	161	112	39	16	17	15
26	42	137	230	215	810	218	166	119	35	13	17	17
27	41	139	178	220	1,070	234	118	119	30	12	16	18
28	47	138	142	174	1,530	253	197	122	29	12	16	18
29	53	137	111	158	------	263	209	121	28	13	15	19
30	53	134	115	144	------	264	226	126	27	12	15	20
31	51	------	84	147	------	274	------	136	------	12	43	------
TOTAL	1,342	3,631	4,606	12,154	10,507	16,746	7,381	5,000	2,348	564	432.1	502
MEAN	43.3	121	149	392	375	540	246	161	78.3	18.2	13.9	16.7
MAX	60	186	757	1,860	1,530	1,940	325	245	158	29	43	73
MIN	32	50	35	55	143	211	118	112	27	12	4.3	11
AC-FT	2,660	7,200	9,140	24,110	20,840	33,220	14,640	9,920	4,660	1,120	857	996

CAL YR 1972 TOTAL 48,454.1 MEAN 132 MAX 1,350 MIN 5.0 AC-FT 96,110
WTR YR 1973 TOTAL 65,213.1 MEAN 179 MAX 1,940 MIN 4.3 AC-FT 129,400

11392500 MIDDLE FORK FEATHER RIVER NEAR CLIO, CALIF.

LOCATION.--Lat 39°45'14", long 120°35'42", in NW¼SE¼ sec.23, T.22 N., R.12 E., Plumas County, on left bank 0.6 mile upstream from Frazier Creek, 1.0 mile northwest of Clio, and 2.2 miles southeast of Blairsden.

DRAINAGE AREA.--686 sq mi.

PERIOD OF RECORD.--October 1925 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,380 ft (from topographic map). Prior to July 29, 1953, at site 0.5 mile downstream at different datum.

AVERAGE DISCHARGE.--48 years, 291 cfs (210,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,440 cfs Jan. 16 (gage height, 10.32 ft); minimum daily, 30 cfs Aug. 9, 18, 19.
Period of record: Maximum discharge, 14,500 cfs Feb. 1, 1963 (gage height, 16.19 ft); minimum, 4.3 cfs Sept. 5, 1934.

REMARKS.--Records good. Diversions for irrigation of about 40,000 acres above station, of which 14,500 acres receive supplemental water of about 7,000 acre-ft annually from Little Truckee River. Flow partly regulated by Lake Davis (total usable capacity, 84,000 acre-ft) beginning in November 1966 (see sta 11391490) and by Frenchman Lake (total usable capacity, 53,600 acre-ft) beginning in November 1961 (see sta 11391370). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1928, 1930, 1932. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	83	163	142	239	2,240	413	362	208	51	32	33
2	61	81	108	147	236	2,080	387	366	176	51	32	32
3	58	85	124	140	230	1,710	369	318	177	51	31	33
4	57	270	117	121	247	1,310	359	303	177	51	32	33
5	58	203	110	128	255	980	365	291	176	49	33	35
6	58	200	107	123	276	903	389	297	179	47	33	36
7	60	187	94	96	311	802	415	300	175	45	33	38
8	67	210	94	88	323	731	427	307	164	45	33	38
9	69	193	92	102	360	696	450	296	148	45	30	37
10	98	176	90	109	465	738	468	284	134	42	31	36
11	113	185	87	198	469	871	484	282	121	41	33	35
12	81	175	87	687	515	896	498	300	110	41	33	32
13	79	158	88	439	558	839	522	335	104	40	33	33
14	86	180	88	625	528	650	500	336	100	39	32	33
15	107	238	92	1,380	476	553	494	338	93	40	32	33
16	114	234	99	2,470	462	520	487	334	83	38	31	33
17	110	221	218	1,630	451	460	496	332	76	37	31	34
18	105	212	281	2,510	440	427	466	330	72	37	30	34
19	106	209	462	1,250	413	419	433	321	79	37	30	34
20	109	206	400	1,260	399	417	393	300	77	36	31	40
21	108	199	462	1,050	395	379	350	272	75	36	31	36
22	105	192	1,180	698	403	360	303	252	70	35	32	36
23	103	183	861	545	447	342	314	238	68	35	32	37
24	101	179	695	429	594	340	339	224	68	36	33	36
25	101	173	503	357	840	345	317	207	65	35	35	36
26	101	175	376	331	1,060	360	312	184	61	33	40	36
27	101	177	302	297	1,370	398	287	183	58	32	41	37
28	99	177	252	280	1,830	406	342	179	55	34	37	38
29	95	175	188	250	------	395	364	177	52	32	36	38
30	92	172	197	247	------	395	360	182	51	32	34	39
31	86	------	168	240	------	400	------	221	------	31	33	------
TOTAL	2,754	5,508	8,185	18,369	14,592	22,362	12,103	8,651	3,252	1,234	1,020	1,061
MEAN	88.8	184	264	593	521	721	403	279	108	39.8	32.9	35.4
MAX	114	270	1,180	2,510	1,830	2,240	522	366	208	51	41	40
MIN	57	81	87	88	230	340	287	177	51	31	30	32
AC-FT	5,460	10,930	16,230	36,430	28,940	44,360	24,010	17,160	6,450	2,450	2,020	2,100

CAL YR 1972 TOTAL 78,290 MEAN 214 MAX 1,730 MIN 25 AC-FT 155,300
WTR YR 1973 TOTAL 99,091 MEAN 271 MAX 2,510 MIN 30 AC-FT 196,500

11394500 MIDDLE FORK FEATHER RIVER NEAR MERRIMAC, CALIF.

LOCATION.--Lat 39°42'30", long 121°16'10", in NW¼NE¼ sec.2, T.21 N., R.6 E., Butte County, Plumas National Forest, on left 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.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,560 ft (from topographic map). Prior to Jan. 21, 1965, on right bank at same site and datum.

AVERAGE DISCHARGE.--22 years, 1,439 cfs (1,043,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 12,000 cfs Jan. 16 (gage height, 12.92 ft); minimum daily, 163 cfs Sept. 16-18.
Period of record: Maximum discharge, 86,200 cfs Dec. 22, 1964 (gage height, 26.5 ft, from floodmarks, present site), from rating curve extended above 19,000 cfs on basis of slope-area measurement of maximum flow; minimum, 92 cfs Jan. 2, 1960.
Flood of Dec. 10, 1937, reached a stage of 19.4 ft, from floodmarks (discharge, 46,100 cfs).

REMARKS.--Records good. Diversions above station for irrigation of about 1,000 acres between stations near Clio and near Merrimac. Flow partly regulated by Antelope Lake (see sta 11401120) beginning in 1963, Lake Davis (see sta 11391490) beginning in 1966, and Frenchman Lake (see sta 11391370) beginning in 1961. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1931, WRD Calif. 1965: 1960. Drainage area. WRD Calif. 1968: 1956(M), 1963(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	265	488	820	1,220	4,980	1,660	3,260	2,160	470	236	187
2	221	268	484	767	1,180	4,880	1,580	3,220	1,940	455	228	208
3	224	292	467	764	1,190	4,180	1,520	3,310	1,770	439	224	235
4	211	1,070	582	688	1,420	3,650	1,530	3,270	1,670	432	219	195
5	208	881	452	615	1,660	3,060	1,650	2,790	1,590	421	219	184
6	208	577	463	644	1,640	2,790	1,920	2,580	1,560	408	219	180
7	208	664	475	582	1,890	2,500	2,210	2,720	1,490	395	217	179
8	214	689	428	603	1,830	2,310	2,160	2,950	1,430	385	215	175
9	232	573	401	773	1,840	2,150	2,370	3,090	1,360	376	212	173
10	436	579	410	858	2,770	2,210	2,630	3,230	1,280	366	205	173
11	944	650	430	1,450	2,550	2,680	2,830	3,510	1,170	354	200	173
12	729	598	444	5,330	2,400	2,500	3,090	3,870	1,090	345	204	173
13	402	590	400	4,690	2,170	2,440	3,150	4,450	1,020	341	203	170
14	333	964	364	3,310	2,130	2,140	2,830	4,560	964	332	198	166
15	389	873	365	3,530	1,910	1,930	2,750	4,650	916	331	191	165
16	519	1,080	437	8,840	1,840	1,850	2,620	4,610	860	325	187	163
17	522	888	1,380	6,650	1,760	1,840	2,790	4,650	812	345	183	163
18	441	759	2,510	6,590	1,680	1,700	2,800	4,620	770	332	179	163
19	375	755	4,550	5,020	1,600	1,680	2,610	4,390	729	314	177	166
20	348	681	3,080	3,570	1,550	1,710	2,440	3,950	712	304	175	303
21	333	628	2,050	3,280	1,530	1,620	2,310	3,450	685	300	173	262
22	319	595	3,890	2,490	1,500	1,530	2,330	3,140	658	296	173	219
23	308	562	2,550	2,080	1,510	1,480	2,560	2,960	630	291	173	308
24	293	534	2,130	1,880	2,040	1,460	2,870	3,100	630	284	173	268
25	281	519	1,830	1,770	2,910	1,510	3,070	3,250	605	279	181	252
26	276	513	1,560	1,550	3,030	1,580	3,400	2,680	580	272	231	222
27	272	521	1,370	1,410	4,100	1,720	3,810	2,380	550	264	254	209
28	268	510	1,240	1,340	4,980	1,750	3,960	2,340	535	259	245	205
29	268	511	1,070	1,340	------	1,660	3,860	2,440	510	257	215	205
30	267	504	952	1,320	------	1,640	3,520	2,430	485	248	203	204
31	264	------	903	1,300	------	1,720	------	2,310	------	240	194	------
TOTAL	10,525	19,093	38,155	75,854	57,830	70,850	78,830	104,160	31,161	10,460	6,306	6,048
MEAN	340	636	1,231	2,447	2,065	2,285	2,628	3,360	1,039	337	203	202
MAX	944	1,080	4,550	8,840	4,980	4,980	3,960	4,650	2,160	470	254	308
MIN	208	265	364	582	1,180	1,460	1,520	2,310	485	240	173	163
AC-FT	20,880	37,870	75,680	150,500	114,700	140,500	156,400	206,600	61,810	20,750	12,510	12,000

CAL YR 1972 TOTAL 389,258 MEAN 1,064 MAX 5,250 MIN 144 AC-FT 772,100
WTR YR 1973 TOTAL 509,272 MEAN 1,395 MAX 8,840 MIN 163 AC-FT 1,010,000

PEAK DISCHARGE (BASE, 7,000 CFS).--Jan. 16 (1530) 12,000 cfs (12.92 ft).

11394620 FALL RIVER NEAR FEATHER FALLS, CALIF.

LOCATION.--Lat 39°40'00", long 121°08'01", in SW¼NW¼ sec.19, T.21 N., R.8 E., Plumas County, on right bank 0.5 mile downstream from Coyote Creek, and 8 miles northeast of Feather Falls.

DRAINAGE AREA.--9.89 sq mi.

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,000 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 44.2 cfs (32,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 483 cfs Jan. 16 (gage height, 4.41 ft); minimum daily, 2.0 cfs Oct. 6, 7.
Period of record: Maximum discharge, 3,770 cfs Dec. 22, 1964 (gage height, 10.00 ft), from rating curve extended above 200 cfs on basis of slope-area measurement of maximum flow; minimum daily, 1.4 cfs Aug. 23-25, 1970.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV.	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.2	14	39	42	160	54	155	66	10	4.4	2.8
2	2.2	3.2	14	37	40	137	53	151	60	10	4.2	2.8
3	2.1	6.4	14	35	40	121	53	153	54	9.7	4.2	2.8
4	2.1	29	14	34	43	105	56	148	48	9.3	4.0	2.6
5	2.1	16	13	33	45	93	63	130	45	9.3	4.0	2.6
6	2.0	11	13	31	49	87	71	124	41	9.0	4.0	2.6
7	2.0	19	12	30	57	77	79	126	38	8.7	3.7	2.6
8	2.2	16	11	29	54	72	83	133	35	8.5	3.7	2.4
9	2.7	14	10	27	57	68	91	142	33	8.1	3.7	2.4
10	13	14	10	29	68	73	101	151	30	7.7	3.5	2.4
11	28	15	11	70	61	78	112	163	28	7.4	3.5	2.4
12	9.9	12	11	234	57	71	122	179	27	7.2	3.5	2.4
13	5.8	14	11	206	52	68	124	198	25	6.9	3.3	2.4
14	5.1	22	12	149	52	64	116	204	24	6.6	3.3	2.4
15	7.7	24	12	133	49	62	113	202	23	6.5	3.2	2.4
16	8.4	32	14	340	48	61	109	200	22	6.3	3.2	2.4
17	8.1	23	60	239	46	61	122	197	21	6.4	3.2	2.4
18	6.2	20	78	186	45	57	121	194	19	6.2	3.2	2.4
19	5.5	20	125	136	44	56	115	183	18	6.1	3.0	2.6
20	5.0	17	102	113	43	54	109	162	17	5.9	3.0	7.8
21	4.6	16	85	97	43	52	107	142	16	5.9	3.0	3.9
22	4.3	15	210	85	42	50	111	130	15	5.7	3.0	3.9
23	4.1	14	140	76	42	48	122	120	15	5.5	3.0	7.7
24	3.9	13	107	70	76	49	131	127	15	5.4	3.0	5.8
25	3.7	13	84	59	93	50	146	116	14	5.1	3.2	4.8
26	3.6	13	71	58	97	53	165	101	13	4.9	3.7	3.9
27	3.5	13	63	55	159	56	183	91	13	4.8	3.7	3.6
28	3.4	13	56	52	176	55	189	87	12	4.7	3.3	3.5
29	3.3	14	50	50	------	54	181	84	11	4.8	3.0	3.5
30	3.3	14	45	48	------	54	166	80	11	4.7	3.0	3.4
31	3.3	------	42	45	------	59	------	73	------	4.5	2.8	------
TOTAL	163.4	468.8	1,514	2,825	1,720	2,205	3,368	4,446	809	211.8	106.5	99.6
MEAN	5.27	15.6	48.8	91.1	61.4	71.1	112	143	27.0	6.83	3.44	3.32
MAX	28	32	210	340	176	160	189	204	66	10	4.4	7.8
MIN	2.0	3.2	10	27	40	48	53	73	11	4.5	2.8	2.4
AC-FT	324	930	3,000	5,600	3,410	4,370	6,680	8,820	1,600	420	211	198

CAL YR 1972 TOTAL 12,924.8 MEAN 35.3 MAX 218 MIN 1.7 AC-FT 25,640
WTR YR 1973 TOTAL 17,937.1 MEAN 49.1 MAX 340 MIN 2.0 AC-FT 35,580

PEAK DISCHARGE (BASE, 180 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-22	0600	3.88	330	2-27	1930	3.38	216
1-12	0530	3.59	258	4-27	1900	3.32	204
1-16	1130	4.41	483	5-15	1730	3.41	222

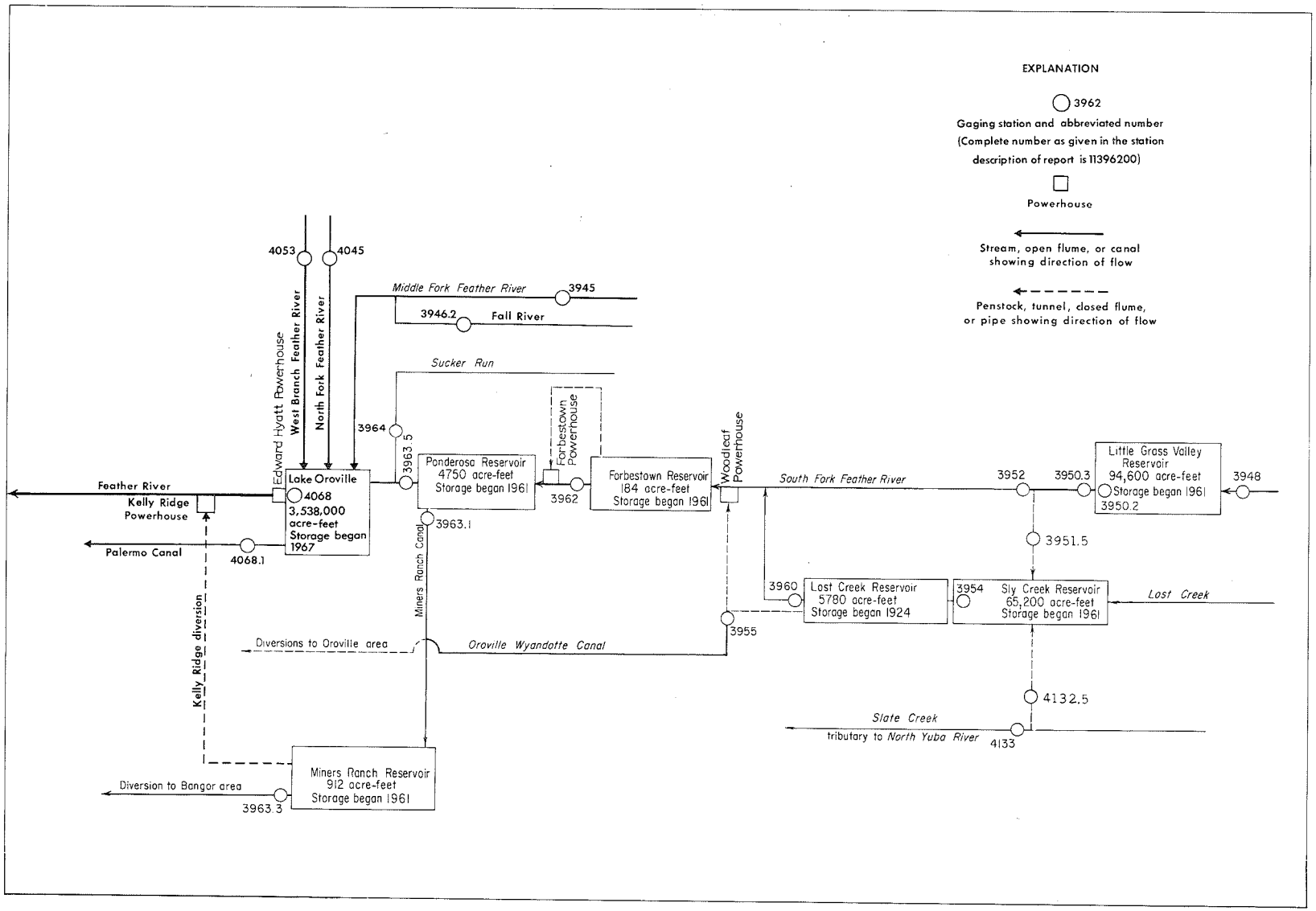

FIGURE 11.--Schematic diagram showing diversions and storage in South Fork Feather River basin.

11394800 SOUTH FORK FEATHER RIVER ABOVE LITTLE GRASS VALLEY RESERVOIR, CALIF.

LOCATION.--Lat 39°45'07", long 120°57'26", in NW¼SE¼ sec.22, T.22 N., R.9 E., Plumas County, Plumas National Forest, on right bank 0.5 mile downstream from unnamed tributary, 4.5 miles upstream from Little Grass Valley Dam, and 5 miles north of La Porte.

DRAINAGE AREA.--8.09 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,080 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 30.1 cfs (21,810 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 237 cfs May 17 (gage height, 3.21 ft); maximum gage height, 4.96 ft (backwater from ice); minimum daily discharge, 0.06 cfs Aug. 22-25.
Period of record: Maximum discharge, 4,160 cfs Jan. 31, 1963 (gage height, 7.12 ft), from rating curve extended above 140 cfs on basis of slope-area measurement at gage height 5.47 ft; minimum daily, 0.06 cfs Sept. 9-13, 29, 1968, Aug. 24, 25, 1970, Aug. 22-25, 1973.

REMARKS.--Records good. No storage or diversion above station. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.73	5.9	18	17	29	18	107	85	4.9	.41	.11
2	.41	.63	5.9	17	17	28	18	109	77	4.5	.35	.08
3	.41	2.2	5.9	16	17	28	18	114	68	4.5	.35	.11
4	.41	14	5.2	16	16	26	19	107	64	4.1	.30	.08
5	.47	9.9	5.0	16	16	23	22	90	62	3.7	.30	.08
6	.47	6.9	4.8	16	16	23	28	87	57	3.4	.25	.08
7	.47	6.9	4.8	16	16	22	32	95	51	3.0	.30	.08
8	.55	6.4	4.8	17	16	21	34	104	51	3.0	.30	.11
9	.55	5.9	4.8	20	16	19	42	114	43	2.8	.25	.25
10	6.9	5.9	4.8	23	16	21	50	128	37	2.5	.25	.30
11	21	5.4	4.8	47	15	22	59	145	31	2.2	.25	.30
12	6.9	4.9	4.9	145	14	20	68	169	28	2.0	.30	.35
13	3.0	4.9	4.9	104	14	19	68	195	27	1.8	.25	.35
14	3.0	6.4	4.9	77	14	18	60	205	23	1.8	.25	.35
15	6.9	5.9	4.9	66	14	18	59	202	20	1.6	.25	.41
16	7.4	7.4	4.9	81	14	18	55	208	18	1.4	.15	.47
17	6.4	6.4	21	68	14	18	60	212	17	1.6	.11	.55
18	4.1	5.9	52	57	14	18	62	212	15	1.4	.11	.55
19	3.0	5.9	74	44	14	18	59	205	14	1.2	.08	.35
20	2.8	5.4	51	38	14	18	57	172	13	.95	.08	1.2
21	2.2	5.4	47	36	14	18	55	145	11	.95	.08	.83
22	2.0	4.9	115	30	14	18	60	136	11	.83	.06	.63
23	1.8	4.9	62	28	14	17	70	128	9.9	.83	.06	2.0
24	1.2	4.5	46	27	16	17	79	145	9.2	.73	.06	1.8
25	1.1	4.5	38	24	17	18	90	142	8.6	.63	.06	1.2
26	1.1	4.9	32	23	18	19	112	112	8.0	.55	.15	.83
27	.95	5.4	30	22	23	21	131	102	6.9	.47	.25	.63
28	.95	5.4	27	20	28	21	136	112	6.9	.47	.25	.55
29	.83	5.4	24	20	------	20	131	120	5.9	.41	.20	.47
30	.73	5.4	21	18	------	20	117	117	5.4	.41	.15	.41
31	.73	------	19	18	------	19	------	99	------	.41	.15	------
TOTAL	89.14	168.66	740.2	1,168	448	635	1,869	4,338	883.8	59.04	6.36	15.51
MEAN	2.88	5.62	23.9	37.7	16.0	20.5	62.3	140	29.5	1.90	.21	.52
MAX	21	14	115	145	28	29	136	212	85	4.9	.41	2.0
MIN	.41	.63	4.8	16	14	17	18	87	5.4	.41	.06	.08
AC-FT	177	335	1,470	2,320	889	1,260	3,710	8,600	1,750	117	13	31

CAL YR 1972 TOTAL 8,323.36 MEAN 22.7 MAX 145 MIN .15 AC-FT 16,510
WTR YR 1973 TOTAL 10,420.71 MEAN 28.5 MAX 212 MIN .06 AC-FT 20,670

PEAK DISCHARGE (BASE, 140 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-22	0430	3.06	185	4-27	2000	2.97	154
1-12	0300	3.13	208	5-17	1830	3.21	237

11395020 LITTLE GRASS VALLEY RESERVOIR NEAR LA PORTE, CALIF.

LOCATION.--Lat 39°43'25", long 121°01'10", in SE¼NW¼ sec.31, T.22 N., R.9 E., Plumas County, Plumas National Forest, on right bank 300 ft upstream from dam on South Fork Feather River, 3.3 miles northwest of La Porte.

DRAINAGE AREA.--25.8 sq mi.

PERIOD OF RECORD.--October 1961 to current year. Monthend elevation and contents only October 1961 to October 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Nov. 1, 1962, in valve chamber in dam at same datum.

EXTREMES.--Current year: Maximum contents, 87,600 acre-ft June 24 to July 5 (elevation, 5,042.8 ft); minimum, 44,400 acre-ft Dec. 5 (elevation, 5,010.0 ft).
Period of record: Maximum contents, 96,100 acre-ft Apr. 29, 1965 (elevation, 5,047.9 ft); minimum since reservoir first filled, 44,400 acre-ft Dec. 5, 1972 (elevation, 5,010.0 ft).

REMARKS.--Reservoir is formed by rockfill dam. Storage began in October 1961. Total capacity, 94,700 acre-ft between elevations 4,876 ft (invert of release valve) and 5,047 ft (top of spillway gates), all of which is usable. Water is released down South Fork Feather River for power development and irrigation downstream. Records, including extremes, represent contents at 2400 hours. See schematic diagram of South Fork Feather River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,000	34,600
5,010	44,400
5,020	55,900
5,030	68,900
5,040	83,500
5,048	96,300

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65,800	56,100	45,700	51,100	62,900	67,500	58,100	58,700	84,600	87,600	86,800	82,300
2	65,400	55,900	45,400	51,200	63,200	67,300	57,700	59,400	84,900	87,600	86,800	82,200
3	65,000	55,700	45,000	51,200	63,300	67,100	57,300	59,900	85,200	87,600	86,800	81,900
4	64,700	55,400	44,700	51,300	63,600	66,900	57,100	60,600	85,500	87,600	86,800	81,600
5	64,500	55,100	44,400	51,400	63,700	66,500	56,800	61,100	85,800	87,600	86,600	81,100
6	64,100	54,700	44,700	51,500	63,900	66,400	56,400	61,500	86,200	87,400	86,600	80,600
7	63,700	54,500	44,800	51,600	64,100	66,200	56,300	61,900	86,300	87,400	86,600	80,100
8	63,300	54,200	44,800	51,800	64,200	65,800	56,000	62,500	86,600	87,400	86,600	79,500
9	63,000	53,800	44,800	52,100	64,500	65,500	55,900	63,300	86,600	87,400	86,500	79,100
10	63,200	53,600	44,800	52,200	64,900	65,200	55,800	64,100	86,800	87,400	86,500	78,500
11	63,000	53,200	44,900	52,900	65,000	65,000	55,800	65,000	87,000	87,400	86,500	78,100
12	62,800	52,800	44,900	54,200	65,200	64,700	55,800	66,000	87,000	87,400	86,300	77,500
13	62,600	52,600	44,900	55,000	65,400	64,300	55,900	67,200	87,000	87,400	86,300	77,100
14	62,100	52,300	44,900	55,500	65,500	64,100	55,900	68,400	87,100	87,400	86,300	76,500
15	62,000	52,100	44,900	56,300	65,600	63,700	55,900	69,800	87,100	87,300	86,300	75,900
16	61,600	51,800	45,100	57,700	65,800	63,300	55,800	71,200	87,300	87,300	86,200	75,500
17	61,300	51,400	45,600	58,600	65,800	63,000	55,900	72,500	87,300	87,300	86,200	74,900
18	61,000	51,100	46,000	59,500	65,900	62,600	55,900	73,900	87,400	87,300	86,000	74,400
19	60,700	50,700	46,700	60,000	66,000	62,400	55,900	75,200	87,400	87,300	86,000	73,900
20	60,300	50,300	47,100	60,400	66,200	62,100	55,900	76,200	87,400	87,300	86,000	73,600
21	60,000	49,900	47,500	60,800	66,200	61,900	55,900	77,200	87,400	87,300	85,700	73,000
22	59,700	49,500	48,700	61,000	66,300	61,500	55,900	78,100	87,400	87,100	85,400	72,500
23	59,300	49,100	49,100	61,200	66,300	61,100	55,900	78,800	87,400	87,100	85,100	72,100
24	58,900	48,700	49,600	61,500	66,800	60,700	56,000	79,700	87,600	87,100	84,700	71,700
25	58,500	48,200	49,800	61,700	66,800	60,400	56,300	80,600	87,600	87,100	84,400	71,200
26	58,200	47,800	50,200	61,900	67,100	60,000	56,500	81,100	87,600	87,100	84,300	70,600
27	57,800	47,400	50,400	62,000	67,600	59,700	57,100	81,700	87,600	87,000	84,000	70,100
28	57,400	47,000	50,500	62,300	67,600	59,300	57,400	82,500	87,600	87,000	83,800	69,600
29	57,100	46,500	50,700	62,500	------	59,000	58,000	83,000	87,600	87,000	83,500	69,000
30	56,700	46,200	50,800	62,600	------	58,700	58,200	83,500	87,600	87,000	83,000	68,500
31	56,500	------	51,000	62,800	------	58,400	------	84,100	------	87,000	82,600	------
MAX	65,800	56,100	51,000	62,800	67,600	67,500	58,200	84,100	87,600	87,600	86,800	82,300
MIN	56,500	46,200	44,400	51,100	62,900	58,400	55,800	58,700	84,600	87,000	82,600	68,500
(a)	5,020.3	5,011.5	5,015.7	5,025.3	5,029.0	5,021.9	5,021.8	5,040.4	5,042.6	5,042.2	5,039.4	5,029.7
(b)	-9,500	-10,300	+4,800	+11,800	+4,800	-9,200	-200	+25,900	+3,500	-600	-4,400	-14,100

CAL YR 1972 b +2,200
WTR YR 1973 b +2,500

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11395030 SOUTH FORK FEATHER RIVER BELOW LITTLE GRASS VALLEY DAM, CALIF.

LOCATION.--Lat 39°43'26", long 121°01'16", in SW¼NW¼ sec.31, T.22 N., R.9 E., Plumas County, Plumas National Forest, on left bank 0.1 mile downstream from Little Grass Valley Dam, 0.7 mile downstream from Ice Creek, and 3.5 miles northwest of La Porte.

DRAINAGE AREA.--25.9 sq mi.

PERIOD OF RECORD.--October 1927 to September 1933 (published as "near La Porte"), October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,809.0 ft above mean sea level. Prior to Oct. 1, 1960, at site 0.4 mile upstream at different datum. Oct. 1, 1960, to Oct. 30, 1962, at present site and datum. Nov. 1, 1962, to May 31, 1966, at site on outlet works at base of Little Grass Valley Dam 0.1 mile upstream at datum 4,850.00 ft above mean sea level.

AVERAGE DISCHARGE (adjusted for change in contents in Little Grass Valley Reservoir).--19 years, 94.4 cfs (68,390 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 685 cfs Feb. 28 (gage height, 10.31 ft); minimum daily, 4.4 cfs Dec. 7-15, Jan. 9, 10.
Period of record: Maximum discharge, 4,250 cfs Feb. 1, 1963; minimum, 0.2 cfs Oct. 28-31, Nov. 2, 1961.

REMARKS.--Records good. Flow regulated by Little Grass Valley Reservoir (see sta 11395020) beginning in October 1961. No diversion above station. See schematic diagram of South Fork Feather River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191	80	236	4.6	4.5	248	248	175	8.8	6.3	7.2	127
2	191	84	236	4.6	4.5	248	248	97	8.6	6.3	7.4	127
3	191	215	236	4.6	4.5	248	248	97	8.2	6.3	7.4	129
4	191	218	236	4.5	4.5	248	248	97	8.0	6.3	7.4	129
5	191	218	104	4.5	4.6	248	248	97	8.0	6.3	7.4	212
6	191	208	4.5	4.5	4.5	248	248	97	7.8	6.3	7.4	272
7	188	223	4.4	4.5	4.5	245	248	97	7.7	6.3	7.4	272
8	186	223	4.4	4.5	4.5	248	251	50	7.5	6.3	7.5	272
9	184	223	4.4	4.4	4.6	251	251	8.8	7.4	6.3	7.5	269
10	184	225	4.4	4.4	4.7	251	251	9.2	7.2	6.3	7.7	269
11	184	225	4.4	5.5	4.6	251	251	9.8	7.0	6.3	7.7	269
12	180	225	4.4	11	4.6	251	251	11	7.0	6.3	7.8	266
13	180	228	4.4	7.8	4.6	251	251	12	7.0	6.3	7.8	266
14	177	228	4.4	6.0	4.6	251	251	12	6.9	6.3	7.8	263
15	177	228	4.4	5.5	4.5	251	251	12	6.9	6.3	7.8	263
16	177	231	4.5	7.8	4.5	251	254	13	6.9	7.0	7.8	263
17	177	231	5.8	6.5	4.5	251	254	13	6.8	7.8	7.8	260
18	175	231	7.0	5.6	4.5	251	254	13	6.8	7.8	7.8	260
19	175	231	8.0	5.4	4.5	251	254	12	6.8	7.8	7.8	257
20	175	231	6.5	5.3	4.5	251	254	11	6.8	7.8	7.8	257
21	173	231	6.2	5.2	4.5	251	254	10	6.6	7.8	73	254
22	171	231	11	5.0	4.5	248	257	10	6.6	7.8	129	254
23	171	231	6.3	4.9	4.5	248	257	10	6.6	7.8	127	251
24	171	234	5.6	4.8	4.6	248	260	11	6.6	7.7	127	251
25	171	234	5.4	4.8	4.8	248	260	11	6.6	7.7	127	251
26	169	234	5.3	4.8	4.7	248	260	9.2	6.6	7.5	127	251
27	169	234	5.2	4.7	5.2	248	260	9.2	6.6	7.5	127	251
28	169	236	5.0	4.7	163	248	263	9.8	6.6	7.4	127	254
29	169	236	4.9	4.6	------	248	263	10	6.5	7.4	127	254
30	167	236	4.8	4.6	------	248	263	10	6.5	7.4	127	254
31	167	------	4.7	4.5	------	248	------	9.5	------	7.2	127	------
TOTAL	5,532	6,543	1,188.3	164.1	286.6	7,724	7,611	1,053.5	213.9	215.9	1,497.2	7,227
MEAN	178	218	38.3	5.29	10.2	249	254	34.0	7.13	6.96	48.3	241
MAX	191	236	236	11	163	251	263	175	8.8	7.8	129	272
MIN	167	80	4.4	4.4	4.5	245	248	8.8	6.5	6.3	7.2	127
AC-FT	10,970	12,980	2,360	325	568	15,320	15,100	2,090	424	428	2,970	14,330

CAL YR 1972 TOTAL 31,377.3 MEAN 85.7 MAX 236 MIN 4.4 AC-FT 62,240 MEAN a 88.8 AC-FT a 64,440
WTR YR 1973 TOTAL 39,256.5 MEAN 108 MAX 272 MIN 4.4 AC-FT 77,870 MEAN a 111 AC-FT a 18,370

a Adjusted for change in contents in Little Grass Valley Reservoir.

11395200 SOUTH FORK FEATHER RIVER BELOW DIVERSION DAM, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°38'51", long 121°07'04", in NE¼SE¼ sec.30, T.21 N., R.8 E., Plumas County, Plumas National Forest, on right bank 0.1 mile downstream from diversion dam, 3.1 miles upstream from Rock Creek, and 5.8 miles north of Strawberry Valley.

DRAINAGE AREA.--37.7 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder and since Nov. 7, 1962, concrete control. Datum of gage is 3,535.02 ft above mean sea level (levels by Oroville-Wyandotte Irrigation District).

AVERAGE DISCHARGE (adjusted for diversion to South Fork tunnel).--13 years, 151 cfs (109,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 644 cfs Apr. 25 (gage height, 5.81 ft); minimum daily, 7.4 cfs Jan. 26 to Feb. 4.
Period of record: Maximum discharge, 6,330 cfs Jan. 31, 1963 (gage height, 13.21 ft), from rating curve extended above 500 cfs on basis of computation of peak flow over diversion dam; minimum daily, 0.3 cfs Dec. 25, 1962, to Jan. 2, 1963, Mar. 1-3, 1963.

REMARKS.--Records good. Flow regulated by Little Grass Valley Reservoir (see sta 11395020). South Fork diversion tunnel (maximum capacity about 600 cfs) 500 ft upstream, diverts to Sly Creek Reservoir (see sta 11395400); diversion began in November 1961. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	10	9.8	8.8	7.4	8.8	8.8	8.9	8.8	8.3	10	29
2	8.5	15	9.8	8.8	7.4	8.5	8.8	9.2	8.8	8.3	10	30
3	8.5	8.5	9.5	14	7.4	8.5	8.5	9.2	8.8	8.3	10	30
4	8.5	8.8	9.5	7.6	7.4	8.5	8.5	9.2	8.5	8.3	10	30
5	8.5	8.8	9.0	7.8	7.6	8.3	8.8	9.2	8.5	8.3	9.8	30
6	8.8	8.8	8.5	7.6	7.6	8.3	8.8	9.5	8.5	8.3	9.8	30
7	8.8	9.0	8.5	7.8	7.6	8.3	8.8	9.5	8.5	8.1	19	30
8	9.0	9.0	8.5	7.8	7.8	8.3	8.8	9.5	8.5	8.1	14	31
9	9.2	9.0	8.8	8.1	7.8	8.3	8.8	9.2	8.5	8.1	14	32
10	9.2	9.2	9.0	8.1	7.8	8.3	8.8	9.2	8.5	8.1	14	32
11	9.8	9.2	9.5	8.3	7.8	8.3	8.8	9.2	8.5	8.1	14	32
12	9.8	9.2	9.0	8.8	7.8	8.3	8.8	9.2	8.5	8.1	14	32
13	9.8	9.2	8.8	8.5	7.8	8.3	9.0	9.2	8.5	8.1	14	32
14	9.8	9.8	8.8	8.5	7.8	8.3	9.0	9.2	8.5	8.1	14	19
15	9.8	9.8	8.5	8.5	7.8	8.5	9.0	9.2	15	8.1	15	7.8
16	10	10	8.5	20	7.8	8.5	8.8	9.2	8.5	8.1	14	7.8
17	10	9.8	8.3	8.5	7.8	8.5	8.8	9.2	8.5	8.1	14	8.1
18	10	9.8	8.5	8.5	7.8	8.5	9.0	9.2	8.5	8.1	14	8.1
19	10	9.8	8.8	8.1	7.8	8.5	8.8	9.2	8.5	9.0	14	8.1
20	10	9.8	8.5	7.8	7.8	8.5	8.8	9.0	8.5	10	14	8.5
21	10	9.8	8.5	7.6	7.8	8.8	8.8	9.0	8.5	10	19	8.5
22	10	9.8	9.0	7.6	7.8	8.8	8.8	9.0	8.3	10	29	8.5
23	10	9.8	8.8	7.6	7.8	8.8	8.8	9.0	8.3	10	29	8.5
24	10	9.8	8.8	7.6	7.8	8.8	42	9.0	8.3	10	29	8.5
25	10	9.8	8.8	7.6	8.1	8.8	32	9.0	8.3	10	29	8.5
26	10	9.8	8.5	7.4	8.1	8.5	8.1	9.0	8.5	10	30	8.5
27	10	9.8	8.5	7.4	8.3	8.5	8.1	9.0	8.3	10	30	8.5
28	10	9.8	8.5	7.4	8.5	8.5	8.1	9.0	8.3	10	29	8.5
29	11	9.8	8.5	7.4	------	8.5	8.1	9.0	8.3	10	29	10
30	11	9.8	8.8	7.4	------	8.8	8.1	9.0	8.3	10	29	18
31	11	------	8.8	7.4	------	8.8	------	9.0	------	10	29	------
TOTAL	299.5	290.5	273.6	264.3	218.0	263.9	317.1	283.4	260.8	276.0	572.6	563.4
MEAN	9.66	9.68	8.83	8.53	7.79	8.51	10.6	9.14	8.69	8.90	18.5	18.8
MAX	11	15	9.8	20	8.5	8.8	42	9.5	15	10	30	32
MIN	8.5	8.5	8.3	7.4	7.4	8.3	8.1	8.9	8.3	8.1	9.8	7.8
AC-FT	594	576	543	524	432	523	629	562	517	547	1,140	1,120
MEAN a	**187**	**242**	**104**	**124**	**97.1**	**344**	**369**	**154**	**29.1**	**15.9**	**58.7**	**236**
AC-FT a	**11,480**	**14,390**	**6,390**	**7,610**	**5,390**	**21,120**	**21,940**	**9,440**	**1,730**	**977**	**3,610**	**14,030**
(b)	**10,890**	**13,810**	**5,850**	**7,090**	**4,960**	**20,600**	**21,310**	**8,880**	**1,210**	**430**	**2,470**	**12,910**

CAL YR 1972 TOTAL 2,879.4 MEAN 7.87 MAX 32 MIN 2.6 AC-FT 5,710 **MEAN a 124** **AC-FT a 89,790**
WTR YR 1973 TOTAL 3,883.1 MEAN 10.6 MAX 42 MIN 7.4 AC-FT 7,700 **MEAN a 163** **AC-FT a 118,100**

a Adjusted for diversion to South Fork tunnel.
b Diversion, in acre-feet, from South Fork Feather River to South Fork diversion tunnel.

11395400 SLY CREEK RESERVOIR NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°35'01", long 121°06'45", in NW¼NW¼ sec.20, T.20 N., R.8 E., Butte County, Plumas National Forest, on right bank 100 ft upstream from dam on Lost Creek, 1.4 miles northwest of Strawberry Valley.

DRAINAGE AREA.--24.0 sq mi.

PERIOD OF RECORD.--November 1961 to current year (fragmentary prior to Mar. 14, 1962).

GAGE.--Nonrecording gage read once daily. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Sept. 30, 1966, water-stage recorder in valve chamber inside dam at same datum.

EXTREMES.--Current year: Maximum contents, 64,600 acre-ft May 26, 27 (elevation, 3,529.2 ft); minimum, 13,200 acre-ft Dec. 17, Jan. 11 (elevation, 3,407.0 ft).
Period of record: Maximum contents, 65,500 acre-ft June 2-5, 11, 12, 1962, Apr. 7, 1963 (elevation, 3,531.5 ft); minimum, 1,610 acre-ft Dec. 17, 1972 (elevation, 3,332.8 ft).

REMARKS.--Reservoir is formed by earthfill dam. Storage began in November 1961. Total capacity, 65,600 acre-ft between elevations 3,285 (invert of outlet) and 3,531 ft (top of spillway gate) all of which is available for release. Water is diverted into reservoir from South Fork Feather River through South Fork diversion tunnel and from North Yuba River basin through Slate Creek tunnel. Records, including extremes, show contents at time nonrecording gage was read. See schematic diagram of South Fork Feather River basin.

COOPERATION.--Reservoir nonrecording gage readings furnished by Oroville-Wyandotte Irrigation District.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

3,320	860	3,420	16,600
3,340	2,150	3,450	26,300
3,360	4,300	3,480	38,500
3,380	7,360	3,510	53,400
3,400	11,500	3,532	66,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,600	27,500	23,900	18,500	33,100	39,200	42,200	46,000	63,000	59,100	48,100	27,300
2	34,700	27,000	23,700	17,600	32,000	40,100	42,100	46,500	62,400	58,800	47,700	26,200
3	34,000	26,700	23,700	17,300	31,300	40,600	41,900	47,100	62,400	58,400	47,400	25,400
4	32,600	27,200	23,400	16,900	31,200	41,000	41,900	48,800	62,400	58,200	47,000	25,400
5	32,200	26,900	23,100	16,400	31,100	41,300	41,800	49,900	62,800	58,000	46,600	25,100
6	31,700	26,700	22,500	15,000	31,000	41,600	41,900	50,300	63,200	57,700	46,200	25,000
7	31,700	26,700	22,300	14,200	31,000	41,700	42,000	50,900	63,400	57,200	45,800	24,200
8	31,500	26,600	21,700	13,800	31,600	42,000	42,000	51,400	63,100	57,000	45,500	24,100
9	31,000	26,600	21,300	13,300	31,500	42,200	42,000	52,100	63,200	56,800	45,000	24,000
10	30,800	27,100	20,500	13,300	31,500	42,400	42,300	52,800	63,100	56,300	44,600	24,000
11	31,000	27,200	19,700	13,200	31,500	42,500	42,400	53,500	63,100	55,700	44,000	23,800
12	31,400	27,200	18,900	15,100	31,500	42,600	42,500	54,800	63,100	55,500	43,500	23,900
13	31,500	27,200	18,100	17,400	31,500	42,700	42,600	56,200	62,500	55,100	42,300	23,900
14	31,800	27,200	17,300	19,100	33,400	42,800	43,300	57,600	62,500	54,900	41,300	23,800
15	31,900	27,400	14,500	20,300	33,900	42,800	43,400	59,000	62,500	54,600	40,500	23,800
16	31,900	28,000	13,700	23,100	34,500	42,800	43,500	60,000	62,300	54,200	39,700	23,700
17	31,300	28,100	13,200	26,300	33,400	42,800	43,500	60,700	62,200	53,800	38,500	23,800
18	30,300	28,100	14,700	29,200	33,300	42,800	43,600	61,300	62,100	53,600	37,500	23,800
19	30,800	27,500	15,300	29,500	33,200	42,700	43,900	61,900	61,900	53,100	36,600	23,800
20	30,800	27,500	17,600	32,600	33,000	42,800	44,000	62,500	61,800	52,700	35,500	23,700
21	30,500	27,200	18,600	36,400	32,800	42,700	44,200	63,000	61,500	52,300	34,700	23,900
22	30,000	27,000	18,900	33,600	32,700	42,700	44,000	63,300	61,300	52,100	33,800	23,900
23	29,600	26,500	19,700	33,800	32,300	42,700	44,200	63,900	61,200	51,500	33,100	23,900
24	29,300	26,100	20,300	33,800	32,200	42,500	44,100	64,000	60,900	51,200	32,200	24,000
25	30,000	25,800	20,400	33,800	33,200	42,400	44,200	64,400	60,600	50,800	31,700	23,900
26	30,000	25,400	20,200	33,900	33,800	42,300	44,400	64,600	60,400	50,400	31,100	23,900
27	29,400	25,100	19,700	33,900	34,200	42,300	44,800	64,600	60,300	50,100	30,700	24,000
28	28,400	24,900	19,100	33,300	34,700	42,300	45,100	64,000	60,000	49,200	30,400	24,000
29	28,200	24,500	18,500	34,100	------	42,200	45,300	63,200	59,700	49,200	30,000	24,100
30	28,200	24,200	17,900	33,200	------	42,200	45,500	63,100	59,500	48,900	28,400	24,100
31	27,700	------	18,800	33,200	------	42,200	------	63,000	------	48,600	27,600	------
MAX	34,700	28,100	23,900	36,400	34,700	42,800	45,500	64,600	63,400	59,100	48,100	27,300
MIN	27,700	24,200	13,200	13,200	31,000	39,200	41,800	46,000	59,500	48,600	27,600	23,700
(a)	3,453.7	3,444.1	3,427.5	3,467.6	3,471.2	3,487.9	3,494.7	3,526.5	3,520.8	3,500.8	3,453.5	3,443.8
(b)	-6,500	-3,500	-5,400	+14,400	+1,500	+7,500	+3,300	+17,500	-3,500	-10,900	-21,000	-3,500

CAL YR 1972 b +12,400
WTR YR 1973 b -10,100

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11395500 OROVILLE-WYANDOTTE CANAL NEAR CLIPPER MILLS, CALIF.

LOCATION.--Lat 39°33'15", long 121°11'31", in NW¼NE¼ sec.33, T.20 N., R.7 E., Butte County, in concrete valve house at head of canal, 2.5 miles north of Clipper Mills.

PERIOD OF RECORD.--October 1927 to September 1941 (published as Forbestown ditch), October 1953 to current year. Monthly discharge only for October 1953 to September 1961, published with records for Lost Creek near Clipper Mills.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 3,166.0 ft above mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Sept. 30, 1941, nonrecording gages and Oct. 1, 1941, to Nov. 16, 1962, water-stage recorder at sites at different datums 4 miles upstream in abandoned portion of canal, 0.3 mile downstream from Lost Creek Dam.

AVERAGE DISCHARGE (prior to closure of lumber mill).--23 years (1927-41, 1953-62), 21.0 cfs (15,200 acre-ft per year); 11 years (1962-73), 8.37 cfs (6,060 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 43 cfs Aug. 9 to Sept. 9, 1937; no flow at times in many years.

REMARKS.--Records good. Water is discharged to canal through valve in Woodleaf penstock. Prior to Nov. 16, 1962, canal diverted from Lost Creek Dam. Water is used for irrigation and domestic supply. Demand for water reduced when a large lumber mill closed at Woodleaf in 1962. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	7.6	.78	.62	.48	.55	.48	.55	5.8	20	17	19
2	18	9.7	.78	.62	.48	.55	.48	.55	5.9	20	19	18
3	17	9.7	.78	.62	.48	.55	.42	.55	5.8	21	20	19
4	17	9.5	.78	.55	.48	.55	.42	.55	5.6	21	21	20
5	17	9.4	.78	.55	.55	.55	.42	.55	5.0	21	22	20
6	17	9.4	.78	.55	.55	.55	.36	.55	3.2	21	20	19
7	17	9.7	.78	.55	.55	.55	.36	.55	3.4	21	21	19
8	17	9.5	.78	.55	.55	.55	.36	.55	4.7	21	22	19
9	17	9.5	.78	.55	.55	.55	.30	.55	5.0	21	25	19
10	17	7.2	.70	.55	.55	.55	.25	.55	5.0	21	25	19
11	9.3	5.6	.70	.62	.55	.48	.25	.55	5.0	21	21	19
12	4.6	5.6	.70	.70	.55	.48	.25	.55	5.8	21	19	19
13	5.0	5.6	.70	.62	.55	.48	.25	.55	6.2	21	21	19
14	6.4	5.4	.62	.55	.48	.48	.20	.55	6.2	21	22	19
15	6.0	5.3	.62	.55	.48	.48	.31	.55	6.0	21	22	19
16	6.0	5.4	.62	.62	.48	.48	.25	.55	5.9	21	20	19
17	6.4	5.4	.55	.62	.55	.48	.25	.55	6.0	21	19	19
18	6.2	5.4	.55	.62	.55	.48	.25	.55	5.9	18	21	19
19	6.0	5.3	.62	.55	.55	.48	.25	.55	6.0	18	20	19
20	6.0	5.4	.62	.55	.55	.48	.20	.55	6.0	18	21	19
21	6.0	3.0	.62	.48	.55	.48	.20	.55	7.0	19	21	19
22	5.9	.78	.62	.48	.55	.55	.20	.55	8.2	18	21	19
23	5.9	.78	.62	.48	.55	.55	.39	.55	8.2	21	21	19
24	5.9	.78	.62	.48	.62	.55	.62	.55	8.2	19	21	19
25	6.2	.78	.55	.48	.55	.55	.55	.55	13	21	22	18
26	5.9	.78	.55	.48	.55	.55	.55	.55	20	17	21	17
27	5.9	.78	.55	.48	.55	.55	.55	.55	21	15	20	18
28	6.0	.78	.55	.48	.55	.48	.55	.55	21	15	19	18
29	5.9	.78	.55	.48	------	.48	.55	.55	21	16	19	18
30	6.0	.78	.55	.48	------	.48	.55	1.5	20	17	17	18
31	6.0	------	.62	.48	------	.48	------	4.3	------	16	17	------
TOTAL	299.5	155.62	20.42	16.99	14.98	16.00	11.02	21.75	256.0	603	637	564
MEAN	9.66	5.19	.66	.55	.54	.52	.37	.70	8.53	19.5	20.5	18.8
MAX	18	9.7	.78	.70	.62	.55	.62	4.3	21	21	25	20
MIN	4.6	.78	.55	.48	.48	.48	.20	.55	3.2	15	17	17
AC-FT	594	309	41	34	30	32	22	43	508	1,200	1,260	1,120

CAL YR 1972 TOTAL 2,924.25 MEAN 7.99 MAX 24 MIN .10 AC-FT 5,800
WTR YR 1973 TOTAL 2,616.28 MEAN 7.17 MAX 25 MIN .20 AC-FT 5,190

11396000 LOST CREEK NEAR CLIPPER MILLS, CALIF.

LOCATION.--Lat 39°34'25", long 121°08'26", in SE¼SW¼ sec.24, T.20 N., R.7 E., Butte County, Plumas National Forest, on left bank 0.3 mile downstream from Lost Creek Reservoir, and 2.8 miles north of Clipper Mills.

DRAINAGE AREA.--30.0 sq mi.

PERIOD OF RECORD.--October 1927 to September 1941, October 1948 to current year. Records for Woodleaf powerplant from February 1963 to September 1966 in files of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 3,170 ft (from topographic map).

AVERAGE DISCHARGE.--27 years (1927-41, 1948-61, prior to regulation by Sly Creek Reservoir), 73.0 cfs (52,850 acre-ft per year); 12 years (1961-73), 25.1 cfs (18,180 acre-ft per year), unadjusted.

EXTREMES.--Current year: Maximum discharge, 68 cfs Oct. 18 (gage height, 1.75 ft); minimum daily, 0.02 cfs Oct. 20-22.
Period of record: Maximum discharge, 5,000 cfs Dec. 22, 1955 (gage height, 6.90 ft); no flow at times in some years.

REMARKS.--Records fair. Flow regulated by Sly Creek Reservoir 1.5 miles upstream (see sta 11395400) and Lost Creek Reservoir 0.3 mile upstream (usable capacity, 5,920 acre-ft with flashboards). Water is diverted into Sly Creek Reservoir through South Fork diversion tunnel from South Fork Feather River and through Slate Creek tunnel from North Yuba River basin. Woodleaf tunnel diverts from Lost Creek Reservoir to Woodleaf powerhouse. Oroville-Wyandotte Canal (see sta 11395500) diverts from Woodleaf penstock for irrigation and domestic use. Records represent seepage, release, or spill from Lost Creek Dam to Lost Creek. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1954. WSP 1931: Drainage area. WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.04	.08	.16	.40	1.5	.52	.18	.12	.62	.28	.20
2	.05	.05	.08	.14	.37	1.2	.46	.16	.11	.58	.26	.20
3	.05	.14	.20	.14	.49	1.1	.43	.16	.11	.55	.24	.20
4	.05	.14	.18	.12	1.2	.98	.40	.18	.10	.52	.24	.22
5	.70	.07	.11	.12	2.1	.86	.40	.18	.10	.52	.24	.24
6	1.3	.06	.12	.11	1.5	.94	.40	.16	.10	.49	.24	.24
7	1.3	.31	.11	.11	2.0	.82	.34	.16	.10	.46	.24	.26
8	1.2	.10	.11	.11	1.4	.78	.34	.16	.10	.43	.24	.24
9	1.2	.09	.10	.61	1.5	.78	.34	.14	.09	.43	.24	.22
10	1.3	.16	.10	.82	2.6	.82	.31	.14	.09	.43	.26	.24
11	1.1	.31	.09	2.0	1.8	.82	.31	.14	.09	.40	.26	.24
12	.07	.11	.09	3.0	1.7	.74	.31	.14	2.4	.40	.24	.26
13	.05	.34	.09	1.5	1.4	.66	.31	.14	12	.37	.24	.26
14	.10	.82	.09	.90	1.4	.62	.28	.16	3.7	.37	.24	.24
15	.12	.46	.09	1.2	.98	.58	.28	.16	2.8	.37	.22	.31
16	.11	.70	.14	5.9	.82	.52	.26	.16	2.4	.40	.22	.40
17	.10	.31	.74	2.9	.74	.52	.26	.16	2.0	.40	.22	.37
18	21	.28	.72	4.7	.62	.49	.24	.16	1.8	.40	.20	.37
19	.38	.34	.74	2.4	.55	.52	.24	.14	1.6	.40	.20	.37
20	.02	.24	.52	1.4	.49	.55	.22	.14	1.5	.40	.20	.40
21	.02	.18	.49	.90	.46	.52	.22	.12	1.4	.43	.20	.31
22	.02	.14	.70	.66	.40	.52	.20	.12	1.2	.40	.20	.34
23	.03	.14	.46	.55	.37	.49	.20	.11	1.1	.40	.20	.34
24	.03	.12	.37	.49	.70	.49	.20	.14	.98	.37	.20	.28
25	.03	.11	.31	.49	.62	.49	.20	.12	.94	.37	.20	.26
26	.03	.10	.26	.40	.82	.49	.20	.11	.90	.37	.22	.22
27	.03	.10	.24	.37	2.1	.46	.20	.11	.86	.34	.22	.20
28	.03	.09	.22	.31	1.9	.46	.18	.10	.78	.34	.22	.18
29	.03	.09	.18	.37	------	.43	.18	.10	.74	.34	.20	.18
30	.03	.09	.18	.40	------	.46	.18	.10	.66	.34	.20	.18
31	.03	------	.16	.43	------	.55	------	.14	------	.31	.20	------
TOTAL	30.56	6.23	8.07	33.71	31.43	21.16	8.61	4.39	40.87	12.95	6.98	7.97
MEAN	.99	.21	.26	1.09	1.12	.68	.29	.14	1.36	.42	.23	.27
MAX	21	.82	.74	5.9	2.6	1.5	.52	.18	12	.62	.28	.40
MIN	.02	.04	.08	.11	.37	.43	.18	.10	.09	.31	.20	.18
AC-FT	61	12	16	67	62	42	17	8.7	81	26	14	16
(a)	20,860	27,960	31,330	27,460	29,510	32,820	32,400	31,140	13,980	14,200	25,300	19,010

CAL YR 1972 TOTAL 511.25 MEAN 1.40 MAX 94 MIN .02 AC-FT 1,010
WTR YR 1973 TOTAL 212.93 MEAN .58 MAX 21 MIN .02 AC-FT 422

a Diversion, in acre-feet, to Woodleaf powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396200 SOUTH FORK FEATHER RIVER BELOW FORBESTOWN DAM, CALIF.

LOCATION.--Lat 39°33'05", long 121°12'30", in SE¼NE¼ sec.32, T.20 N., R.7 E., Butte County, Plumas National Forest, on right bank 500 ft downstream from Forbestown Dam, 0.4 mile upstream from Oroleve Creek, and 4.0 miles northeast of Forbestown.

DRAINAGE AREA.--87.5 sq mi.

PERIOD OF RECORD.--July 1962 to current year. Records for Forbestown powerplant from February 1963 to September 1966 in files of Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 1,690 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 64.9 cfs (47,020 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,060 cfs Jan. 16 (gage height, 7.94 ft); minimum daily, 8.7 cfs May 27, 28.
Period of record: Maximum discharge, 7,510 cfs Jan. 31, 1963 (gage height, 13.85 ft in gage well, 15.3 ft, from floodmarks); minimum daily, 0.6 cfs Apr. 4, 1963.

REMARKS.--Records fair. Flow regulated by Little Grass Valley Reservoir (see sta 11395020), Sly Creek Reservoir (see sta 11395400), and smaller reservoirs. Water from North Yuba River basin is imported through Slate Creek tunnel (see sta 11413250) to Sly Creek Reservoir. Oroville-Wyandotte Canal (see sta 11395500) diverts above station. Tunnel 600 ft above station diverts most flow through Forbestown powerplant except fishwater releases and uncontrolled spill over Forbestown Dam. See schematic diagram of South Fork Feather River basin.

REVISIONS.--WRD Calif. 1968: 1967 diversions.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	9.4	9.2	10	224	41	9.2	11	10	10	11
2	11	9.9	9.4	9.2	10	181	26	9.4	11	10	10	11
3	11	10	9.4	9.2	10	144	11	9.4	11	10	10	11
4	12	9.9	9.4	9.2	71	120	10	9.4	11	10	10	11
5	11	9.9	9.4	9.2	99	101	10	9.4	11	10	10	11
6	11	9.9	9.4	9.2	94	104	10	9.2	11	10	10	11
7	11	10	9.4	9.0	154	92	10	9.2	11	10	10	11
8	11	9.9	9.2	9.0	112	52	10	9.2	11	10	10	11
9	11	9.9	9.2	9.2	106	65	16	9.2	11	10	10	10
10	11	9.9	9.2	9.2	261	63	26	9.0	11	10	10	10
11	11	10	9.2	9.2	210	65	15	9.0	11	10	10	10
12	11	9.9	9.2	24	169	52	9.2	9.0	11	10	11	10
13	11	10	9.2	9.4	122	42	28	9.0	11	10	11	10
14	11	10	9.2	9.2	116	36	26	9.0	11	10	11	10
15	11	10	9.2	9.2	95	29	24	9.2	11	10	11	10
16	11	10	9.2	275	75	23	19	9.2	11	10	11	10
17	11	9.2	9.4	9.7	62	21	22	9.4	11	10	11	10
18	11	9.2	9.4	260	53	14	17	9.4	11	10	11	10
19	11	9.2	9.2	218	43	16	13	9.4	11	10	11	10
20	11	9.2	9.2	137	35	24	11	9.2	11	10	11	10
21	11	9.2	9.4	71	168	20	9.9	9.2	11	10	11	10
22	11	9.2	9.4	56	172	22	9.9	9.2	11	10	11	10
23	12	9.2	9.4	34	14	17	9.9	9.2	11	10	11	10
24	12	9.2	9.4	21	77	13	14	9.0	11	10	11	10
25	12	9.2	9.4	20	91	11	9.7	9.0	11	10	11	10
26	12	9.2	9.2	11	105	10	12	9.0	10	10	11	10
27	12	9.4	9.2	11	321	10	21	8.7	10	10	11	10
28	12	9.4	9.2	10	291	10	12	8.7	10	10	11	10
29	12	9.4	9.2	10	------	10	11	12	10	10	11	9.9
30	12	9.4	9.2	10	------	17	9.7	11	10	10	11	9.9
31	12	------	9.2	10	------	61	------	11	------	10	11	------
TOTAL	351	289.8	288.0	1,316.3	3,146	1,669	473.3	290.4	325	310	330	307.8
MEAN	11.3	9.66	9.29	42.5	112	53.8	15.8	9.37	10.8	10.0	10.6	10.3
MAX	12	11	9.4	275	321	224	41	12	11	10	11	11
MIN	11	9.2	9.2	9.0	10	10	9.2	8.7	10	10	10	9.9
AC-FT	696	575	571	2,610	6,240	3,310	939	576	645	615	655	611
(a)	20,740	29,260	33,830	33,690	32,740	38,530	36,890	33,300	13,020	12,520	25,550	17,470

CAL YR 1972 TOTAL 3,155.6 MEAN 8.62 MAX 20 MIN 3.8 AC-FT 6,260
WTR YR 1973 TOTAL 9,096.6 MEAN 24.9 MAX 321 MIN 8.7 AC-FT 18,040

a Diversion, in acre-feet, to Forbestown powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396310 MINERS RANCH CANAL BELOW PONDEROSA DAM, NEAR FORBESTOWN, CALIF.

LOCATION.--Lat 39°33'00", long 121°18'20", in SE¼NW¼ sec.33, T.20 N., R.6 E., Butte County, on right bank 800 ft downstream from Ponderosa Dam, and 3 miles northwest of Forbestown.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 975 ft (from topographic map).

AVERAGE DISCHARGE.--11 years, 222 cfs (160,800 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 279 cfs Oct. 12, 1971; no flow at times in most years.

REMARKS.--Records good. Canal diverts from South Fork Feather River at Ponderosa Dam. Water is used for power development and irrigation. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	233	207	229	236	216	215	251	235	232	248	241	154
2	233	207	234	236	216	215	251	234	232	248	241	154
3	233	207	234	236	216	215	253	151	232	248	241	154
4	229	207	234	236	216	215	254	232	232	248	241	153
5	50	208	234	238	216	215	253	232	150	247	241	153
6	0	208	234	238	216	215	253	232	146	247	242	152
7	113	203	234	238	216	215	253	232	141	247	242	152
8	221	196	234	238	216	215	253	232	234	247	242	152
9	220	156	234	230	216	215	253	232	241	246	242	152
10	219	210	234	212	216	215	254	228	242	246	241	152
11	219	215	234	212	216	215	254	228	242	246	241	153
12	211	221	234	212	216	215	253	228	242	246	240	153
13	203	222	234	212	216	215	254	227	242	245	240	153
14	202	216	234	210	216	215	254	227	245	244	240	153
15	202	211	234	209	216	215	254	227	248	244	240	152
16	202	211	234	210	216	224	254	227	248	244	240	152
17	202	211	235	211	216	230	251	226	248	242	240	153
18	202	211	236	204	216	230	245	226	248	242	240	153
19	202	211	236	203	216	230	245	226	248	242	241	152
20	204	211	236	213	216	230	245	226	248	242	121	188
21	204	215	236	214	215	230	245	227	248	240	150	234
22	207	218	236	214	215	230	245	228	248	241	150	234
23	212	218	236	214	215	230	244	228	248	241	151	234
24	212	221	236	214	215	240	244	229	248	241	152	234
25	147	224	236	215	215	251	244	229	248	241	152	234
26	211	224	236	215	215	251	241	230	250	241	152	235
27	211	224	236	215	215	251	236	232	250	241	152	236
28	211	224	236	215	215	251	235	232	250	241	153	244
29	210	224	236	216	------	251	235	232	250	241	153	246
30	208	224	236	216	------	251	235	232	250	241	153	250
31	208	------	236	216	------	251	------	232	------	241	154	------
TOTAL	6,041	6,365	7,278	6,798	6,040	7,056	7,441	7,039	7,031	7,559	6,369	5,471
MEAN	195	212	235	219	216	228	248	227	234	244	205	182
MAX	233	224	236	238	216	251	254	235	250	248	242	250
MIN	0	156	229	203	215	215	235	151	141	240	121	152
AC-FT	11,980	12,620	14,440	13,480	11,980	14,000	14,760	13,960	13,950	14,990	12,630	10,850
(a)	11,110	12,300	13,560	12,960	11,730	13,080	13,410	12,010	11,430	12,780	8,080	3,780

CAL YR 1972 TOTAL 81,406.00 MEAN 222 MAX 259 MIN 0 AC-FT 161,500
WTR YR 1973 TOTAL 80,488.00 MEAN 221 MAX 254 MIN 0 AC-FT 159,600

a Diversion, in acre-feet, to Kelly Ridge powerplant, furnished by Oroville-Wyandotte Irrigation District.

11396330 BANGOR CANAL BELOW MINERS RANCH RESERVOIR, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'15", long 121°27'16", in NE¼SW¼ sec.18, T.19 N., R.5 E., Butte County, on left bank 400 ft downstream from outlet at Miners Ranch Dam, and 5 miles east of Oroville.

PERIOD OF RECORD.--January 1963 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 815 ft (from topographic map).

AVERAGE DISCHARGE.--10 years, 15.5 cfs (11,230 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 65 cfs Aug. 17-20, 1963; no flow for several days in 1965, 1969.

REMARKS.--Records excellent. Flow regulated by Miners Ranch Reservoir (capacity, 912 acre-ft). Canal completed in November 1962. Water is used for irrigation. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	8.7	7.8	5.6	3.7	4.2	5.2	11	25	29	28	29
2	17	8.7	7.8	5.6	4.0	4.2	5.2	11	25	29	29	30
3	19	8.7	7.8	5.6	4.0	4.0	5.2	11	25	29	29	30
4	23	8.7	8.1	5.6	4.0	3.7	5.2	12	25	29	29	30
5	23	8.7	8.1	5.6	3.7	3.7	5.2	12	26	29	29	30
6	23	8.7	8.1	5.6	3.5	3.7	5.2	12	26	29	29	28
7	22	8.7	8.4	5.6	3.5	3.7	6.4	12	26	29	29	28
8	21	8.1	8.4	5.4	3.7	3.7	7.8	12	26	29	29	28
9	21	8.1	8.4	5.4	3.7	3.7	7.8	13	26	29	29	29
10	21	8.1	8.1	5.4	4.0	3.7	7.8	14	27	29	29	29
11	14	8.1	8.1	5.4	4.0	3.7	7.8	18	27	29	29	30
12	8.7	8.1	8.1	5.4	4.0	3.7	7.8	23	27	29	29	30
13	9.9	8.1	8.1	5.4	4.0	3.7	7.8	23	27	29	29	28
14	13	8.1	8.1	5.4	4.0	3.7	7.8	23	27	28	29	27
15	11	8.1	8.1	5.4	4.0	3.7	7.8	23	27	28	29	26
16	9.9	8.1	8.1	5.4	3.7	3.7	7.8	23	27	28	29	27
17	12	8.1	8.1	5.2	3.7	3.7	7.8	24	27	28	29	28
18	11	8.1	8.1	5.2	3.7	3.7	7.5	25	28	28	29	28
19	11	8.1	7.2	4.9	3.7	3.7	7.5	25	28	28	29	29
20	11	8.1	6.4	4.9	3.5	3.7	7.5	25	28	28	29	30
21	11	8.1	6.4	4.9	3.5	4.0	7.5	25	28	28	27	29
22	11	8.1	6.4	4.9	3.5	4.8	7.5	25	28	28	27	28
23	11	8.1	6.4	4.9	3.7	5.6	7.5	25	29	27	27	28
24	11	8.1	6.4	4.6	3.7	5.4	8.4	25	29	27	26	28
25	11	7.8	6.4	4.0	4.0	5.4	9.6	24	28	27	28	28
26	10	7.8	6.2	3.7	4.0	5.4	11	23	28	27	29	26
27	10	7.8	5.9	3.7	4.0	5.4	11	23	29	27	28	24
28	10	7.8	5.9	3.7	4.2	5.2	9.6	23	29	27	29	25
29	9.9	7.8	5.9	3.7	------	5.2	12	23	29	27	30	26
30	9.9	7.8	5.9	3.7	------	5.2	9.6	25	29	27	29	26
31	9.3	------	5.9	3.7	------	5.2	------	25	------	27	29	------
TOTAL	432.6	245.4	227.1	153.5	106.7	132.1	231.8	618	816	872	888	842
MEAN	14.0	8.18	7.33	4.95	3.81	4.26	7.73	19.9	27.2	28.1	28.6	28.1
MAX	23	8.7	8.4	5.6	4.2	5.6	12	25	29	29	30	30
MIN	8.7	7.8	5.9	3.7	3.5	3.7	5.2	11	25	27	26	24
AC-FT	858	487	450	304	212	262	460	1,230	1,620	1,730	1,760	1,670

CAL YR 1972 TOTAL 5,529.1 MEAN 15.1 MAX 36 MIN 3.1 AC-FT 10,970
WTR YR 1973 TOTAL 5,565.2 MEAN 15.2 MAX 30 MIN 3.5 AC-FT 11,040

11396350 SOUTH FORK FEATHER RIVER AT PONDEROSA DAM, CALIF.

LOCATION.--Lat 39°32'52", long 121°18'11", in NW¼SE¼ sec.33, T.20 N., R.6 E., Butte County, at entrance to Miners Ranch Canal on the left end of Ponderosa Dam, 2,800 ft upstream from Sucker Run, and 2.6 miles northwest of Forbestown.

DRAINAGE AREA.--108 sq mi.

PERIOD OF RECORD.--July 1962 to current year.

GAGE.--Water-stage recorder, high level sluice gate, and concrete spillway of Ponderosa Dam. Datum of gage is at mean sea level (levels by Oroville-Wyandotte Irrigation District). Prior to Oct. 1, 1967, at site 1,800 ft downstream at different datum.

AVERAGE DISCHARGE (adjusted for diversion to Miners Ranch Canal).--11 years, 479 cfs (347,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,040 cfs May 16; no flow many days.
Period of record: Maximum discharge, 11,000 cfs Dec. 22, 1964 (gage height, 11.52 ft in gage well, 12.7 ft, outside from floodmarks, site and datum then in use); no flow for several months in 1968-73.

REMARKS.--Records good. Records are combined flow through sluice gate and flow over spillway. Flow regulated by several reservoirs and diversions. Water is imported from North Yuba River basin through Slate Creek tunnel. Miners Ranch Canal (see sta 11396310) diverts at Ponderosa Dam for power development and irrigation; diversion began in October 1962. See schematic diagram of South Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	63	285	280	466	902	502	394	250		0	361
2	184	210	280	295	472	822	472	210	121		0	366
3	184	187	290	305	460	731	432	484	114		0	366
4	185	205	310	300	645	710	427	416	74		0	299
5	182	196	290	300	724	664	427	422	0		0	134
6	185	174	300	300	684	704	427	405	0		0	126
7	184	210	300	295	836	684	422	400	0		0	126
8	185	228	290	305	745	250	422	394	0		0	126
9	181	117	174	422	697	612	432	394	0		0	121
10	182	214	275	550	1,080	520	454	258	0		0	114
11	182	236	300	612	1,020	606	438	178	0		266	110
12	183	196	300	910	865	574	250	182	0		308	117
13	182	205	300	638	752	544	427	175	0		242	121
14	183	444	300	508	745	532	438	169	0		239	121
15	183	438	295	514	710	520	438	174	0		236	103
16	182	490	305	1,370	658	490	432	601	0		233	90
17	178	416	410	843	600	484	427	388	0		233	86
18	157	372	410	1,260	580	472	427	383	0		233	90
19	160	410	350	1,020	544	466	422	383	0		233	90
20	177	388	444	780	520	520	422	383	0		384	74
21	183	361	410	645	478	484	416	383	0		340	20
22	184	305	410	574	478	484	416	196	0		356	21
23	184	310	350	526	472	484	422	366	0		361	23
24	184	310	383	502	562	484	410	378	0		361	28
25	183	300	366	508	645	449	394	383	0		356	27
26	183	300	340	478	632	449	388	378	0		356	20
27	184	290	340	416	925	438	427	372	0		361	21
28	184	290	340	449	1,150	422	444	372	0		356	15
29	169	280	340	460	------	410	427	361	0		350	1.0
30	150	257	335	514	------	410	427	366	0		356	17
31	62	------	260	356	------	574	------	366	------		361	------
TOTAL	5,453	8,402	10,082	17,235	19,145	16,895	12,709	10,714	559	0	6,521	3,334.0
MEAN	176	280	325	556	684	545	424	346	18.6	0	210	111
MAX	185	490	444	1,370	1,150	902	502	601	250	0	384	366
MIN	62	63	174	280	460	250	250	169	0	0	0	1.0
AC-FT	10,820	16,670	20,000	34,190	37,970	33,510	25,210	21,250	1,110	0	12,930	6,610
MEAN a	371	492	560	775	900	773	672	573	253	244	416	293
AC-FT a	22,800	29,290	34,440	47,670	49,970	47,510	39,970	35,210	15,060	14,990	25,560	17,460

CAL YR 1972 TOTAL 52,697.68 MEAN 144 MAX 490 MIN 0 AC-FT 104,500 MEAN a 366 AC-FT a 266,000
WTR YR 1973 TOTAL 111,049.00 MEAN 304 MAX 1,370 MIN 0 AC-FT 220,300 MEAN a 525 AC-FT a 379,900

a Adjusted for diversion to Miners Ranch Canal.

11396400 SUCKER RUN NEAR FORBESTOWN, CALIF.

LOCATION.--Lat 39°33'12", long 121°18'04", in NW¼NE¼ sec.33, T.20 N., R.6 E., Butte County, on left bank at upstream side of road bridge, 0.7 mile upstream from confluence with South Fork Feather River, and 2.8 miles northwest of Forbestown.

DRAINAGE AREA.--18.7 sq mi.

PERIOD OF RECORD.--June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 960 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 25.3 cfs (18,330 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 905 cfs Jan. 16 (gage height, 5.23 ft); minimum daily, 3.2 cfs Oct. 1.
Period of record: Maximum discharge, 1,320 cfs Jan. 21, 1967 (gage height, 6.03 ft), from rating curve extended as explained below; minimum daily, 0.40 cfs Oct. 7, 1966.
Flood of Dec. 22, 1964, reached a stage of 7.4 ft, from floodmarks, discharge, 2,190 cfs from rating curve extended above 600 cfs on basis of computation of maximum flow over rock control.

REMARKS.--Records good for flows above 15 cfs, poor below. See schematic diagram of South Fork Feather River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1966-68(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	6.0	8.9	13	59	137	54	23	16	9.0	4.6	3.8
2	3.4	6.0	16	12	52	110	48	23	15	9.0	4.7	4.1
3	3.3	6.4	17	12	59	103	44	22	15	8.7	4.4	4.3
4	3.4	12	13	12	131	99	42	25	14	8.5	4.4	4.1
5	3.6	8.3	13	11	108	88	41	25	14	8.1	4.4	4.2
6	4.8	12	13	11	109	112	40	23	14	7.6	4.3	4.3
7	6.2	14	13	11	130	103	38	22	13	7.7	4.4	4.4
8	6.6	9.5	12	13	97	96	36	22	12	7.5	4.4	4.1
9	8.9	18	13	73	98	84	36	21	12	7.4	4.5	3.9
10	18	13	13	100	225	83	35	20	13	7.4	4.5	4.0
11	17	13	13	226	174	80	34	20	12	7.2	4.6	4.2
12	8.9	51	13	269	139	70	33	19	11	7.0	4.6	4.8
13	8.0	40	13	114	108	65	33	19	11	6.7	4.5	4.4
14	9.2	27	13	69	122	60	32	18	11	6.6	4.2	4.3
15	10	15	12	74	101	57	32	18	12	6.8	4.3	4.3
16	11	19	13	501	87	54	31	18	12	7.6	4.2	4.2
17	8.0	16	88	197	78	54	31	18	12	8.3	4.4	4.3
18	7.4	13	65	359	70	51	30	17	12	7.3	4.1	4.4
19	7.1	11	78	157	64	52	29	17	11	7.0	4.0	4.4
20	6.8	10	41	100	59	61	28	16	11	7.0	4.0	6.8
21	6.8	9.5	31	80	55	56	28	16	11	6.9	4.0	4.9
22	6.6	9.2	53	64	51	55	27	16	11	6.9	3.9	4.9
23	6.4	8.6	32	54	48	52	27	16	11	6.7	3.9	5.8
24	6.4	8.9	27	50	90	50	26	18	11	6.4	4.1	5.4
25	6.4	8.5	22	62	81	48	25	17	11	6.3	4.2	5.7
26	6.2	8.5	19	54	91	47	25	16	10	6.0	4.4	4.9
27	6.0	8.5	18	49	223	45	25	16	9.6	5.9	4.3	4.8
28	6.2	8.5	18	45	210	43	24	15	9.3	5.6	4.3	4.6
29	6.4	8.5	16	52	------	41	24	15	9.1	5.0	4.0	4.6
30	6.2	8.6	15	75	------	46	24	14	9.0	4.9	3.9	4.5
31	6.0	------	14	68	------	76	------	16	------	4.7	3.8	------
TOTAL	224.4	407.5	745.9	2,987	2,919	2,178	982	581	355.0	217.7	132.3	137.4
MEAN	7.24	13.6	24.1	96.4	104	70.3	32.7	18.7	11.8	7.02	4.27	4.58
MAX	18	51	88	501	225	137	54	25	16	9.0	4.7	6.8
MIN	3.2	6.0	8.9	11	48	41	24	14	9.0	4.7	3.8	3.8
AC-FT	445	808	1,480	5,920	5,790	4,320	1,950	1,150	704	432	262	273

CAL YR 1972 TOTAL 4,705.9 MEAN 12.9 MAX 94 MIN 1.6 AC-FT 9,330
WTR YR 1973 TOTAL 11,867.2 MEAN 32.5 MAX 501 MIN 3.2 AC-FT 23,540

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-11	2200	4.12	462	1-18	0930	4.89	776
1-16	1100	5.23	905	2-27	2100	4.52	628

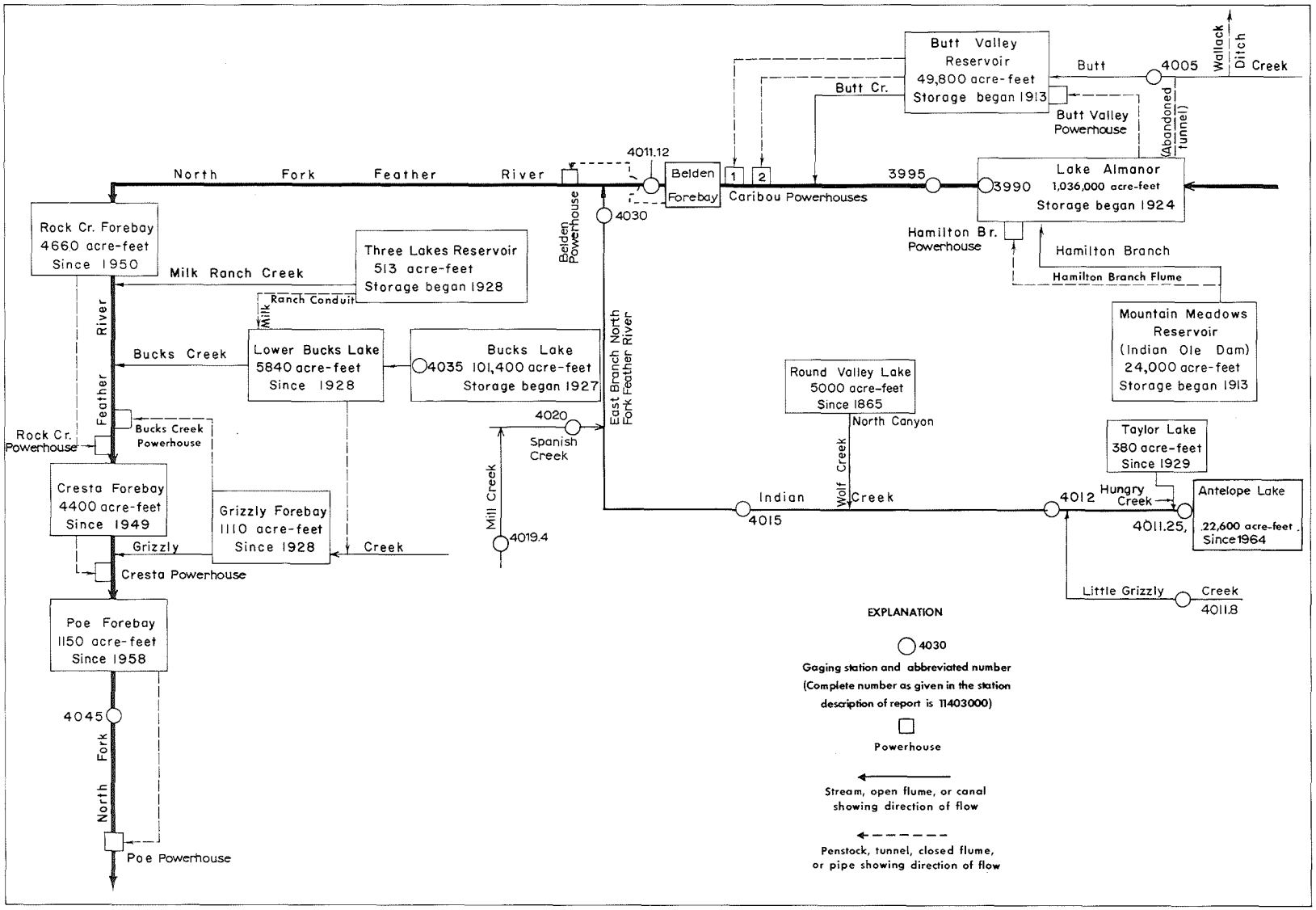

FIGURE 12.--Schematic diagram showing diversions and storage in North Fork Feather River basin.

11399000 LAKE ALMANOR AT PRATTVILLE, CALIF.

LOCATION.--Lat 40°12'50", long 121°09'40", in SW¼NE¼ sec.11, T.27 N., R.7 E., Plumas County, Plumas National Forest, at outlet tower to No. 2 tunnel on North Fork Feather River at Prattville, 4.7 miles northwest of Lake Almanor Dam, and 5.6 miles northwest of Canyondam.

DRAINAGE AREA.--491 sq mi.

PERIOD OF RECORD.--July 1913 to current year. Monthly contents only for some periods, published in WSP 1315-A. Published as "near Prattville" 1937-60. Prior to October 1964, records published as usable contents.

GAGE.--Nonrecording gage monitored once daily. Datum of gage is 10.23 ft below mean sea level (levels by Pacific Gas and Electric Co.). Prior to June 1, 1965, nonrecording gage at site 4.7 miles southeast at same datum.

EXTREMES (at 2400).--Current year: Maximum contents observed, 967,700 acre-ft July 7, 8 (gage height, 4,487.35 ft); minimum observed, 652,100 acre-ft Jan. 11 (gage height, 4,474.07 ft).
Period of record: Maximum contents, 1,078,000 acre-ft June 28, 1971 (gage height, 4,491.58 ft); minimum, 5,230 acre-ft Feb. 5, 1918 (gage height, 4,416.1 ft).

REMARKS.--Lake is formed by earthfill dam; storage began in July 1913; dam raised to gage height 4,455 ft in 1917 and 4,515 ft in 1927. Capacity, 1,036,000 acre-ft between gage heights 4,490 (upper storage limit) and 4,422 ft (bottom of lowest outlet) of which 8,950 acre-ft is not available for release. Water is diverted by tunnel and penstock to Butt Valley Reservoir and powerhouse for use in Caribou powerplants; some water also released down North Fork Feather River (see sta 11399500). Figures given herein represent total contents at 2400 hours. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,422	8,950	4,432	34,200	4,450	220,800	4,475	672,700
4,424	10,100	4,434	49,500	4,455	294,500	4,480	787,300
4,426	11,300	4,437	74,200	4,460	376,700	4,485	908,500
4,428	13,500	4,440	101,900	4,465	467,000	4,490	1,036,000
4,430	21,200	4,445	156,400	4,470	565,500	4,492	1,089,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	759,634	793,688	730,518	676,671	667,106	681,362	728,226	805,319	921,940	961,547	952,665	914,691
2	760,566	794,162	727,583	673,774	664,446	683,152	729,142	808,414	923,943	962,565	951,905	913,693
3	761,032	796,057	724,563	670,881	663,118	685,616	731,206	811,752	925,948	963,837	950,892	912,446
4	761,731	798,429	721,592	667,993	665,554	687,410	732,813	815,333	927,704	964,856	949,880	911,698
5	762,663	797,006	718,626	664,668	666,884	689,430	734,651	817,963	929,712	965,620	948,109	910,951
6	763,130	793,925	716,347	661,570	668,659	690,329	736,951	820,835	931,722	966,130	946,845	910,203
7	764,063	793,215	713,389	658,257	670,214	691,453	739,023	824,190	933,481	967,660	945,076	909,207
8	764,997	791,558	710,207	656,714	669,992	692,353	741,097	827,550	935,746	967,660	943,056	907,465
9	766,165	790,612	706,805	655,392	672,438	691,003	743,174	831,156	937,257	967,150	941,290	905,972
10	768,269	787,776	703,408	652,752	675,556	690,778	745,715	834,526	938,516	966,385	940,533	903,984
11	770,609	785,416	703,408	652,093	678,233	692,353	748,028	838,142	940,281	965,620	938,264	903,487
12	772,014	782,587	696,632	653,412	678,101	693,928	751,039	842,006	941,542	965,111	935,746	902,494
13	772,952	780,703	693,253	654,732	679,127	695,279	753,590	846,602	942,803	964,856	934,488	901,501
14	774,828	778,821	689,880	656,934	680,467	696,632	756,145	851,692	944,318	964,092	933,481	900,508
15	776,941	777,411	688,757	658,919	680,467	697,985	758,703	856,550	945,076	963,837	932,476	899,517
16	778,821	775,532	686,064	671,548	679,127	700,243	761,265	861,418	946,087	963,328	931,219	898,524
17	779,997	772,717	683,823	676,002	677,341	701,599	764,297	867,274	947,350	963,074	929,963	897,782
18	781,174	770,140	683,152	678,233	674,888	703,408	767,517	872,901	948,868	962,565	928,457	897,039
19	782,116	767,333	685,167	680,467	672,661	705,672	768,736	878,297	950,133	962,056	926,951	896,791
20	783,294	764,297	687,185	682,704	671,548	707,938	770,843	882,721	951,652	961,293	925,697	896,543
21	784,237	761,731	688,083	683,823	669,770	709,299	772,952	887,894	951,905	961,039	924,695	895,553
22	785,416	758,470	689,880	683,823	668,215	712,025	775,297	892,091	952,412	960,785	923,943	896,296
23	786,832	755,680	692,578	680,020	665,997	712,025	777,881	894,563	954,186	960,785	922,190	897,286
24	787,304	752,662	694,378	681,138	668,215	713,844	780,703	897,782	955,200	960,276	921,439	896,543
25	788,249	749,417	693,478	679,797	669,770	715,209	783,529	901,997	956,722	959,768	920,688	895,801
26	789,430	746,177	691,228	678,903	673,106	716,803	788,721	905,475	956,214	959,260	920,188	894,811
27	789,903	743,174	689,655	676,448	677,564	718,626	791,795	908,211	957,483	958,752	919,438	894,069
28	790,849	740,406	686,737	673,328	679,573	719,994	796,057	910,951	958,498	957,991	918,688	893,327
29	791,795	736,721	684,495	672,661	------	721,821	799,140	913,194	959,260	956,214	917,938	892,832
30	792,032	733,502	682,704	671,103	------	724,106	802,465	915,690	960,531	954,186	916,689	893,327
31	792,741	------	680,020	669,547	------	726,393	------	919,188	------	953,425	915,690	------
MAX	792,741	798,429	730,518	683,823	680,467	726,393	802,465	919,188	960,531	967,660	952,665	914,691
MIN	759,634	733,502	680,020	652,093	663,118	681,362	728,226	805,319	921,940	953,425	915,690	892,832
(a)	4,480.23	4,477.69	4,475.33	4,474.86	4,475.31	4,477.38	4,480.64	4,485.43	4,487.07	4,486.79	4,485.29	4,484.39
(b)	+34,000	-59,200	-53,500	-10,500	+10,000	+46,800	+76,100	+116,700	+41,300	-7,110	-37,700	-22,400

CAL YR 1972 b -16,400
WTR YR 1973 b +134,600

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11399500 NORTH FORK FEATHER RIVER NEAR PRATTVILLE, CALIF.

LOCATION.--Lat 40°10'10", long 121°05'29", in NE¼SW¼ sec.28, T.27 N., R.8 E., Plumas County, Plumas National Forest, on left bank 0.5 mile downstream from Almanor Dam, 4.5 miles southeast of Prattville, and 9 miles upstream from Butt Creek.

DRAINAGE AREA.--493 sq mi.

PERIOD OF RECORD.--June 1905 to current year (daily discharges for July 1921 to September 1936 include water diverted through Almanor-Butt Creek tunnel). Records for water year 1911 incomplete, yearly estimate published in WSP 1315-A. Published as "below Prattville" prior to 1911. Supplemental records for Almanor-Butt Creek tunnel diversion computed November 1924 to Dec. 30, 1958, as difference of flow between Butt Creek above Almanor-Butt Creek tunnel (unpublished prior to 1936 and since 1964), and Butt Creek below Almanor-Butt Creek tunnel (unpublished prior to 1936 and 1960-64).

GAGE.--Water-stage recorder and broad-crested weir. Altitude of gage is 4,380 ft (from topographic map). Prior to Oct. 1, 1936, nonrecording gages or water-stage recorders at several sites within 0.5 mile of present site at various datums.

AVERAGE DISCHARGE (adjusted for diversion and leakage).--68 years, 905 cfs (655,700 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 136 cfs Feb. 1; minimum daily, 24 cfs Feb. 23-25.
Period of record: Maximum discharge, 10,000 cfs Mar. 19, 1907, before construction of dam (gage height, 16.2 ft at former site), from rating curve extended above 3,700 cfs; no flow Apr. 15, 16, 1914, at times January to April 1919, Apr. 21, 1923.

REMARKS.--Flow regulated by Lake Almanor 0.5 mile upstream (see sta 11399000) and Mountain Meadows Reservoir since 1924 (capacity, 24,000 acre-ft). Water diverted for power from Lake Almanor through old Almanor-Butt Creek tunnel to Butt Creek until Dec. 30, 1958. Diversion through new tunnel and Butt Valley powerhouse began Dec. 31, 1958. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1245: 1951 (yearly summaries). WSP 1285: 1952 (yearly summaries).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	37	39	33	136	38	38	33	36	40	36	38
2	37	38	39	33	62	38	35	33	38	40	36	38
3	37	38	38	33	62	38	33	33	38	40	36	38
4	37	38	38	33	62	38	33	34	38	40	36	38
5	37	37	38	33	62	39	34	34	38	40	36	38
6	37	37	38	35	62	39	34	34	38	40	36	38
7	37	37	37	35	62	39	32	34	38	40	36	38
8	37	36	37	35	62	38	31	34	38	40	36	38
9	37	36	37	36	62	37	31	34	38	40	36	38
10	36	35	37	36	62	38	31	33	38	40	36	33
11	36	35	35	39	63	38	32	34	38	40	36	36
12	36	35	34	39	63	38	31	34	38	40	36	37
13	36	35	35	39	63	38	31	34	39	40	36	37
14	36	35	34	39	63	38	31	34	39	40	36	37
15	37	34	34	39	64	38	32	34	39	40	36	37
16	36	34	34	40	54	38	32	34	39	40	37	37
17	36	34	34	40	47	38	32	35	39	40	39	37
18	36	33	34	40	47	38	32	35	39	38	39	37
19	35	34	34	41	46	38	32	35	39	36	39	37
20	35	34	34	41	46	38	31	35	39	36	39	37
21	36	33	34	42	47	38	31	36	39	36	39	37
22	36	33	34	42	34	38	32	36	39	36	39	37
23	36	33	34	42	24	38	32	37	39	36	39	37
24	37	32	34	42	24	38	32	37	39	36	39	37
25	37	32	34	43	24	38	32	37	39	36	39	37
26	37	32	34	43	25	39	32	37	39	36	38	37
27	37	32	34	44	25	38	32	37	39	36	38	37
28	37	35	34	44	26	38	32	38	39	36	38	37
29	37	39	33	45	------	38	33	38	40	36	38	37
30	37	39	33	46	------	39	33	38	40	36	38	37
31	37	------	33	48	------	39	------	38	------	35	39	------
TOTAL	1,132	1,052	1,091	1,220	1,479	1,183	969	1,089	1,160	1,185	1,156	1,114
MEAN	36.5	35.1	35.2	39.4	52.8	38.2	32.3	35.1	38.7	38.2	37.3	37.1
MAX	37	39	39	48	136	39	38	38	40	40	39	38
MIN	35	32	33	33	24	37	31	33	38	35	36	33
AC-FT	2,250	2,090	2,160	2,420	2,930	2,350	1,920	2,160	2,300	2,350	2,290	2,210
MEAN a	49.8	1,840	1,760	1,316	879	182	40.5	54.5	116	851	1,130	914
AC-FT a	3,060	109,400	108,200	80,890	48,790	11,200	2,410	3,350	6,930	52,340	69,390	54,380

CAL YR 1972 TOTAL 13,252 MEAN 36.2 MAX 132 MIN 32 AC-FT 26,290 MEAN a 1,444 AC-FT a 1,046,000
WTR YR 1973 TOTAL 13,830 MEAN 37.9 MAX 136 MIN 24 AC-FT 27,430 MEAN a 760 AC-FT a 550,400

a Adjusted for diversion through Butt Valley powerhouse and leakage from Almanor-Butt Creek tunnel No. 1.

11400500 BUTT CREEK BELOW ALMANOR-BUTT CREEK TUNNEL, NEAR PRATTVILLE, CALIF.

LOCATION.--Lat 40°11'12", long 121°11'11", in NW¼NW¼ sec.22, T.27 N., R.7 E., Plumas County, on right bank 400 ft downstream from outlet of old tunnel from Lake Almanor to Butt Creek, and 2.2 miles southwest of Prattville.

DRAINAGE AREA.--69.3 sq mi.

PERIOD OF RECORD.--October 1936 to September 1959, October 1964 to current year. Published as "below tunnel No. 1" 1938-40. Records for water years 1937-38, published in WSP 1515.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,400 ft (from topographic map). Prior to Oct. 5, 1937, at site 200 ft downstream at datum 4 ft lower.

AVERAGE DISCHARGE (natural flow of Butt Creek, adjusted for leakage from Almanor-Butt Creek tunnel No. 1).--37 years (including records for sta 11400000 Butt Creek above Almanor-Butt Creek tunnel, near Prattville for water years 1960-64), 81.4 cfs (58,970 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 517 cfs May 15 (gage height, 2.10 ft); minimum daily, 43 cfs Oct. 1-6.
Period of record: Maximum discharge, 3,830 cfs Dec. 23, 1964 (gage height, 5.87 ft), from rating curve extended above 1,400 cfs; minimum daily, 30 cfs Dec. 1, 2, 1936.

REMARKS.--No regulation above station. Hal-Bunger valve in conduit from Lake Almanor to Butt Valley powerhouse is opened for short periods several times a year causing sharp peaks. Wallack ditch, above station, diverts several cubic feet per second during each irrigation season into Yellow Creek basin. Leakage from Almanor-Butt Creek tunnel No. 1 was 6,410 acre-ft during the current year. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	50	51	59	67	119	102	306	141	63	52	49
2	43	51	51	62	67	111	93	302	126	62	51	51
3	43	52	54	58	67	103	97	297	118	61	51	52
4	43	78	53	58	69	95	114	296	112	60	51	51
5	43	66	50	60	69	90	139	259	106	57	51	51
6	43	56	54	60	69	89	172	255	102	56	51	50
7	46	62	52	60	69	84	187	266	96	58	51	50
8	48	60	51	62	70	84	175	272	92	58	50	47
9	49	57	51	63	72	84	193	273	88	58	50	47
10	59	61	51	63	76	94	216	276	85	58	50	47
11	73	62	51	65	74	105	239	283	84	58	49	47
12	64	58	51	122	71	93	275	297	82	56	49	47
13	53	60	51	172	69	88	275	323	81	57	48	47
14	55	59	51	114	70	85	257	338	80	56	48	47
15	80	65	53	97	69	85	264	365	79	56	48	47
16	66	68	56	134	69	87	250	367	78	58	48	47
17	67	63	85	150	69	86	279	352	77	59	48	48
18	55	60	106	109	69	84	257	341	75	58	48	48
19	53	60	142	101	68	86	232	366	73	58	48	48
20	51	57	109	101	69	84	219	303	72	56	48	61
21	51	56	96	91	69	80	229	267	70	57	48	51
22	51	56	221	87	70	78	257	242	70	58	48	51
23	50	54	118	85	71	77	290	224	70	56	48	60
24	50	55	96	82	88	81	310	234	71	54	49	53
25	50	54	81	78	101	89	322	243	68	54	50	51
26	50	54	74	78	96	99	367	199	66	54	52	48
27	50	55	72	77	105	111	387	179	65	53	53	48
28	50	55	67	76	115	104	391	169	64	52	50	48
29	49	55	62	75	------	96	371	161	64	52	49	47
30	49	52	64	73	------	96	334	155	64	52	49	47
31	49	------	60	71	------	105	------	153	------	52	49	------
TOTAL	1,626	1,751	2,284	2,643	2,107	2,852	7,293	8,363	2,519	1,757	1,535	1,486
MEAN	52.5	58.4	73.7	85.3	75.3	92.0	243	270	84.0	56.7	49.5	49.5
MAX	80	78	221	172	115	119	391	367	141	63	53	61
MIN	43	50	50	58	67	77	93	153	64	52	48	47
AC-FT	3,230	3,470	4,530	5,240	4,180	5,660	14,470	16,590	5,000	3,490	3,040	2,950

CAL YR 1972 TOTAL 29,506 MEAN 80.6 MAX 302 MIN 42 AC-FT 58,530
WTR YR 1973 TOTAL 36,216 MEAN 99.2 MAX 391 MIN 43 AC-FT 71,830

11401112 NORTH FORK FEATHER RIVER BELOW BELDEN DAM, CALIF.

LOCATION.--Lat 40°04'18", long 121°09'46", in SE¼SW¼ sec.26, T.26 N., R.7 E., Plumas County, Plumas National Forest, on left bank 0.2 mile downstream from Belden Dam, 0.4 mile upstream from Deadwood Canyon, and 6.2 miles northeast of Belden.

DRAINAGE AREA.--612 sq mi.

PERIOD OF RECORD.--October 1969 to current year. July 1959 to September 1969 in files of Pacific Gas and Electric Co.

GAGE.--Water-stage recorder. Datum of gage is 2,811.00 ft above mean sea level (levels by Pacific Gas and Electric Co.).

EXTREMES.--Current year: Maximum discharge, 1,640 cfs Feb. 22 (gage height, 7.13 ft); minimum daily, 48 cfs Sept. 23.
Period of record: Maximum discharge, 1,870 cfs Mar. 9, 1970 (gage height, 7.46 ft); minimum daily, 12 cfs June 15, 1971.

REMARKS.--Flow regulated by Belden Reservoir 0.2 mile upstream, Lake Almanor (see sta 11399000), Butt Valley Reservoir, and Mountain Meadows Reservoir (combined capacity, 1,105,000 acre-ft, revised). Diversion through tunnel to Belden powerhouse began on Aug. 27, 1969. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	67	72	70	67	61	56	130	143	140	54	156
2	62	67	72	70	68	60	56	134	143	138	53	158
3	58	67	72	70	68	60	122	139	148	131	53	141
4	58	67	72	70	69	60	115	136	145	130	54	77
5	58	70	72	70	66	58	67	141	134	130	53	107
6	60	72	72	71	67	60	65	141	135	133	52	171
7	63	72	72	71	66	55	68	135	140	134	53	161
8	63	72	72	70	68	62	73	141	145	133	54	163
9	63	72	72	70	69	62	591	142	143	135	53	163
10	62	72	72	70	70	61	829	138	143	138	55	159
11	61	70	72	71	65	61	352	140	140	134	55	156
12	59	67	73	69	65	59	231	137	137	133	54	152
13	57	68	73	70	67	61	209	135	135	134	54	143
14	57	70	73	69	67	61	197	137	135	136	54	145
15	58	69	72	65	67	61	197	138	138	135	54	146
16	58	69	72	72	68	62	197	140	140	132	54	144
17	58	71	71	69	69	59	196	139	133	137	56	147
18	59	70	71	70	68	62	95	141	131	140	133	145
19	59	71	71	68	69	58	78	139	135	140	141	144
20	60	70	72	67	68	59	65	138	140	137	150	144
21	60	72	71	66	69	61	66	142	141	139	149	146
22	60	72	70	68	124	60	62	145	143	136	141	96
23	60	72	70	69	59	59	66	147	138	136	143	48
24	60	72	70	68	59	58	126	144	141	136	150	61
25	60	72	70	66	58	60	68	145	141	138	150	62
26	60	72	70	66	61	59	83	145	141	137	151	61
27	60	73	71	69	61	58	142	141	140	135	148	62
28	60	72	70	68	62	57	140	141	138	136	149	61
29	60	71	71	70	------	59	138	144	140	134	146	64
30	60	72	70	68	------	58	133	143	144	136	144	65
31	64	------	70	70	------	56	------	143	------	103	156	------
TOTAL	1,882	2,113	2,213	2,140	1,904	1,847	4,883	4,341	4,190	4,166	2,966	3,648
MEAN	60.7	70.4	71.4	69.0	68.0	59.6	163	140	140	134	95.7	122
MAX	85	73	73	72	124	62	829	147	148	140	156	171
MIN	57	67	70	65	58	55	56	130	131	103	52	48
AC-FT	3,730	4,190	4,390	4,240	3,780	3,660	9,690	8,610	8,310	8,260	5,880	7,240

CAL YR 1972 TOTAL 34,139 MEAN 93.3 MAX 166 MIN 41 AC-FT 67,710
WTR YR 1973 TOTAL 36,293 MEAN 99.4 MAX 829 MIN 48 AC-FT 71,990

NOTE.--No gage-height record May 23 to July 2.

11401125 INDIAN CREEK NEAR BOULDER CREEK GUARD STATION, NEAR TAYLORSVILLE, CALIF.

LOCATION.--Lat 40°10'42", long 120°36'35", in SE¼SE¼ sec.22, T.27 N., R.12 E., Plumas County, on left bank 150 ft downstream from Antelope Dam, 1.0 mile upstream from Cold Stream, 2.2 miles south of Boulder Creek Guard Station, 12.1 miles northeast of Genesee, and 17.1 miles northeast of Taylorsville.

DRAINAGE AREA.--68.6 sq mi.

PERIOD OF RECORD.--October 1965 to current year. June 1961 to September 1965 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder and steel-lipped weir. Supplementary water-stage recorder on dam and concrete spillway. Altitude of gage is 4,930 ft (from topographic map). October 1965 to September 1968, at site 0.9 mile downstream at different datum.

AVERAGE DISCHARGE.--8 years, 68.2 cfs (49,410 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 235 cfs Apr. 29 (includes flow over spillway); minimum daily, 5.0 cfs Oct. 1-18.
Period of record: Maximum discharge, 828 cfs May 24, 1967 (gage height, 6.31 ft, previous site and datum) and Jan. 24, 1970 (includes flow over spillway); no flow for several months in 1971-72 (caused by draining of Antelope Lake).

REMARKS.--Flow regulated since Nov. 25, 1963 by Antelope Lake (capacity, 22,500 acre-ft) and storage in Taylor Lake since 1929 (capacity, 380 acre-ft). Some diversions for irrigation upstream. See schematic diagram of North Fork Feather River basin. Records since October 1968 are combined flow of release from Antelope Dam and flow over spillway.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	8.5	10	10	17	38	67	192	55	24	10	10
2	5.0	10	10	10	17	39	64	185	51	15	10	10
3	5.0	10	10	10	17	40	62	180	46	10	10	10
4	5.0	10	10	10	21	41	61	179	42	10	10	10
5	5.0	10	10	10	21	40	65	180	38	10	10	10
6	5.0	10	10	10	21	38	80	168	35	10	10	10
7	5.0	10	10	10	21	36	101	162	33	10	10	10
8	5.0	10	10	10	22	34	107	154	30	10	10	10
9	5.0	10	10	10	22	33	116	155	27	10	10	10
10	5.0	10	10	10	26	34	132	158	25	10	10	10
11	5.0	10	10	10	28	42	150	159	38	10	10	10
12	5.0	10	10	10	29	44	169	158	44	10	10	10
13	5.0	10	10	10	29	43	178	158	36	10	10	10
14	5.0	10	10	10	27	41	176	157	34	10	10	10
15	5.0	10	10	10	26	38	171	152	31	10	10	10
16	5.0	10	10	10	23	38	161	146	29	10	10	10
17	5.0	10	10	10	22	40	153	135	29	10	10	10
18	5.0	10	10	10	21	41	151	121	29	10	10	10
19	6.0	10	10	10	21	41	140	111	29	10	10	10
20	7.0	10	10	10	21	42	131	96	29	10	10	10
21	7.0	10	10	10	21	42	125	90	24	10	10	10
22	7.0	10	10	10	22	42	125	83	24	10	10	10
23	7.0	10	10	10	22	42	139	83	24	10	10	10
24	7.0	10	10	10	24	42	160	78	24	10	10	10
25	7.0	10	10	11	29	46	173	74	24	10	10	10
26	7.0	10	10	12	29	51	191	68	24	10	10	10
27	7.0	10	10	12	31	60	215	64	24	10	10	10
28	7.0	10	10	13	35	64	234	58	24	10	10	10
29	7.0	10	10	14	------	65	235	54	24	10	10	10
30	7.0	10	10	16	------	65	222	51	24	10	10	10
31	7.0	------	10	17	------	65	------	52	------	10	10	------
TOTAL	180.0	298.5	310	335	665	1,367	4,254	3,861	950	329	310	300
MEAN	5.81	9.95	10.0	10.8	23.8	44.1	142	125	31.7	10.6	10.0	10.0
MAX	7.0	10	10	17	35	65	235	192	55	24	10	10
MIN	5.0	8.5	10	10	17	33	61	51	24	10	10	10
AC-FT	357	592	615	664	1,320	2,710	8,440	7,660	1,880	653	615	595

CAL YR 1972 TOTAL 5,806.20 MEAN 15.9 MAX 134 MIN 0 AC-FT 11,520
WTR YR 1973 TOTAL 13,159.50 MEAN 36.1 MAX 235 MIN 5.0 AC-FT 26,100

11401180 LITTLE GRIZZLY CREEK NEAR GENESEE, CALIF.

LOCATION.--Lat 40°00'50", long 120°45'11", in NE¼SW¼ sec.21, T.25 N., R.11 E., Plumas County, Plumas National Forest, on right bank 2 miles south of Genesee, and 2.5 miles upstream from Indian Creek.

DRAINAGE AREA.--29.6 sq mi.

PERIOD OF RECORD.--August 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,180 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 55.3 cfs (40,060 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 450 cfs May 16 (gage height, 3.90 ft); minimum daily, 6.5 cfs Oct. 4-6, Jan. 6-8.
Period of record: Maximum discharge, 1,800 cfs Jan. 24, 1970 (gage height, 6.15 ft), from rating curve extended above 500 cfs on basis of slope-area measurement at gage height, 5.90 ft; minimum daily, 3.5 cfs Sept. 10, 11, 30, 1966.

REMARKS.--Records good. No known diversion or regulation above station. Records of water temperatures for the current year are published in Part 2 of this report. See schematic diagram of North Fork Feather River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	7.4	8.8	8.9	14	119	26	196	103	19	9.9	8.0
2	7.2	7.4	8.7	8.7	14	102	24	195	88	19	9.7	7.9
3	6.6	8.8	8.9	7.9	14	79	24	197	79	18	9.6	7.6
4	6.5	38	8.5	6.8	14	56	27	189	71	17	9.6	7.4
5	6.5	25	8.3	6.6	18	41	35	166	64	16	9.3	7.2
6	6.5	16	8.1	6.5	21	31	48	151	59	15	9.2	7.2
7	6.6	17	7.8	6.5	29	30	61	154	54	15	9.1	7.2
8	6.8	16	7.6	6.5	37	20	64	167	50	17	9.1	7.3
9	8.0	14	7.5	6.6	46	17	75	182	49	16	9.0	7.3
10	15	14	7.4	6.6	81	19	97	199	45	14	9.0	7.2
11	28	15	7.3	14	77	24	115	230	43	13	8.9	7.1
12	13	14	7.3	125	61	26	126	269	40	14	8.7	7.0
13	9.7	14	7.3	202	43	31	122	330	39	13	8.6	6.6
14	9.2	17	7.2	152	33	27	110	335	34	13	8.2	6.6
15	13	17	7.1	109	28	22	103	338	34	13	8.1	6.7
16	14	18	7.4	307	29	20	98	342	32	13	7.9	6.8
17	15	16	16	244	33	18	108	344	30	13	7.9	6.7
18	11	14	29	173	34	18	103	327	29	13	7.9	6.8
19	9.9	14	54	124	37	19	97	301	28	12	7.8	7.0
20	9.1	13	43	79	36	18	94	254	27	12	7.8	11
21	8.5	12	35	57	37	17	92	218	26	12	7.8	8.1
22	8.1	11	79	41	38	16	107	193	25	13	7.9	8.2
23	7.9	10	46	32	39	15	134	172	24	12	7.9	10
24	7.7	10	31	27	60	16	154	173	26	12	7.9	9.3
25	7.6	10	23	24	106	19	177	154	25	11	8.4	8.8
26	7.6	10	19	27	103	21	210	132	24	10	9.6	8.0
27	7.4	10	17	18	112	26	248	117	23	10	11	7.7
28	7.4	9.6	15	17	130	28	258	108	22	11	9.0	7.6
29	7.3	9.4	11	16	------	27	241	103	21	11	8.4	7.5
30	7.0	9.2	11	16	------	27	215	116	20	11	8.2	7.5
31	7.2	------	10	15	------	26	------	125	------	10	7.9	------
TOTAL	292.7	416.8	564.2	1,890.6	1,324	975	3,393	6,477	1,234	418	269.3	229.3
MEAN	9.44	13.9	18.2	61.0	47.3	31.5	113	209	41.1	13.5	8.69	7.64
MAX	28	38	79	307	130	119	258	344	103	19	11	11
MIN	6.5	7.4	7.1	6.5	14	15	24	103	20	10	7.8	6.6
AC-FT	581	827	1,120	3,750	2,630	1,930	6,730	12,850	2,450	829	534	455

CAL YR 1972 TOTAL 13,437.5 MEAN 36.7 MAX 195 MIN 5.4 AC-FT 26,650
WTR YR 1973 TOTAL 17,483.9 MEAN 47.9 MAX 344 MIN 6.5 AC-FT 34,680

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	1200	3.88	443	5-16	1930	3.90	450
4-27	1800	3.45	305				

11401200 INDIAN CREEK NEAR TAYLORSVILLE, CALIF.

LOCATION.--Lat 40°02'53", long 120°49'01", in SE¼NW¼ sec.12, T.25 N., R.10 E., Plumas County, on right bank 0.3 mile upstream from Montgomery Creek, and 2.3 miles southeast of Taylorsville.

DRAINAGE AREA.--526 sq mi.

PERIOD OF RECORD.--May 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,580 ft (from topographic map). Prior to Oct. 22, 1963, at site 1.0 mile downstream at different datum.

AVERAGE DISCHARGE.--16 years, 375 cfs (271,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,700 cfs Apr. 7 (gage height, 8.55 ft); minimum daily, 31 cfs Aug. 20.
Period of record: Maximum discharge, 30,200 cfs Feb. 1, 1963 (gage height, 10.65 ft, site and datum then in use), from rating curve extended above 3,000 cfs on basis of slope-area measurements at gage heights 10.3 and 10.65 ft; minimum daily, 13 cfs Aug. 2-4, 1961.
Flood of Dec. 23, 1955, reached a stage of 11.5 ft, from floodmarks, site and datum then in use (discharge, unknown).

REMARKS.--Flow partly regulated by Antelope Lake (see sta 11401120) and storage in Taylor Lake since 1929 (capacity, 380 acre-ft). Some diversions for irrigation upstream. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	57	77	144	148	780	655	829	300	75	45	38
2	51	58	77	141	148	668	565	771	271	73	43	44
3	48	64	83	135	154	570	525	771	236	66	42	45
4	44	122	88	100	164	498	611	775	208	62	41	45
5	43	160	78	100	165	432	845	784	190	59	40	45
6	41	139	83	107	167	408	1,100	761	177	60	39	45
7	42	128	83	100	185	366	1,400	673	166	60	38	45
8	42	142	80	95	191	349	1,090	646	156	60	39	45
9	45	125	78	110	201	331	1,170	632	146	59	39	45
10	58	128	85	132	283	388	1,270	650	140	56	40	45
11	95	133	81	142	289	611	1,300	686	133	56	41	45
12	71	129	82	495	274	537	1,350	741	141	55	41	44
13	64	120	81	767	247	475	1,300	865	136	53	39	40
14	58	150	82	428	234	404	1,140	875	132	51	38	37
15	62	139	86	346	221	375	1,130	855	131	51	40	37
16	69	160	95	1,210	207	396	1,010	839	128	52	39	37
17	74	135	139	889	208	459	1,020	824	125	52	37	37
18	66	120	230	746	207	437	970	761	117	52	37	38
19	64	106	369	541	201	447	880	713	108	49	35	39
20	63	102	339	420	204	433	800	603	103	47	31	51
21	59	98	294	331	207	386	732	533	95	45	32	45
22	58	93	641	250	217	373	722	460	89	44	32	42
23	56	79	491	196	213	386	804	413	89	44	35	46
24	55	80	349	191	254	438	875	410	89	44	38	46
25	55	78	259	185	339	611	896	392	89	45	40	46
26	55	79	214	178	335	790	964	356	88	45	43	45
27	55	81	205	173	393	850	1,060	325	83	45	53	42
28	56	80	191	169	901	677	1,100	300	80	45	47	42
29	56	80	147	164	------	557	1,060	280	78	45	44	41
30	54	78	154	169	------	632	959	303	76	46	38	40
31	56	------	152	164	------	650	------	334	------	47	36	------
TOTAL	1,764	3,243	5,493	9,318	6,957	15,714	29,303	19,160	4,104	1,643	1,222	1,282
MEAN	56.9	108	177	301	248	507	977	618	137	53.0	39.4	42.7
MAX	95	160	641	1,210	901	850	1,400	875	300	75	53	51
MIN	41	57	77	95	148	331	525	280	76	44	31	37
AC-FT	3,500	6,430	10,900	18,480	13,800	31,170	58,120	38,000	8,140	3,260	2,420	2,540

CAL YR 1972 TOTAL 78,971 MEAN 216 MAX 2,010 MIN 29 AC-FT 156,600
WTR YR 1973 TOTAL 99,203 MEAN 272 MAX 1,400 MIN 31 AC-FT 196,800

11401500 INDIAN CREEK NEAR CRESCENT MILLS, CALIF.

LOCATION.--Lat 40°04'42", long 120°55'36", in SW¼SW¼ sec.25, T.26 N., R.9 E., Plumas County, on left bank 0.8 mile upstream from Dixie Creek, and 1.5 miles south of Crescent Mills.

DRAINAGE AREA.--739 sq mi.

PERIOD OF RECORD.--January 1906 to December 1909, September 1911 to March 1918, October 1930 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (from topographic map). Prior to March 1918, nonrecording gage at site 800 ft upstream at different datum.

AVERAGE DISCHARGE.--52 years (1906-9, 1911-17, 1930-73), 551 cfs (399,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,110 cfs Jan. 16 (gage height, 8.54 ft); minimum daily, 17 cfs Aug. 26.
Period of record: Maximum discharge observed, 25,000 cfs Mar. 19, 1907, (gage height, 20.2 ft, site and datum then in use); minimum, 1.7 cfs Aug. 25, 1931.

REMARKS.--Records good. Natural flow affected by storage in Round Valley Reservoir since 1865 (capacity, 5,000 acre-ft), Taylor Lake since 1929 (capacity, 380 acre-ft), and Antelope Lake since November 1963, (see sta 11401120). Diversions above station for irrigation of about 11,800 acres of which 9,700 acres are in Indian and Genesee Valleys. See schematic diagram of North Fork Feather River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1445: 1906-9. WSP 1931: 1956, 1958(M). WRD Calif. 1968: 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	91	119	191	349	1,580	939	1,200	473	50	30	27
2	54	89	117	180	332	1,420	837	1,090	383	50	26	20
3	52	94	128	188	327	1,240	780	1,050	328	48	28	21
4	50	174	115	147	407	1,100	843	1,090	296	44	25	21
5	48	241	103	131	539	916	1,120	1,070	250	40	22	20
6	44	178	102	142	531	844	1,530	1,000	215	43	19	21
7	43	175	100	125	662	762	1,840	920	194	42	21	23
8	47	221	100	119	691	707	1,540	911	168	37	21	23
9	56	168	102	154	713	663	1,570	896	146	34	22	26
10	79	174	103	189	1,310	699	1,730	899	134	36	21	24
11	207	191	110	262	1,150	977	1,830	918	130	34	22	24
12	193	175	115	1,210	1,010	889	1,920	963	135	34	25	23
13	118	160	121	1,510	808	799	1,860	1,090	116	36	29	21
14	102	248	114	955	735	710	1,650	1,140	110	33	31	22
15	114	235	114	798	676	653	1,620	1,120	116	35	27	23
16	136	267	122	2,920	627	653	1,480	1,110	112	39	24	22
17	149	222	190	2,680	599	714	1,470	1,090	112	43	21	25
18	126	191	334	2,010	576	691	1,420	1,010	108	42	23	27
19	104	183	683	1,520	547	685	1,300	937	96	36	20	29
20	106	168	681	966	527	701	1,180	835	91	33	22	40
21	102	156	489	821	523	640	1,090	735	87	30	20	42
22	96	155	1,010	658	529	589	1,080	641	77	28	19	37
23	87	142	779	554	523	574	1,220	581	57	25	18	41
24	88	136	559	510	717	616	1,320	537	57	28	18	44
25	86	131	411	508	1,240	756	1,370	535	59	28	20	46
26	86	131	329	444	1,080	920	1,490	471	51	28	17	43
27	85	130	299	374	1,280	1,160	1,640	421	56	33	26	42
28	86	129	280	372	1,830	1,070	1,650	353	57	31	29	40
29	88	126	220	369	------	874	1,560	324	53	36	31	39
30	86	123	213	383	------	820	1,380	341	50	33	27	39
31	87	------	207	380	------	842	------	476	------	29	26	------
TOTAL	2,853	5,004	8,469	21,770	20,838	26,264	42,259	25,754	4,317	1,118	730	895
MEAN	92.0	167	273	702	744	847	1,409	831	144	36.1	23.5	29.8
MAX	207	267	1,010	2,920	1,830	1,580	1,920	1,200	473	50	31	46
MIN	43	89	100	119	327	574	780	324	50	25	17	20
AC-FT	5,660	9,930	16,800	43,180	41,330	52,090	83,820	51,080	8,560	2,220	1,450	1,780

CAL YR 1972 TOTAL 124,237 MEAN 339 MAX 2,920 MIN 10 AC-FT 246,400
WTR YR 1973 TOTAL 160,271 MEAN 439 MAX 2,920 MIN 17 AC-FT 317,900

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-13	0430	6.29	1,790	4-7	0630	6.70	2,140
1-16	1730	8.54	4,110	4-12	0600	6.53	1,990
2-28	0400	6.46	1,940	4-28	0200	6.10	1,720

11402000 SPANISH CREEK ABOVE BLACKHAWK CREEK, AT KEDDIE, CALIF.

LOCATION.--Lat 40°00'11", long 120°57'12", in SE¼NE¼ sec.27, T.25 N., R.9 E., Plumas County, on right bank 200 ft upstream from Blackhawk Creek, and 0.9 mile southeast of Keddie.

DRAINAGE AREA.--184 sq mi.

PERIOD OF RECORD.--October 1933 to current year. Prior to October 1953, published as "at Keddie." Records for October 1911 to September 1933 at site 1.2 miles downstream not equivalent owing to inflow.

GAGE.--Water-stage recorder. Datum of gage is 3,129.86 ft above mean sea level.

AVERAGE DISCHARGE.--40 years, 267 cfs (193,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,930 cfs Jan. 16 (gage height, 9.11 ft); minimum daily, 25 cfs Aug. 9.
Period of record: Maximum discharge, 15,400 cfs Dec. 22, 1964 (gage height, 13.53 ft), from rating curve extended above 5,200 cfs on basis of slope-area measurement at gage height 12.47 ft; minimum, 3.8 cfs Aug. 12, 1934.

REMARKS.--Records good. Flow regulated by five small reservoirs having a combined capacity of 800 acre-ft. Approximately 4,600 acres irrigated above station (from information furnished by U.S. Forest Service). City of Quincy diverts about 450 acre-ft annually for municipal supply. See schematic diagram of North Fork Feather River basin.

REVISIONS (WATER YEARS).--WSP 1041: 1938(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	59	89	147	214	1,270	369	586	250	60	33	35
2	48	59	87	140	203	1,020	321	562	220	60	32	35
3	47	61	89	137	204	800	309	572	201	58	28	34
4	45	121	85	122	382	654	338	590	189	52	26	33
5	43	138	84	108	556	545	421	508	178	48	28	33
6	44	100	84	100	461	516	535	470	166	46	30	35
7	44	128	84	99	549	454	621	499	157	47	29	35
8	44	149	85	118	498	412	555	529	146	55	27	33
9	50	111	85	134	510	383	597	534	138	53	25	28
10	79	121	85	152	1,290	413	698	543	132	47	27	28
11	168	152	84	287	904	596	731	565	127	49	26	30
12	126	136	100	1,280	776	476	781	620	119	50	27	30
13	85	124	101	1,080	563	423	756	688	117	48	27	30
14	73	237	90	696	503	374	616	701	110	42	30	30
15	105	182	91	554	462	342	608	719	109	45	28	30
16	116	280	94	4,220	431	343	562	705	108	44	27	31
17	114	190	321	1,840	404	373	592	683	102	72	27	32
18	92	150	464	1,990	378	346	582	643	95	52	27	31
19	79	143	850	1,160	345	338	520	604	92	49	27	32
20	73	128	540	659	323	365	472	530	89	47	28	41
21	64	119	407	511	317	319	446	459	82	47	28	37
22	64	115	1,460	408	309	292	473	393	79	48	28	36
23	63	106	639	336	307	281	552	348	75	43	31	38
24	62	101	425	297	652	289	622	361	82	42	30	41
25	63	97	307	290	1,120	332	648	365	79	39	34	45
26	64	96	250	260	878	394	733	303	77	44	32	44
27	61	97	224	235	1,390	447	826	271	73	39	44	42
28	60	95	209	223	1,720	417	826	258	70	39	41	43
29	60	92	181	226	------	367	760	247	66	39	42	43
30	59	91	167	237	------	340	656	232	63	38	40	42
31	59	------	156	226	------	360	------	250	------	37	36	------
TOTAL	2,201	3,778	8,017	18,272	16,649	14,281	17,526	15,338	3,591	1,479	945	1,057
MEAN	71.0	126	259	589	595	461	584	495	120	47.7	30.5	35.2
MAX	168	280	1,460	4,220	1,720	1,270	826	719	250	72	44	45
MIN	43	59	84	99	203	281	309	232	63	37	25	28
AC-FT	4,370	7,490	15,900	36,240	33,020	28,330	34,760	30,420	7,120	2,930	1,870	2,100

CAL YR 1972 TOTAL 71,021 MEAN 194 MAX 1,800 MIN 20 AC-FT 140,900
WTR YR 1973 TOTAL 103,134 MEAN 283 MAX 4,220 MIN 25 AC-FT 204,600

PEAK DISCHARGE (BASE, 1,700 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-22	0830	5.89	2,480	2-27	2230	5.89	2,480
1-16	1330	9.11	6,930				

11403000 EAST BRANCH OF NORTH FORK FEATHER RIVER NEAR RICH BAR, CALIF.

LOCATION.--Lat 40°00'38", long 121°13'03", in SW¼NE¼ sec.20, T.25 N., R.7 E., Plumas County, Plumas National Forest, on left bank 0.5 mile upstream from mouth, and 1.3 miles west of Rich Bar.

DRAINAGE AREA.--1,025 sq mi.

PERIOD OF RECORD.--October 1950 to September 1961, December 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,300 ft (from topographic map). Prior to Nov. 29, 1950, at site 30 ft downstream at same datum.

AVERAGE DISCHARGE.--16 years (1950-61, 1968-73), 1,097 cfs (794,800 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,200 cfs Jan. 16 (gage height, 11.03 ft); minimum daily, 83 cfs Aug. 20, 22, 23.
Period of record: Maximum discharge, 48,000 cfs Dec. 23, 1955 (gage height, 16.52 ft), from rating curve extended above 15,000 cfs on basis of study of upstream and downstream peak discharges; minimum, 39 cfs Sept. 6, 7, 1955, July 28, Aug. 23, 1961.

REMARKS.--No storage or diversion between stations on Indian and Spanish Creeks and station near Rich Bar.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1245: 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	207	302	459	722	3,470	1,480	1,980	858	183	106	93
2	132	206	296	432	675	3,050	1,270	1,840	748	182	101	92
3	130	209	305	431	660	2,600	1,250	1,800	661	180	97	89
4	130	325	369	387	866	2,330	1,300	1,830	604	173	96	89
5	130	490	327	341	1,220	2,050	1,600	1,750	563	164	94	87
6	127	381	294	346	1,190	1,910	2,130	1,640	502	159	90	87
7	125	403	290	326	1,500	1,760	2,630	1,590	465	159	89	89
8	125	523	284	322	1,500	1,570	2,300	1,610	437	162	91	91
9	135	392	280	373	1,500	1,420	2,310	1,600	395	156	89	89
10	207	383	302	448	2,570	1,420	2,580	1,610	368	150	90	88
11	466	463	343	610	2,370	1,970	2,750	1,650	357	148	88	87
12	491	454	358	2,530	2,090	1,860	2,910	1,760	335	148	90	88
13	315	430	335	3,540	1,730	1,630	2,870	1,940	337	147	89	88
14	267	773	299	2,420	1,540	1,420	2,490	2,040	308	143	95	87
15	308	734	360	1,910	1,430	1,270	2,410	2,050	305	138	95	86
16	357	882	457	7,390	1,300	1,200	2,230	2,040	304	140	89	87
17	356	724	899	5,390	1,160	1,280	2,190	1,980	300	153	85	86
18	321	571	1,390	4,700	1,030	1,260	2,180	1,880	286	167	88	89
19	271	518	2,530	3,650	934	1,230	1,970	1,760	275	149	85	90
20	251	463	1,930	2,410	851	1,290	1,780	1,550	261	137	83	107
21	241	421	1,190	2,030	815	1,190	1,640	1,350	253	130	85	114
22	231	402	2,620	1,720	800	1,110	1,630	1,190	243	129	83	111
23	220	377	1,940	1,330	794	1,050	1,830	1,080	226	125	83	110
24	214	353	1,300	1,070	1,110	1,070	2,040	1,040	221	119	85	116
25	212	341	998	1,000	2,830	1,230	2,120	1,060	217	118	91	119
26	211	331	821	892	2,360	1,470	2,310	926	213	126	96	120
27	211	328	720	771	2,950	1,760	2,580	853	204	116	92	115
28	207	325	669	735	4,280	1,730	2,650	794	203	115	103	112
29	208	325	571	723	------	1,490	2,520	756	197	114	103	110
30	206	308	509	766	------	1,350	2,230	720	188	114	102	108
31	204	------	482	763	------	1,370	------	804	------	107	98	------
TOTAL	7,141	13,042	23,770	50,215	42,777	50,810	64,280	46,473	10,834	4,451	2,851	2,924
MEAN	230	435	767	1,620	1,528	1,639	2,143	1,499	361	144	92.0	97.5
MAX	491	882	2,620	7,390	4,280	3,470	2,910	2,050	858	183	106	120
MIN	125	206	280	322	660	1,050	1,250	720	188	107	83	86
AC-FT	14,160	25,870	47,150	99,600	84,850	100,800	127,500	92,180	21,490	8,830	5,650	5,800

CAL YR 1972 TOTAL 252,093 MEAN 689 MAX 5,090 MIN 93 AC-FT 500,000
WTR YR 1973 TOTAL 319,568 MEAN 876 MAX 7,390 MIN 83 AC-FT 633,900

11403500 BUCKS LAKE NEAR BUCKS LODGE, CALIF.

LOCATION.--Lat 39°53'45", long 121°12'10", in NW¼ sec.33, T.24 N., R.7 E., Plumas County, Plumas National Forest, in intake tower No. 2 upstream from dam on Bucks Creek, 2 miles northwest of Bucks Lodge, and 15 miles west of Quincy.

DRAINAGE AREA.--28.6 sq mi.

PERIOD OF RECORD.--1927-28 (year-end contents only, published in WSP 1315-A), October 1928 to current year. Prior to October 1954 published as Bucks Creek Reservoir near Bucks Ranch.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Feather River Power Co.).

EXTREMES.--Current year: Maximum contents, 91,200 acre-ft July 10 (elevation, 5,149.0 ft); minimum, 47,600 acre-ft Apr. 22 (elevation, 5,121.5 ft).
Period of record: Maximum contents, 105,800 acre-ft June 23, 1938 (elevation, 5,157.1 ft); minimum, 12,330 acre-ft Feb. 27, 1929 (elevation, 5,090.7 ft).

REMARKS.--Reservoir is formed by concrete-faced, rockfill dam completed in 1927; storage began in May 1927. Capacity, 101,400 acre-ft between elevations 5,064.75 (sill of outlet gate) and 5,154.85 ft (spillway crest) above mean sea level. Released water flows down Bucks Creek to Lower Bucks Lake, where it enters tunnel that discharges into Grizzly Creek, thence to Bucks Creek powerhouse. Figures given herein represent total contents, of which 274 acre-ft is not available for release. See schematic diagram of North Fork Feather River basin.

COOPERATION.--Records of contents collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,064.75	274	5,075	2,400	5,100	21,200	5,125	52,500
5,066	388	5,080	4,740	5,105	26,600	5,130	60,000
5,068	635	5,085	7,920	5,110	32,500	5,140	75,900
5,070	977	5,090	11,700	5,115	38,800	5,150	93,000
5,072	1,440	5,095	16,200	5,120	45,500	5,160	111,200

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65,501	67,370	60,363	55,217	54,670	55,810	50,585	52,199	82,292	90,641	81,110	66,560
2	65,501	67,386	60,088	54,862	54,346	56,004	50,241	52,839	82,987	90,728	80,874	66,085
3	65,517	67,720	59,829	54,508	54,141	56,272	49,898	53,481	83,600	90,798	80,604	65,596
4	65,533	68,119	59,463	54,155	54,435	56,406	49,599	54,170	84,196	90,886	80,100	65,108
5	65,533	68,198	59,008	53,774	54,553	56,555	49,357	54,656	84,794	90,956	79,648	64,637
6	65,533	68,230	58,826	53,422	54,818	56,824	49,144	55,217	85,273	91,008	79,146	64,167
7	65,548	68,357	58,478	53,203	54,995	56,959	48,918	55,899	85,479	91,061	78,678	63,683
8	65,580	67,960	58,055	52,984	55,054	57,093	48,705	56,734	85,994	91,113	78,195	63,185
9	65,643	67,672	57,619	52,780	54,936	56,899	48,536	57,483	86,476	91,183	77,729	62,719
10	66,069	67,561	57,183	52,548	54,302	56,764	48,381	58,281	86,889	90,886	77,248	62,270
11	66,481	67,195	56,764	52,518	55,261	56,674	48,268	59,190	86,958	90,431	76,784	61,791
12	66,560	66,766	56,376	53,130	55,424	56,764	49,585	60,286	87,286	90,169	76,288	61,344
13	66,607	66,623	56,018	53,671	55,410	56,436	48,381	61,498	87,580	89,837	75,760	60,884
14	66,687	66,354	55,691	53,950	55,365	56,078	48,240	62,688	87,857	89,367	75,299	60,409
15	66,877	66,338	55,528	54,449	55,395	55,736	48,113	63,933	88,117	89,019	74,807	59,905
16	67,004	66,227	55,276	55,454	55,232	55,380	47,958	65,249	88,359	88,758	74,299	59,433
17	67,099	65,832	55,261	55,989	55,276	55,128	47,986	66,576	88,585	88,290	73,808	59,008
18	67,131	65,517	55,647	56,555	55,084	54,774	48,085	68,055	88,810	87,840	73,319	58,780
19	67,163	65,108	56,108	56,734	55,025	54,685	47,944	69,331	89,019	87,355	72,814	58,947
20	67,195	64,951	56,361	56,944	54,744	54,258	47,776	70,437	89,210	86,889	72,327	59,038
21	67,227	64,668	56,376	57,123	54,759	53,979	47,649	71,453	89,367	86,390	71,825	59,053
22	67,242	64,261	57,213	57,228	54,479	53,627	47,579	72,457	89,541	85,908	71,324	59,114
23	67,274	63,823	57,543	57,123	54,332	53,261	47,720	73,547	89,715	85,411	70,840	59,159
24	67,242	63,387	57,769	57,123	54,376	52,926	47,902	74,889	89,855	84,914	70,309	59,205
25	67,274	62,983	57,483	56,929	54,420	52,606	48,409	75,925	90,012	84,452	69,827	59,235
26	67,306	62,548	57,258	56,630	54,744	52,315	48,960	76,850	90,134	85,651	69,331	59,235
27	67,322	62,146	56,974	56,301	55,276	52,011	49,656	77,779	90,256	83,463	68,836	59,250
28	67,322	61,729	56,630	55,989	55,528	51,693	50,355	78,745	90,378	83,038	68,342	59,266
29	67,338	61,314	56,286	55,662	------	51,375	51,015	79,731	90,483	82,563	67,833	59,296
30	67,322	60,914	55,944	55,424	------	51,130	51,620	80,588	90,553	82,072	67,513	59,311
31	67,338	------	55,558	55,025	------	50,915	------	81,565	------	81,649	67,036	------
MAX	67,338	68,357	60,363	57,228	55,528	57,093	51,620	81,565	90,553	91,183	81,110	66,560
MIN	65,501	60,914	55,261	52,518	54,141	50,915	47,579	52,199	82,292	81,649	67,036	58,780
(a)	4,134.71	4,130.60	4,127.05	4,126.69	4,127.03	4,123.87	4,124.36	4,143.60	4,148.63	4,143.45	4,134.52	4,129.55
(b)	+1,840	-6,420	-5,360	-533	+503	-4,610	+705	+29,900	+8,990	-8,900	-14,600	-7,720

CAL YR 1972 b +4,830
WTR YR 1973 b -6,190

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet, rounded to Geological Survey standards.

11404500 NORTH FORK FEATHER RIVER AT PULGA, CALIF.

LOCATION.--Lat 39°47'39", long 121°27'03", in SW¼NE¼ sec.6, T.22 N., R.5 E., Butte County, Plumas National Forest, on left bank between railroad and highway bridges, 0.5 mile downstream from Flea Valley Creek and Pulga, and 1.5 miles downstream from Poe Dam.

DRAINAGE AREA.--1,953 sq mi.

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods and yearly estimates for water years 1911 and 1938, published in WSP 1315-A. Prior to October 1960, published as "at Big Bar."

GAGE.--Water-stage recorder. Datum of gage is 1,304.88 ft above mean sea level (levels by Pacific Gas and Electric Co.). Prior to Oct. 1, 1937, at site 1.1 miles upstream at different datum. Oct. 1, 1937, to Sept. 30, 1958, at present site at datum 5.00 ft higher.

AVERAGE DISCHARGE (including diversion through Poe powerhouse).--63 years, 2,965 cfs (2,148,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,300 cfs Jan. 16 (gage height, 17.13 ft); minimum daily, 46 cfs Nov. 29.
Period of record (prior to diversion to Poe powerhouse): Maximum discharge, 72,400 cfs Dec. 23, 1955 (gage height, 35.60 ft, present datum), from rating curve extended above 34,000 cfs; minimum daily, 235 cfs Oct. 31, 1932.
1958 to current year: Maximum discharge, 73,000 cfs Dec. 22, 1964 (gage height, 35.80 ft), from rating curve extended above 34,000 cfs; minimum daily, 33 cfs June 25, 1961.

REMARKS.--Records good. Flow regulated by Lake Almanor (see sta 11399000), Bucks Lake (see sta 11403500), Mountain Meadows Reservoir, Butt Valley Reservoir, and five forebays (combined capacity, 1,239,000 acre-ft). Diversion through Poe powerhouse began on May 29, 1958. See schematic diagram of North Fork Feather River basin. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Gage-height record and 10 discharge measurements furnished by Pacific Gas and Electric Co., in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 931: 1938(M), 1940. WSP 1515: 1935.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	477	52	66	126	2,440	112	153	62	58	52	50
2	395	523	53	65	116	1,650	106	369	60	59	49	51
3	392	601	54	67	117	891	104	88	61	58	47	51
4	365	1,200	59	65	897	465	102	86	60	58	47	51
5	423	534	53	63	1,660	224	103	83	58	58	47	52
6	854	300	55	61	1,030	223	107	83	69	58	51	50
7	606	66	57	62	1,360	209	102	81	63	55	51	52
8	331	55	56	66	241	197	100	83	63	54	49	51
9	518	52	53	160	241	164	105	78	63	55	50	50
10	1,480	58	51	207	738	157	938	80	62	54	49	50
11	1,610	72	53	272	1,200	158	1,210	77	61	55	48	50
12	1,060	54	53	1,520	466	135	1,110	78	61	55	48	49
13	242	66	51	2,530	249	129	1,070	634	61	53	49	49
14	605	147	52	605	209	122	547	865	61	54	47	50
15	900	89	54	275	175	117	407	874	62	54	48	50
16	639	124	56	8,900	153	115	192	1,150	60	53	50	50
17	646	68	140	6,400	131	115	103	1,290	62	51	49	48
18	991	64	135	5,050	122	110	182	1,270	61	51	48	50
19	508	68	194	3,000	115	112	97	888	60	52	49	51
20	730	62	110	867	111	129	90	695	58	53	48	55
21	536	54	90	348	107	131	90	216	58	52	47	50
22	473	53	1,470	169	103	131	92	64	59	53	49	50
23	459	51	564	136	100	127	91	64	60	52	49	52
24	535	49	90	125	163	120	88	66	60	50	50	52
25	551	50	80	124	672	115	89	65	59	50	50	51
26	504	49	76	117	496	113	245	61	57	50	53	51
27	443	50	77	109	1,890	110	1,020	62	59	51	52	50
28	595	49	73	105	3,700	106	1,120	59	59	50	53	50
29	82	46	70	119	------	102	940	61	58	50	53	50
30	161	49	68	142	------	103	540	60	59	50	52	49
31	498	------	67	135	------	126	------	63	------	51	50	------
TOTAL	18,525	5,180	4,165	31,930	16,688	9,146	11,202	9,846	1,816	1,657	1,534	1,515
MEAN	598	173	134	1,030	596	295	373	318	60.5	53.5	49.5	50.5
MAX	1,610	1,200	1,470	8,900	3,700	2,440	1,210	1,290	69	59	53	55
MIN	82	46	51	61	100	102	88	59	57	50	47	48
AC-FT	36,740	10,270	8,260	63,330	33,100	18,140	22,220	19,530	3,600	3,290	3,040	3,010
MEAN a	598	2,980	3,680	5,009	4,374	3,820	4,420	4,230	1,224	1,007	1,327	972
AC-FT a	36,740	177,300	226,000	308,000	242,900	235,100	263,000	260,000	72,810	61,940	81,600	57,850

CAL YR 1972 TOTAL 74,808 MEAN 204 MAX 4,640 MIN 46 AC-FT 148,400 MEAN a 2,349 AC-FT a 1,705,000
WTR YR 1973 TOTAL 113,204 MEAN 310 MAX 8,900 MIN 46 AC-FT 224,500 MEAN a 2,796 AC-FT a 2,024,000

a Adjusted for diversion through Poe powerhouse.

11405300 WEST BRANCH FEATHER RIVER NEAR PARADISE, CALIF.

LOCATION.--Lat 39°47'12", long 121°33'42", in SE¼SE¼ sec.6, T.22 N., R.4 E., Butte County, on right bank 0.6 mile upstream from Griffin Gulch, and 4.0 miles northeast of Paradise.

DRAINAGE AREA.--110 sq mi.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,370 ft (from topographic map). Prior to June 1, 1970, on left bank at same datum.

AVERAGE DISCHARGE.--16 years, 308 cfs (223,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,740 cfs Jan. 16 (gage height, 13.39 ft); minimum daily, 0.65 cfs Oct. 4, 5.
Period of record: Maximum discharge, 26,300 cfs Dec. 22, 1964 (gage height, 26.2 ft, from floodmarks), from rating curve extended above 14,000 cfs; minimum, 0.3 cfs Aug. 31, Sept. 1, 2, 1960, Sept. 8, 1962.

REMARKS.--Records good. Dewey, Miners, and Hendricks Canals divert from headwaters of West Branch Feather River into Butte Creek basin for power development at DeSabla and Centerville plants of Pacific Gas and Electric Co. Upper Miocene Canal diverts about 50 cfs to Lime Saddle powerplant. Flow regulated by Round Valley Reservoir (usable capacity, 5,000 acre-ft) and Philbrook Reservoir (capacity, 5,010 acre-ft). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WRD Calif. 1968: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	.98	31	86	308	1,400	416	745	681	17	2.1	1.6
2	.73	.98	31	77	272	1,150	361	750	568	15	7.5	1.6
3	.73	1.6	33	72	282	965	340	750	516	14	2.5	1.5
4	.65	128	76	58	482	860	340	780	464	12	2.1	1.5
5	.65	146	37	55	606	755	374	609	443	11	2.1	1.5
6	.81	74	40	53	582	790	433	609	359	9.9	2.1	1.5
7	.81	126	37	49	790	678	476	700	332	9.0	2.1	1.5
8	.81	105	23	52	614	606	440	755	338	8.6	1.8	1.5
9	.98	76	32	419	610	554	492	760	332	7.8	1.5	1.5
10	19	96	29	439	1,180	640	532	780	335	7.0	1.5	1.3
11	60	176	26	768	890	811	568	830	275	9.1	1.5	1.1
12	90	99	37	2,050	695	582	636	926	250	7.6	1.4	1.3
13	8.1	141	42	1,450	622	510	650	1,110	230	5.2	5.9	1.4
14	5.4	458	50	775	638	450	548	1,200	188	4.0	1.7	1.5
15	71	243	37	828	550	412	552	1,180	179	3.3	1.4	1.5
16	105	445	48	4,270	470	398	512	1,130	134	3.2	1.4	1.5
17	120	180	586	1,990	412	422	540	1,160	120	3.0	1.4	1.5
18	63	117	584	2,190	371	371	548	1,280	103	2.9	1.4	1.5
19	43	134	980	1,290	340	377	504	1,260	95	2.7	1.4	1.8
20	37	99	499	865	342	446	468	1,070	77	2.6	1.4	35
21	34	70	333	678	350	422	456	914	66	2.6	1.4	11
22	31	54	1,240	578	338	398	504	855	55	2.5	1.7	3.2
23	29	44	583	443	325	377	600	815	48	2.3	1.8	9.2
24	25	63	394	377	643	356	715	920	46	2.2	1.8	13
25	30	66	295	250	725	356	765	1,250	38	2.2	1.8	7.0
26	22	68	232	335	874	353	875	790	33	4.2	1.9	3.3
27	1.9	65	205	298	1,850	365	968	690	28	2.9	2.0	2.1
28	1.3	35	180	272	1,770	348	980	765	25	2.6	1.9	1.8
29	1.1	32	140	312	------	328	920	795	21	3.2	1.8	1.5
30	1.1	31	118	362	------	335	815	681	19	4.0	1.6	1.1
31	.98	------	102	350	------	490	------	720	------	2.3	1.6	------
TOTAL	805.86	3,374.56	7,080	22,091	17,931	17,305	17,328	27,579	6,398	185.9	63.5	116.3
MEAN	26.0	112	228	713	640	558	578	890	213	6.00	2.05	3.88
MAX	120	458	1,240	4,270	1,850	1,400	980	1,280	681	17	7.5	35
MIN	.65	.98	23	49	272	328	340	609	19	2.2	1.4	1.1
AC-FT	1,600	6,690	14,040	43,820	35,570	34,320	34,370	54,700	12,690	369	126	231

CAL YR 1972 TOTAL 64,715.69 MEAN 177 MAX 1,500 MIN .43 AC-FT 128,400
WTR YR 1973 TOTAL 120,258.12 MEAN 329 MAX 4,270 MIN .65 AC-FT 238,500

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-22	0700	8.87	2,250	1-18	0900	10.04	3,260
1-12	0830	8.97	2,330	2-27	2100	9.63	2,890
1-16	1000	13.39	6,740				

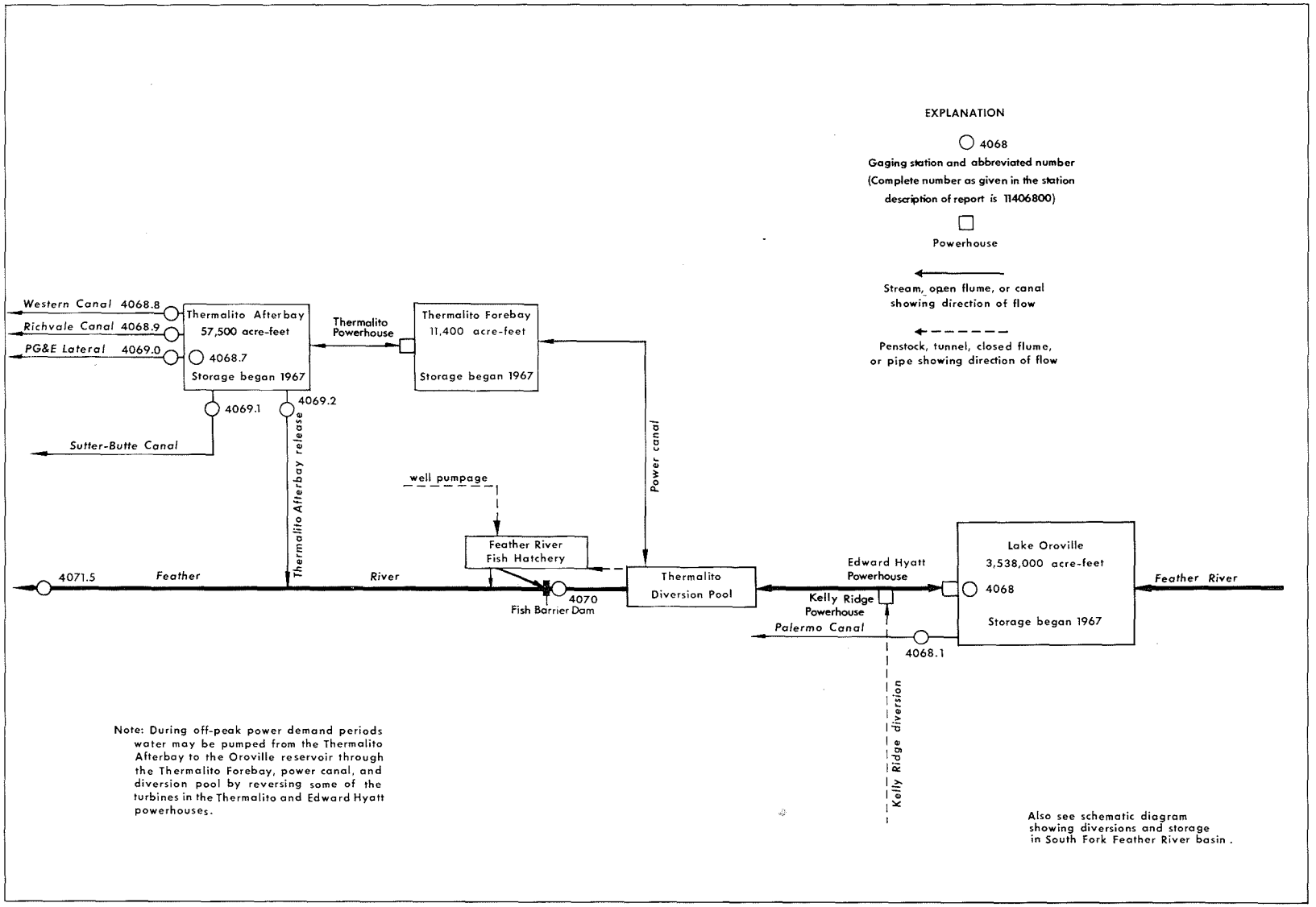

FIGURE 13.--Schematic diagram showing diversions and storage from Feather River at Lake Oroville.

11406800 LAKE OROVILLE NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°32'06", long 121°28'26", in NE¼SW¼ sec.1, T.19 N., R.4 E., Butte County, near intake structure at left end of Oroville Dam on Feather River, 1.0 mile downstream from North Fork Feather River, and 4.2 miles east of Oroville.
DRAINAGE AREA.--3,607 sq mi.
PERIOD OF RECORD.--November 1967 to current year.
GAGE.--Water-stage recorder. Datum of gage is 0.47 ft above mean sea level (levels by California Department of Water Resources).
EXTREMES.--Current year: Maximum contents, 3,536,000 acre-ft June 4 (gage height, 899.88 ft); minimum, 2,476,000 acre-ft Nov. 3 (gage height, 824.15 ft).
Period of record: Maximum contents, 3,536,000 acre-ft June 4, 1973 (gage height, 899.88 ft); minimum since initial storage began, 1,643,000 acre-ft Sept. 3, 1968 (gage height, 746.27 ft).
REMARKS.--Reservoir is formed by an earthfill dam with concrete chute-type sidehill spillway completed May 13, 1968; storage began Nov. 14, 1967. Usable capacity, 2,686,000 acre-ft between elevations 640.0 ft (minimum power pool) and 900.0 ft (normal maximum pool). Dead storage, 852,200 acre-ft. Total capacity at normal maximum pool 3,538,000 acre-ft; temporary detention storage occurred at times during dam construction; maximum was 155,200 acre-ft Dec. 23, 1964. Water is released to Edward Hyatt powerhouse through penstock in left abutment of dam and to Palermo Canal through concrete tunnel also in left abutment of dam. Three of the total of six turbines in the Edward Hyatt powerplant are reversible and during periods of low power demand water is pumped at times from the river back into Lake Oroville. Records, including extremes, represent total contents at 2400 hours. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.
COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project. Contents rounded to Geological Survey standards.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

730	1,498,000	790	2,081,000	850	2,808,000
740	1,586,000	800	2,192,000	860	2,945,000
750	1,678,000	810	2,307,000	870	3,086,000
760	1,773,000	820	2,426,000	880	3,232,000
770	1,872,000	830	2,549,000	890	3,382,000
780	1,974,000	840	2,676,000	900	3,538,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,609	2,480	2,640	2,870	2,811	2,883	2,997	3,322	3,512	3,390	3,127	2,871
2	2,605	2,479	2,643	2,874	2,807	2,886	3,007	3,324	3,523	3,383	3,111	2,873
3	2,601	2,476	2,639	2,876	2,811	2,886	3,012	3,327	3,532	3,369	3,095	2,876
4	2,596	2,482	2,641	2,872	2,813	2,883	3,020	3,334	3,536	3,364	3,096	2,866
5	2,587	2,485	2,645	2,865	2,811	2,877	3,033	3,347	3,532	3,350	3,097	2,858
6	2,577	2,487	2,653	2,868	2,808	2,872	3,048	3,359	3,525	3,337	3,081	2,845
7	2,573	2,495	2,655	2,869	2,807	2,861	3,064	3,359	3,514	3,337	3,066	2,836
8	2,571	2,499	2,662	2,864	2,802	2,848	3,085	3,362	3,505	3,340	3,058	2,833
9	2,563	2,504	2,668	2,869	2,798	2,834	3,092	3,363	3,507	3,330	3,042	2,841
10	2,561	2,509	2,674	2,866	2,812	2,823	3,106	3,362	3,514	3,324	3,024	2,835
11	2,560	2,519	2,678	2,878	2,810	2,821	3,122	3,363	3,503	3,315	3,021	2,830
12	2,557	2,527	2,686	2,901	2,803	2,824	3,145	3,380	3,493	3,306	3,025	2,822
13	2,553	2,532	2,691	2,907	2,794	2,835	3,165	3,402	3,489	3,295	3,012	2,816
14	2,552	2,543	2,695	2,902	2,792	2,842	3,183	3,406	3,484	3,286	2,998	2,809
15	2,553	2,547	2,698	2,899	2,791	2,851	3,201	3,414	3,480	3,281	2,982	2,805
16	2,549	2,558	2,705	2,924	2,789	2,860	3,212	3,426	3,482	3,276	2,965	2,799
17	2,546	2,569	2,718	2,887	2,796	2,873	3,224	3,434	3,486	3,265	2,954	2,789
18	2,543	2,579	2,732	2,854	2,798	2,886	3,225	3,451	3,486	3,253	2,955	2,783
19	2,536	2,588	2,745	2,817	2,794	2,893	3,222	3,473	3,478	3,241	2,956	2,776
20	2,528	2,596	2,749	2,799	2,791	2,905	3,226	3,494	3,466	3,231	2,948	2,773
21	2,527	2,604	2,756	2,795	2,788	2,913	3,239	3,501	3,456	3,232	2,939	2,770
22	2,527	2,609	2,766	2,790	2,787	2,909	3,251	3,502	3,447	3,235	2,932	2,771
23	2,523	2,617	2,793	2,793	2,785	2,907	3,256	3,496	3,450	3,223	2,922	2,773
24	2,519	2,621	2,806	2,792	2,805	2,919	3,259	3,490	3,451	3,205	2,915	2,770
25	2,514	2,626	2,817	2,791	2,827	2,931	3,261	3,486	3,437	3,184	2,915	2,760
26	2,507	2,628	2,824	2,790	2,840	2,937	3,263	3,500	3,428	3,174	2,918	2,746
27	2,501	2,632	2,830	2,798	2,861	2,945	3,268	3,508	3,416	3,161	2,909	2,735
28	2,500	2,635	2,837	2,812	2,876	2,953	3,288	3,517	3,403	3,159	2,904	2,728
29	2,499	2,638	2,841	2,811	------	2,959	3,308	3,516	3,391	3,160	2,890	2,729
30	2,491	2,639	2,852	2,813	------	2,967	3,316	3,513	3,389	3,150	2,878	2,729
31	2,484	------	2,861	2,813	------	2,983	------	3,515	------	3,139	2,867	------
MAX	2,609	2,639	2,861	2,924	2,876	2,983	3,316	3,517	3,536	3,390	3,127	2,876
MIN	2,484	2,476	2,639	2,790	2,785	2,821	2,997	3,322	3,389	3,139	2,867	2,728
(a)	824.77	837.09	853.89	850.35	854.97	862.73	885.65	898.54	890.47	873.67	854.37	843.99
(b)	-127.60	+155.00	+222.00	-47.82	+62.52	+10.72	+333.20	+198.60	-125.30	-250.60	-271.30	-138.85
(c)	4,386	1,257	1,052	948	1,073	2,189	5,258	8,343	10,770	12,390	12,190	8,436

CAL YR 1972 b +259.80
WTR YR 1973 b +117.10

a Gage height, in feet, at end of month.
b Change in contents, in thousands of acre-feet.
c Evaporation, in acre-feet.

11406810 PALERMO CANAL NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°31'59", long 121°28'55", in SW¼SW¼ sec.1, T.19 N., R.4 E., Butte County, on right bank 50 ft downstream from Oroville Dam, and 4.4 miles east of Oroville.

PERIOD OF RECORD.--April 1965 to current year. Daily discharge of diversion from Kelly Ridge penstock for period April 1965 to October 1968 when Kelly Ridge penstock supplied the entire flow of Palermo Canal are in files of California district office of Geological Survey.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 547.67 ft (levels by California Department of Water Resources). April 1965 to October 1968, water-stage recorder and Parshall flume at site of diversion fromKelly Ridge penstock, 0.4 mile downstream at different datum.

AVERAGE DISCHARGE.--8 years, 12.3 cfs (8,910 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 28 cfs several days in July to September 1967; no flow several days in 1967, 1970.

REMARKS.--Canal diverts from left end of Oroville Dam. Water is used for irrigation near Oroville. During period of construction of Oroville Dam, water was released from Kelly Ridge penstock to meet irrigation requirements.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	4.2	4.3	4.4	2.5	2.6	4.9	14	20	21	22	20
2	12	4.2	4.3	4.4	2.4	2.5	4.8	14	18	21	22	20
3	12	4.2	4.3	4.4	2.4	2.5	2.6	15	17	21	22	20
4	12	4.2	4.3	4.4	2.4	2.5	1.2	17	17	21	22	20
5	12	4.2	4.3	4.4	2.5	2.5	1.3	17	17	21	21	20
6	12	4.3	4.3	4.4	2.5	2.5	1.3	17	17	21	20	20
7	12	4.3	4.3	4.4	2.5	2.5	1.3	17	17	21	20	20
8	12	4.3	4.3	4.4	2.5	2.5	1.4	18	17	21	20	20
9	12	4.3	4.3	4.4	2.5	2.5	1.6	19	18	22	20	20
10	10	4.3	4.3	4.5	2.5	2.5	2.0	19	19	23	20	20
11	6.0	4.3	4.3	4.5	2.6	2.5	2.0	19	19	23	19	20
12	4.3	4.3	4.3	4.5	2.6	2.4	2.4	19	19	23	19	19
13	4.3	4.3	4.3	4.5	2.5	2.5	5.8	19	19	23	20	19
14	4.2	4.3	4.3	4.5	2.6	2.5	5.9	19	19	23	20	18
15	4.3	4.3	4.3	4.5	2.6	2.4	5.9	19	19	23	20	18
16	4.3	4.3	4.3	4.5	2.5	3.6	5.9	19	19	23	20	18
17	4.3	4.3	4.3	4.5	2.6	4.8	6.0	19	19	23	21	18
18	4.3	4.3	4.3	4.5	2.6	4.8	6.0	19	19	23	22	18
19	4.3	4.3	4.3	4.5	2.6	4.8	6.0	19	19	23	22	18
20	4.4	4.3	4.3	4.5	2.6	4.8	6.0	19	20	20	22	18
21	4.5	4.3	4.3	4.5	2.6	4.8	6.0	19	21	23	22	18
22	4.5	4.3	4.3	4.5	2.6	4.8	6.0	20	21	21	22	18
23	4.5	4.3	4.3	4.5	2.6	4.9	8.2	20	21	21	22	18
24	4.5	4.3	4.3	3.3	2.6	4.8	10	20	21	21	22	16
25	4.5	4.3	4.3	2.5	2.6	4.9	10	20	21	21	22	13
26	4.5	4.3	4.3	2.5	2.6	4.8	13	20	21	22	22	12
27	4.5	4.3	4.3	2.5	2.6	4.8	14	20	21	22	20	10
28	4.5	4.3	4.3	2.5	2.7	4.9	14	20	21	22	20	12
29	4.5	4.3	4.4	2.5	------	4.9	14	20	21	22	20	15
30	4.5	4.3	4.4	2.5	------	5.0	14	20	21	22	20	16
31	4.5	------	4.4	2.5	------	5.0	------	20	------	22	20	------
TOTAL	212.2	128.5	133.6	123.4	71.4	113.8	183.5	576	578	679	646	532
MEAN	6.85	4.28	4.31	3.98	2.55	3.67	6.12	18.6	19.3	21.9	20.8	17.7
MAX	12	4.3	4.4	4.5	2.7	5.0	14	20	21	23	22	20
MIN	4.2	4.2	4.3	2.5	2.4	2.4	1.2	14	17	20	19	10
AC-FT	421	255	265	245	142	226	364	1,140	1,150	1,350	1,280	1,060

CAL YR 1972 TOTAL 4,037.0 MEAN 11.1 MAX 23 MIN 3.1 AC-FT 8,010
WTR YR 1973 TOTAL 3,977.4 MEAN 10.9 MAX 23 MIN 1.2 AC-FT 7,890

11406870 THERMALITO AFTERBAY NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'30", long 121°38'17", in NE¼SE¼ sec.33, T.19 N., R.3 E., Butte County, at dam 195 ft northeast of centerline of outlet structure, and 5.7 miles southwest of Oroville.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.47 ft above mean sea level (levels by California Department of Water Resources). Auxiliary water-stage recorder 90 ft southwest of centerline of Western Canal outlet, and 7.2 miles west of Oroville.

EXTREMES.--Current year: Maximum contents, 51,894 acre-ft Aug. 31 (gage height, 135.28 ft); minimum, 15,227 acre-ft June 24 (gage height, 124.03 ft).
Period of record: Maximum contents, 57,300 acre-ft May 24, 1969 (gage height, 136.56 ft); minimum since initial operation began, 5,590 acre-ft Mar. 1, 1968 (gage height, 119.09 ft).

REMARKS.--Reservoir is formed by an earthfill dam completed in 1967; diversion from the reservoir began Oct. 12, 1967. Usable capacity, 61,134 acre-ft between gage heights 120.0 and 139.0 ft, extreme operating levels. Normal operating range is 123 to 136.5 ft. Water is released to four canals and to the Feather River from the reservoir (see sta 11406880, 11406890, 11406900, 11406910, 11406920). Total maximum release to the four canals is approximately 4,000 cfs. Water is pumped, at times, from Thermalito Afterbay back into Thermalito Forebay during off-peak periods to be re-released through Thermalito powerplant for power generation during peak demand periods. Records, including extremes, represent total contents at 2400 hours. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

120.0	7,054	128.0	25,832
122.0	10,792	130.0	32,150
124.0	15,157	134.0	46,719
126.0	20,171	139.0	68,198

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42,163	35,590	29,480	27,565	33,561	31,687	23,489	23,892	36,178	25,236	32,919	43,914
2	40,406	34,242	30,056	28,593	34,792	26,494	23,147	28,155	29,098	23,432	37,425	36,115
3	39,890	33,731	38,395	30,594	26,920	23,432	28,845	31,786	20,011	29,671	41,786	27,411
4	38,250	30,250	43,225	35,765	23,090	20,331	31,621	31,324	16,888	26,132	30,574	29,671
5	42,088	26,798	42,845	44,415	25,000	18,292	31,259	23,604	18,805	32,184	17,509	31,324
6	46,877	26,677	39,816	40,963	27,196	18,651	30,412	17,259	25,088	36,820	22,078	39,669
7	45,463	25,652	39,064	35,765	31,259	20,924	28,540	23,147	32,684	28,972	26,464	42,465
8	40,591	25,474	34,965	38,106	37,532	23,719	27,534	25,832	42,088	19,378	24,647	34,277
9	44,686	25,802	32,051	40,517	42,428	27,596	28,530	31,292	36,255	23,119	31,390	26,494
10	43,838	26,222	28,468	43,225	38,250	35,555	31,687	39,266	26,677	20,762	40,000	25,712
11	44,377	23,318	25,772	48,190	40,111	37,890	31,423	45,229	33,731	22,582	33,833	26,768
12	44,996	19,958	21,912	44,841	40,740	38,467	29,289	35,975	39,486	24,472	21,142	30,899
13	44,492	22,218	19,641	38,395	43,761	37,711	27,288	26,768	36,927	29,035	26,677	31,030
14	41,411	25,355	18,909	32,184	45,541	38,793	23,547	35,975	38,502	29,225	32,017	34,345
15	37,962	29,992	18,702	27,349	46,089	40,258	18,139	41,711	39,632	26,616	38,286	31,653
16	37,818	29,480	16,938	26,132	45,035	41,224	17,135	44,996	30,997	23,661	46,443	32,751
17	37,318	28,313	19,614	27,319	34,861	38,214	16,496	51,522	22,329	27,134	48,110	38,612
18	37,033	24,355	19,352	30,509	28,468	35,485	24,941	48,712	17,284	29,480	39,486	39,486
19	40,369	22,190	24,647	28,593	27,565	41,112	34,482	37,998	20,519	32,684	31,030	40,889
20	44,145	21,115	33,969	27,349	28,908	38,829	36,714	27,411	26,192	34,311	32,017	38,829
21	40,258	19,693	37,639	25,682	35,416	36,467	27,349	28,124	31,160	26,283	34,037	36,679
22	36,749	19,825	39,413	28,908	37,603	35,138	19,430	27,844	33,087	15,392	33,493	30,834
23	35,346	16,496	37,747	30,250	44,918	34,380	22,413	31,030	23,232	18,754	38,467	24,007
24	36,326	17,309	36,431	36,326	38,902	26,404	25,533	38,395	15,227	27,503	39,632	22,638
25	36,185	17,434	35,346	42,088	34,654	19,905	30,574	47,233	22,582	39,706	33,901	27,658
26	37,998	20,331	36,679	46,168	39,303	21,856	35,312	37,675	25,952	40,443	25,593	37,603
27	39,413	20,492	37,818	40,480	40,889	23,090	39,632	31,753	31,193	45,035	28,972	44,763
28	35,207	22,050	38,250	28,972	37,104	25,000	28,782	24,647	36,185	37,783	28,593	48,390
29	30,834	22,751	39,632	33,222	------	27,134	20,681	28,468	40,777	29,225	37,998	42,845
30	33,222	26,373	34,930	33,867	------	28,877	22,078	31,621	33,256	29,799	45,619	38,793
31	35,381	------	31,423	33,697	------	26,222	------	33,189	------	32,953	51,894	------
MAX	46,877	35,590	43,225	48,190	46,089	41,224	39,632	51,522	42,088	45,035	51,894	48,390
MIN	30,834	16,496	16,938	25,682	23,090	18,292	16,496	17,259	15,227	15,392	17,509	22,638
(a)	130.95	128.18	129.78	130.46	131.44	128.13	126.70	130.31	130.33	130.24	135.28	131.91
(b)	-10,082	-9,008	+5,050	+2,274	+3,407	-10,882	-4,144	+11,111	+67	-303	+18,941	-13,101
(c)	1,614	373	262	275	314	673	1,558	2,451	2,783	3,095	3,253	2,705

CAL YR 1972 b -3,300
WTR YR 1973 b -6,670

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11406880 WESTERN CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'19", long 121°41'06", in SW¼NW¼ sec.18, T.19 N., R.3 E., Butte County, on left bank 500 ft downstream from Thermalito Afterbay Dam, and 7.3 miles west of Oroville.

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.47 ft above mean sea level (levels by California Department of Water Resources).

EXTREMES.--Period of record: Maximum daily discharge, 955 cfs May 4, 5, 1968; no flow for several months in each year.

REMARKS.--Water is diverted from Thermalito Afterbay and is used for irrigation. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	256	263	210	0			0	470	495	675	652	339
2	250	263	209	0			0	511	519	676	652	340
3	248	262	165	94			0	557	542	675	653	332
4	246	260	108	155			0	598	542	676	652	308
5	249	257	142	159			0	611	556	676	650	293
6	254	254	200	155			0	610	576	674	652	273
7	249	251	200	150			0	606	578	673	653	271
8	250	250	196	86			0	636	594	670	652	253
9	252	255	192	0			0	657	634	671	652	243
10	258	220	193	0			0	657	651	673	651	236
11	259	92	192	0			0	658	654	673	652	196
12	258	52	191	0			0	640	663	675	652	170
13	254	21	192	0			0	627	686	686	650	151
14	254	0	195	0			0	608	697	687	641	110
15	252	0	200	0			0	528	696	685	635	89
16	250	0	197	0			0	550	694	688	635	88
17	250	0	74	0			44	526	693	700	615	88
18	250	0	0	0			84	505	685	705	576	88
19	252	0	0	0			122	507	677	705	561	88
20	259	0	0	0			165	507	678	705	540	88
21	260	0	0	0			150	503	679	706	529	88
22	255	0	0	0			182	506	679	700	517	88
23	250	0	0	0			203	506	679	687	496	89
24	255	0	0	0			217	475	673	676	447	172
25	256	0	0	0			253	451	669	675	425	242
26	258	0	0	0			300	453	676	658	425	242
27	261	113	0	0			362	450	679	645	426	242
28	261	202	0	0			394	451	681	650	405	241
29	255	208	0	0	------		447	463	677	653	378	240
30	256	206	0	0	------		494	490	679	648	366	241
31	260	------	0	0	------		------	489	------	652	350	------
TOTAL	7,877	3,429	3,056	799	0	0	3,417	16,806	19,281	20,998	17,440	5,929
MEAN	254	114	98.6	25.8	0	0	114	542	643	677	563	198
MAX	261	263	210	159	0	0	494	658	697	706	653	340
MIN	246	0	0	0	0	0	0	450	495	645	350	88
AC-FT	15,620	6,800	6,060	1,580	0	0	6,780	33,330	38,240	41,650	34,590	11,760

CAL YR 1972 TOTAL 100,273.00 MEAN 274 MAX 888 MIN 0 AC-FT 198,900
WTR YR 1973 TOTAL 99,032.00 MEAN 271 MAX 706 MIN 0 AC-FT 196,400

11406890 RICHVALE CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°30'19", long 121°41'06", in SW¼NW¼ sec.18, T.19 N., R.3 E., Butte County, on right bank 500 ft downstream from axis of Thermalito Afterbay Dam, and 7.3 miles west of Oroville.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.47 ft above mean sea level (levels by California Department of Water Resources).

EXTREMES.--Period of record: Maximum daily discharge, 485 cfs May 9, 1973; no flow for several months in each year.

REMARKS.--Canal diverts from Thermalito Afterbay; water is used for irrigation. The canal is part of the Oroville project. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0						0	483	389	379	366	206
2	0						0	481	381	378	365	204
3	0						0	483	383	380	364	179
4	10						0	483	382	381	366	148
5	32						0	481	376	382	366	143
6	19						0	482	381	381	366	143
7	0						0	484	383	378	374	142
8	0						0	484	385	375	379	141
9	0						0	485	384	376	377	142
10	0						0	484	382	375	372	142
11	0						0	484	383	377	349	106
12	0						0	483	382	379	348	92
13	0						0	420	383	378	350	63
14	0						0	389	383	377	355	49
15	0						0	392	382	374	354	49
16	0						0	393	380	374	354	50
17	0						118	393	382	372	353	50
18	0						204	393	381	375	353	50
19	0						231	394	383	378	353	28
20	0						227	388	386	368	325	14
21	0						225	395	387	361	308	14
22	0						225	391	383	359	308	14
23	0						227	392	377	360	276	14
24	0						212	393	376	363	266	14
25	0						309	391	378	362	268	14
26	0						460	390	380	362	268	14
27	0						476	390	380	359	232	14
28	0						479	389	381	360	206	14
29	0				------		476	394	380	360	207	14
30	0				------		478	393	383	360	205	14
31	0	------			------		------	394	------	371	207	------
TOTAL	61	0	0	0	0	0	4,347	13,271	11,456	11,514	9,940	2,281
MEAN	1.97	0	0	0	0	0	145	428	382	371	321	76.0
MAX	32	0	0	0	0	0	479	485	389	382	379	206
MIN	0	0	0	0	0	0	0	388	376	359	205	14
AC-FT	121	0	0	0	0	0	8,620	26,320	22,720	22,840	19,720	4,520

CAL YR 1972 TOTAL 36,918.00 MEAN 101 MAX 463 MIN 0 AC-FT 73,230
WTR YR 1973 TOTAL 52,870.00 MEAN 145 MAX 485 MIN 0 AC-FT 104,900

11406900 PACIFIC GAS AND ELECTRIC CO. LATERAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°29'22", long 121°41'12", in SW¼NW¼ sec.19, T.19 N., R.3 E., Butte County, on right bank 82 ft downstream from axis of Thermalito Afterbay Dam, and 7.2 miles west of Oroville.

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.47 ft above mean sea level (levels by California Department of Water Resources).

EXTREMES.--Period of record: Maximum daily discharge, 43 cfs Apr. 30, 1973; no flow for several months in each year.

REMARKS.--Flow regulated at outlet works from Thermalito Afterbay; water is used for irrigation. Records include diversions from Thermalito Afterbay into Pacific Gas and Electric Co. lateral via Duncan lateral siphon in some years. No diversion was made during the current year to Duncan lateral siphon.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	42	9.0	10	10	6.0
2							0	42	9.0	10	10	6.0
3							0	42	9.0	10	10	6.0
4							0	27	9.0	10	10	6.0
5							0	17	9.1	13	10	4.4
6							0	14	9.0	15	10	2.0
7							0	14	9.1	15	10	1.6
8							0	14	9.1	12	10	.60
9							0	14	8.9	10	10	0
10							0	14	9.0	10	10	0
11							0	14	9.1	10	10	0
12							0	14	9.1	10	10	0
13							0	14	9.0	10	10	0
14							0	14	9.0	10	10	0
15							0	14	8.9	10	10	0
16							0	14	8.9	10	10	0
17							0	14	9.7	10	10	0
18							0	14	10	10	10	0
19							0	14	11	10	10	0
20							0	14	11	10	7.5	0
21							0	14	11	10	6.0	0
22							0	14	11	10	6.1	0
23							0	14	11	10	6.0	0
24							0	13	11	10	6.0	0
25							0	11	11	10	6.0	0
26							7.6	9.7	10	10	6.0	0
27							18	9.0	10	10	6.0	0
28							19	8.9	10	10	6.1	0
29					------		35	9.0	10	10	6.1	0
30					------		43	9.0	10	10	6.0	0
31		------			------		------	9.1	------	10	6.0	------
TOTAL	0	0	0	0	0	0	122.6	500.7	290.9	325	263.8	32.60
MEAN	0	0	0	0	0	0	4.09	16.2	9.70	10.5	8.51	1.09
MAX	0	0	0	0	0	0	43	42	11	15	10	6.0
MIN	0	0	0	0	0	0	0	8.9	8.9	10	6.0	0
AC-FT	0	0	0	0	0	0	243	993	577	645	523	65

CAL YR 1972 TOTAL 1,581.50 MEAN 4.32 MAX 37 MIN 0 AC-FT 3,140
WTR YR 1973 TOTAL 1,535.60 MEAN 4.21 MAX 43 MIN 0 AC-FT 3,050

11406910 SUTTER BUTTE CANAL AT INTAKE, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'01", long 121°39'27", in NW corner of Boga Fernandez Grant, T.18 N., R.3 E., Butte County, on left bank 675 ft downstream from Thermalito Afterbay Dam, and 6.8 miles southwest of Oroville.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 109.97 ft above mean sea level (levels by California Department of Water Resources). Prior to May 1, 1970, at datum 9.50 ft lower.

EXTREMES.--Period of record: Maximum daily discharge, 2,110 cfs Apr. 22-24, 1968; no flow for several months in each year.

REMARKS.--Water is diverted from Thermalito Afterbay and is used for irrigation. See schematic diagram showing diversions and storage from Feather River at Lake Oroville.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	453	105	106			0	158	1,840	1,310	1,350	1,380	1,060
2	452	103	70			0	131	1,880	1,280	1,340	1,370	1,060
3	453	105	.40			0	126	1,950	1,280	1,340	1,370	1,050
4	452	104	.30			0	126	1,970	1,300	1,350	1,370	1,010
5	432	104	.10			0	155	1,910	1,310	1,390	1,370	978
6	422	106	.10			0	169	1,900	1,290	1,450	1,370	973
7	421	105	.10			0	220	1,900	1,300	1,440	1,350	964
8	421	105	0			0	244	1,870	1,350	1,430	1,340	950
9	422	106	0			0	347	1,840	1,370	1,430	1,330	946
10	394	105	0			0	482	1,800	1,370	1,430	1,320	947
11	374	106	0			0	470	1,760	1,380	1,440	1,310	900
12	328	105	0			0	470	1,720	1,360	1,450	1,310	883
13	324	106	0			0	516	1,710	1,370	1,460	1,310	852
14	321	106	0			0	532	1,670	1,380	1,450	1,310	768
15	327	106	0			0	532	1,600	1,360	1,440	1,290	710
16	229	105	0			0	532	1,570	1,360	1,450	1,280	676
17	131	105	0			0	562	1,560	1,360	1,440	1,280	641
18	103	105	0			0	630	1,550	1,370	1,450	1,280	592
19	103	106	0			0	742	1,510	1,390	1,450	1,290	548
20	103	106	0			0	797	1,480	1,380	1,440	1,240	512
21	103	106	0			0	905	1,440	1,400	1,440	1,210	504
22	103	105	0			0	1,020	1,420	1,410	1,440	1,220	503
23	103	105	0			0	1,130	1,450	1,430	1,440	1,210	486
24	103	106	0			0	1,340	1,440	1,410	1,460	1,230	445
25	103	105	0			0	1,480	1,380	1,370	1,460	1,220	435
26	103	106	0			0	1,600	1,360	1,380	1,460	1,190	423
27	103	105	0			69	1,700	1,370	1,360	1,430	1,170	415
28	103	105	0			178	1,790	1,370	1,350	1,420	1,140	416
29	105	106	0		------	202	1,810	1,360	1,360	1,420	1,100	442
30	106	106	0		------	170	1,810	1,370	1,370	1,420	1,060	456
31	106	------	0		------	157	------	1,350	------	1,410	1,060	------
TOTAL	7,806	3,159	177.00	0	0	776	22,526	50,300	40,710	44,220	39,280	21,545
MEAN	252	105	5.71	0	0	25.0	751	1,623	1,357	1,426	1,267	718
MAX	453	106	106	0	0	202	1,810	1,970	1,430	1,460	1,380	1,060
MIN	103	103	0	0	0	0	126	1,350	1,280	1,340	1,060	415
AC-FT	15,480	6,270	351	0	0	1,540	44,680	99,770	80,750	87,710	77,910	42,730

CAL YR 1972 TOTAL 250,213.00 MEAN 684 MAX 1,760 MIN 0 AC-FT 496,300
WTR YR 1973 TOTAL 230,499.00 MEAN 632 MAX 1,970 MIN 0 AC-FT 457,200

11406920 THERMALITO AFTERBAY RELEASE TO FEATHER RIVER, NEAR OROVILLE, CALIF.

LOCATION.--Lat 39°27'23", long 121°38'10", in NW¼SE¼ sec.33, T.19 N., R.3 E., Butte County, on left bank of outlet channel 955 ft downstream from centerline of Thermalito Afterbay Dam, and 5.7 miles southwest of Oroville.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 113.47 ft above mean sea level (levels by California Department of Water Resources). Prior to May 1, 1970, at datum 13.00 ft lower.

EXTREMES.--Current year: Maximum discharge, 18,900 cfs Jan. 16 (gage height, 8.95 ft); minimum daily, 619 cfs Apr. 10.
Period of record: Maximum discharge, 21,600 cfs Jan. 28, 1970 (gage height, 23.30 ft, previous datum); no flow for many days in 1968.

REMARKS.--Flow regulated by gates at Thermalito Afterbay outlet 955 ft upstream. See schematic diagram showing diversions and storage from Feather River at Lake Oroville. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by California Department of Water Resources, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,570	2,190	1,720	2,400	7,900	16,300	1,260	2,550	2,610	2,460	4,020	2,450
2	2,580	1,930	1,710	2,430	7,940	16,300	1,270	2,560	2,490	2,490	4,520	2,430
3	2,570	1,700	1,730	2,670	7,830	15,600	1,180	2,560	2,460	2,530	4,690	2,880
4	2,580	1,670	1,730	3,400	7,910	15,200	1,060	2,570	2,480	2,490	4,710	2,950
5	2,600	1,640	1,720	3,530	8,340	15,000	943	2,540	2,500	2,510	4,710	2,970
6	2,640	1,660	1,860	3,970	8,960	15,100	754	2,530	2,510	2,530	4,730	3,000
7	2,630	1,680	2,070	5,220	8,970	15,300	650	2,560	2,530	2,490	4,720	2,980
8	2,580	1,680	2,330	6,260	9,030	15,300	622	2,560	2,530	2,440	4,240	2,920
9	2,600	1,680	2,360	6,680	10,000	14,400	622	2,550	2,490	2,500	4,220	2,920
10	2,650	1,700	2,360	6,660	10,600	11,300	619	2,550	2,460	2,480	4,210	2,950
11	2,640	1,670	2,370	6,690	13,800	9,440	623	2,540	2,530	2,540	4,190	2,960
12	2,640	1,650	2,370	13,100	13,900	6,100	634	2,510	2,540	2,550	4,180	2,970
13	2,650	1,680	2,370	17,400	13,100	3,540	1,360	2,020	2,530	2,570	4,070	2,960
14	2,620	1,720	2,370	17,300	11,000	2,780	2,280	2,040	2,270	2,560	3,580	2,980
15	2,570	1,720	2,390	17,300	9,950	2,070	2,280	2,040	2,030	2,570	3,600	2,950
16	2,570	1,710	2,390	18,100	9,960	1,900	2,570	2,010	1,990	2,800	3,610	2,940
17	2,570	1,690	2,410	17,200	9,850	1,720	2,560	2,050	1,990	3,020	3,590	2,990
18	2,580	1,660	2,380	16,200	9,840	1,490	3,140	2,590	1,980	3,010	3,550	3,010
19	2,620	1,660	2,390	17,100	9,950	1,500	3,590	3,090	2,020	3,020	3,540	2,990
20	2,650	1,670	2,400	17,200	7,590	1,900	3,570	3,120	2,030	3,050	3,420	2,980
21	2,630	1,670	2,410	14,100	5,560	5,060	3,540	3,470	2,010	3,040	2,890	2,940
22	2,570	1,690	2,410	8,960	5,270	9,500	3,510	6,010	2,180	3,010	2,580	2,930
23	2,560	1,670	2,380	6,530	4,180	7,450	3,550	6,230	2,480	3,040	2,550	2,920
24	2,590	1,670	2,370	5,900	3,180	4,130	3,560	5,090	2,460	3,050	2,480	2,960
25	2,600	1,680	2,370	5,930	2,250	3,440	3,560	4,210	2,510	3,050	2,450	2,990
26	2,620	1,710	2,400	5,900	3,030	2,680	3,550	3,530	2,520	3,040	2,440	3,000
27	2,650	1,700	2,410	5,780	12,000	1,920	3,540	3,500	2,500	3,030	2,490	2,720
28	2,620	1,710	2,420	5,720	16,300	1,820	3,540	3,480	2,490	3,030	2,480	2,470
29	2,580	1,720	2,410	6,030	------	1,590	2,550	3,500	2,520	3,030	2,520	2,440
30	2,620	1,710	2,390	6,840	------	1,410	2,560	3,520	2,530	3,040	2,490	2,440
31	2,650	------	2,360	7,250	------	1,270	------	3,290	------	3,040	2,520	------
TOTAL	80,800	51,290	69,760	279,750	248,190	222,510	65,047	95,370	71,170	86,010	109,990	85,990
MEAN	2,606	1,710	2,250	9,024	8,864	7,178	2,168	3,076	2,372	2,775	3,548	2,866
MAX	2,650	2,190	2,420	18,100	16,300	16,300	3,590	6,230	2,610	3,050	4,730	3,010
MIN	2,560	1,640	1,710	2,400	2,250	1,270	619	2,010	1,980	2,440	2,440	2,430
AC-FT	160,300	101,700	138,400	554,900	492,300	441,300	129,000	189,200	141,200	170,600	218,200	170,600

CAL YR 1972 TOTAL 895,568 MEAN 2,447 MAX 11,400 MIN 388 AC-FT 1,776,000
WTR YR 1973 TOTAL 1,465,877 MEAN 4,016 MAX 18,100 MIN 619 AC-FT 2,908,000

11407000 FEATHER RIVER AT OROVILLE, CALIF.

LOCATION (revised).--Lat 39°31'18", long 121°32'48", in Boga Fernandez Grant, T.19 N., R.4 E., Butte County, on right bank 300 ft upstream from fish barrier dam on Feather River, and 0.8 mile northeast of Oroville Post Office.
DRAINAGE AREA.--3,624 sq mi.
PERIOD OF RECORD.--October 1901 to current year. Monthly discharge only for some periods, published in WSP 1315-A. October 1934 to September 1961 published as "near Oroville." Records since October 1967 equivalent to earlier records if diversions out of Thermalito Afterbay are added to flow past station.
GAGE.--Water-stage recorder. Datum of gage is 148.97 ft above mean sea level (levels by California Department of Water Resources). Jan. 1, 1902, to Dec. 15, 1912, nonrecording gages at several locations 0.2 mile downstream at various datums. Dec. 16, 1912, to Sept. 30, 1934, water-stage recorder at site 0.2 mile downstream at datum 139.53 ft above mean sea level. Oct. 1, 1934, to June 30, 1962, water-stage recorder at site 5.0 miles upstream at datum 182.02 ft above mean sea level. July 1, 1962, to Sept. 30, 1964, water-stage recorder at site 0.2 mile downstream at mean sea level datum.
AVERAGE DISCHARGE (adjusted for diversions into and out of, change in storage of, and evaporation from Lake Oroville, Thermalito diversion pool, Thermalito Forebay, and Thermalito Afterbay).--72 years, 5,900 cfs (4,275,000 acre-ft per year).
EXTREMES (River only).--Current year: Maximum discharge, 29,700 cfs Jan. 16 (gage height, 9.96 ft); minimum daily, 256 cfs Jan. 1.
Period of record: Maximum discharge observed, 230,000 cfs Mar. 19, 1907 (elevation, 167.5 ft above mean sea level); minimum daily, 89 cfs Sept. 19, 1972.
(Combined flow).--Current year: Maximum discharge, 29,800 cfs Jan. 16; minimum daily, 380 cfs Mar. 21.
Period of record (since construction of Oroville Dam).--Maximum discharge, 56,400 cfs Jan. 25, 1970; minimum daily, 222 cfs Sept. 19, 1972.
Flood of February 1881 reached a stage of 25 ft from floodmarks, site and datum in use from Dec. 16, 1912, to Sept. 30, 1934.
REMARKS.--Flow regulated by Lake Oroville (see sta 11406800) and other powerplants and reservoirs above station. Several diversions above station for power and irrigation. Feather River Fish Hatchery diverts up to 120 cfs at Thermalito diversion dam 0.4 mile upstream from gage. Diverted flow returns to Feather River approximately 0.3 mile downstream from gage. Daily figures shown are combined figures of river flow and diversion to fish hatchery. See REMARKS for upstream stations and schematic diagrams showing diversions from Feather River at Lake Oroville and for South Fork Feather River basin. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.
COOPERATION.--Records collected by California Department of Water Resources under general supervision of the Geological Survey, in connection with a Federal Power Commission project.
REVISIONS (WATER YEARS).--WSP 843: 1907(M), 1909(M), 1914-15(M), 1919(M), 1927-28(M). WSP 881: 1913-28 (yearly summaries only). WSP 1515: 1906-8. WSP 1931: Drainage area. WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	428	426	399	388	419	413	407	412	409	411	409	431
2	430	411	400	398	420	414	406	409	408	410	413	420
3	432	410	400	403	417	414	403	411	407	419	415	416
4	435	410	399	403	420	415	405	411	408	409	412	425
5	429	411	396	405	421	413	408	411	404	414	412	426
6	430	410	397	397	433	414	411	410	405	418	415	421
7	430	407	398	398	429	413	407	413	406	414	415	415
8	430	409	402	406	426	415	406	412	407	413	412	408
9	430	406	402	416	422	412	408	411	405	415	414	407
10	430	409	398	404	422	412	408	411	408	414	412	411
11	430	411	397	444	414	409	405	408	409	414	407	416
12	432	407	395	417	411	406	410	413	409	415	408	417
13	436	408	399	400	412	404	408	412	412	414	410	416
14	435	413	405	398	416	403	408	411	412	422	402	417
15	432	408	408	409	416	403	408	412	405	420	406	415
16	426	407	403	14,500	411	402	410	411	401	416	408	418
17	412	404	418	29,000	410	406	417	407	399	416	407	416
18	414	403	414	29,000	416	405	422	404	401	416	408	408
19	409	403	408	21,900	415	411	417	402	406	414	404	410
20	408	404	408	5,480	416	385	411	402	409	409	406	412
21	409	402	400	447	417	380	407	407	409	403	405	414
22	407	398	395	424	418	381	410	404	409	403	404	411
23	405	397	395	407	418	391	415	404	410	405	407	412
24	405	401	396	411	418	406	412	410	409	408	400	409
25	404	397	397	413	415	409	421	412	413	403	392	410
26	412	401	398	414	418	406	434	408	408	398	390	408
27	416	400	398	407	447	408	426	409	405	404	402	409
28	410	404	400	405	416	407	418	406	408	398	414	408
29	411	401	396	416	------	409	419	405	410	401	423	408
30	411	403	395	424	------	406	420	407	412	409	422	408
31	410	------	394	423	------	407	------	409	------	412	434	------
TOTAL	13,038	12,181	12,410	110,557	11,733	12,581	12,367	12,674	12,223	12,737	12,688	12,422
MEAN	421	406	400	3,566	419	406	412	409	407	411	409	414
MAX	436	426	418	29,000	447	415	434	413	413	422	434	431
MIN	404	397	394	388	410	380	403	402	399	398	390	407
AC-FT	25,860	24,160	24,620	219,300	23,270	24,950	24,530	25,140	24,240	25,260	25,170	24,640
MEAN a	1,403	4,829	6,474	11,900	10,480	9,246	9,251	9,704	3,331	1,873	2,302	1,939
AC-FT a	86,260	287,400	398,000	732,000	582,200	568,600	550,500	596,700	198,200	115,200	141,500	115,400

CAL YR 1972 TOTAL 151,625 MEAN 414 MAX 2,050 MIN 222 AC-FT 300,700 MEAN a 6,039 AC-FT a 4,372,000
WTR YR 1973 TOTAL 247,611 MEAN 678 MAX 29,000 MIN 380 AC-FT 491,100 MEAN a 4,418 AC-FT a 3,207,000

a Adjusted for diversions in and out of, change in contents of, and evaporation from Lake Oroville, Thermalito diversion pool, Thermalito Forebay, and Thermalito Afterbay.

SACRAMENTO RIVER BASIN

11407150 FEATHER RIVER NEAR GRIDLEY, CALIF.

LOCATION.--Lat 39°22'00", long 121°38'46", in Boga Fernandez Grant (revised), T.18 N., R.3 E., Butte County, on right bank 300 ft upstream from highway bridge, and 2.7 miles east of Gridley.

DRAINAGE AREA.--3,676 sq mi.

PERIOD OF RECORD.--October 1964 to current year. January 1944 to September 1964 are published in reports by California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 47.09 ft above mean sea level. Prior to Mar. 13, 1966, water-stage recorder on left bank at datum 2.91 ft below mean sea level.

AVERAGE DISCHARGE.--9 years, 5,263 cfs (3,813,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 47,000 cfs Jan. 19 (gage height, 38.69 ft); minimum daily, 1,310 cfs Apr. 9-11.
Period of record: Maximum discharge, 151,000 cfs Dec. 23, 1964 (gage height, 50.43 ft, present datum); minimum daily, 117 cfs June 27, 1966. Maximum discharge since construction of Oroville Dam in 1967, 72,900 cfs Jan. 27, 1970 (gage height, 42.81 ft).
Flood of Dec. 23, 1955, reached a stage of 52.25 ft (present datum), discharge unknown.

REMARKS.--Flow regulated by Lake Oroville since November 1967 (see sta 11406800) and Thermalito Afterbay release to the Feather River since December 1968 (see sta 11406920). See schematic diagram showing diversions and storage from Feather River at Lake Oroville. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,080	2,720	2,200	2,890	8,760	17,100	1,900	2,990	3,040	2,680	4,680	2,800
2	3,060	2,450	2,190	2,890	8,780	16,900	1,890	2,980	2,880	2,680	5,390	2,770
3	3,060	2,250	2,220	3,110	8,720	16,300	1,840	2,990	2,820	2,710	5,200	3,170
4	3,060	2,200	2,220	3,970	8,750	15,800	1,740	3,000	2,820	2,690	4,750	3,280
5	3,060	2,140	2,210	4,200	9,060	15,500	1,660	2,960	2,840	2,680	4,770	3,330
6	3,090	2,140	2,320	4,620	9,930	15,500	1,490	2,960	2,840	2,680	4,790	3,350
7	3,080	2,180	2,450	6,080	10,100	15,800	1,350	2,960	2,830	2,660	4,770	3,330
8	3,040	2,170	2,860	7,290	10,000	15,800	1,320	2,970	2,850	2,590	4,350	3,270
9	3,050	2,170	2,960	7,960	10,900	15,200	1,310	2,960	2,820	2,640	4,300	3,270
10	3,120	2,200	2,960	7,840	11,500	12,100	1,310	2,940	2,770	2,640	4,300	3,320
11	3,110	2,210	2,980	7,810	14,700	10,500	1,310	2,940	2,820	2,700	4,300	3,350
12	3,100	2,150	2,970	11,700	15,000	7,010	1,320	2,900	2,850	2,750	4,300	3,380
13	3,110	2,190	2,960	18,500	14,300	4,510	1,330	2,530	2,820	2,800	4,230	3,380
14	3,100	2,260	2,960	18,000	12,300	3,540	1,800	2,500	2,620	2,790	3,750	3,400
15	3,050	2,270	2,940	17,900	10,900	2,920	2,630	2,490	2,370	2,820	3,760	3,380
16	3,030	2,260	2,990	26,800	10,800	2,690	3,010	2,470	2,310	3,040	3,800	3,370
17	3,030	2,210	3,070	45,300	10,700	2,510	3,000	2,480	2,280	3,380	3,780	3,430
18	3,040	2,180	3,060	45,200	10,600	2,270	3,400	2,910	2,280	3,420	3,750	3,450
19	3,060	2,180	3,100	42,800	10,700	2,250	3,950	3,450	2,300	3,440	3,740	3,430
20	3,120	2,170	3,090	28,100	8,880	2,470	3,950	3,440	2,310	3,460	3,680	3,440
21	3,100	2,170	3,070	17,300	6,340	4,720	3,920	3,730	2,320	3,470	3,200	3,390
22	3,040	2,170	3,050	11,400	6,050	9,500	3,900	6,200	2,430	3,430	2,870	3,400
23	3,000	2,170	3,010	8,120	4,990	8,110	3,940	6,800	2,750	3,450	2,870	3,370
24	3,030	2,150	2,970	7,200	4,070	4,860	3,910	5,560	2,720	3,480	2,780	3,380
25	3,070	2,180	2,940	7,100	3,110	3,980	3,920	4,650	2,760	3,530	2,740	3,380
26	3,090	2,200	2,970	6,970	3,360	3,420	3,960	3,880	2,760	3,500	2,740	3,420
27	3,160	2,180	3,000	6,790	11,600	2,610	3,940	3,800	2,740	3,500	2,770	3,160
28	3,140	2,190	3,000	6,610	17,400	2,460	3,920	3,810	2,730	3,500	2,800	2,900
29	3,080	2,200	2,950	6,840	------	2,280	3,130	3,810	2,740	3,500	2,850	2,850
30	3,090	2,190	2,950	7,680	------	2,120	2,980	3,830	2,760	3,500	2,820	2,820
31	3,150	------	2,890	8,020	------	1,960	------	3,660	------	3,510	2,850	------
TOTAL	95,400	66,500	87,510	406,990	272,300	242,690	79,030	107,550	80,180	95,620	117,680	97,970
MEAN	3,077	2,217	2,823	13,130	9,725	7,829	2,634	3,469	2,673	3,085	3,796	3,266
MAX	3,160	2,720	3,100	45,300	17,400	17,100	3,960	6,800	3,040	3,530	5,390	3,450
MIN	3,000	2,140	2,190	2,890	3,110	1,960	1,310	2,470	2,280	2,590	2,740	2,770
AC-FT	189,200	131,900	173,600	807,300	540,100	481,400	156,800	213,300	159,000	189,700	233,400	194,300

CAL YR 1972 TOTAL 1,071,102 MEAN 2,927 MAX 11,800 MIN 975 AC-FT 2,125,000
WTR YR 1973 TOTAL 1,749,420 MEAN 4,793 MAX 45,300 MIN 1,310 AC-FT 3,470,000

11407300 NORTH HONCUT CREEK NEAR BANGOR, CALIF.

LOCATION.--Lat 39°20'32", long 121°29'25", in NW¼SE¼ sec.11, T.17 N., R.4 E., Butte County, on left bank 0.2 mile upstream from unnamed tributary, and 5.7 miles southwest of Bangor.

DRAINAGE AREA.--47.1 sq mi.

PERIOD OF RECORD.--October 1960 to September 1962, July 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 125 ft (from topographic map). Prior to September 1962, at site 50 ft upstream at same datum.

AVERAGE DISCHARGE.--12 years, 49.7 cfs (36,010 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 8,740 cfs Feb. 27 (gage height, 12.03 ft); no flow for several days. Period of record: Maximum discharge, 10,700 cfs Dec. 26, 1964 (gage height, 11.57 ft), from rating curve extended above 4,600 cfs; maximum gage height, 12.03 ft Feb. 27, 1973; no flow many days in 1961-62, 1966, 1968, 1971-73.

REMARKS.--Small diversions above station for irrigation. Slight regulation occurs from Lake Wyandotte (capacity, 1,460 acre-ft).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS.--WRD Calif. 1972: 1971(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	2.4	8.8	28	219	265	57	4.7	3.4	1.2	0	.70
2	.60	2.5	8.5	25	105	204	38	4.9	3.4	1.2	0	.50
3	.40	2.5	8.3	23	94	194	31	4.7	2.9	1.2	0	.50
4	.30	4.3	9.4	22	252	213	26	4.1	2.3	1.2	0	.70
5	1.6	25	9.9	20	193	146	23	4.2	1.9	.60	0	.90
6	1.6	7.9	12	18	307	593	21	4.4	1.8	.30	0	1.2
7	1.5	7.3	21	18	470	284	20	3.9	1.6	.20	0	1.2
8	1.7	19	24	36	212	235	17	3.6	1.5	.20	0	.90
9	2.1	11	20	899	265	155	16	3.3	1.6	.20	0	.50
10	3.0	13	18	530	1,350	121	15	3.0	1.6	.20	.40	.30
11	4.2	35	16	2,240	544	109	14	2.4	1.8	.10	.50	.70
12	5.1	28	15	1,650	221	83	13	2.1	2.0	.10	.50	1.3
13	3.5	14	13	494	195	68	13	3.7	2.1	0	.50	1.3
14	2.6	219	12	197	636	57	13	4.3	2.5	0	.50	1.1
15	2.3	198	12	321	309	48	12	4.6	2.5	0	.30	1.0
16	2.9	336	13	2,380	178	43	12	4.6	2.5	0	.30	.70
17	3.0	101	758	660	132	40	11	4.5	2.5	0	.20	.50
18	2.8	44	458	1,320	100	36	11	4.3	2.3	.30	.30	.50
19	3.1	52	732	406	78	34	10	4.5	2.0	.50	.30	.70
20	3.2	40	172	252	62	46	9.4	4.4	1.6	.50	.90	1.5
21	3.2	28	104	280	51	50	8.5	4.4	1.1	.60	.50	1.7
22	3.2	23	96	219	43	71	8.0	4.3	1.0	.80	.30	1.7
23	3.0	19	73	149	36	47	7.6	3.9	1.1	.70	.20	2.2
24	3.0	16	85	130	315	38	7.2	4.4	1.6	.50	.10	2.1
25	2.8	14	65	283	238	34	6.5	5.0	1.6	.40	.30	2.3
26	2.7	13	48	226	255	32	6.2	4.5	1.2	.30	.50	1.6
27	2.6	12	41	153	2,180	31	6.9	3.7	1.0	.20	.80	1.7
28	2.3	11	65	127	873	28	6.8	3.2	.90	.30	1.1	1.3
29	2.2	10	45	153	------	25	6.3	3.1	1.3	.20	.80	.70
30	2.1	9.5	36	773	------	24	5.3	2.8	1.2	.10	.70	1.0
31	2.2	------	32	254	------	147	------	2.9	------	.10	.80	------
TOTAL	75.70	1,317.4	3,030.9	14,286	9,913	3,501	451.7	122.4	55.80	12.20	10.80	33.00
MEAN	2.44	43.9	97.8	461	354	113	15.1	3.95	1.86	.39	.35	1.10
MAX	5.1	336	758	2,380	2,180	593	57	5.0	3.4	1.2	1.1	2.3
MIN	.30	2.4	8.3	18	36	24	5.3	2.1	.90	0	0	.30
AC-FT	150	2,610	6,010	28,340	19,660	6,940	896	243	111	24	21	65

CAL YR 1972 TOTAL 6,619.50 MEAN 18.1 MAX 758 MIN 0 AC-FT 13,130
WTR YR 1973 TOTAL 32,809.90 MEAN 89.9 MAX 2,380 MIN 0 AC-FT 65,080

11407500 SOUTH HONCUT CREEK NEAR BANGOR, CALIF.

LOCATION.--Lat 39°22'04", long 121°22'16", in SE¼SE¼ sec.35, T.18 N., R.5 E., Butte County, on right bank 2.3 miles southeast of Bangor, 3.3 miles upstream from Tennessee Creek, and 16.3 miles southeast of Oroville.

DRAINAGE AREA.--30.6 sq mi.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 620 ft (from topographic map).

AVERAGE DISCHARGE.--23 years, 36.1 cfs (26,150 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,890 cfs Feb. 27 (gage height, 9.37 ft); no flow Aug. 1-4.
Period of record: Maximum discharge, 17,600 cfs Dec. 26, 1964 (gage height, 19.25 ft), from rating curve extended above 2,200 cfs on basis of slope-area measurements at gage heights 11.15 and 19.25 ft; no flow at times in most years.

REMARKS.--Records good November through May, fair October and June through September. Some small diversions upstream for irrigation.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	1.3	3.9	13	100	178	92	10	3.2	1.0	0	.09
2	.24	1.4	3.6	12	77	140	68	9.9	3.8	1.0	0	.07
3	.21	2.0	3.7	11	101	148	54	9.7	3.4	.84	0	.05
4	.21	11	7.0	10	179	149	45	10	3.2	.73	0	.06
5	.25	8.1	5.7	9.3	116	113	40	12	2.7	.52	.01	.11
6	.28	3.1	7.5	8.8	193	342	36	9.8	2.4	.49	.03	.20
7	.21	14	8.5	8.0	314	171	33	11	2.0	.62	.04	.45
8	.22	13	7.9	17	148	140	31	9.9	1.6	1.2	.04	.56
9	.31	5.8	6.3	432	331	106	28	9.3	1.3	1.3	.03	.50
10	1.2	14	5.7	282	578	100	26	9.0	1.2	1.2	.04	.59
11	4.5	40	5.5	1,330	296	93	23	7.3	1.3	.97	.05	.68
12	3.1	14	5.3	1,150	163	77	23	6.2	1.4	.84	.04	.61
13	1.4	13	5.1	295	127	66	22	5.5	1.4	.58	.07	.68
14	1.1	267	4.6	130	331	58	22	5.1	1.6	.45	.05	.87
15	1.3	140	4.6	219	165	51	21	4.8	2.1	.38	.03	1.1
16	1.5	235	11	1,760	119	46	20	4.3	2.2	.33	.02	1.1
17	1.6	43	451	416	96	45	19	4.0	2.1	.30	.02	1.1
18	1.6	23	270	816	80	40	18	3.9	2.0	.26	.04	.94
19	1.5	48	293	231	67	45	17	3.7	2.0	.25	.05	.73
20	1.0	24	89	133	57	74	16	3.5	1.5	.40	.05	1.6
21	.93	16	49	121	50	84	15	3.5	1.1	.22	.06	1.7
22	1.1	12	40	87	44	77	15	3.4	.86	.27	.09	1.7
23	1.0	9.6	30	68	40	56	15	3.3	.95	.25	.07	2.2
24	.89	7.9	37	62	142	47	14	3.7	1.8	.22	.13	2.1
25	.73	6.7	27	149	76	43	13	4.2	1.8	.14	.21	2.0
26	.74	5.5	23	110	159	41	12	3.8	1.5	.13	.31	1.9
27	.85	4.9	22	83	1,170	38	11	3.4	1.1	.13	.36	1.8
28	1.1	4.6	24	67	320	34	10	3.0	1.2	.07	.38	1.8
29	.95	4.3	20	152	------	34	10	2.6	1.1	.08	.29	1.5
30	.80	4.0	16	335	------	60	10	2.4	1.0	.03	.20	1.2
31	1.0	------	15	144	------	290	------	2.6	------	.01	.12	------
TOTAL	32.10	996.2	1,501.9	8,661.1	5,639	2,986	779	184.8	54.81	15.21	2.83	29.99
MEAN	1.04	33.2	48.4	279	201	96.3	26.0	5.96	1.83	.49	.091	1.00
MAX	4.5	267	451	1,760	1,170	342	92	12	3.8	1.3	.38	2.2
MIN	.21	1.3	3.6	8.0	40	34	10	2.4	.86	.01	0	.05
AC-FT	64	1,980	2,980	17,180	11,180	5,920	1,550	367	109	30	5.6	59

CAL YR 1972 TOTAL 4,385.97 MEAN 12.0 MAX 451 MIN 0 AC-FT 8,700
WTR YR 1973 TOTAL 20,882.94 MEAN 57.2 MAX 1,760 MIN 0 AC-FT 41,420

PEAK DISCHARGE (BASE, 1,400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-11	2200	8.57	2,900	2-27	1400	9.37	3,890
1-16	0600	8.86	3,250				

11407700 FEATHER RIVER AT YUBA CITY, CALIF.

LOCATION.--Lat 39°08'20", long 121°36'17", in New Helvetia Grant, T.15 N., R.3 E., Yuba County, on left bank at 5th Street railroad bridge in Yuba City, 0.7 mile above confluence with Yuba River, and at mile 28.0 above mouth.

DRAINAGE AREA.--3,974 sq mi.

PERIOD OF RECORD.--October 1964 to current year. November 1943 to September 1963 (prior to July 1, 1944, stage only) published in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft below mean sea level.

AVERAGE DISCHARGE.--9 years, 5,590 cfs (4,050,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 54,600 cfs Jan. 19; minimum daily, 1,040 cfs Apr. 8.
Period of record: Maximum discharge, 172,000 cfs Dec. 23, 1964 (gage height, 76.42 ft); minimum daily, 166 cfs June 30, 1966.

REMARKS.--Flow regulated by powerplants and reservoirs. There are many diversions above the station for irrigation. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report. Discharge figures computed as differences between Feather River below Shanghai Bend and Yuba River near Marysville (see sta 11421000, 11421700).

COOPERATION.--Gage-height record furnished by California Department of Water Resources.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,050	2,800	2,210	2,450	9,080	22,500	1,970	3,000	3,580	2,940	4,220	3,150
2	3,030	2,380	2,220	2,390	8,650	19,000	1,590	3,080	3,150	2,920	5,100	3,100
3	3,070	2,210	2,220	2,360	8,430	17,500	1,620	3,160	3,020	2,950	5,600	3,290
4	3,090	2,070	2,190	2,910	8,520	17,400	1,510	3,250	2,980	2,990	5,060	3,540
5	3,120	2,050	2,250	3,450	9,190	16,800	1,440	3,210	2,950	2,930	4,990	3,620
6	3,120	2,050	2,410	3,580	9,680	16,100	1,320	3,150	2,940	2,990	4,990	3,620
7	3,120	2,060	2,440	4,450	11,300	17,600	1,110	3,260	2,880	3,070	5,000	3,640
8	3,100	2,110	2,710	5,840	11,500	16,900	1,040	3,200	2,830	3,030	4,790	3,630
9	3,080	2,120	2,940	7,250	10,900	16,300	1,290	3,120	2,830	3,070	4,550	3,550
10	3,200	2,180	2,970	10,600	12,700	13,800	1,290	3,100	2,780	3,050	4,550	3,560
11	3,230	2,260	2,950	9,080	18,000	11,700	1,260	3,130	2,790	2,990	4,520	3,630
12	3,230	2,430	3,210	16,100	18,000	8,370	1,250	3,150	2,810	3,080	4,480	3,690
13	3,230	2,290	3,000	41,200	16,300	5,490	1,270	2,990	2,750	3,120	4,510	3,780
14	3,220	2,230	2,950	33,000	14,100	3,710	1,420	2,800	2,750	3,090	4,180	3,810
15	3,170	3,270	2,970	20,500	14,100	3,580	2,180	2,810	2,440	3,110	4,000	3,810
16	3,150	3,160	3,040	17,500	12,300	2,050	2,840	2,760	2,370	3,130	4,030	3,730
17	3,150	3,360	4,390	49,200	11,400	2,280	2,950	2,690	2,370	3,460	3,990	3,750
18	3,080	2,790	5,640	46,000	10,800	2,030	2,960	2,750	2,360	3,590	3,880	3,770
19	3,110	2,490	6,200	54,600	10,600	1,870	3,760	3,550	2,310	3,660	3,830	3,800
20	3,130	2,460	4,960	48,400	10,200	1,850	3,910	3,670	2,340	3,690	3,890	3,840
21	3,100	2,360	4,090	27,300	6,670	2,660	3,890	3,730	2,340	3,720	3,650	3,800
22	3,020	2,250	3,830	16,200	6,030	7,770	3,820	4,840	2,360	3,710	3,190	3,840
23	2,960	2,220	3,410	10,300	5,130	9,060	3,850	7,180	2,710	3,690	3,110	3,860
24	2,910	2,170	3,180	8,230	4,280	5,570	3,870	6,310	2,860	3,670	3,040	3,790
25	2,970	2,180	3,090	7,500	3,890	3,900	3,870	5,380	2,860	3,690	3,030	3,800
26	2,960	2,150	2,940	7,560	2,890	3,520	3,920	4,440	2,870	3,670	3,020	3,850
27	3,010	2,170	2,870	7,440	6,400	2,580	3,930	4,100	2,870	3,640	3,010	3,750
28	3,000	2,180	2,840	6,860	21,400	2,240	3,900	4,110	2,850	3,800	3,070	3,450
29	2,930	2,180	2,800	6,590	------	2,110	3,580	3,990	2,870	3,700	3,100	3,290
30	2,920	2,180	2,690	5,900	------	1,910	3,020	4,000	2,930	3,550	3,070	3,270
31	2,980	------	2,530	9,740	------	1,750	------	4,000	------	3,690	3,100	------
TOTAL	95,440	70,810	98,140	494,480	292,440	259,900	75,630	113,910	82,750	103,390	124,550	109,010
MEAN	3,079	2,360	3,166	15,950	10,440	8,384	2,521	3,675	2,758	3,335	4,018	3,634
MAX	3,230	3,360	6,200	54,600	21,400	22,500	3,930	7,180	3,580	3,800	5,600	3,860
MIN	2,910	2,050	2,190	2,360	2,890	1,750	1,040	2,690	2,310	2,920	3,010	3,100
AC-FT	189,300	140,500	194,700	980,800	580,100	515,500	150,000	225,900	164,100	205,100	247,000	216,200

CAL YR 1972 TOTAL 1,114,230 MEAN 3,044 MAX 11,700 MIN 1,240 AC-FT 2,210,000
WTR YR 1973 TOTAL 1,920,450 MEAN 5,262 MAX 54,600 MIN 1,040 AC-FT 3,809,000

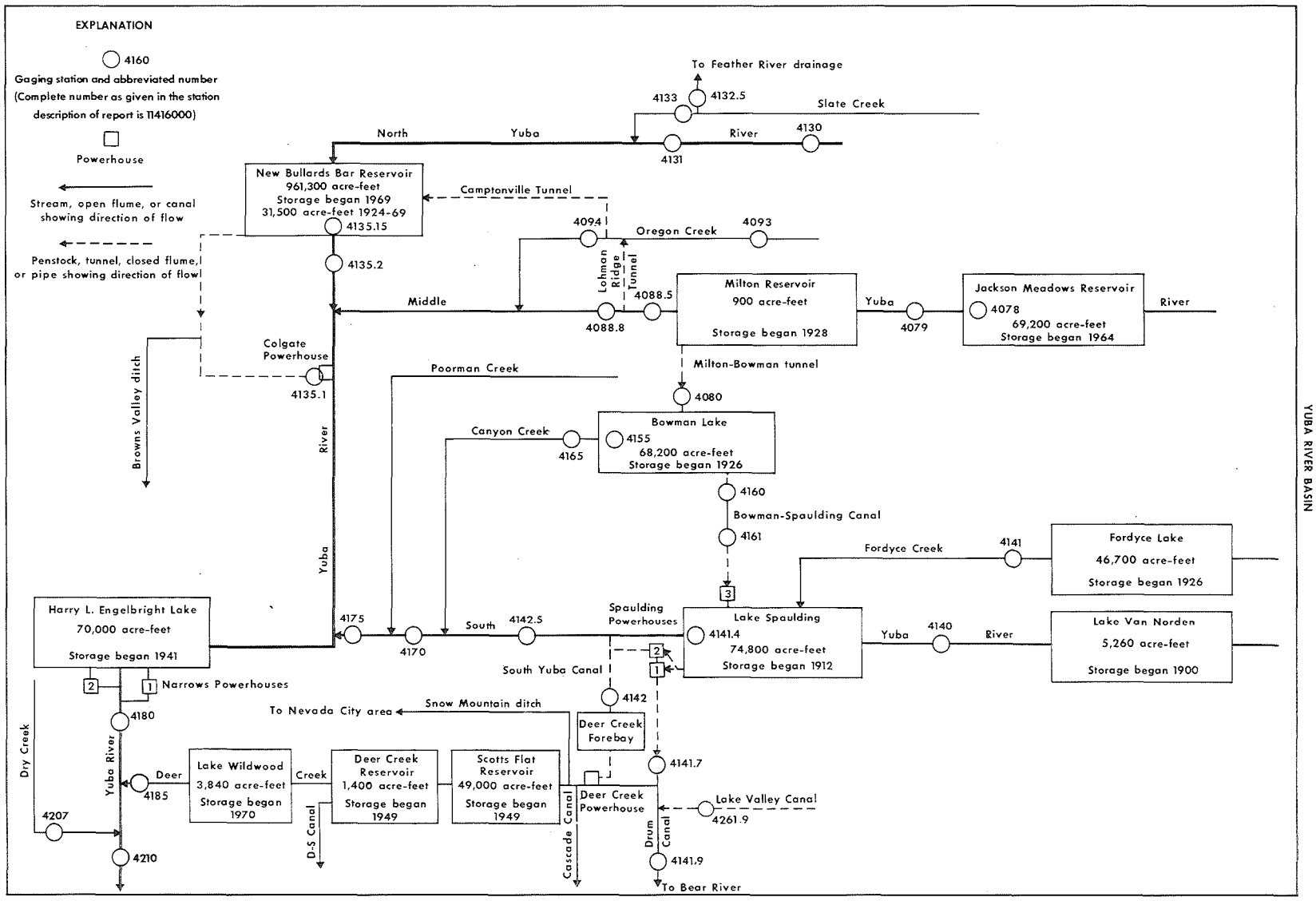

FIGURE 14.--Schematic diagram showing diversions and storage in Yuba River basin.

11407800 JACKSON MEADOWS RESERVOIR NEAR SIERRA CITY, CALIF.

LOCATION.--Lat 39°30'40", long 120°33'15", in NW¼SE¼ sec.18, T.19 N., R.13 E., Sierra County, Tahoe National Forest, on right bank at Jackson Meadows Dam on Middle Yuba River, 0.7 mile downstream from Pass Creek, and 5.7 miles southeast of Sierra City.

DRAINAGE AREA.--37.6 sq mi.

PERIOD OF RECORD.--November 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District).

EXTREMES.--Current year: Maximum contents, 70,200 acre-ft June 9-11 (elevation, 6,036.9 ft); minimum, 25,500 acre-ft Jan. 17 (elevation, 5,987.0 ft).
Period of record: Maximum contents, 71,000 acre-ft on several days in 1969-71 (elevation, 6,037.7 ft); minimum since reservoir first filled, 20,300 acre-ft Oct. 21 to Nov. 1, 1968 (elevation, 5,978.7 ft).

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Nov. 9, 1964. Usable capacity, 66,700 acre-ft between elevations 5,933.0 (bottom of intake tower) and 6,036.0 ft (top of spillway Tainter gates). Dead storage, 2,500 acre-ft. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1970: 1969.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,960	10,600	6,010	43,900
5,970	15,400	6,020	53,200
5,980	21,000	6,030	63,000
5,990	27,600	6,040	73,500
6,000	35,300		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68,000	64,800	45,700	30,800	27,800	30,700	33,300	46,200	--	69,600	69,300	62,100
2	68,200	64,000	45,100	30,300	28,000	30,800	33,400	47,000	--	69,500	69,200	61,600
3	68,200	63,400	44,500	29,800	28,100	31,000	33,500	47,900	--	69,500	69,200	61,100
4	68,200	63,000	43,600	29,200	28,200	31,000	33,600	48,700	69,400	69,500	69,100	60,600
5	68,200	62,200	43,200	28,600	28,300	31,100	33,800	49,200	69,300	69,500	69,100	60,000
6	68,000	61,500	42,700	28,100	28,500	31,200	33,900	49,700	69,400	69,500	69,100	59,500
7	68,000	60,900	42,200	27,500	28,600	31,300	34,000	50,400	69,800	69,500	69,000	58,900
8	68,000	60,200	41,600	27,100	28,600	31,300	34,300	51,200	70,100	69,500	69,000	58,400
9	68,000	59,400	41,000	26,600	28,900	31,400	34,800	52,100	70,200	69,500	69,000	57,800
10	68,000	58,600	40,200	26,100	29,000	31,500	35,200	53,300	70,200	69,500	69,000	57,300
11	68,300	57,800	39,600	25,900	29,200	31,600	35,500	54,500	70,200	69,500	69,000	56,700
12	68,400	57,000	39,000	26,200	29,200	31,700	36,000	56,000	70,100	69,400	68,900	56,200
13	68,400	56,300	38,400	26,200	29,300	31,700	36,300	57,600	70,100	69,400	68,900	55,500
14	68,400	55,800	37,700	26,000	29,400	31,800	36,800	59,500	69,900	69,400	68,900	54,900
15	68,400	55,100	37,200	25,700	29,500	31,900	37,000	61,300	69,900	69,400	68,900	54,300
16	68,400	54,600	36,400	25,600	29,500	32,000	37,300	--	69,900	69,400	68,800	53,800
17	68,500	54,000	36,200	25,500	29,600	32,000	37,700	--	69,900	69,400	68,800	53,100
18	68,500	53,500	36,000	25,900	29,800	32,100	37,900	--	69,900	69,400	68,700	52,400
19	68,500	52,800	36,200	26,100	29,800	32,200	38,100	--	69,900	69,400	68,700	51,800
20	68,600	52,200	35,900	26,200	29,900	32,300	38,400	--	69,900	69,400	68,500	51,300
21	68,600	51,700	35,700	26,400	30,000	32,400	38,700	--	69,700	69,300	67,800	50,700
22	68,600	51,100	35,600	26,600	30,100	32,400	39,000	--	69,700	69,300	67,300	50,200
23	68,600	50,500	35,200	26,700	30,100	32,500	39,600	--	69,700	69,300	66,700	49,500
24	68,500	50,000	34,800	26,800	30,200	32,600	40,200	--	69,700	69,300	66,200	49,000
25	68,500	49,400	34,400	27,000	30,300	32,700	41,000	--	69,700	69,300	65,700	48,400
26	68,500	48,900	33,900	27,100	30,400	32,800	41,800	--	69,700	69,300	65,100	47,800
27	68,500	48,200	33,400	27,300	30,600	32,800	42,900	--	69,700	69,300	64,600	47,200
28	68,200	47,600	32,900	27,300	30,700	32,900	43,900	--	69,600	69,300	64,100	46,700
29	67,200	46,900	32,400	27,500	------	33,000	44,800	--	69,600	69,300	63,600	46,000
30	66,400	46,400	31,800	27,600	------	33,200	45,500	--	69,600	69,300	63,100	45,500
31	65,700	------	31,300	27,800	------	33,200	------	--	------	69,300	62,600	------
MAX	68,600	64,800	45,700	30,800	30,700	33,200	45,500	--		69,600	69,300	62,100
MIN	65,700	46,400	31,300	25,500	27,800	30,700	33,300	--		69,300	62,600	45,500
(a)	6,032.6	6,012.7	5,995.0	5,990.2	5,994.1	5,997.4	6,011.7	--	6,036.4	6,036.1	6,029.6	6,011.7
(b)	+15,400	-19,300	-15,100	-3,500	+2,900	+2,500	+12,300	--	--	-300	-6,700	-17,100

CAL YR 1972 b --
WTR YR 1973 b -22,700

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11407900 MIDDLE YUBA RIVER BELOW JACKSON MEADOWS DAM, NEAR SIERRA CITY, CALIF.

LOCATION.--Lat 39°30'58", long 120°33'40", in SE¼NW¼ sec.18, T.19 N., R.13 E., Sierra County, Tahoe National Forest, on right bank 0.6 mile downstream from Jackson Meadows Dam, and 5.2 miles southeast of Sierra City.

DRAINAGE AREA.--38.3 sq mi.

PERIOD OF RECORD.--October 1964 to current year. If record for Milton-Bowman tunnel near Graniteville is added to record published as Middle Yuba River at Milton, a record equivalent to this site can be obtained for the period 1928-64.

GAGE.--Water-stage recorder. Datum of gage is 5,717.20 ft above mean sea level (levels by Nevada Irrigation District).

AVERAGE DISCHARGE (adjusted for change in contents in Jackson Meadows Reservoir).--9 years, 119 cfs (86,220 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 740 cfs May 31 (gage height, 4.10 ft); minimum daily, 5.5 cfs Oct. 3, Aug. 18, 19.
Period of record: Maximum discharge, 2,300 cfs Sept. 1, 1965 (gage height, 6.60 ft), from rating curve extended above 1,100 cfs on basis of computation of flow over Milton Dam at gage height, 10.57 ft; minimum daily, 0.1 cfs Oct. 1, 2, 1964.
Maximum stage known since at least 1925, 10.57 ft Jan. 31, 1963, from floodmarks (discharge, 10,000 cfs, by computation of flow over Milton Dam, adjusted for diversion and inflow).

REMARKS.--Records good. Flow regulated by Jackson Meadows Reservoir since November 1964 (see sta 11407800). See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	456	390	306	6.5	7.9	8.5	12	665	25	5.8	248
2	5.8	472	386	298	6.5	7.9	8.5	13	520	22	5.8	254
3	5.5	484	382	298	6.5	7.9	8.5	14	432	20	5.8	257
4	5.8	472	379	295	6.5	7.9	8.8	12	379	19	5.8	260
5	5.8	456	376	295	6.5	7.6	9.8	12	376	18	5.8	260
6	5.8	456	372	295	6.5	7.6	12	10	197	16	5.8	257
7	5.8	436	368	295	6.5	7.9	12	11	32	12	5.8	257
8	5.8	424	365	292	6.5	7.9	13	12	98	11	5.8	257
9	6.0	488	362	292	6.5	7.9	14	12	146	10	5.8	254
10	6.2	508	358	292	6.5	7.9	17	12	158	10	5.8	254
11	8.2	496	358	298	6.5	8.2	18	13	152	8.8	5.8	270
12	6.2	472	354	306	6.5	8.2	19	12	138	8.2	5.8	302
13	6.0	420	351	295	6.2	8.2	16	14	130	8.8	5.8	302
14	6.0	396	344	292	6.2	8.2	14	14	119	8.8	5.8	302
15	6.0	379	344	292	6.2	8.2	13	12	109	8.2	5.8	302
16	6.5	354	344	295	6.2	8.2	12	12	98	8.5	5.8	302
17	6.5	326	348	200	6.2	8.2	13	11	86	8.2	5.8	302
18	6.8	326	344	10	6.2	8.2	12	161	79	7.6	5.5	302
19	6.2	326	348	8.2	6.2	8.2	12	448	73	6.8	5.5	302
20	6.0	326	337	7.9	6.8	8.2	11	448	68	6.5	113	298
21	6.0	326	337	7.6	6.8	8.2	12	291	63	6.2	257	298
22	6.0	326	337	7.3	6.8	7.9	13	138	62	6.0	257	298
23	6.0	326	330	7.0	6.8	8.2	14	148	54	5.8	257	295
24	6.0	326	323	6.8	7.0	8.2	15	309	51	5.8	254	295
25	6.0	320	323	6.8	7.0	8.2	16	508	45	5.8	254	295
26	6.0	320	320	6.8	7.0	8.2	17	560	44	5.8	254	295
27	6.0	362	320	6.5	7.0	8.5	17	476	41	5.8	248	292
28	198	379	316	6.5	7.9	8.8	17	460	41	5.8	248	288
29	468	386	316	6.5	------	8.5	15	480	33	5.8	248	284
30	420	386	312	6.5	------	8.8	13	536	28	5.8	248	284
31	444	------	309	6.5	------	8.5	------	625	------	5.8	248	------
TOTAL	1,694.7	11,930	10,753	5,036.9	184.5	252.4	401.1	5,796	4,517	307.8	2,995.6	8,466
MEAN	54.7	398	347	162	6.59	8.14	13.4	187	151	9.93	96.6	282
MAX	468	508	390	306	7.9	8.8	19	625	665	25	257	302
MIN	5.5	320	309	6.5	6.2	7.6	8.5	10	28	5.8	5.5	248
AC-FT	3,360	23,660	21,330	9,990	366	501	796	11,500	8,960	611	5,940	16,790

CAL YR 1972 TOTAL 31,403.1 MEAN 85.8 MAX 508 MIN 4.8 AC-FT 62,290 MEAN a -- AC-FT a --
WTR YR 1973 TOTAL 52,335.0 MEAN 143 MAX 665 MIN 5.5 AC-FT 103,800 MEAN a 112 AC-FT a 81,100

a Adjusted for change in contents in Jackson Meadows Reservoir.

11408000 MILTON-BOWMAN TUNNEL OUTLET NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°27'36", long 120°36'40", in NW¼NE¼ sec.3, T.18 N., R.12 E., Nevada County, on right bank 100 ft downstream from tunnel outlet near upper end of Bowman Lake, and 6.9 miles east of Graniteville.

PERIOD OF RECORD.--May 1928 to September 1930, February 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to October 1962, published as Milton-Bowman tunnel at outlet.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 5,592.51 ft above mean sea level. Prior to Sept. 22, 1964, at datum 0.56 ft higher.

AVERAGE DISCHARGE.--45 years, 73.0 cfs (52,890 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 492 cfs Feb. 11, 1941; minimum daily, 0.4 cfs Oct. 7, 1944.

REMARKS.--Records good. Tunnel diverts from Middle Yuba River at Milton, in sec.12, T.19 N., R.12 E., and discharges into Bowman Lake. Practically the entire flow of Middle Yuba River is diverted during low and medium flows. Middle Yuba River flow is regulated by Jackson Meadows Reservoir (see sta 11407800) since November 1964. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	419	353	340	13	14	14	43	24	28	5.1	272
2	3.1	419	352	339	13	14	14	44	21	28	4.9	273
3	3.1	425	354	338	13	14	14	46	22	27	4.6	277
4	3.1	438	354	335	14	14	15	46	20	27	4.6	276
5	3.1	428	349	332	12	13	16	36	20	26	4.6	275
6	3.1	418	350	331	12	13	20	32	19	26	4.6	274
7	2.9	409	349	328	12	12	23	34	18	25	4.9	273
8	2.9	396	347	330	12	12	24	40	17	24	4.9	269
9	2.9	402	345	330	12	12	28	44	17	22	5.1	270
10	3.5	435	344	326	14	12	31	48	16	14	4.9	272
11	5.8	435	345	336	13	13	31	54	15	8.9	4.9	282
12	4.0	425	349	414	12	12	36	58	15	8.9	4.9	313
13	3.5	402	349	380	11	12	37	66	13	8.9	4.9	312
14	3.5	378	348	350	11	12	28	68	12	8.9	4.9	312
15	3.5	362	347	350	10	12	30	66	12	8.6	4.9	311
16	3.8	338	347	364	10	12	30	64	11	8.0	4.6	309
17	4.4	316	374	306	10	13	32	63	11	8.0	4.6	310
18	4.0	317	374	44	10	12	30	138	10	7.4	4.6	309
19	3.8	317	404	28	10	12	28	421	10	7.2	4.6	309
20	3.5	316	381	24	10	13	27	425	75	6.7	53	314
21	3.5	315	370	22	11	12	27	382	107	5.8	276	306
22	3.5	311	389	20	10	11	30	197	64	5.8	269	306
23	3.5	311	372	19	10	12	36	197	58	5.6	275	306
24	3.5	311	364	18	12	12	41	316	39	5.3	274	306
25	3.5	310	356	18	12	13	44	278	26	5.1	277	304
26	3.5	310	354	16	12	14	50	140	27	5.1	279	304
27	3.5	322	352	16	13	15	56	108	28	5.1	277	304
28	218	352	350	15	14	15	57	109	28	5.1	274	303
29	322	352	346	15	------	14	52	109	28	5.1	273	303
30	399	350	345	15	------	14	46	109	28	5.1	272	302
31	405	------	342	14	------	14	------	76	------	5.1	272	------
TOTAL	1,439.3	11,039	11,055	6,113	328	399	947	3,857	811	386.7	3,162.1	8,856
MEAN	46.4	368	357	197	11.7	12.9	31.6	124	27.0	12.5	102	295
MAX	405	438	404	414	14	15	57	425	107	28	279	314
MIN	2.9	310	342	14	10	11	14	32	10	5.1	4.6	269
AC-FT	2,850	21,900	21,930	12,130	651	791	1,880	7,650	1,610	767	6,270	17,570

CAL YR 1972 TOTAL 32,194.6 MEAN 88.0 MAX 438 MIN 2.9 AC-FT 63,860
WTR YR 1973 TOTAL 48,393.1 MEAN 133 MAX 438 MIN 2.9 AC-FT 95,990

11408850 MIDDLE YUBA RIVER NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°25'01", long 120°57'06", in SW¼SE¼ sec.15, T.18 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 0.6 mile downstream from Kanaka Creek, and 5.8 miles southeast of Camptonville.

DRAINAGE AREA.--136 sq mi.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,170 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 334 cfs (242,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,120 cfs Jan. 12 (gage height, 10.77 ft); minimum daily, 33 cfs Aug. 22, 23.
Period of record: Maximum discharge, 12,300 cfs Jan. 21, 1970 (gage height, 14.80 ft); minimum daily, 21 cfs Oct. 17, 1971.

REMARKS.--Records good. Natural flow of stream affected by Jackson Meadows Reservoir since November 1964 (see sta 11407800), Milton-Bowman tunnel (see sta 11408000) which diverts above station to Bowman Lake (see sta 11415500), and other small diversions above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	40	98	185	332	918	410	566	810	76	41	40
2	43	40	95	177	308	876	383	554	730	72	40	40
3	41	54	113	173	320	786	365	566	645	69	39	39
4	39	381	157	146	510	730	356	590	594	68	39	39
5	37	308	116	137	518	660	386	500	578	67	39	38
6	36	152	116	135	514	626	444	444	518	64	39	38
7	39	141	114	125	574	570	503	440	231	62	38	36
8	38	185	101	144	510	526	486	482	237	62	37	36
9	40	128	106	245	482	486	542	514	302	60	37	35
10	66	144	111	320	838	510	582	554	335	59	37	36
11	192	205	146	1,010	828	590	618	606	326	57	36	36
12	106	156	109	3,240	755	518	670	670	302	57	37	36
13	61	132	98	1,770	606	478	685	740	292	56	36	36
14	54	336	113	1,120	578	440	590	775	275	58	35	35
15	66	265	89	917	514	416	558	792	255	59	35	35
16	80	357	99	2,640	461	407	518	765	235	57	35	35
17	82	245	768	1,710	431	416	538	755	217	55	34	35
18	72	185	885	1,620	410	395	530	740	199	54	34	35
19	65	193	1,510	1,160	386	392	489	675	195	53	34	35
20	58	177	867	870	371	416	454	606	173	51	34	67
21	55	150	623	710	359	386	437	538	120	51	34	57
22	52	139	936	590	350	365	447	478	98	51	33	41
23	49	123	665	503	341	356	510	450	95	50	33	45
24	47	113	534	447	410	350	562	464	92	49	34	51
25	45	106	425	431	510	359	598	475	88	47	34	48
26	44	108	362	386	542	371	670	740	87	45	49	42
27	43	113	315	356	839	407	750	705	82	44	51	39
28	43	111	290	326	1,010	407	765	665	78	43	49	37
29	43	106	243	326	------	392	715	690	78	43	43	36
30	54	103	221	341	------	389	626	720	81	42	42	36
31	42	------	205	353	------	431	------	725	------	41	40	------
TOTAL	1,770	4,996	10,630	22,613	14,607	15,369	16,187	18,984	8,348	1,722	1,178	1,194
MEAN	57.1	167	343	729	522	496	540	612	278	55.5	38.0	39.8
MAX	192	381	1,510	3,240	1,010	918	765	792	810	76	51	67
MIN	36	40	89	125	308	350	356	440	78	41	33	35
AC-FT	3,510	9,910	21,080	44,850	28,970	30,480	32,110	37,650	16,560	3,420	2,340	2,370

CAL YR 1972 TOTAL 89,982 MEAN 246 MAX 1,550 MIN 30 AC-FT 178,500
WTR YR 1973 TOTAL 117,598 MEAN 322 MAX 3,240 MIN 33 AC-FT 233,300

11408880 MIDDLE YUBA RIVER BELOW OUR HOUSE DAM, CALIF.

LOCATION.--Lat 39°24'42", long 120°59'49", in SW¼NW¼ sec.20, T.18 N., R.9 E., Sierra County, Tahoe National Forest, on right bank 400 ft downstream from Our House Dam, and 4.0 miles southeast of Camptonville.

DRAINAGE AREA.--145 sq mi.

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,967.51 ft above mean sea level. Prior to Nov. 4, 1970, at datum 10.0 ft lower.

AVERAGE DISCHARGE.--5 years, 182 cfs (131,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,550 cfs Jan. 12 (gage height, 16.79 ft); minimum daily, 19 cfs Oct. 7-9.
Period of record: Maximum discharge, 12,500 cfs Jan. 21, 1970 (gage height, 20.70 ft, present datum); minimum daily, 3.2 cfs Oct. 21 to Nov. 4, 1970.

REMARKS.--Records good. Natural flow of stream affected by Jackson Meadows Reservoir since November 1964 (see sta 11407800), Milton-Bowman tunnel (see sta 11408000) which diverts above station to Bowman Lake (see sta 11415500), Lohman Ridge tunnel since October 1968 which diverts 400 ft upstream to Oregon Creek and thence to Bullards Bar Reservoir via Camptonville tunnel. Other small diversions above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	28	35	50	51	140	57	56	54	28	32	32
2	20	29	35	50	51	106	57	56	53	28	32	32
3	20	30	35	50	51	59	57	56	51	28	32	32
4	20	35	36	49	53	59	57	56	50	29	32	32
5	20	35	36	49	54	57	57	56	49	30	32	32
6	20	33	36	49	53	57	57	56	49	30	32	32
7	19	33	36	50	54	57	57	56	44	30	32	32
8	19	33	43	49	53	57	57	48	44	30	32	32
9	19	33	48	50	53	57	57	47	44	31	32	32
10	20	33	46	52	162	57	57	49	44	31	32	32
11	24	34	46	598	158	57	57	51	44	31	32	31
12	26	34	45	3,240	78	57	57	53	44	31	32	32
13	25	33	45	1,190	55	57	56	54	44	31	32	32
14	25	36	45	399	54	57	55	55	44	31	32	32
15	25	36	45	138	53	57	55	55	44	31	32	32
16	25	36	45	2,420	53	57	54	54	36	31	32	32
17	25	36	175	1,120	52	57	54	51	27	31	32	32
18	26	36	168	966	52	57	54	51	22	31	32	32
19	27	36	842	473	51	57	54	49	21	31	32	32
20	27	36	136	114	51	57	54	47	25	31	32	32
21	27	35	56	56	51	57	54	47	29	31	32	33
22	27	35	182	54	51	57	54	46	28	31	32	32
23	27	35	57	52	51	57	54	45	28	31	32	32
24	27	35	54	52	52	57	55	45	28	31	32	32
25	27	35	53	51	53	57	56	45	28	32	32	32
26	27	35	52	51	53	57	58	50	28	32	32	32
27	27	35	51	51	147	57	59	50	28	32	32	32
28	27	35	51	51	296	57	59	50	28	32	32	32
29	27	36	51	51	------	57	59	50	28	32	32	32
30	27	36	51	51	------	57	58	50	28	32	32	32
31	27	------	50	51	------	57	------	50	------	32	32	------
TOTAL	749	1,027	2,686	11,727	2,046	1,903	1,686	1,584	1,114	953	992	960
MEAN	24.2	34.2	86.6	378	73.1	61.4	56.2	51.1	37.1	30.7	32.0	32.0
MAX	27	36	842	3,240	296	140	59	56	54	32	32	33
MIN	19	28	35	49	51	57	54	45	21	28	32	31
AC-FT	1,490	2,040	5,330	23,260	4,060	3,770	3,340	3,140	2,210	1,890	1,970	1,900
(a)	2,280	8,590	17,290	24,860	27,020	28,930	31,110	37,260	15,560	1,780	540	640

CAL YR 1972 TOTAL 16,803 MEAN 45.9 MAX 1,050 MIN 19 AC-FT 33,330
WTR YR 1973 TOTAL 27,427 MEAN 75.1 MAX 3,240 MIN 19 AC-FT 54,400

a Diversion, in acre-feet, to Lohman Ridge tunnel.

11409300 OREGON CREEK AT CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°26'46", long 121°02'43", in SE¼NE¼ sec.11, T.18 N., R.8 E., Yuba County, Tahoe National Forest, on right bank 25 ft downstream from county bridge, 0.5 mile southeast of Camptonville, and 5.5 miles upstream from mouth.

DRAINAGE AREA.--23.0 sq mi.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,230 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 74.4 cfs (53,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,700 cfs Jan. 12 (gage height, 8.15 ft); minimum daily, 1.6 cfs Sept. 10.
Period of record: Maximum discharge, 3,130 cfs Jan. 21, 1970 (gage height, 10.07 ft); minimum daily, 1.6 cfs Sept. 3, 1972, Sept. 10, 1973.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.9	18	53	128	328	132	88	21	7.1	2.3	2.7
2	3.6	4.8	18	50	116	310	115	82	19	6.9	2.1	2.4
3	3.4	8.2	26	49	123	266	105	81	18	6.7	2.0	2.1
4	3.3	76	53	42	208	240	99	86	17	6.4	2.1	2.1
5	3.3	49	31	40	221	216	100	77	15	6.2	2.3	2.1
6	3.3	21	26	37	226	218	103	68	14	6.2	2.7	2.1
7	3.3	31	15	34	265	177	108	64	14	6.7	2.7	2.1
8	4.7	36	10	37	244	162	107	64	13	6.1	2.7	2.0
9	4.5	22	9.1	64	238	147	110	66	12	5.8	2.7	1.8
10	8.9	38	9.0	93	416	155	114	67	12	5.8	2.8	1.6
11	31	58	9.1	473	318	193	117	68	12	5.5	2.7	1.7
12	13	36	9.2	1,230	295	166	123	68	11	5.3	2.6	1.9
13	7.4	28	9.4	704	234	148	128	69	11	5.3	2.6	2.1
14	6.3	97	9.7	441	220	132	120	68	12	5.3	2.3	2.0
15	7.6	75	19	353	199	119	112	63	12	5.1	2.0	2.0
16	9.0	102	23	983	176	111	104	59	11	5.1	1.9	2.0
17	9.4	65	216	677	157	111	109	56	11	4.9	1.8	2.1
18	7.4	52	275	641	142	102	107	53	11	4.9	1.9	2.3
19	6.5	71	482	469	131	100	103	49	10	4.7	2.0	2.3
20	6.2	58	257	342	123	105	96	44	9.5	4.0	1.9	11
21	5.8	43	187	277	116	98	90	40	9.3	3.6	1.9	6.9
22	5.5	36	288	232	112	93	85	36	8.9	3.8	2.0	3.6
23	5.4	29	222	197	106	91	86	32	8.9	3.3	2.4	9.3
24	5.2	26	176	173	128	88	91	37	9.5	3.0	2.8	9.6
25	5.0	23	136	163	173	87	95	33	8.7	2.8	3.3	7.9
26	5.0	22	111	143	180	88	100	29	8.2	2.8	4.0	4.9
27	5.0	22	97	130	268	92	106	26	8.2	2.6	4.7	3.6
28	4.9	21	86	119	354	92	108	24	7.6	2.4	4.0	3.3
29	4.8	20	73	119	------	88	105	22	7.4	2.6	3.6	3.0
30	4.8	19	46	123	------	94	91	21	7.1	2.4	2.8	2.8
31	4.8	------	59	137	------	156	------	22	------	2.3	2.7	------
TOTAL	201.8	1,193.9	3,005.5	8,625	5,617	4,573	3,169	1,662	349.3	145.6	80.3	105.3
MEAN	6.51	39.8	97.0	278	201	148	106	53.6	11.6	4.70	2.59	3.51
MAX	31	102	482	1,230	416	328	132	88	21	7.1	4.7	11
MIN	3.3	4.8	9.0	34	106	87	85	21	7.1	2.3	1.8	1.6
AC-FT	400	2,370	5,960	17,110	11,140	9,070	6,290	3,300	693	289	159	209

CAL YR 1972 TOTAL 21,661.2 MEAN 59.2 MAX 732 MIN 1.6 AC-FT 42,960
WTR YR 1973 TOTAL 28,727.7 MEAN 78.7 MAX 1,230 MIN 1.6 AC-FT 56,980

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-18	2300	6.37	780	1-16	1315	7.52	1,360
1-12	0445	8.15	1,700	1-18	1130	6.45	840

11409400 OREGON CREEK BELOW LOG CABIN DAM, NEAR CAMPTONVILLE, CALIF.

LOCATION.--Lat 39°26'22", long 121°03'29", in SW¼SW¼ sec.11, T.18 N., R.8 E., Yuba County, Tahoe National Forest, on right bank 500 ft downstream from Log Cabin Dam, 670 ft upstream from High Point Ravine, and 1.1 miles southwest of Camptonville. Prior to July 24, 1973, at site 470 ft downstream.

DRAINAGE AREA.--29.1 sq mi.

PERIOD OF RECORD.--August 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,919.96 ft above mean sea level (levels by Yuba County Water Agency). Prior to July 24, 1973, at site 470 ft downstream at datum 8.40 ft lower.

AVERAGE DISCHARGE.--5 years, 56.7 cfs (41,080 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,930 cfs Jan. 12 (gage height, 5.68 ft, site and datum then in use); minimum daily, 4.7 cfs Oct. 22, 23.
Period of record: Maximum discharge, 4,180 cfs Jan. 21, 1970 (gage height, 7.02 ft, previous site and datum); maximum gage height, 7.51 ft Jan. 16, 1970; minimum daily discharge, 0.34 cfs Sept. 18, 1972.

REMARKS.--Records good. Camptonville tunnel (maximum capacity, about 830 cfs) 600 ft upstream, diverts to New Bullards Bar Reservoir (see sta 11413515); diversion began October 1968. See schematic diagram showing diversions and storage in Yuba River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.5	8.4	10	13	19	15	15	16	7.5	12	9.4
2	12	7.5	8.4	10	12	19	15	14	15	7.5	12	9.0
3	12	8.1	8.9	10	12	18	15	15	15	7.5	12	8.6
4	12	12	9.8	9.7	14	17	15	15	15	8.0	11	8.6
5	12	11	8.9	9.4	15	17	15	14	14	8.4	11	8.4
6	12	9.4	8.9	9.1	15	17	16	14	14	8.4	11	8.4
7	12	9.4	8.7	9.0	15	16	16	14	12	8.4	10	8.4
8	12	9.8	8.6	9.4	15	16	16	14	12	8.4	10	7.9
9	12	8.9	8.3	11	15	16	16	14	13	8.4	10	6.7
10	13	9.4	8.6	12	32	16	16	14	13	8.4	10	6.7
11	13	10	8.2	317	20	16	16	15	13	8.4	9.5	7.1
12	10	9.4	8.5	1,210	19	16	15	15	13	8.4	9.5	7.0
13	8.7	9.1	8.4	331	17	16	15	15	13	8.4	9.5	6.6
14	8.7	12	8.3	51	17	15	14	15	13	8.4	9.5	6.3
15	8.7	11	8.4	20	16	15	14	15	13	7.5	9.5	6.3
16	9.1	12	8.6	757	16	15	14	15	11	13	9.0	6.5
17	9.1	11	14	327	16	15	15	15	10	12	8.8	6.7
18	9.1	10	50	307	15	15	15	15	10	11	8.6	6.8
19	8.7	10	134	85	15	15	15	15	9.6	11	8.6	6.9
20	6.5	9.9	15	17	15	15	15	15	8.7	11	8.4	11
21	4.9	9.4	14	16	15	15	14	15	8.1	11	8.4	11
22	4.7	9.1	15	15	15	15	14	14	7.8	11	8.4	10
23	4.7	8.7	15	14	15	15	15	14	7.8	11	8.6	10
24	4.9	8.7	13	13	15	15	14	14	7.8	11	9.2	11
25	4.9	8.5	13	13	16	15	15	14	7.8	11	9.9	11
26	4.9	8.4	12	13	16	15	15	15	7.8	11	10	10
27	4.9	8.5	11	13	28	15	15	15	7.8	11	11	10
28	4.9	8.4	11	13	24	15	16	15	7.8	11	11	10
29	4.9	8.4	11	13	------	15	16	15	7.5	12	10	10
30	5.2	8.4	10	13	------	15	15	15	7.7	12	10	9.9
31	5.2	------	10	13	------	16	------	15	------	12	9.6	------
TOTAL	265.7	282.9	485.9	3,670.6	468	490	452	454	331.2	304.0	306.0	256.2
MEAN	8.57	9.43	15.7	118	16.7	15.8	15.1	14.6	11.0	9.81	9.87	8.54
MAX	13	12	134	1,210	32	19	16	15	16	13	12	11
MIN	4.7	6.5	8.2	9.0	12	15	14	14	7.5	7.5	8.4	6.3
AC-FT	527	561	964	7,280	928	972	897	901	657	603	607	508
(a)	2,240	11,030	24,200	39,220	40,180	39,430	38,170	40,530	15,780	1,540	134	396

CAL YR 1972 TOTAL 4,937.40 MEAN 13.5 MAX 515 MIN .34 AC-FT 9,790
WTR YR 1973 TOTAL 7,766.50 MEAN 21.3 MAX 1,210 MIN 4.7 AC-FT 15,400

(a) Camptonville tunnel diversion, in acre-feet, to New Bullards Bar Reservoir.

11413000 NORTH YUBA RIVER BELOW GOODYEARS BAR, CALIF.

LOCATION.--Lat 39°31'30", long 120°56'13", in NE¼SW¼ sec.11, T.19 N., R.9 E., Sierra County, Tahoe National Forest, 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.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1949, published as North Fork Yuba River below Goodyears Bar. Monthly and yearly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2,435 ft above mean sea level (river-profile survey).

AVERAGE DISCHARGE.--43 years, 751 cfs (544,100 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,540 cfs Jan. 16 (gage height, 9.74 ft); minimum daily, 144 cfs Sept. 30.
Period of record: Maximum discharge, 40,000 cfs Feb. 1, 1963 (gage height, 23.8 ft, from floodmarks), from rating curve extended above 8,500 cfs on basis of one float measurement at 17,900 cfs and slope-area measurements at gage heights 19.15 and 23.8 ft; minimum, 69 cfs Aug. 26, 1931.

REMARKS.--Records good. Several small diversions above station for irrigation and mining. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1041: 1944. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	171	268	497	676	1,480	709	1,800	1,600	341	201	164
2	175	171	266	483	654	1,380	673	1,840	1,460	333	197	161
3	162	193	297	480	660	1,260	653	1,940	1,340	324	194	161
4	155	1,100	349	431	834	1,160	664	1,930	1,240	313	193	158
5	156	653	271	404	916	1,050	730	1,560	1,190	306	192	157
6	151	431	296	405	893	1,010	863	1,420	1,140	298	191	157
7	151	454	289	375	966	925	998	1,560	1,070	291	190	156
8	154	436	269	400	895	872	956	1,790	1,030	287	186	153
9	170	357	238	460	867	820	1,130	1,920	992	281	185	151
10	299	393	246	496	1,330	880	1,270	2,070	927	274	183	150
11	720	443	229	1,320	1,190	1,030	1,400	2,340	844	269	182	151
12	392	365	252	4,240	1,140	908	1,530	2,600	784	263	180	150
13	250	365	228	3,060	973	844	1,550	2,950	742	264	177	149
14	224	604	226	2,070	919	788	1,290	3,060	701	261	175	147
15	290	504	233	1,690	850	753	1,250	3,100	659	257	173	147
16	358	594	247	3,930	791	743	1,160	3,050	620	253	170	147
17	379	465	1,210	2,670	756	755	1,280	3,110	590	253	168	147
18	304	402	1,600	2,540	731	713	1,210	3,100	555	246	167	147
19	273	423	3,010	1,990	703	709	1,140	2,920	526	240	165	148
20	242	379	1,930	1,520	686	724	1,080	2,670	505	237	164	238
21	221	340	1,400	1,290	677	690	1,050	2,390	486	236	164	192
22	208	320	2,440	1,100	661	660	1,150	2,250	470	233	163	164
23	200	286	1,570	975	651	645	1,380	2,180	457	229	163	202
24	190	280	1,210	896	778	645	1,560	2,360	445	225	165	196
25	183	271	955	865	929	668	1,700	2,320	428	221	171	186
26	181	286	816	784	944	693	1,990	1,940	415	215	201	164
27	179	300	746	734	1,290	752	2,250	1,760	399	216	218	155
28	176	285	693	704	1,610	732	2,310	1,810	385	212	185	151
29	174	278	615	702	------	695	2,170	1,870	368	209	174	147
30	167	262	574	704	------	703	1,950	1,890	351	205	169	144
31	169	------	536	702	------	749	------	1,790	------	202	165	------
TOTAL	7,221	11,811	23,509	38,917	24,970	26,436	39,046	69,290	22,719	7,994	5,571	4,840
MEAN	233	394	758	1,255	892	853	1,302	2,235	757	258	180	161
MAX	720	1,100	3,010	4,240	1,610	1,480	2,310	3,110	1,600	341	218	238
MIN	151	171	226	375	651	645	653	1,420	351	202	163	144
AC-FT	14,320	23,430	46,630	77,190	49,530	52,440	77,450	137,400	45,060	15,860	11,050	9,600

CAL YR 1972 TOTAL 249,975 MEAN 683 MAX 3,010 MIN 138 AC-FT 495,800
WTR YR 1973 TOTAL 282,324 MEAN 773 MAX 4,240 MIN 144 AC-FT 560,000

PEAK DISCHARGE (BASE, 3,200 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-19	0130	8.36	3,820	1-16	1300	9.74	5,540
12-22	0830	7.86	3,290	5-14	2200	8.23	3,670
1-12	0730	9.47	5,190				

11413100 NORTH YUBA RIVER ABOVE SLATE CREEK, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°31'29", long 121°05'26", in NE¼SW¼ sec.9, T.19 N., R.8 E., Yuba County, Tahoe National Forest, on left bank 500 ft upstream from Slate Creek, and 2.8 miles southeast of Strawberry Valley.

DRAINAGE AREA.--351 sq mi.

PERIOD OF RECORD.--July 1968 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 1,953.44 ft above mean sea level.

AVERAGE DISCHARGE.--5 years, 1,331 cfs (964,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,600 cfs Jan. 16 (gage height, 13.66 ft); minimum daily, 157 cfs Sept. 14.
Period of record: Maximum discharge, 35,800 cfs Jan. 22, 1970 (gage height, 19.91 ft, recorded; 20.7 ft, from floodmarks); minimum daily, 138 cfs Sept. 29, 1968.
Flood of Dec. 22, 1964, reached a stage of 29.8 ft, from floodmarks (discharge, 63,400 cfs from slope-area measurement).

REMARKS.--Records good. Several small diversions above station for irrigation and mining. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	190	382	770	1,100	2,800	1,350	2,640	2,040	443	234	183
2	192	190	378	728	1,040	2,700	1,260	2,630	1,860	431	229	180
3	182	218	428	734	1,060	2,500	1,190	2,780	1,710	417	224	179
4	171	1,510	592	662	1,430	2,200	1,200	2,810	1,580	403	222	176
5	170	957	416	602	1,670	2,100	1,350	2,280	1,510	392	221	172
6	167	568	446	590	1,620	1,900	1,570	2,050	1,470	382	219	173
7	167	649	435	542	1,860	1,800	1,790	2,210	1,390	373	218	171
8	172	685	400	590	1,700	1,700	1,700	2,500	1,340	368	213	167
9	181	495	370	752	1,630	1,550	1,920	2,670	1,290	361	212	164
10	345	553	367	918	2,600	1,650	2,160	2,860	1,220	349	211	163
11	1,070	704	343	2,380	2,300	1,800	2,320	3,240	1,120	342	209	164
12	554	558	376	8,380	2,200	1,700	2,540	3,630	1,050	333	206	164
13	309	534	341	5,550	1,830	1,540	2,580	4,140	988	333	202	162
14	259	1,120	339	3,650	1,720	1,430	2,150	4,270	934	329	199	157
15	334	869	340	2,980	1,550	1,370	2,070	4,340	873	326	196	159
16	439	1,080	373	8,740	1,430	1,340	1,930	4,250	821	319	192	160
17	453	793	2,240	5,570	1,350	1,350	2,090	4,310	785	317	189	160
18	357	666	2,950	5,050	1,300	1,280	2,030	4,310	742	308	188	160
19	316	754	4,960	3,800	1,230	1,260	1,880	4,010	707	299	186	162
20	279	656	3,030	2,760	1,190	1,300	1,770	3,660	678	292	184	301
21	253	552	2,200	2,290	1,100	1,220	1,710	3,210	650	290	183	262
22	237	500	4,600	1,920	1,080	1,160	1,820	2,950	628	287	183	198
23	229	437	2,660	1,690	1,050	1,130	2,130	2,830	608	280	183	247
24	216	408	1,980	1,480	1,400	1,130	2,420	3,090	598	274	185	277
25	205	392	1,560	1,410	1,750	1,180	2,620	3,120	571	265	190	236
26	202	408	1,340	1,270	1,800	1,220	3,090	2,560	551	257	231	208
27	201	438	1,210	1,190	2,200	1,340	3,520	2,280	527	255	262	189
28	196	417	1,110	1,110	3,000	1,310	3,600	2,320	506	251	219	184
29	192	405	974	1,120	------	1,230	3,330	2,410	480	247	200	181
30	188	391	902	1,140	------	1,240	2,940	2,430	453	241	191	181
31	187	------	846	1,160	------	1,430	------	2,290	------	238	186	------
TOTAL	8,603	18,097	38,888	71,528	45,190	48,860	64,030	95,080	29,680	10,002	6,367	5,640
MEAN	278	603	1,254	2,307	1,614	1,576	2,134	3,067	989	323	205	188
MAX	1,070	1,510	4,960	8,740	3,000	2,800	3,600	4,340	2,040	443	262	301
MIN	167	190	339	542	1,040	1,130	1,190	2,050	453	238	183	157
AC-FT	17,060	35,900	77,130	141,900	89,630	96,910	127,000	188,600	58,870	19,840	12,630	11,190

CAL YR 1972 TOTAL 363,896 MEAN 994 MAX 4,960 MIN 167 AC-FT 721,800
WTR YR 1973 TOTAL 441,965 MEAN 1,211 MAX 8,740 MIN 157 AC-FT 876,600

PEAK DISCHARGE (BASE, 4,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-18	2330	11.17	6,570	1-16	1400	13.66	13,600
12-22	0630	11.06	6,330	5-14	2300	10.43	5,000
1-12	0730	12.51	10,000				

11413250 SLATE CREEK TUNNEL NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°36'57", long 121°03'03", in SE¼SW¼ sec.2, T.20 N., R.8 E., Plumas County, Plumas National Forest, on right bank 30 ft upstream from diversion dam on Slate Creek, 0.3 mile upstream from Fency Ravine, and 4.5 miles northeast of town of Strawberry Valley.

PERIOD OF RECORD.--October 1966 to current year. Records of daily discharge for December 1961 to September 1966 are in files of Geological Survey. Monthly diversion used to adjust Slate Creek below diversion dam near Strawberry Valley since February 1962.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level.

AVERAGE DISCHARGE.--7 years, 123 cfs (89,110 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 863 cfs Apr. 6, 1963; no flow many days in each year.

REMARKS.--Records good. Tunnel diverts water from Slate Creek to Sly Creek Reservoir (see sta 11395400) for power development. See schematic diagrams of South Fork Feather and Yuba River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	6.3	48	106	137	295		383	275	26	0	0
2	0	6.3	46	100	131	0		624	246	24	0	0
3	0	17	54	94	133	0		643	219	23	0	0
4	0	195	54	76	167	0		634	198	21	0	0
5	0	91	44	69	204	0		513	183	20	0	0
6	0	48	38	69	230	0		476	169	19	0	0
7	0	108	42	58	318	0		521	155	18	0	0
8	0	84	38	66	293	0		571	141	18	0	0
9	0	58	36	74	298	0		598	129	17	0	0
10	42	64	36	80	424	0		644	121	16	0	0
11	188	70	34	280	365	0		716	106	15	0	0
12	49	57	35	641	295	0		825	97	14	0	0
13	24	76	32	700	255	0		844	89	14	0	0
14	18	135	32	740	252	0		847	84	13	0	0
15	36	122	31	602	224	0		849	76	12	0	0
16	44	165	40	522	214	0		851	70	12	0	0
17	36	103	504	558	204	0		852	66	13	0	0
18	27	92	531	831	198	0		852	60	6.2	0	0
19	22	94	772	701	190	0		852	56	0	0	0
20	19	75	535	501	188	0		849	52	0	0	27
21	15	63	440	401	190	0		841	50	0	0	7.6
22	13	57	449	327	183	0		805	48	0	0	2.1
23	13	50	416	275	181	0		761	46	0	0	18
24	10	46	365	260	353	0		810	44	0	0	14
25	8.9	45	300	243	509	0		835	42	0	0	8.6
26	8.6	51	241	206	465	0		699	40	0	3.7	4.5
27	7.8	59	210	185	663	0		211	38	0	10	2.6
28	7.2	55	182	171	808	0		0	36	0	.26	1.8
29	6.9	53	153	170	------	0		206	34	0	0	1.1
30	6.0	50	135	164	------	0		358	29	0	0	.70
31	6.0	------	119	149	------	0	------	320	------	0	0	------
TOTAL	607.4	2,195.6	5,992	9,419	8,072	295	0	19,790	2,999	301.2	13.96	88.00
MEAN	19.6	73.2	193	304	288	9.52	0	638	100	9.72	.45	2.93
MAX	188	195	772	831	808	295	0	852	275	26	10	27
MIN	0	6.3	31	58	131	0	0	0	29	0	0	0
AC-FT	1,200	4,350	11,890	18,680	16,010	585	0	39,250	5,950	597	28	175

CAL YR 1972 TOTAL 55,666.34 MEAN 152 MAX 838 MIN 0 AC-FT 110,400
WTR YR 1973 TOTAL 49,773.16 MEAN 136 MAX 852 MIN 0 AC-FT 98,730

11413300 SLATE CREEK BELOW DIVERSION DAM, NEAR STRAWBERRY VALLEY, CALIF.

LOCATION.--Lat 39°36'52", long 121°03'04", in SE¼SW¼ sec.2, T.20 N., R.8 E., Plumas County, Plumas National Forest, on right bank 300 ft downstream from diversion dam, 0.2 mile upstream from Feney Ravine, and 4.5 miles northeast of town of Strawberry Valley.

DRAINAGE AREA.--49.4 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,570 ft (from topographic map).

AVERAGE DISCHARGE (adjusted for diversion to Slate Creek tunnel).--13 years, 212 cfs (153,600 acre-ft per year).

EXTREMES (Creek only).--Current year: Maximum discharge, 2,790 cfs Jan. 16 (gage height, 8.91 ft); minimum daily, 5.6 cfs May 2-10.
Period of record: Maximum discharge, 13,100 cfs Dec. 22, 1964 (gage height, 16.42 ft), from rating curve extended above 5,500 cfs on basis of computed flow over dam at gage heights 12.75 and 15.90 ft; minimum, 0.3 cfs Mar. 4, 5, 1962.
(Combined flow).--Current year: Maximum discharge, 3,100 cfs Jan. 16; minimum daily, 9.8 cfs Oct. 6.
Period of record: Maximum discharge, 13,900 cfs Dec. 22, 1964; minimum daily, 2.3 cfs Nov. 23, 1961.

REMARKS.--Records good. Slate Creek tunnel (see sta 11413250) diverts at diversion dam 300 ft upstream up to 900 cfs from Slate Creek Reservoir (capacity, 223 acre-ft) to Sly Creek Reservoir (see sta 11395400). Diversion began in February 1962. See schematic diagrams of South Fork Feather and Yuba River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.2	8.5	8.8	5.8	378	276	218	7.0	13	14	11
2	11	9.2	8.5	8.8	5.8	590	253	5.6	7.0	13	14	11
3	11	9.5	8.8	9.5	6.0	520	253	5.6	7.0	12	13	11
4	10	9.5	8.8	8.8	6.0	436	282	5.6	7.0	12	13	11
5	10	9.5	8.8	8.8	6.0	375	339	5.6	7.0	12	13	11
6	9.8	9.5	8.8	8.8	6.2	348	404	5.6	6.8	12	13	11
7	10	9.8	8.5	8.5	6.2	306	439	5.6	6.8	12	13	11
8	12	9.5	8.5	8.8	6.2	285	432	5.6	6.8	12	13	11
9	13	9.5	8.5	8.8	6.2	267	484	5.6	6.8	12	13	10
10	15	9.2	8.5	8.8	6.8	288	526	5.6	6.5	12	13	10
11	9.2	9.2	8.5	82	6.5	411	562	23	6.5	12	13	10
12	9.4	9.2	8.5	467	6.5	351	600	68	6.5	12	12	10
13	9.2	9.5	8.5	429	6.2	318	576	190	6.5	12	12	10
14	9.2	9.5	8.5	27	6.2	288	520	237	6.5	12	12	10
15	9.2	9.5	8.5	22	6.2	279	502	239	6.5	12	11	10
16	9.2	9.5	8.5	1,370	6.2	285	478	264	6.5	12	11	10
17	9.2	9.2	8.8	585	6.2	291	558	282	6.9	12	11	10
18	8.8	9.2	69	194	6.2	264	540	259	7.0	17	11	10
19	8.8	9.2	134	18	6.2	264	498	219	7.0	23	11	10
20	8.8	8.8	9.2	6.5	6.2	250	460	124	7.0	22	11	12
21	9.2	8.8	9.2	6.2	6.2	229	446	37	7.0	22	11	12
22	9.2	8.8	611	6.2	6.2	216	474	9.8	7.0	21	11	12
23	9.2	8.8	167	6.2	6.2	219	537	6.5	7.0	20	11	12
24	9.2	8.8	41	6.2	6.2	232	586	47	7.0	19	11	11
25	9.2	8.5	9.2	6.2	6.5	253	626	55	7.0	19	11	11
26	9.2	8.5	17	6.0	6.5	279	712	6.5	7.0	17	13	10
27	9.2	8.5	9.2	6.0	41	318	764	226	7.0	17	13	10
28	9.2	8.5	9.2	6.0	35	303	761	400	7.0	16	13	10
29	9.2	8.5	9.2	5.8	------	270	712	196	7.0	16	12	10
30	9.2	8.5	9.2	5.8	------	270	642	7.0	10	16	12	10
31	9.2	------	8.8	5.8	------	288	------	7.0	------	15	12	------
TOTAL	305.0	273.4	1,258.2	3,355.3	237.6	9,671	15,242	3,171.2	208.6	466	377	318
MEAN	9.84	9.11	40.6	108	8.49	312	508	102	6.95	15.0	12.2	10.6
MAX	15	9.8	611	1,370	41	590	764	400	10	23	14	12
MIN	8.8	8.5	8.5	5.8	5.8	216	253	5.6	6.5	12	11	10
AC-FT	605	542	2,500	6,660	471	19,180	30,230	6,290	414	924	748	631
MEAN a	**29.4**	**82.2**	**234**	**412**	**297**	**322**	**508**	**741**	**107**	**24.7**	**12.6**	**13.5**
AC-FT a	**1,800**	**4,890**	**14,390**	**25,340**	**16,480**	**19,760**	**30,230**	**45,540**	**6,360**	**1,520**	**776**	**806**

CAL YR 1972 TOTAL 7,287.0 MEAN 19.9 MAX 862 MIN 6.2 AC-FT 14,450 **MEAN a 172** **AC-FT a 124,900**
WTR YR 1973 TOTAL 34,883.3 MEAN 95.6 MAX 1,370 MIN 5.6 AC-FT 69,190 **MEAN a 232** **AC-FT a 167,900**

a Adjusted for diversion to Slate Creek tunnel.

11413510 NEW COLGATE POWERPLANT NEAR FRENCH CORRAL, CALIF.

LOCATION.--Lat 39°19'51", long 121°11'23", in NE¼SE¼ sec.16, T.17 N., R.7 E., Yuba County, at powerplant on right bank of Yuba River, 0.3 mile upstream from Dobbins Creek, and 2.3 miles northwest of French Corral.

PERIOD OF RECORD.--October 1966 to current year. Records of daily discharge for October 1960 to September 1966 are available in files of Geological Survey. Prior to October 1969, published as "Colgate powerplant."

GAGE.--Recorded output from powerplant turbines.

AVERAGE DISCHARGE.--7 years, 1,033 cfs (748,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 4,200 cfs June 2, 1971; no flow for several days in each year.

REMARKS.--Water is diverted from North Yuba River at New Bullards Bar Dam (see sta 11413515). Colgate powerplant was rebuilt during the 1970 water year with an increased capacity. Browns Valley ditch diverts up to 10 cfs at times from the head of the penstock for use in irrigation. During the current year, 260 acre-ft of water was diverted. See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Yuba County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,780	2,470	2,630	2,340	2,940	1,720	2,420	1,400	0	609	1,560	1,930
2	2,430	2,030	2,190	2,640	2,730	2,610	2,750	1,230	0	963	2,120	1,950
3	2,740	2,320	2,130	2,850	3,070	2,110	2,730	1,470	0	1,590	2,430	1,470
4	2,350	2,060	2,010	2,570	1,310	1,250	2,830	1,170	702	804	977	1,770
5	2,350	1,480	2,770	2,790	2,370	2,100	2,750	1,270	1,220	452	946	2,210
6	2,670	1,610	2,550	2,740	2,930	2,460	2,920	1,740	1,330	456	2,020	1,870
7	2,170	1,720	2,460	2,470	2,770	2,410	2,760	929	644	1,390	2,380	1,870
8	2,430	2,020	2,190	2,440	2,820	2,970	2,680	1,490	595	1,110	2,070	1,560
9	2,270	2,350	2,450	2,330	2,800	3,080	2,450	1,770	1,040	447	1,250	1,230
10	2,390	1,880	2,650	528	1,570	2,910	1,530	1,500	275	1,060	2,520	1,260
11	1,960	1,290	1,910	1,730	0	2,460	1,190	456	166	997	2,130	2,160
12	2,430	1,900	2,340	0	1,300	2,170	715	16	837	1,320	1,660	1,840
13	2,720	2,430	2,040	0	2,230	3,030	1,040	30	911	938	1,100	2,090
14	2,170	1,880	2,200	0	2,070	3,040	794	4.0	1,220	1,260	1,610	1,760
15	1,810	453	1,960	649	1,830	2,200	1,130	339	1,040	87	1,500	1,350
16	2,630	1,080	1,510	72	2,270	3,120	1,590	645	210	1,540	1,310	1,390
17	2,330	1,340	1,260	0	2,230	2,970	1,220	758	806	1,890	1,750	2,180
18	2,410	1,750	0	17	2,850	3,060	1,590	842	1,010	1,950	1,690	2,160
19	2,550	2,710	0	0	2,930	3,150	1,130	37	1,660	1,900	1,130	1,710
20	2,260	2,220	0	1,100	3,040	2,900	964	16	833	1,980	1,430	1,540
21	2,200	2,240	928	1,220	3,010	3,060	1,060	66	929	1,650	1,310	1,430
22	2,300	2,410	2,230	2,080	3,140	2,890	1,250	6.0	577	1,710	2,200	1,670
23	1,950	2,180	2,480	1,730	3,070	3,170	1,360	1.0	1,530	1,920	1,950	2,090
24	2,300	2,530	1,910	1,600	2,970	3,150	1,290	0	786	1,950	2,450	1,970
25	2,360	2,790	1,550	1,450	2,880	3,160	2,250	0	717	1,860	1,020	1,730
26	2,420	2,790	2,240	2,410	3,080	3,160	1,320	545	766	1,830	1,350	1,770
27	2,630	2,060	2,900	3,050	2,370	3,160	1,010	328	796	2,790	1,820	1,810
28	2,510	2,630	2,910	3,010	1,000	2,660	592	719	775	764	2,090	2,060
29	2,230	2,690	2,860	2,990	------	2,770	968	564	1,270	866	1,860	898
30	2,350	2,650	1,880	2,350	------	2,600	1,860	83	785	1,310	1,720	1,480
31	2,570	------	2,420	2,480	------	2,100	------	11	------	1,430	1,730	------
TOTAL	73,670	61,963	61,558	51,636	67,580	83,600	50,543	19,435.0	23,430	40,823	53,083	52,208
MEAN	2,376	2,065	1,986	1,666	2,414	2,697	1,685	627	781	1,317	1,712	1,740
MAX	2,780	2,790	2,910	3,050	3,140	3,170	2,920	1,770	1,660	2,790	2,520	2,210
MIN	1,810	453	0	0	0	1,250	592	0	0	87	946	898
AC-FT	146,100	122,900	122,100	102,400	134,000	165,800	100,300	38,550	46,470	80,970	105,300	103,600

CAL YR 1972 TOTAL 489,125.00 MEAN 1,336 MAX 2,910 MIN 0 AC-FT 970,200
WTR YR 1973 TOTAL 639,529.00 MEAN 1,752 MAX 3,170 MIN 0 AC-FT 1,269,000

11413515 NEW BULLARDS BAR RESERVOIR NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°23'34", long 121°08'25", in SE¼NW¼ sec.25, T.18 N., R.7 E., Yuba County, Plumas National Forest, in center of dam on North Yuba River, 2.2 miles upstream from Middle Yuba River, and 2.4 miles northwest of North San Juan.

DRAINAGE AREA.--489 sq mi.

PERIOD OF RECORD.--February 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Yuba County Water Agency).

EXTREMES.--Current year: Maximum contents, 852,143 acre-ft June 18 (elevation, 1,931.28 ft); minimum, 334,333 acre-ft Dec. 16 (elevation, 1,778.30 ft).
Period of record: Maximum contents, 963,364 acre-ft June 27, 1971 (elevation, 1,955.43 ft); minimum since reservoir first filled, 327,322 acre-ft Jan. 21, 1972 (elevation, 1,775.40 ft).

REMARKS.--Reservoir is formed by concrete-arch dam with a concrete-sidehill spillway. Spill controlled by three 30- by 53-feet radial gates. Storage began in January 1969. Usable capacity, 727,380 acre-ft between elevations 1,732.0 ft (minimum power pool) and 1,955.0 ft (normal gross pool). Dead storage, 233,920 acre-ft. Total capacity at normal gross pool (1,955.0 ft), 961,300 acre-ft. Water is released to Colgate powerplant through a tunnel at the dam. Water is diverted into the reservoir from Middle Yuba River via Lohman Ridge tunnel to Oregon Creek then via Camptonville tunnel. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Yuba County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

1,600.0	64,900	1,750.0	270,110
1,630.0	90,570	1,800.0	389,980
1,660.0	122,990	1,850.0	539,750
1,690.0	162,980	1,900.0	721,130
1,720.0	211,770	1,960.0	985,471

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	589,461	462,590	388,630	370,884	494,319	537,309	538,000	633,987	823,915	845,620	788,058	699,530
2	585,005	458,700	385,091	367,244	492,353	542,613	536,682	637,902	828,808	844,741	784,704	695,959
3	579,811	454,979	381,945	363,113	490,081	547,311	535,170	641,647	833,371	842,547	780,524	693,712
4	575,540	454,830	379,822	362,009	493,382	553,194	533,661	646,404	836,072	842,108	779,107	690,276
5	571,184	454,503	374,810	354,945	494,495	556,218	532,514	649,587	837,819	841,976	777,773	686,772
6	566,236	452,666	370,884	349,401	495,258	558,782	531,661	651,628	839,043	842,108	774,407	683,396
7	562,161	451,276	367,244	346,776	497,106	560,469	531,859	654,679	840,969	840,093	770,386	680,258
8	557,768	448,917	363,705	343,470	497,733	560,503	531,859	657,589	842,854	838,606	766,833	677,475
9	553,731	445,450	359,422	341,689	498,204	559,793	532,972	660,583	843,775	838,650	764,896	675,533
10	550,048	443,254	354,793	344,288	505,617	560,131	536,584	663,961	846,104	837,295	760,456	673,519
11	549,045	443,020	351,535	349,702	514,697	561,620	541,269	670,374	848,436	836,422	756,810	669,617
12	545,714	440,658	347,650	374,337	521,034	563,857	547,378	678,732	849,450	834,677	754,113	666,371
13	540,971	437,259	344,238	391,110	523,719	563,518	553,262	688,310	849,936	833,632	752,319	662,834
14	537,276	437,693	340,456	402,471	526,640	562,500	558,341	698,364	849,891	831,890	749,755	659,459
15	534,743	439,813	337,141	409,991	528,627	562,941	562,636	708,120	850,024	833,327	747,357	657,589
16	530,551	441,240	334,333	437,519	529,474	561,822	565,896	717,171	851,524	830,327	745,211	654,977
17	526,901	440,949	339,117	455,038	529,898	560,063	569,987	725,101	851,966	827,421	742,258	651,256
18	522,975	439,494	347,150	471,402	529,116	558,274	572,280	734,047	852,143	824,520	739,394	647,550
19	518,530	436,187	361,239	484,042	527,617	556,420	575,882	743,389	850,378	821,628	737,623	644,595
20	514,569	433,710	370,440	491,076	525,536	555,310	579,469	751,708	850,378	818,569	735,292	642,752
21	510,733	430,532	374,731	496,949	523,492	553,564	582,439	758,652	850,115	816,077	733,126	640,544
22	506,565	427,018	382,477	499,210	520,970	551,888	585,491	765,349	850,378	813,425	729,206	637,792
23	503,243	423,885	385,412	501,287	518,359	549,379	588,972	771,753	848,877	809,654	725,897	634,315
24	498,927	419,777	387,341	502,928	517,265	546,712	592,641	778,565	846,939	807,307	721,526	631,032
25	494,539	414,993	388,630	505,395	517,321	544,384	595,622	785,542	848,348	804,370	719,941	628,596
26	489,428	410,161	387,744	501,665	517,265	542,063	601,577	790,832	848,348	801,481	718,358	625,585
27	485,369	406,957	384,877	499,147	521,648	540,079	609,205	796,060	847,996	796,695	715,119	622,403
28	480,625	402,580	381,626	496,949	530,551	539,253	618,188	801,141	847,820	795,849	711,653	618,943
29	476,519	398,005	378,128	494,819	------	537,835	625,042	806,798	846,324	794,794	708,512	617,253
30	472,162	393,490	376,651	497,262	------	537,243	629,577	812,305	845,840	792,600	705,693	615,137
31	467,285	------	373,760	496,478	------	538,231	------	818,397	------	790,580	702,802	------
MAX	589,461	462,590	388,630	505,395	530,551	563,857	629,577	818,397	852,143	845,620	788,058	699,530
MIN	467,285	393,490	334,333	341,689	490,081	537,243	531,661	633,987	823,915	790,580	702,802	615,137
(a)	1,827.06	1,801.30	1,793.90	1,836.55	1,847.20	1,849.54	1,875.90	1,923.54	1,929.85	1,917.00	1,895.34	1,871.90
(b)	-127,284	-73,895	-19,730	+122,718	+34,073	+7,680	+91,346	+188,820	+27,443	-55,260	-87,778	-87,665

CAL YR 1972 b -15,947
WTR YR 1973 b +20,568

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11413520 NORTH YUBA RIVER BELOW NEW BULLARDS BAR DAM, NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°22'48", long 121°08'19", in SW¼NE¼ sec.36, T.18 N., R.7 E., Yuba County, Plumas National Forest, on right bank 1.1 miles downstream from New Bullards Bar Dam, and 2 miles northwest of North San Juan.

DRAINAGE AREA.--490 sq mi.

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Altitude of gage is 1,280 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 58 cfs Feb. 10 (gage height, 4.85 ft); minimum daily, 6.1 cfs Oct. 6-8, 30.
Period of record: Maximum discharge, 56,200 cfs Jan. 22, 1970 (gage height, 35.29 ft), from rating curve extended above 40,000 cfs on basis of computation of flow over old Colgate Dam; minimum daily, 0.42 cfs Nov. 5, 1966.
Flood of Dec. 22, 1964, reached a stage of 49.8 ft, from floodmarks (discharge, 91,000 cfs, from computation of flow over old Colgate Dam).

REMARKS.--Records fair. Flow regulated by New Bullards Bar Reservoir since 1969 (see sta 11413515). Colgate powerplant (see sta 11413510) diverts from New Bullards Bar Dam 1.1 miles upstream. Water is diverted out of basin through Slate Creek tunnel (see sta 11413250). See schematic diagram of Yuba River basin. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.6	7.1	7.4	13	11	10	7.8	9.2	8.5	8.8	8.2
2	6.4	7.2	7.0	7.4	14	9.7	10	7.9	8.8	8.5	8.7	8.2
3	6.4	8.7	8.5	7.4	11	10	9.7	7.9	8.8	8.5	8.7	8.2
4	6.2	12	8.4	7.4	17	10	9.7	8.2	8.8	8.5	8.6	8.2
5	6.2	9.4	7.5	7.4	18	9.6	9.7	8.1	8.8	8.5	8.6	8.2
6	6.1	8.1	7.5	7.4	29	9.9	8.2	7.9	8.8	8.5	8.6	8.3
7	6.1	9.0	7.5	7.4	31	9.3	7.8	8.0	8.8	8.5	8.6	8.2
8	6.1	8.3	7.4	8.2	29	9.1	7.8	7.9	8.8	8.5	8.7	8.0
9	6.2	8.0	7.4	10	32	8.8	7.8	7.9	8.8	8.5	8.9	8.0
10	7.6	9.0	7.1	11	42	8.7	7.8	7.9	8.8	8.5	8.6	7.9
11	8.3	9.7	7.1	22	38	8.6	7.8	8.0	8.8	8.5	8.6	8.0
12	8.6	8.2	7.1	30	33	8.2	7.8	8.0	8.8	8.5	8.6	8.0
13	8.6	8.0	7.1	16	20	8.0	7.8	8.1	8.9	8.5	8.4	7.9
14	7.3	11	7.1	13	15	7.8	7.8	8.2	8.9	8.5	8.5	7.9
15	7.6	9.9	7.1	14	12	7.0	7.8	8.4	8.9	8.5	8.5	7.9
16	7.3	9.9	7.8	25	10	7.7	7.8	8.2	8.9	8.2	8.4	7.9
17	6.8	8.4	12	22	9.2	7.5	7.8	8.3	8.9	8.2	8.4	7.9
18	6.5	8.8	12	20	8.6	8.2	7.8	8.4	8.9	8.2	8.4	7.8
19	6.4	9.0	13	17	8.1	7.7	7.8	8.3	8.9	8.2	8.4	7.8
20	6.4	8.2	10	15	8.0	7.8	7.8	8.3	8.9	8.2	8.4	8.4
21	6.3	7.8	9.2	13	7.9	8.2	7.9	8.3	8.5	8.2	8.3	7.9
22	6.4	7.5	9.6	14	7.8	7.0	7.9	8.4	8.5	8.2	8.2	7.8
23	6.5	7.5	9.2	14	7.7	6.6	7.9	8.5	8.5	8.2	8.2	7.8
24	6.4	7.5	9.6	16	9.1	7.2	7.9	8.5	8.6	8.2	8.2	7.9
25	6.5	7.5	10	16	8.8	8.7	7.9	8.7	8.6	8.2	8.2	7.9
26	6.5	7.5	10	15	8.7	8.6	8.0	8.6	8.6	8.2	8.4	7.8
27	6.2	7.5	9.6	16	14	8.8	7.9	8.5	8.6	8.2	8.2	8.0
28	6.2	7.2	8.8	13	12	8.2	7.9	8.5	8.5	8.6	8.2	8.2
29	6.2	7.1	8.2	14	------	8.1	7.9	8.5	8.5	8.7	8.2	8.2
30	6.1	7.1	7.8	25	------	11	7.9	8.8	8.5	8.8	8.2	8.2
31	6.2	------	7.4	22	------	14	------	9.2	------	8.8	8.3	------
TOTAL	207.0	251.6	265.1	453.0	473.9	271.0	245.6	256.2	262.6	260.8	262.0	240.6
MEAN	6.68	8.39	8.55	14.6	16.9	8.74	8.19	8.26	8.75	8.41	8.45	8.02
MAX	8.6	12	13	30	42	14	10	9.2	9.2	8.8	8.9	8.4
MIN	6.1	6.6	7.0	7.4	7.7	6.6	7.8	7.8	8.5	8.2	8.2	7.8
AC-FT	411	499	526	899	940	538	487	508	521	517	520	477

CAL YR 1972 TOTAL 2,753.7 MEAN 7.52 MAX 15 MIN 5.0 AC-FT 5,460
WTR YR 1973 TOTAL 3,449.4 MEAN 9.45 MAX 42 MIN 6.1 AC-FT 6,840

11413600 SWEETLAND CREEK NEAR NORTH SAN JUAN, CALIF.

LOCATION.--Lat 39°20'18", long 121°06'58", in NE¼NE¼ sec.18, T.17 N., R.8 E., Nevada County, on left bank at culvert on State Highway 49, 2.2 miles southwest of North San Juan.

DRAINAGE AREA.--2.68 sq mi.

PERIOD OF RECORD.--Water years 1963-68 (annual maximum), October 1968 to September 1973 (discontinued).

GAGE.--Water-stage recorder, crest-stage gages, float-operated rain gage, and culvert control. Prior to October 1968, crest-stage gage only. Altitude of gage is 1,860 ft (from topographic map).

AVERAGE DISCHARGE.--5 years, 4.06 cfs (2,940 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 382 cfs Jan. 12 (gage height, 5.98 ft); no flow for several months. Period of record: Maximum discharge, 600 cfs Dec. 22, 1964 (gage height, 7.04 ft); no flow for several months in each year.

REMARKS.--Records good except those for period of no gage-height record, which are poor. No known diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.48	1.9	10	16	6.0	1.2	.28			
2		0	.48	1.9	8.1	15	4.9	1.1	.24			
3		.30	.68	2.0	17	19	4.1	1.0	.18			
4		3.0	2.0	1.6	42	24	3.6	1.4	.11			
5		1.2	1.1	1.5	17	13	3.4	1.4	.09			
6		.60	1.1	1.5	17	19	3.4	1.2	.06			
7		.90	1.1	1.2	15	15	3.2	1.1	.05			
8		1.2	.94	3.4	11	15	3.2	1.0	.03			
9		.60	.84	18	14	10	3.2	.94	.03			
10		1.2	.84	14	87	11	3.0	.84	.01			
11		2.3	.76	140	42	10	2.8	.76	.01			
12		1.3	.76	150	19	8.1	2.8	.68	.01			
13		.90	.68	42	13	6.7	2.8	.60	.01			
14		4.5	.68	18	27	6.0	3.0	.48	.01			
15		3.5	.68	20	17	5.4	2.8	.48	.02			
16		5.0	2.4	143	12	5.2	2.8	.42	.01			
17		3.2	38	35	9.2	5.7	2.8	.37	.01			
18		2.5	23	50	8.1	4.9	2.7	.32	.01			
19		3.0	28	20	7.0	5.4	2.5	.28	0			
20		2.2	7.0	12	6.4	4.1	2.3	.24	0			
21		1.7	4.6	11	5.7	6.0	2.3	.21	0			
22		1.2	6.4	8.1	5.2	5.2	2.3	.21	0			
23		.90	3.9	6.7	5.2	4.3	2.3	.21	0			
24		.80	4.6	6.4	6.4	3.9	2.2	.28	0			
25		.70	3.4	13	6.7	3.9	2.0	.21	0			
26		.60	2.7	8.4	8.1	3.9	1.9	.28	0			
27		.60	2.8	6.7	34	3.6	1.7	.21	0			
28		.50	3.6	6.4	24	3.4	1.6	.18	0			
29		.50	2.5	10	------	3.2	1.6	.16	0			
30		.50	2.2	25	------	5.4	1.5	.11	0			
31		------	2.0	13	------	11	------	.11	------			------
TOTAL	0	45.40	150.22	791.7	494.1	272.3	84.7	17.98	1.17	0	0	0
MEAN	0	1.51	4.85	25.5	17.6	8.78	2.82	.58	.039	0	0	0
MAX	0	5.0	38	150	87	24	6.0	1.4	.28	0	0	0
MIN	0	0	.48	1.2	5.2	3.2	1.5	.11	0	0	0	0
AC-FT	0	90	298	1,570	980	540	168	36	2.3	0	0	0
(a)	2.10	10.36	6.93	14.30	9.65	5.55	0	.3	0	0	0	.24

CAL YR 1972 TOTAL 557.90 MEAN 1.52 MAX 44 MIN 0 AC-FT 1,110
WTR YR 1973 TOTAL 1,857.57 MEAN 5.09 MAX 150 MIN 0 AC-FT 3,680

a Precipitation, in inches.

NOTE.--No gage-height record Nov. 1 to Dec. 1.

11413950 SOUTH YUBA RIVER TRIBUTARY NEAR SODA SPRINGS, CALIF.

LOCATION.--Lat 39°18'57", long 120°27'26", in NE¼NE¼ sec.25, T.17 N., R.13 E., Placer County, Tahoe National Forest, on old U.S. Highway 40, 4.3 miles west of Soda Springs.

DRAINAGE AREA.--0.92 sq mi.

PERIOD OF RECORD.--Water years 1963-71 (annual maximum), October 1971 to September 1973 (discontinued).

GAGE.--Water-stage recorder, crest-stage gage, and float-operated rain gage. Prior to October 1971, crest-stage gage only. Altitude of gage is 6,050 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 174 cfs Dec. 17 (gage height, 17.28 ft); no flow for several months. Period of record: Maximum discharge, 585 cfs Dec. 23, 1964 (gage height, 21.91 ft); no flow for several months in each year.

REMARKS.--Records good.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.11	1.3	4.4	1.6	2.3	2.3	20	18	.38		0
2	0	.11	1.6	4.3	1.4	2.2	2.2	26	14	.38		0
3	0	.86	1.3	4.4	1.3	2.0	2.3	27	11	.32		0
4	0	39	1.2	4.5	1.4	2.2	2.7	17	11	.26		0
5	0	10	1.3	4.9	1.3	2.0	4.1	8.6	10	.26		0
6	0	6.2	1.5	4.1	1.3	1.9	6.4	8.6	8.6	.20		0
7	0	3.0	1.7	4.5	1.3	1.9	7.7	20	6.8	.20		0
8	0	2.0	1.5	4.1	1.3	1.9	6.8	28	5.8	.15		0
9	0	1.5	1.2	3.8	1.2	1.7	10	31	4.6	.11		0
10	.01	1.3	1.1	3.5	1.4	1.9	13	36	3.5	.07		0
11	.85	1.3	1.0	7.0	1.4	1.9	16	42	2.6	.05		0
12	.55	1.3	1.0	64	1.4	1.7	17	45	2.2	.04		0
13	.38	1.2	.96	35	1.3	1.6	13	53	1.7	.04		0
14	.26	1.2	.96	15	1.3	1.6	7.7	58	1.6	.04		0
15	.43	1.3	.96	10	1.4	1.7	7.7	52	1.4	.03		0
16	.65	1.4	1.0	7.9	1.4	2.0	6.8	62	1.2	.03		0
17	.95	1.3	79	6.0	1.4	2.2	9.5	54	1.1	.02		0
18	1.3	1.3	52	5.0	1.4	2.0	9.0	44	.90	.02		0
19	1.1	1.4	69	4.5	1.4	1.9	8.1	46	.80	.01		0
20	.80	1.3	24	4.0	1.6	1.9	7.7	36	.60	.01		.10
21	.52	1.3	17	3.0	1.7	1.7	9.0	35	.52	0		0
22	.38	1.2	36	2.0	1.7	1.7	14	36	.44	0		0
23	.32	1.2	14	2.0	1.7	1.7	22	36	.38	0		0
24	.26	1.2	10	2.0	1.7	2.0	26	40	.38	0		0
25	.26	1.2	8.3	2.0	1.6	2.4	28	38	.32	0		0
26	.26	1.6	8.1	2.3	1.5	2.9	33	22	.26	0		0
27	.20	2.0	7.5	3.0	1.7	3.4	36	26	.52	0		0
28	.20	1.7	7.0	2.3	2.2	3.0	32	35	.60	0		0
29	.20	1.5	6.0	1.7	------	2.7	23	34	.44	0		0
30	.15	1.4	5.4	1.6	------	2.6	19	26	.38	0		0
31	.11	------	4.8	1.5	------	2.4	------	22	------	0		------
TOTAL	10.14	91.38	367.68	224.3	41.3	65.0	402.0	1,064.2	111.64	2.62	0	.10
MEAN	.33	3.05	11.9	7.24	1.48	2.10	13.4	34.3	3.72	.085	0	.003
MAX	1.3	39	79	64	2.2	3.4	36	62	18	.38	0	.10
MIN	0	.11	.96	1.5	1.2	1.6	2.2	8.6	.26	0	0	0
AC-FT	20	181	729	445	82	129	797	2,110	221	5.2	0	.2
(a)	--	b 12.40	7.97	6.65	8.23	4.53	1.12	1.02	.40	0	1.00	2.11

CAL YR 1972 TOTAL 2,132.50 MEAN 5.83 MAX 79 MIN 0 AC-FT 4,230
WTR YR 1973 TOTAL 2,380.36 MEAN 6.52 MAX 79 MIN 0 AC-FT 4,720

a Precipitation, in inches (some precipitation falling as snow may not be included).
b Combined precipitation, in inches, for October and November.

11414000 SOUTH YUBA RIVER NEAR CISCO, CALIF.

LOCATION.--Lat 39°19'12", long 120°33'38", in SE¼SW¼ sec.19, T.17 N., R.13 E., Nevada County, Tahoe National Forest, 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.

PERIOD OF RECORD.--April 1942 to current year. Prior to October 1949, published as South Fork Yuba River near Cisco.

GAGE.--Water-stage recorder. Altitude of gage is 5,520 ft (from river-profile map). Prior to October 1945, water-stage recorder at site 200 ft upstream at same datum.

AVERAGE DISCHARGE.--31 years, 200 cfs (144,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,210 cfs May 14 (gage height, 7.58 ft); minimum daily, 15 cfs on several days in August.
Period of record: Maximum discharge, 18,400 cfs Jan. 31, 1963 (gage height, 19.6 ft, from floodmarks in gage house, 20.6 ft, from outside floodmarks), from rating curve extended above 4,600 cfs on basis of slope-area measurement at gage height 15.8 ft; minimum daily, 0.1 cfs Nov. 5-7, 1954.

REMARKS.--Records good. Low flow regulated by Lake Van Norden (capacity, 4,320 acre-ft, 5,260 acre-ft with flashboards). See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	44	63	69	79	108	87	744	869	27	17	33
2	52	43	57	69	75	96	81	844	713	24	17	45
3	50	40	57	66	74	90	80	914	628	22	16	57
4	50	425	54	59	76	84	101	759	590	20	16	56
5	50	152	54	56	76	76	174	465	603	18	16	56
6	49	95	47	57	76	74	308	402	575	22	16	57
7	50	78	44	56	78	70	369	651	477	23	16	65
8	49	69	46	54	74	67	344	865	392	22	16	64
9	52	62	45	55	71	67	463	952	416	21	16	63
10	62	60	43	58	74	71	512	1,060	403	21	16	64
11	110	48	42	190	84	80	604	1,210	348	20	16	63
12	72	41	43	1,070	81	72	652	1,310	297	19	16	62
13	57	44	43	693	72	68	565	1,500	248	19	16	61
14	58	46	39	396	69	63	354	1,550	190	19	16	60
15	65	47	35	272	65	63	341	1,450	148	19	15	59
16	83	48	38	319	63	74	287	1,490	130	20	15	58
17	91	45	680	248	64	82	363	1,540	104	21	15	58
18	95	44	769	191	67	74	320	1,400	89	19	15	56
19	90	44	1,230	164	69	74	296	1,240	88	18	15	55
20	73	40	528	136	71	73	297	1,100	88	17	15	73
21	65	41	341	124	75	69	343	989	87	17	15	53
22	59	40	672	109	74	66	504	931	83	17	15	50
23	56	38	263	101	75	67	715	909	73	16	15	49
24	53	40	185	96	81	76	832	1,020	64	18	15	48
25	51	46	142	94	80	97	892	1,070	59	18	16	58
26	50	61	125	87	78	117	1,040	790	56	18	19	56
27	49	70	117	83	92	144	1,140	780	53	18	22	55
28	48	61	102	81	114	121	1,080	966	58	18	16	53
29	47	61	86	83	------	103	914	1,010	37	18	16	51
30	46	60	83	87	------	95	780	964	30	17	15	39
31	45	------	75	86	------	93	------	1,010	------	17	15	------
TOTAL	1,880	2,033	6,148	5,309	2,127	2,574	14,838	31,885	7,996	603	495	1,677
MEAN	60.6	67.8	198	171	76.0	83.0	495	1,029	267	19.5	16.0	55.9
MAX	110	425	1,230	1,070	114	144	1,140	1,550	869	27	22	73
MIN	45	38	35	54	63	63	80	402	30	16	15	33
AC-FT	3,730	4,030	12,190	10,530	4,220	5,110	29,430	63,240	15,860	1,200	982	3,330

CAL YR 1972 TOTAL 65,087.3 MEAN 178 MAX 1,230 MIN 7.8 AC-FT 129,100
WTR YR 1973 TOTAL 77,565.0 MEAN 213 MAX 1,550 MIN 15 AC-FT 153,900

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-19	0300	6.64	1,590	5-14	2000	7.58	2,210
4-27	2000	6.65	1,600				

11414100 FORDYCE CREEK BELOW FORDYCE DAM, NEAR CISCO, CALIF.

LOCATION.--Lat 39°22'45", long 120°29'52", in NW¼SE¼ sec.34, T.18 N., R.13 E., Nevada County, Tahoe National Forest, on right bank 850 ft downstream from Fordyce Dam, and 5.3 miles northeast of Cisco.

DRAINAGE AREA.--31.7 sq mi.

PERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,250 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 132 cfs (95,630 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 824 cfs May 29 (gage height, 4.28 ft); minimum daily, 5.4 cfs Oct. 1.
Period of record: Maximum discharge, 2,240 cfs June 26, 1971 (gage height, 5.86 ft), from rating curve extended above 750 cfs; minimum daily, 5.3 cfs Jan. 8, 9, 1968.

REMARKS.--Flow regulated by Fordyce Lake (usable capacity, 46,700 acre-ft). See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	7.3	123	18	15	8.1	13	21	400	483	358	8.6
2	5.5	7.3	199	18	15	8.2	13	23	348	479	356	8.7
3	5.5	8.4	198	18	16	8.4	13	25	455	476	172	8.7
4	5.8	13	198	18	16	8.4	13	25	461	471	19	8.7
5	6.1	10	196	129	16	8.4	14	25	286	469	19	8.9
6	6.2	9.8	194	208	16	8.4	94	26	176	462	203	8.9
7	6.3	9.9	193	206	16	8.4	154	28	381	465	348	8.9
8	6.3	10	193	205	103	8.4	153	29	478	463	343	8.9
9	6.4	10	170	204	206	96	153	30	479	460	337	8.9
10	6.8	10	83	202	207	142	153	31	465	458	160	9.1
11	8.3	10	8.9	202	205	141	154	33	368	455	15	9.2
12	7.3	10	9.0	207	203	139	154	35	217	450	16	9.2
13	7.3	10	9.2	201	200	137	154	37	172	444	195	9.2
14	7.1	10	9.2	199	198	136	154	39	182	441	323	9.2
15	7.5	10	9.2	198	196	61	154	40	172	439	318	9.2
16	7.8	11	9.4	200	192	12	69	43	164	434	307	9.2
17	7.8	11	14	200	189	12	8.9	44	158	430	304	9.2
18	8.1	11	15	199	186	12	9.0	46	234	426	298	9.2
19	7.9	11	17	90	184	12	9.3	48	420	421	291	9.1
20	7.9	11	15	15	181	12	9.5	49	487	417	285	9.3
21	7.8	11	16	15	178	12	10	51	515	410	142	9.2
22	7.9	11	18	15	88	12	11	53	514	404	8.4	9.1
23	7.9	11	16	15	7.4	12	12	54	509	398	8.4	9.1
24	7.9	11	17	15	7.7	12	13	97	506	389	8.4	9.1
25	7.7	11	17	15	7.7	12	14	465	499	380	8.4	9.1
26	7.7	11	17	15	7.7	13	15	527	493	373	8.6	9.0
27	7.7	11	17	15	7.8	13	17	503	491	220	8.5	8.9
28	7.7	11	17	15	8.1	13	18	596	491	25	8.4	8.9
29	7.7	11	17	15	------	13	19	714	484	25	8.5	8.9
30	7.6	11	17	15	------	13	20	736	486	214	8.4	8.9
31	7.3	------	18	15	------	13	------	723	------	361	8.4	------
TOTAL	222.2	310.7	2,049.9	3,102	2,872.4	1,116.7	1,797.7	5,196	11,491	12,242	4,893.4	270.5
MEAN	7.17	10.4	66.1	100	103	36.0	59.9	168	383	395	158	9.02
MAX	8.3	13	199	208	207	142	154	736	515	483	358	9.3
MIN	5.4	7.3	8.9	15	7.4	8.1	8.9	21	158	25	8.4	8.6
AC-FT	441	616	4,070	6,150	5,700	2,210	3,570	10,310	22,790	24,280	9,710	537

CAL YR 1972 TOTAL 41,378.5 MEAN 113 MAX 710 MIN 5.4 AC-FT 82,070
WTR YR 1973 TOTAL 45,564.5 MEAN 125 MAX 736 MIN 5.4 AC-FT 90,380

11414140 LAKE SPAULDING NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'35", long 120°38'32", in SE¼NE¼ sec.20, T.17 N., R.12 E., Nevada County, on left abutment of Spaulding Dam on South Yuba River, 2.5 miles northeast of Emigrant Gap.

DRAINAGE AREA.--118 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,809.6 ft above mean sea level (levels by Pacific Gas and Electric Co.). Prior to July 1968, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 74,773 acre-ft June 7-11 (gage height, 205.0 ft); minimum, 4,180 acre-ft Mar. 23 (gage height, 48.0 ft).
Period of record: Maximum contents, 75,100 acre-ft July 13, 1967 (gage height, 205.5 ft); minimum 4,180 acre-ft Mar. 23, 1973 (gage height, 48.0 ft).

REMARKS.--Lake is formed by three concrete-arch dams with spillway on the middle arc. Storage began in 1913. Capacity, 74,773 acre-ft between gage heights 0.6 ft (bottom of outlet) and 205.0 ft (top of radial gates). Released water flows through Spaulding powerhouses Nos. 1 and 2. Flow through powerhouse No. 1 is transported out of Yuba River basin by Drum Canal to Bear River basin. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project. Contents not rounded to Geological Survey standards.

CAPACITY TABLE (GAGE HEIGHT, IN FEET, AND CONTENTS, IN ACRE-FEET)

11	329	50	4,578
15	427	70	9,632
20	566	100	19,541
25	874	150	41,545
30	1,352	200	71,329
40	2,742	206	75,473

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59,983	22,363	8,846	15,187	14,519	6,571	4,537	26,952	73,730	70,652	58,753	34,457
2	58,937	20,841	9,721	14,157	13,764	6,252	4,298	28,099	73,730	70,046	58,448	33,284
3	57,839	19,358	10,498	13,406	12,956	6,035	4,477	29,487	73,730	69,510	57,112	32,452
4	56,510	21,331	10,528	12,510	12,194	6,131	4,377	30,460	73,937	68,976	56,871	31,493
5	55,197	21,597	10,317	11,600	11,414	5,941	4,497	30,460	74,286	68,180	55,792	30,460
6	53,900	20,504	10,227	11,045	10,619	5,800	4,805	30,237	74,564	67,519	54,488	29,531
7	52,330	19,395	9,899	10,377	9,869	5,234	6,722	30,683	74,773	66,863	54,370	28,529
8	51,410	18,560	9,661	9,809	9,192	5,082	7,131	31,675	74,773	66,275	53,842	27,671
9	49,369	17,739	9,485	9,338	8,875	5,276	8,339	32,913	74,773	65,884	53,549	26,659
10	47,975	17,070	9,192	8,789	8,619	5,800	9,544	34,790	74,773	65,754	53,258	25,623
11	47,147	17,210	8,619	9,691	8,339	6,155	11,045	37,010	74,773	65,559	52,099	24,567
12	46,381	17,315	8,284	15,761	7,954	6,252	12,510	39,752	74,634	65,495	51,067	23,648
13	44,866	16,653	8,036	18,344	7,577	6,252	13,568	41,960	74,147	65,236	50,158	22,711
14	44,171	15,931	7,873	18,958	7,313	6,252	13,927	45,675	73,937	65,042	49,651	22,286
15	43,587	15,153	7,765	19,212	6,951	6,131	14,255	48,698	73,522	65,106	49,313	22,634
16	42,796	14,321	7,819	22,363	6,591	5,893	14,321	51,639	72,970	64,977	48,809	23,100
17	41,597	13,862	11,137	23,218	6,773	5,661	14,586	54,606	72,283	64,848	48,308	23,532
18	40,260	13,666	13,927	23,808	7,053	5,278	14,553	56,931	71,464	64,591	47,864	23,967
19	38,995	12,956	18,023	23,729	7,575	5,103	14,124	59,060	71,193	64,398	47,367	24,486
20	37,848	11,974	18,958	23,139	7,235	4,953	13,764	60,667	71,193	64,142	46,873	25,052
21	37,207	10,892	19,358	22,556	6,925	4,826	13,406	61,982	71,261	64,013	46,218	25,541
22	36,717	10,137	21,407	21,786	6,547	4,477	13,731	62,994	71,329	63,694	45,135	25,952
23	36,522	10,137	21,407	21,142	5,941	4,180	14,752	64,077	71,396	63,566	43,905	26,450
24	35,171	10,137	21,029	20,392	5,234	4,239	15,523	65,431	71,396	63,949	43,111	26,868
25	33,657	10,137	20,466	19,725	5,125	4,337	17,456	67,191	71,329	63,694	42,116	27,417
26	32,176	10,137	19,836	18,956	5,389	4,337	18,452	68,378	71,193	62,740	41,132	27,885
27	30,594	10,287	19,139	18,273	5,777	5,323	21,711	69,310	71,193	62,487	40,107	28,056
28	29,050	9,780	18,524	17,491	6,083	5,147	23,848	71,057	71,057	61,417	38,995	27,501
29	27,205	9,338	17,703	16,684	------	4,437	25,337	72,764	70,922	60,419	37,403	27,036
30	25,870	8,846	16,965	15,999	------	4,477	26,201	73,730	70,787	59,186	36,376	26,575
31	23,927	------	16,033	15,229	------	4,722	------	73,730	------	59,244	35,219	------
MAX	59,983	22,363	21,407	23,808	14,519	6,571	26,201	73,730	74,773	70,652	58,753	34,457
MIN	23,927	8,846	7,765	8,789	5,125	4,180	4,298	26,952	70,787	59,186	35,219	22,286
(a)	111.5	67.3	90.1	87.7	56.8	50.7	117.1	203.5	199.2	181.3	139.3	118.6
(b)	-37,177	-15,081	+7,187	-804	-9,146	-1,361	+21,479	+47,529	-2,943	-11,543	-24,025	-8,644

CAL YR 1972 b -206
WTR YR 1973 b -34,529

a Gage height, in feet, at end of month.
b Change in contents, in acre-feet.

11414170 DRUM CANAL AT TUNNEL OUTLET, NEAR EMIGRANT GAP, CALIF.
(Formerly published as Drum Canal at Intake, near Emigrant Gap)

LOCATION (revised).--Lat 39°19'03", long 120°39'08", in SE¼SW¼ sec.20, T.17 N., R.12 E., Nevada County, in Tahoe National Forest, 100 ft downstream from tunnel outlet, 1.0 mile downstream from Spaulding No. 1 powerhouse, and 1.7 miles northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year. Prior to October 1972, published as "Drum Canal at Intake."

GAGE.--Water-stage recorder. Altitude of gage is 4,880 ft (from topographic map). Prior to Oct. 1, 1968, in powerhouse 0.7 mile upstream at different datum.

AVERAGE DISCHARGE.--9 years, 543 cfs (393,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 838 cfs Apr. 11, 16, May 14, 1969; no flow for several days in most years.

REMARKS.--Canal diverts from Spaulding No. 1 powerhouse at Lake Spaulding Dam. Water is used for irrigation and power in the Bear River basin. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR.	APR	MAY	JUN	JUL	AUG	SEP
1	740	750	323	743	736	340	574	766	779	492	714	711
2	731	754	51	745	738	542	452	771	782	588	717	699
3	713	734	118	749	732	521	469	775	778	706	719	705
4	721	231	448	748	728	351	609	777	779	712	716	702
5	723	195	506	749	730	433	621	783	776	710	717	703
6	718	618	509	748	724	409	637	776	776	706	719	709
7	699	715	517	750	722	530	681	779	774	706	717	717
8	727	709	440	745	709	428	703	771	778	713	715	716
9	727	712	291	733	707	313	723	771	776	714	713	720
10	727	613	287	729	710	297	726	776	775	714	715	720
11	727	196	448	731	706	436	748	779	774	714	720	710
12	722	197	366	392	701	484	787	779	774	714	716	719
13	723	580	265	517	686	484	785	779	776	715	717	715
14	375	722	247	723	677	482	777	778	742	663	715	440
15	196	723	229	733	667	483	782	782	725	709	712	40
16	614	734	190	293	567	495	789	779	724	709	714	2.6
17	735	617	191	488	372	498	775	784	721	715	711	15
18	732	387	490	584	381	488	774	783	554	718	715	1.5
19	734	614	561	691	390	449	791	784	488	718	714	1.3
20	640	731	692	730	561	420	793	778	484	716	714	1.3
21	192	742	731	735	671	408	784	784	484	715	713	1.2
22	191	566	697	734	663	396	780	777	494	713	712	1.0
23	190	192	734	733	645	342	779	783	494	696	714	1.2
24	625	197	751	729	622	270	771	784	494	717	708	1.6
25	732	198	746	732	529	275	764	777	494	715	698	1.3
26	734	199	744	729	388	369	771	779	494	719	702	.7
27	738	445	743	727	360	543	767	781	494	719	704	187
28	739	513	746	729	422	596	766	788	490	717	713	440
29	746	511	748	730	------	523	765	784	490	713	715	439
30	749	516	746	735	------	377	758	783	492	716	713	447
31	751	------	748	738	------	435	------	781	------	715	717	------
TOTAL	19,811	15,611	15,303	21,372	17,244	13,417	21,701	24,151	19,455	21,707	22,119	11,267.7
MEAN	639	520	494	689	616	433	723	779	649	700	714	376
MAX	751	754	751	750	738	596	793	788	782	719	720	720
MIN	190	192	51	293	360	270	452	766	484	492	698	.70
AC-FT	39,300	30,960	30,350	42,390	34,200	26,610	43,040	47,900	38,590	43,060	43,870	22,350

CAL YR 1972 TOTAL 203,712.50 MEAN 557 MAX 824 MIN .50 AC-FT 404,100
WTR YR 1973 TOTAL 223,158.70 MEAN 611 MAX 793 MIN .70 AC-FT 442,600

11414190 DRUM CANAL ABOVE DRUM FOREBAY, NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'50", long 120°43'47", in NE¼SW¼ sec.10, T.16 N., R.11 E., Placer County, on right bank 1.2 miles west of Blue Canyon, and 1.5 miles upstream from Drum Forebay.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,800 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 551 cfs (399,200 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 782 cfs Sept. 16, 1971; no flow at times in most years.

REMARKS.--Flow represents water diverted from South Yuba River through Spaulding No. 1 powerplant plus diversion from North Fork American River basin by way of Lake Valley Canal (see sta 11426190). This water enters the Bear River at Drum Forebay. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	734	370	733	739	385	546	731	733	527	740	738
2	739	734	57	736	742	555	491	734	732	613	740	734
3	741	740	115	740	740	563	491	737	729	736	741	735
4	746	337	450	738	736	398	626	740	731	741	740	735
5	748	263	509	739	736	459	624	738	732	740	742	736
6	740	608	512	739	733	409	641	735	730	738	746	736
7	727	737	520	742	733	538	688	736	725	737	743	740
8	738	730	471	737	724	465	707	730	736	741	739	737
9	733	728	338	727	718	367	729	732	737	742	736	736
10	727	678	334	720	725	336	735	734	738	741	738	745
11	739	257	451	610	717	461	742	738	738	742	739	735
12	733	255	409	269	709	507	740	736	737	743	736	735
13	737	570	315	508	699	504	730	734	733	745	736	726
14	446	735	294	716	689	503	723	737	730	700	737	506
15	245	719	280	732	679	502	725	739	736	742	731	59
16	585	730	236	329	596	512	723	737	735	740	736	28
17	740	647	251	492	408	517	723	738	732	743	735	13
18	743	402	505	588	414	510	725	738	596	744	739	.5
19	738	594	572	688	421	481	730	737	515	744	738	.4
20	609	732	697	734	577	460	738	732	507	742	737	.9
21	239	740	735	735	686	453	739	737	515	742	735	.4
22	237	616	704	734	676	444	738	736	529	742	739	.3
23	237	228	728	731	658	404	739	736	528	727	735	.4
24	594	234	735	730	639	332	739	738	527	742	731	.4
25	730	235	733	734	563	341	737	734	527	741	728	.3
26	732	237	732	732	441	396	737	735	527	742	730	.3
27	733	432	733	730	364	529	736	735	527	744	734	101
28	737	507	736	730	475	587	731	738	526	743	739	458
29	737	507	738	733	------	530	727	736	527	739	742	459
30	737	510	735	739	------	381	725	735	527	739	740	469
31	735	------	738	743	------	420	------	735	------	740	744	------
TOTAL	20,142	16,176	15,733	21,088	17,737	14,249	20,925	22,808	19,342	22,582	22,866	11,664.9
MEAN	650	539	508	680	633	460	698	736	645	728	738	389
MAX	748	740	738	743	742	587	742	740	738	745	746	745
MIN	237	228	57	269	364	332	491	730	507	527	728	.30
AC-FT	39,950	32,090	31,210	41,830	35,180	28,260	41,500	45,240	38,360	44,790	45,350	23,140

CAL YR 1972 TOTAL 209,455.30 MEAN 572 MAX 767 MIN .10 AC-FT 415,500
WTR YR 1973 TOTAL 225,312.90 MEAN 617 MAX 748 MIN .30 AC-FT 446,900

11414200 SOUTH YUBA CANAL NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°18'45", long 120°39'45", in SE¼NE¼ sec.30, T.17 N., R.12 E., Nevada County, on left bank of concrete flume 400 ft downstream from Bowman Lake Road, and 2.5 miles northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,640 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 104 cfs (75,350 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 165 cfs Aug. 3, 1965; no flow Apr. 20-22, 1966, Apr. 6-11, 1971.

REMARKS.--Canal diverts from South Yuba River below Lake Spaulding. Water is diverted to Deer Creek powerhouse where it enters Deer Creek. See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	90	86	82	65	62	67	130	148	115	119	120
2	91	90	88	81	64	59	19	130	145	115	118	121
3	88	90	86	87	64	63	.18	134	143	116	118	122
4	68	91	86	85	64	68	.18	137	143	116	117	122
5	88	85	87	82	62	67	.90	135	144	116	117	120
6	88	89	97	83	64	65	1.0	136	144	116	117	120
7	87	90	103	82	65	63	1.0	134	144	115	116	121
8	90	88	103	83	64	65	1.0	135	145	114	117	121
9	89	89	105	93	63	66	1.0	137	144	114	118	120
10	88	93	103	88	62	67	1.0	139	144	115	117	122
11	88	97	101	80	62	67	1.0	141	145	114	118	123
12	87	93	100	70	61	66	1.0	143	144	116	117	123
13	88	93	99	75	61	66	1.0	143	122	117	117	122
14	89	93	100	67	64	66	1.0	144	108	97	117	122
15	90	92	100	63	66	66	1.0	145	116	114	117	123
16	89	82	100	52	66	65	1.0	145	116	114	118	124
17	91	79	87	64	64	65	1.0	143	116	117	120	123
18	95	79	85	67	62	64	42	147	116	119	123	124
19	94	80	89	65	63	64	116	147	116	119	122	120
20	103	80	87	64	61	64	115	147	116	119	123	124
21	108	79	88	64	64	64	120	147	116	119	122	122
22	109	79	88	63	66	64	122	146	115	118	121	123
23	109	79	86	62	66	62	124	146	115	111	121	123
24	110	80	85	65	66	63	127	145	115	121	121	123
25	109	84	84	65	64	66	128	147	116	120	120	122
26	108	84	86	65	63	65	130	146	116	120	120	120
27	109	87	87	64	63	71	132	144	116	120	120	115
28	108	87	85	63	62	74	133	145	116	119	119	113
29	107	85	84	63	------	66	133	146	115	119	118	110
30	105	85	84	64	------	60	130	148	115	119	117	95
31	95	------	83	64	------	63	------	148	------	119	117	------
TOTAL	2,995	2,592	2,832	2,215	1,781	2,016	1,651.26	4,400	3,814	3,603	3,682	3,603
MEAN	96.6	86.4	91.4	71.5	63.6	65.0	55.0	142	127	116	119	120
MAX	110	97	105	93	66	74	133	148	148	121	123	124
MIN	87	79	83	52	61	59	.18	130	108	97	116	95
AC-FT	5,940	5,140	5,620	4,390	3,530	4,000	3,280	8,730	7,570	7,150	7,300	7,150

CAL YR 1972 TOTAL 31,462.77 MEAN 86.0 MAX 144 MIN .05 AC-FT 62,410
WTR YR 1973 TOTAL 35,184.26 MEAN 96.4 MAX 148 MIN .18 AC-FT 69,790

11414250 SOUTH YUBA RIVER AT LANGS CROSSING, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°19'07", long 120°39'27", in SW¼SW¼ sec.20, T.17 N., R.12 E., Nevada County, on right bank 150 ft downstream from road bridge, 0.8 mile downstream from Spaulding Nos. 1 and 2 powerplants, and 1.6 miles northeast of Emigrant Gap.

DRAINAGE AREA.--120 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,432.44 ft above mean sea level (levels by Pacific Gas and Electric Co.).

AVERAGE DISCHARGE.--7 years, 86.4 cfs (62,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,080 cfs May 31 (gage height, 8.20 ft); minimum daily, 4.0 cfs Oct. 4, 6.
Period of record: Maximum discharge, 9,700 cfs Jan. 22, 1970 (gage height, 14.45 ft); minimum daily, 3.1 cfs Nov. 5-7, 1967.

REMARKS.--Flow regulated by Lake Spaulding (see sta 11414140). See schematic diagrams of Yuba River and Bear River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.2	6.9	7.9	9.9	27	15	9.3	882	8.5	5.8	5.0
2	4.7	4.1	6.7	7.9	9.9	23	13	9.3	476	8.4	6.0	5.1
3	4.1	8.0	7.5	7.9	10	19	12	9.3	523	8.1	6.1	5.1
4	4.0	25	9.2	7.9	11	17	13	10	323	7.8	6.3	4.9
5	4.2	17	7.8	7.4	11	15	14	9.5	213	7.6	6.4	4.9
6	4.0	10	7.7	7.2	11	14	16	9.0	37	7.3	6.6	4.7
7	4.2	14	7.7	6.8	15	13	15	8.3	131	7.1	6.7	4.7
8	4.9	20	7.7	7.1	18	12	14	8.5	288	6.7	6.9	4.6
9	5.5	11	7.7	8.0	18	12	15	8.6	305	6.5	7.0	4.6
10	7.5	11	7.7	8.5	21	20	15	8.2	254	6.8	7.2	4.7
11	15	13	7.7	47	17	21	15	8.2	161	6.4	7.3	4.7
12	7.9	12	7.7	81	15	16	14	8.2	78	6.3	7.5	4.6
13	6.3	11	7.2	36	14	14	15	8.3	53	6.5	7.6	4.4
14	6.3	23	7.2	24	13	12	14	8.2	14	6.6	7.7	4.8
15	7.2	18	7.2	25	13	12	13	8.1	13	6.5	7.9	5.8
16	8.1	19	9.4	114	13	12	12	7.8	13	6.5	8.0	5.6
17	7.5	15	45	35	12	13	12	10	12	6.5	8.2	5.6
18	7.2	13	43	34	13	12	12	12	11	6.4	8.3	5.6
19	6.2	13	43	23	12	12	12	13	10	6.3	8.4	5.6
20	5.8	12	25	18	12	13	11	14	9.5	6.2	8.5	8.7
21	5.8	11	20	16	12	12	11	16	9.3	6.0	8.6	6.5
22	5.6	9.8	43	14	12	11	11	37	9.3	5.8	8.7	6.2
23	5.3	9.3	20	13	12	11	11	24	9.3	5.7	8.8	6.0
24	4.7	8.6	17	12	19	12	12	26	9.3	5.8	8.9	5.9
25	4.7	8.3	14	12	23	13	11	150	9.3	5.6	9.0	5.8
26	4.7	8.5	13	11	24	14	12	252	9.2	5.6	9.0	5.6
27	4.5	8.4	12	10	32	17	22	222	8.9	5.5	9.0	5.3
28	4.7	7.8	11	9.7	30	15	16	237	8.7	5.4	6.8	4.9
29	4.9	7.4	9.6	9.6	------	13	11	392	8.4	5.4	5.0	4.7
30	4.6	7.2	9.4	9.9	------	12	9.7	975	8.4	7.0	4.9	4.5
31	4.4	------	8.3	9.9	------	16	------	1,380	------	5.7	5.0	------
TOTAL	179.6	359.6	456.3	640.7	432.8	455	398.7	3,898.8	3,896.6	202.5	228.1	159.1
MEAN	5.79	12.0	14.7	20.7	15.5	14.7	13.3	126	130	6.53	7.36	5.30
MAX	15	25	45	114	32	27	22	1,380	882	8.5	9.0	8.7
MIN	4.0	4.1	6.7	6.8	9.9	11	9.7	7.8	8.4	5.4	4.9	4.4
AC-FT	356	713	905	1,270	858	902	791	7,730	7,730	402	452	316

CAL YR 1972 TOTAL 3,587.9 MEAN 9.80 MAX 88 MIN 4.0 AC-FT 7,120
WTR YR 1973 TOTAL 11,307.8 MEAN 31.0 MAX 1,380 MIN 4.0 AC-FT 22,430

11415500 BOWMAN LAKE NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°27'01", long 120°39'10", in SE¼SW¼ sec.5, T.18 N., R.12 E., Nevada County, on rockfill portion of Bowman Dam on Canyon Creek, 4.5 miles east of Graniteville, and 8 miles south of Sierra City.

DRAINAGE AREA.--27.1 sq mi.

PERIOD OF RECORD.--December 1926 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District). Prior to Oct. 8, 1964, nonrecording gage at same site and datum.

EXTREMES.--Current year: Maximum contents, 68,900 acre-ft May 31 to June 3 (elevation, 5,563.9 ft); no storage Oct. 4-29.
Period of record: Maximum contents, 71,000 acre-ft May 30, 1965 (elevation, 5,566.5 ft); minimum observed under normal operating conditions since reservoir first filled, 1,000 acre-ft Mar. 4, 1931 (elevation, 5,430.1 ft).

REMARKS.--Lake is formed by one rockfill and one concrete-arch dam; storage began in November 1926. Total capacity, 68,200 acre-ft between elevations 5,400 ft (bottom of outlet tunnel) and 5,563 ft (crest of concrete-arch dam). Flashboards are occasionally added, increasing elevation to 5,565.8 ft and capacity to 70,400 acre-ft, all of which is available for release. Lake receives water from Middle Yuba River through Milton-Bowman tunnel (see sta 11408000), and releases it through Bowman-Spaulding Canal (see sta 11416000), which conveys it to reservoirs of Pacific Gas and Electric Co. Water is eventually used for irrigation by Nevada Irrigation District. See schematic diagram of Yuba River basin. Lake completely drained for inspection and repair Nov. 25 to Dec. 9, 1949, Oct. 1-20, 1966, Oct. 4-29, 1972.

COOPERATION.--Fifteen nonrecording gage readings furnished by Nevada Irrigation District.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,419.6	0	5,460	6,900
5,425	500	5,470	10,200
5,430	900	5,480	14,200
5,435	1,400	5,510	30,000
5,440	2,100	5,540	49,800
5,450	4,100	5,570	73,800

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,460	3,360	24,900	44,700	53,700	45,100	35,200	40,400	68,900	68,800	55,900	45,800
2	1,030	4,420	25,400	44,900	53,300	44,800	34,700	40,900	68,900	68,800	55,200	45,800
3	490	5,580	26,100	45,200	53,100	44,600	34,100	41,500	68,900	68,800	54,700	45,900
4	0	7,530	26,600	45,500	52,800	44,300	33,700	42,100	68,800	68,800	54,100	45,900
5	0	9,240	27,100	45,700	52,400	44,000	33,500	42,300	68,800	68,800	53,600	46,000
6	0	10,200	27,800	46,000	52,100	43,600	33,400	42,400	68,800	68,800	52,900	46,000
7	0	11,400	28,400	46,200	51,800	43,200	33,300	42,900	68,800	68,800	52,400	46,000
8	0	12,400	28,900	46,400	51,500	42,900	33,300	43,400	68,800	68,800	51,800	46,000
9	0	13,400	29,400	46,800	51,200	42,600	33,400	44,100	68,700	68,400	51,200	46,000
10	0	14,100	29,900	47,000	51,000	42,200	33,500	44,800	68,600	68,000	50,600	46,000
11	0	14,800	30,400	48,000	50,700	41,900	33,700	45,700	68,400	67,400	50,000	46,000
12	0	15,400	30,700	51,300	50,400	41,500	34,100	47,000	68,300	66,900	49,500	46,100
13	0	16,100	31,000	53,000	50,000	41,100	34,300	48,500	68,000	66,400	49,000	46,100
14	0	16,800	31,300	54,000	49,700	40,800	34,500	50,000	67,600	66,000	48,400	46,200
15	0	17,500	31,600	54,800	49,300	40,400	34,600	51,600	67,300	65,600	47,800	46,200
16	0	18,100	31,800	56,200	49,200	40,000	34,600	53,200	66,900	64,800	47,400	46,200
17	0	18,600	33,500	57,000	48,800	39,700	34,600	54,800	66,800	64,600	46,800	46,200
18	0	19,000	35,200	57,200	48,400	39,200	34,600	56,400	67,000	63,900	46,200	46,300
19	0	19,600	37,100	57,200	48,000	38,900	34,600	58,500	67,200	63,300	45,700	46,300
20	0	20,000	38,200	57,100	47,600	38,500	34,600	60,200	67,300	62,600	45,300	46,500
21	0	20,400	39,000	56,900	47,300	38,200	34,600	61,600	67,600	62,000	45,300	46,600
22	0	20,800	40,500	56,700	46,900	37,800	34,700	62,500	67,800	61,500	45,300	46,600
23	0	21,200	41,300	56,400	46,500	37,400	35,000	63,400	68,000	60,900	45,400	46,600
24	0	21,600	41,800	56,200	46,200	37,000	35,500	64,600	68,100	60,400	45,400	46,700
25	0	22,000	42,200	56,000	45,900	36,700	36,100	65,800	68,300	59,700	45,500	46,800
26	0	22,400	42,700	55,600	45,700	36,400	36,800	66,400	68,400	59,200	45,500	46,800
27	0	22,800	43,200	55,300	45,500	36,200	37,600	67,000	68,400	58,600	45,600	46,800
28	0	23,300	43,500	55,000	45,200	35,900	38,600	67,600	68,600	58,000	45,600	46,900
29	0	23,800	43,800	54,700	------	35,600	39,400	68,200	68,600	57,600	45,900	46,900
30	1,770	24,400	44,100	54,400	------	35,400	39,900	68,800	68,700	57,100	45,900	46,900
31	2,720	------	44,400	54,000	------	35,300	------	68,900	------	56,400	45,800	------
MAX	2,720	24,400	44,400	57,200	53,700	45,100	39,900	68,900	68,900	68,800	55,900	46,900
MIN	0	3,360	24,900	44,700	45,200	35,300	33,300	40,400	66,800	56,400	45,300	45,800
(a)	5,443.6	5,500.6	5,532.3	5,545.3	5,533.5	5,518.8	5,525.9	5,563.9	5,563.6	5,548.3	5,534.3	5,535.8
(b)	+830	+21,700	+20,000	+9,600	-8,800	-9,900	+4,600	+29,000	-200	-12,300	-10,600	+1,100

CAL YR 1972 b +2,500
WTR YR 1973 b +45,000

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11416000 BOWMAN-SPAULDING CANAL INTAKE NEAR GRANITEVILLE, CALIF.

LOCATION.--Lat 39°26'26", long 120°39'30", in NW¼SW¼ sec.8, T.18 N., R.12 E., Nevada County, Tahoe National Forest, on left bank 0.6 mile downstream from Bowman Dam, 4.5 miles east of Graniteville, and 8.5 miles south of Sierra City.

PERIOD OF RECORD.--October 1927 to current year. Prior to October 1970, published as Bowman-Spaulding Canal at intake or Bowman-Spaulding Canal intake, near Sierra City.

GAGE.--Water-stage recorder. Datum of gage is 5,390.39 ft above mean sea level. Prior to July 1965 at site 0.3 mile upstream at different datum.

AVERAGE DISCHARGE.--46 years, 155 cfs (112,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 339 cfs July 24, 1973; no flow at times in most years.

REMARKS.--Records good. Canal diverts from left bank of Canyon Creek at diversion dam 500 ft downstream from Bowman Dam. Water is diverted to Lake Spaulding and after passing through several powerhouses is used for irrigation by Nevada Irrigation District. See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1935-36, 1940.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	26	228	232	224	192	262	106	188	3.7	315	302
2	235	20	223	234	226	211	264	108	202	.54	308	294
3	200	17	220	233	228	217	265	98	209	.54	308	290
4	30	13	220	234	227	217	265	98	211	.54	308	274
5	4.2	13	215	236	226	222	257	111	220	.54	306	277
6	3.8	12	209	242	224	229	223	131	230	.54	309	280
7	3.8	46	207	242	223	232	194	142	232	.54	316	280
8	3.4	155	207	242	224	235	181	111	234	56	302	281
9	4.8	218	208	234	227	241	179	81	239	225	305	283
10	8.2	233	209	229	228	245	173	83	245	288	312	283
11	5.6	229	210	166	224	246	146	71	247	301	315	280
12	15	229	210	9.2	221	239	125	46	250	302	315	277
13	17	228	210	38	224	236	121	25	258	316	315	277
14	17	219	223	103	230	247	140	27	259	322	315	280
15	12	213	250	142	222	246	163	36	259	329	312	277
16	13	225	258	67	128	246	172	50	258	336	308	277
17	14	228	202	84	229	246	176	34	96	336	308	278
18	14	225	188	113	239	248	163	37	1.1	336	306	277
19	10	226	163	152	238	248	171	63	1.1	333	305	273
20	15	223	185	180	235	251	194	84	1.1	332	305	266
21	18	225	223	181	232	253	178	105	1.1	336	301	270
22	20	229	144	190	230	262	154	142	1.1	334	304	273
23	18	230	194	202	232	264	144	161	1.1	333	306	277
24	18	230	216	212	232	269	103	141	1.1	339	306	277
25	18	232	212	216	226	265	89	136	1.1	336	301	277
26	19	233	209	216	223	263	82	156	1.1	329	299	278
27	21	221	213	216	220	254	56	170	1.4	322	298	285
28	24	225	214	216	203	254	24	179	1.1	312	295	294
29	26	229	223	221	------	263	55	178	1.1	322	200	294
30	20	230	229	224	------	269	80	178	2.5	318	301	291
31	23	------	229	224	------	264	------	179	------	315	302	------
TOTAL	1,103.8	5,282	6,551	5,730.2	6,245	7,574	4,799	3,267	3,853.0	7,414.94	9,406	8,422
MEAN	35.6	176	211	185	223	244	160	105	128	239	303	281
MAX	253	233	258	242	239	269	265	179	259	339	316	302
MIN	3.4	12	144	9.2	128	192	24	25	1.1	.54	200	266
AC-FT	2,190	10,480	12,990	11,370	12,390	15,020	9,520	6,480	7,640	14,710	18,660	16,710

CAL YR 1972 TOTAL 72,664.70 MEAN 199 MAX 311 MIN 1.9 AC-FT 144,100
WTR YR 1973 TOTAL 69,647.94 MEAN 191 MAX 339 MIN .54 AC-FT 138,100

11416100 BOWMAN-SPAULDING CANAL AT JORDAN CREEK SIPHON VENTURI, NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°20'32", long 120°38'26", in SW¼NW¼ sec.16, T.17 N., R.12 E., Nevada County, at outlet of Jordan Creek siphon 0.6 mile downstream from Fuller Lake, and 3.5 miles northeast of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,440 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 228 cfs (165,200 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 330 cfs Dec. 22, 1964; no flow at times in most years.

REMARKS.--Records show water diverted from Bowman Lake (see sta 11415500) plus numerous small tributaries before it enters Lake Spaulding (see sta 11414140). See schematic diagram of Yuba River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	261	0	233	256	272	276	275	288	298	0	298	294
2	255	0	233	258	269	270	269	301	295	0	298	295
3	205	0	230	266	270	271	270	302	296	0	297	294
4	155	0	230	265	277	272	273	303	292	0	295	291
5	39	0	221	260	276	266	280	289	289	0	296	283
6	0	0	219	261	273	268	284	281	290	0	295	286
7	0	45	218	261	273	270	284	291	294	0	295	286
8	0	146	216	263	270	268	268	304	292	44	296	285
9	0	226	214	268	270	269	271	292	290	202	294	287
10	0	238	214	266	275	274	278	289	290	296	295	286
11	0	233	214	279	279	287	284	300	293	296	296	286
12	0	233	214	308	273	286	279	299	292	299	295	286
13	0	233	214	265	264	273	277	295	292	297	296	286
14	0	236	222	265	264	272	258	295	295	301	295	288
15	0	231	243	258	264	276	264	292	299	310	295	289
16	0	225	260	288	167	276	266	296	298	311	293	287
17	0	231	289	271	248	276	276	293	155	312	292	287
18	0	231	274	241	267	274	287	293	0	315	292	287
19	0	233	295	245	274	272	273	284	0	314	291	285
20	0	230	269	265	277	274	281	285	0	313	291	290
21	0	228	282	268	276	272	287	275	0	309	290	288
22	0	230	292	261	272	270	284	286	0	309	290	283
23	0	230	273	261	271	271	290	300	0	312	294	285
24	0	231	275	266	273	273	299	305	0	309	300	286
25	0	232	275	273	280	275	291	299	0	309	300	286
26	0	233	265	275	275	272	301	295	0	309	299	285
27	0	235	263	271	279	277	304	287	0	301	302	283
28	0	233	262	267	289	277	297	292	0	299	294	286
29	0	233	255	265	------	265	281	298	0	299	174	289
30	0	233	259	273	------	270	279	298	0	300	299	290
31	0	------	260	276	------	277	------	299	------	299	296	------
TOTAL	915	5,289	7,683	8,265	7,517	8,469	8,410	9,106	4,850	6,965	9,033	8,619
MEAN	29.5	176	248	267	268	273	280	294	162	225	291	287
MAX	261	238	295	308	289	287	304	305	299	315	302	295
MIN	0	0	214	241	167	265	258	275	0	0	174	283
AC-FT	1,810	10,490	15,240	16,390	14,910	16,800	16,680	18,060	9,620	13,820	17,920	17,100

CAL YR 1972 TOTAL 85,103 MEAN 233 MAX 305 MIN 0 AC-FT 168,800
WTR YR 1973 TOTAL 85,121 MEAN 233 MAX 315 MIN 0 AC-FT 168,800

11416500 CANYON CREEK BELOW BOWMAN LAKE, CALIF.

LOCATION.--Lat 39°26'23", long 120°39'39", in NE¼SE¼ sec.7, T.18 N., R.12 E., Nevada County, on left bank 1 mile downstream from Bowman Dam, 3 miles upstream from Texas Creek, and 9 miles south of Sierra City.

DRAINAGE AREA.--28.3 sq mi.

PERIOD OF RECORD.--January 1927 to current year.

GAGE.--Water-stage recorder and concrete control. Concrete control covered with rocks Jan. 22, 1970. Altitude of gage is 5,100 ft (from topographic map).

AVERAGE DISCHARGE.--46 years, 38.9 cfs (28,180 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 285 cfs May 31 (gage height, 4.90 ft); minimum daily, 0.80 cfs Dec. 13-15, 31, Jan. 1, Aug. 10.
Period of record: Maximum discharge, 3,740 cfs Jan. 22, 1970 (gage height, 9.42 ft in gage well, 10.32 ft, from floodmarks), from rating curve extended above 1,500 cfs on basis of slope-area measurement of maximum flow; no flow at times.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Flow regulated by French Lake (usable capacity, 13,840 acre-ft), Bowman Lake (see sta 11415500), several smaller reservoirs, and diversion into Bowman-Spaulding Canal (see sta 11416000). See schematic diagram of Yuba River basin.

REVISIONS (WATER YEARS).--WSP 1315-A: 1930(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	1.9	2.0	.80	1.9	5.5	3.5	4.1	160	13	3.3	4.2
2	3.9	2.8	2.0	1.1	1.9	4.6	3.5	3.9	142	32	3.3	2.6
3	3.7	5.4	1.5	3.0	1.3	4.1	3.5	3.9	106	45	3.6	1.5
4	6.8	17	1.5	3.0	.94	3.7	3.7	3.7	69	50	2.7	2.8
5	20	8.4	1.3	4.1	1.1	3.5	4.0	3.3	29	49	2.6	2.4
6	18	5.5	1.3	1.4	2.5	3.3	5.0	3.2	25	43	4.2	2.9
7	18	12	1.3	.94	4.3	3.3	5.3	3.5	14	42	1.9	4.2
8	18	6.1	1.0	2.1	4.3	3.3	6.0	3.5	7.3	31	2.7	2.6
9	18	4.8	.94	2.8	4.6	3.3	7.6	3.2	2.6	8.6	3.4	1.5
10	18	3.7	.87	1.7	4.6	5.5	7.1	3.2	1.7	2.3	.80	1.1
11	57	3.3	.87	21	4.3	4.3	7.6	3.2	1.5	1.7	2.3	3.3
12	37	4.1	.87	41	4.1	3.7	7.4	3.0	3.4	3.0	3.6	5.9
13	28	8.7	.80	9.3	4.1	3.3	6.1	2.8	3.1	1.5	3.8	5.1
14	29	8.7	.80	4.3	4.1	3.3	5.0	2.6	3.1	1.4	3.3	4.2
15	33	6.3	.80	4.3	4.1	3.5	4.8	3.2	3.1	2.1	2.7	5.5
16	45	5.3	1.2	21	4.1	3.9	4.6	4.6	3.1	2.6	3.6	5.9
17	45	3.2	18	5.3	4.3	3.3	6.3	3.7	5.3	2.1	2.7	4.3
18	38	2.5	16	4.8	4.3	3.3	4.8	3.2	9.8	2.3	2.4	6.2
19	51	2.8	11	3.9	3.7	3.2	4.6	3.2	8.3	2.1	1.9	9.5
20	49	5.8	5.5	3.3	3.7	3.2	4.1	3.2	10	2.8	1.6	10
21	37	5.8	4.3	3.0	4.3	3.2	4.3	3.2	8.9	2.1	2.4	9.8
22	31	4.6	12	2.6	4.3	3.2	5.0	3.0	8.6	1.8	3.1	8.9
23	26	3.3	4.3	2.5	3.9	3.2	6.1	3.0	8.6	3.0	2.1	7.7
24	25	3.2	3.0	2.5	4.8	3.7	5.8	3.2	9.8	4.2	1.9	7.7
25	23	3.2	1.8	2.3	4.6	3.7	5.8	3.2	10	4.0	3.5	6.8
26	23	3.0	1.6	2.0	4.6	4.8	6.3	3.2	8.6	4.2	5.1	5.5
27	23	2.2	1.2	2.0	6.6	4.3	6.1	3.0	8.6	2.4	3.8	4.9
28	12	1.9	1.2	2.0	5.8	3.7	5.3	2.8	8.6	5.1	3.1	3.1
29	2.6	1.5	1.2	2.0	------	3.3	4.6	2.8	8.9	2.9	2.4	3.6
30	2.5	2.5	.94	2.0	------	3.5	4.3	3.6	8.9	2.9	2.8	5.3
31	2.5	------	.80	1.9	------	3.5	------	191	------	3.1	3.1	------
TOTAL	748.3	149.5	101.89	163.94	107.14	115.2	158.1	290.2	696.8	373.2	89.70	149.0
MEAN	24.1	4.98	3.29	5.29	3.83	3.72	5.27	9.36	23.2	12.0	2.89	4.97
MAX	57	17	18	41	6.6	5.5	7.6	191	160	50	5.1	10
MIN	2.5	1.5	.80	.80	.94	3.2	3.5	2.6	1.5	1.4	.80	1.1
AC-FT	1,480	297	202	325	213	228	314	576	1,380	740	178	296

CAL YR 1972 TOTAL 2,001.69 MEAN 5.47 MAX 57 MIN .80 AC-FT 3,970
WTR YR 1973 TOTAL 3,142.97 MEAN 8.61 MAX 191 MIN .80 AC-FT 6,230

11417500 SOUTH YUBA RIVER AT JONES BAR, NEAR GRASS VALLEY, CALIF.

LOCATION.--Lat 39°17'32", long 121°06'13", in NW¼SE¼ sec.32, T.17 N., R.8 E., Nevada County, on left bank at Jones Bar, 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.--308 sq mi.

PERIOD OF RECORD.--October 1940 to September 1948, April 1959 to current year. Published as South Fork Yuba River at Jones Bar 1940-48 and as South Yuba River at Jones Bar 1959-63.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (from river-profile map). Oct. 1, 1940, to Sept. 30, 1948, at site 150 ft upstream at datum 2.00 ft higher.

AVERAGE DISCHARGE.--22 years, 471 cfs (341,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,860 cfs Jan. 16 (gage height, 12.48 ft); minimum daily, 34 cfs Aug. 23.
Period of record: Maximum discharge, 53,600 cfs Dec. 22, 1964 (gage height, 25.0 ft, from floodmarks), from rating curve extended above 23,000 cfs on basis of slope-area measurement of maximum flow; minimum, 1.0 cfs Sept. 10-13, 1944.
Flood of Dec. 23, 1955, reached a stage of 30.7 ft, from floodmarks, present datum, at site 100 ft upstream.

REMARKS.--Records good. Flow regulated by Lake Spaulding (see sta 11414040), Fordyce Lake (capacity, 46,700 acre-ft), Bowman Lake (see sta 11415500), and many smaller reservoirs. Diversions into and out of basin for several powerhouses and for irrigation of about 20,000 acres by the Nevada Irrigation District. See schematic diagram of Yuba River basin. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1315-A: 1942-43(M), drainage area at former site. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	58	111	193	526	1,270	508	412	1,620	87	41	39
2	49	56	111	186	481	1,230	454	375	802	89	41	39
3	47	61	118	189	559	1,110	427	385	805	104	40	39
4	43	453	183	180	1,270	1,190	403	406	679	112	40	39
5	44	379	146	162	946	985	433	368	489	116	40	39
6	57	183	140	164	914	1,070	466	330	206	111	40	38
7	56	178	142	166	1,150	923	530	315	194	108	40	38
8	58	259	131	178	990	856	472	328	383	104	40	38
9	59	174	96	642	860	762	493	340	417	90	40	38
10	89	205	131	1,110	2,000	779	522	348	435	72	40	37
11	235	340	107	2,030	1,940	1,000	516	365	324	61	39	36
12	208	208	131	5,050	1,470	806	540	391	191	56	37	36
13	106	188	111	1,810	1,180	726	554	418	181	54	37	37
14	87	686	110	1,200	1,200	646	493	424	146	54	38	39
15	103	442	121	1,040	1,010	589	466	415	116	55	38	39
16	133	692	154	5,190	874	554	454	412	112	56	37	39
17	137	378	1,270	2,530	774	561	460	415	109	54	36	42
18	123	263	1,040	2,930	714	530	463	403	125	53	36	42
19	116	279	1,660	1,750	646	558	433	380	133	52	36	41
20	120	257	772	1,210	589	674	403	340	125	51	36	60
21	107	217	531	1,000	554	589	397	310	120	50	35	92
22	97	189	867	815	516	540	382	285	116	50	35	56
23	89	166	628	690	499	508	385	292	114	49	34	55
24	85	150	481	596	572	478	439	281	114	47	35	59
25	79	136	394	626	714	472	460	305	109	46	36	62
26	77	132	338	540	827	484	475	499	107	47	39	56
27	75	132	305	481	1,490	496	516	475	104	47	48	49
28	75	127	295	445	1,690	493	544	433	98	46	59	46
29	74	122	251	508	------	457	499	487	95	44	44	44
30	59	114	230	702	------	469	445	788	89	44	46	44
31	58	------	210	578	------	547	------	1,370	------	42	41	------
TOTAL	2,794	7,224	11,315	34,891	26,955	22,352	14,032	13,095	8,658	2,051	1,224	1,358
MEAN	90.1	241	365	1,126	963	721	468	422	289	66.2	39.5	45.3
MAX	235	692	1,660	5,190	2,000	1,270	554	1,370	1,620	116	59	92
MIN	43	56	96	162	481	457	382	281	89	42	34	36
AC-FT	5,540	14,330	22,440	69,210	53,470	44,340	27,830	25,970	17,170	4,070	2,430	2,690

CAL YR 1972 TOTAL 87,831 MEAN 240 MAX 1,740 MIN 41 AC-FT 174,200
WTR YR 1973 TOTAL 145,949 MEAN 400 MAX 5,190 MIN 34 AC-FT 289,500

11418000 YUBA RIVER BELOW ENGLEBRIGHT DAM, NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°14'07", long 121°16'23", in NW¼NW¼ sec.23, T.16 N., R.6 E., Yuba County, on right bank 2,000 ft downstream from Englebright Dam, 0.5 mile upstream from Deer Creek, and 2.3 miles northeast of Smartville.

DRAINAGE AREA.--1,108 sq mi.

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1953, published as "at Narrows Dam." October 1953 to Sept. 30, 1969, published as "at Englebright Dam." If records for Deer Creek near Smartville (sta 11418500) since 1941 are added to records at this station, records equivalent to those published from 1903 to 1941 as Yuba River at Smartville (sta 11419000) can be obtained.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 278.68 ft above mean sea level (levels by International Engineering Co.). Prior to Sept. 19, 1958, at site 2,000 ft upstream at datum 248.31 ft higher and Sept. 19, 1958, to Sept. 30, 1969, at datum 278.68 ft lower. Supplementary gage 2,000 ft upstream since Oct. 1, 1969, at Englebright Dam at datum 248.31 ft higher.

AVERAGE DISCHARGE.--32 years, 2,527 cfs (1,831,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,700 cfs Jan. 16 (gage height, 14.54 ft); minimum daily, 839 cfs May 17.
Period of record: Maximum discharge, 171,000 cfs Dec. 22, 1964 (gage height, 546.14 ft, site and datum then in use), no flow through powerplant, from rating curve extended above 25,000 cfs on basis of computation of peak flow over spillway of dam at gage heights 544.72 and 546.14 ft; no flow at times in 1942, 1949, 1956, 1958-61, 1968-69.

REMARKS.--Records good. Diversions out of basin for power and irrigation above station up to 1,800 cfs (see sta 11413250, 11414190, 11414200). Flow regulated by Lake Spaulding beginning in 1912 (see sta 11414140), Jackson Meadows Reservoir (see sta 11407800) since November 1964, New Bullards Bar Reservoir (see sta 11413515) since January 1969, Englebright Reservoir beginning in 1941 (capacity, 70,000 acre-ft), Bowman Lake (see sta 11415500), Fordyce Lake beginning in 1926 (capacity, 46,700 acre-ft), and many smaller reservoirs. See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,750	2,760	2,960	3,350	4,140	4,310	3,570	1,950	1,020	984	1,820	1,830
2	2,750	2,760	2,980	3,380	4,130	4,320	3,570	1,940	1,030	982	1,820	1,830
3	2,750	2,760	2,960	3,390	4,130	4,330	3,580	1,940	1,020	982	1,800	1,830
4	2,720	2,760	2,990	3,390	4,190	4,330	3,590	1,940	1,010	984	1,800	1,860
5	2,720	2,760	3,010	3,390	4,150	4,280	3,590	1,940	994	983	1,790	1,880
6	2,760	2,760	3,040	3,370	4,160	4,300	3,600	1,950	1,000	978	1,790	1,870
7	2,760	2,810	3,040	3,360	4,200	4,280	3,600	1,520	1,010	981	1,790	1,870
8	2,770	2,830	3,020	3,340	4,210	4,290	3,610	876	1,010	983	1,800	1,870
9	2,760	2,850	3,020	3,390	4,220	4,310	2,850	881	1,010	982	1,810	1,870
10	2,780	2,830	3,020	3,360	4,350	4,310	1,980	870	1,010	984	1,840	1,870
11	2,780	2,830	3,000	3,630	4,280	4,310	1,980	873	979	984	1,780	1,890
12	2,780	2,850	2,600	7,270	4,200	4,290	1,980	872	972	984	1,810	1,900
13	2,750	2,880	2,450	6,030	4,200	4,280	1,970	867	999	984	1,780	1,900
14	2,740	2,900	2,440	4,380	4,230	4,290	1,970	867	1,010	987	1,820	1,880
15	2,730	2,870	2,460	4,310	4,250	1,630	1,980	855	1,010	988	1,820	1,880
16	2,730	2,930	2,450	7,840	4,250	4,340	1,990	845	1,010	1,290	1,640	1,890
17	2,730	2,940	2,500	6,870	4,240	4,340	1,980	839	1,000	1,820	1,280	1,900
18	2,740	2,960	2,410	5,750	4,230	4,330	1,980	842	1,000	1,820	1,290	1,900
19	2,740	3,040	2,660	4,790	4,230	4,330	1,970	845	1,000	1,830	1,430	1,900
20	2,740	2,990	3,500	4,400	4,230	4,330	1,960	840	1,010	1,830	1,810	1,900
21	2,740	2,990	4,000	4,360	4,230	4,320	1,950	884	1,010	1,800	1,810	1,880
22	2,740	3,000	3,680	4,320	4,230	4,310	1,950	1,000	981	1,810	1,830	1,880
23	2,740	3,000	3,340	4,280	4,230	4,310	1,940	997	995	1,810	1,840	1,880
24	2,750	3,050	3,310	4,230	4,050	4,300	1,950	986	999	1,810	1,820	1,880
25	2,780	3,050	3,280	4,170	4,270	4,300	1,960	1,000	923	1,820	1,800	1,880
26	2,780	3,050	3,380	4,150	4,270	4,300	1,960	1,000	984	1,810	1,800	1,870
27	2,780	3,010	3,380	4,140	4,370	3,900	1,970	1,010	987	1,930	1,820	1,860
28	2,780	3,010	3,350	4,150	4,350	3,570	1,960	1,030	988	926	1,840	1,870
29	2,740	3,010	3,360	4,140	------	3,570	1,940	1,030	982	1,020	1,830	1,870
30	2,740	3,000	3,350	4,170	------	3,570	1,940	1,020	984	1,880	1,830	1,860
31	2,760	------	3,330	4,140	------	3,580	------	1,020	------	1,790	1,830	------
TOTAL	85,310	87,240	94,270	135,240	118,220	127,560	72,820	35,329	29,937	41,746	54,570	56,250
MEAN	2,752	2,908	3,041	4,363	4,222	4,115	2,427	1,140	998	1,347	1,760	1,875
MAX	2,780	3,050	4,000	7,840	4,370	4,340	3,610	1,950	1,030	1,930	1,840	1,900
MIN	2,720	2,760	2,410	3,340	4,050	1,630	1,940	839	923	926	1,280	1,830
AC-FT	169,200	173,000	187,000	268,200	234,500	253,000	144,400	70,080	59,380	82,800	108,200	111,600

CAL YR 1972 TOTAL 657,065 MEAN 1,795 MAX 4,000 MIN 580 AC-FT 1,303,000
WTR YR 1973 TOTAL 938,492 MEAN 2,571 MAX 7,840 MIN 839 AC-FT 1,861,000

11418500 DEER CREEK NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°13'28", long 121°16'03", in SW¼SE¼ sec.23, T.16 N., R.6 E., Nevada County, 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.

PERIOD OF RECORD.--June 1935 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 630 ft (from river-profile map). June 21, 1935, to Nov. 30, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--38 years, 131 cfs (94,910 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,430 cfs Jan. 12 (gage height, 9.83 ft); minimum daily, 1.6 cfs July 31.
Period of record: Maximum discharge, 11,600 cfs Oct. 13, 1962 (gage height, 13.77 ft), from rating curve extended above 5,200 cfs; minimum daily, 0.1 cfs Aug. 4-6, 15, 1940.
Flood of March 1928 reached a stage of 14.5 ft, from floodmarks (discharge, 14,000 cfs).

REMARKS.--Records good. Natural flow of stream is affected by Scotts Flat Reservoir beginning in 1949 (usable capacity, 26,300 acre-ft, increased to 49,000 acre-ft in July 1964), Deer Creek Reservoir (capacity, 1,400 acre-ft), Lake Wildwood (capacity, 3,840 acre-ft) beginning in 1970, power developments, and diversion for irrigation. At times water from South Yuba River is diverted to Deer Creek and water from Deer Creek is diverted to Bear River. See schematic diagram of Yuba River basin.

REVISIONS.--WSP 1395: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	2.8	26	35	331	641	298	27	12	5.9	1.8	5.0
2	8.7	2.8	25	34	277	616	249	29	13	5.9	2.0	4.6
3	10	3.9	23	34	310	681	201	27	13	5.2	2.1	4.5
4	8.4	110	56	33	1,210	1,010	152	26	11	5.1	2.2	4.3
5	7.6	49	37	31	579	576	130	33	7.6	5.0	2.4	4.2
6	6.6	27	43	30	570	885	121	26	7.4	4.5	2.5	4.1
7	7.5	42	48	30	743	607	112	22	6.7	4.4	2.5	4.2
8	7.6	62	41	45	535	571	105	18	6.8	4.7	2.7	2.8
9	8.9	34	40	667	487	446	101	17	6.4	4.6	2.9	3.1
10	36	135	37	586	1,680	464	97	17	5.7	4.8	3.5	3.3
11	88	345	31	1,710	1,320	607	91	15	5.6	4.5	3.2	2.8
12	68	107	30	2,510	791	454	87	12	5.8	4.2	3.0	3.4
13	35	79	26	684	655	438	84	11	6.9	3.8	2.8	3.7
14	23	662	24	300	1,070	291	90	10	7.7	4.1	2.8	3.7
15	21	312	26	198	721	315	80	9.1	8.8	5.2	2.9	3.8
16	23	586	58	2,850	550	303	77	7.4	8.3	5.4	2.8	3.8
17	19	265	1,160	942	471	301	74	6.0	8.1	5.4	2.7	4.4
18	15	120	462	1,650	422	282	70	6.2	8.2	5.5	3.1	8.5
19	9.2	50	650	925	376	276	61	5.5	6.7	5.4	3.1	3.7
20	8.2	30	179	650	341	474	59	4.5	5.0	4.3	3.0	6.1
21	6.3	22	103	557	315	416	48	5.7	3.8	3.9	3.0	4.4
22	5.5	18	127	384	291	380	39	7.2	3.9	3.6	3.4	2.9
23	4.9	17	101	371	274	295	35	9.7	5.2	3.0	3.8	3.1
24	6.0	15	131	332	298	263	31	7.2	6.7	2.9	4.0	3.7
25	5.0	12	83	503	339	244	30	11	6.2	2.9	4.6	4.2
26	3.3	12	60	383	451	236	28	11	6.0	2.5	5.2	3.8
27	3.4	20	56	299	1,320	234	27	10	6.1	2.2	5.4	3.2
28	3.2	23	70	262	1,040	220	25	10	5.0	1.9	5.4	3.0
29	4.1	25	48	296	------	210	26	9.0	4.4	1.9	5.3	2.4
30	3.6	27	42	783	------	242	31	6.6	4.7	1.8	5.1	2.2
31	2.9	------	38	430	------	464	------	5.9	------	1.6	5.0	------
TOTAL	465.9	3,215.5	3,881	18,544	17,767	13,442	2,659	422.0	212.7	126.1	104.2	116.9
MEAN	15.0	107	125	598	635	434	88.6	13.6	7.09	4.07	3.36	3.90
MAX	88	662	1,160	2,850	1,680	1,010	298	33	13	5.9	5.4	8.5
MIN	2.9	2.8	23	30	274	210	25	4.5	3.8	1.6	1.8	2.2
AC-FT	924	6,380	7,700	36,780	35,240	26,660	5,270	837	422	250	207	232
(a)	32,878	36,820	41,773	48,692	48,728	48,728	48,257	47,026	43,927	39,539	34,394	31,169

CAL YR 1972 TOTAL 17,774.4 MEAN 48.6 MAX 1,160 MIN 2.8 AC-FT 35,260
WTR YR 1973 TOTAL 60,956.3 MEAN 167 MAX 2,850 MIN 1.6 AC-FT 120,900

a Contents, in acre-feet, at end of month for Scotts Flat Reservoir, furnished by Nevada Irrigation District.

11420700 DRY CREEK NEAR BROWNS VALLEY, CALIF.

LOCATION.--Lat 39°15'23", long 121°20'34", in NE¼SW¼ sec.7, T.16 N., R.6 E., Yuba County, on left bank 500 ft upstream from diversion dam, and 3.6 miles east of Browns Valley.

DRAINAGE AREA.--87.1 sq mi.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 265 ft (from topographic map).

AVERAGE DISCHARGE (unadjusted).--9 years, 80.5 cfs (58,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,880 cfs Jan. 16 (gage height, 9.71 ft); minimum daily, 2.7 cfs Dec. 13.
Period of record: Maximum discharge, 5,950 cfs Jan. 21 1969 (gage height, 10.38 ft); minimum daily, 1.2 cfs Dec. 12-15, 1964.

REMARKS.--Records good except those for the summer months, which are fair. Flow regulated by Lake Mildred (capacity, 1,500 acre-ft) and Merle Collins Reservoir since 1963 (capacity, 57,000 acre-ft), 6.5 miles upstream. Some diversion above station for irrigation. See schematic diagram of Yuba River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	3.1	5.0	11	359	708	417	8.3	8.3	5.1	8.1	6.5
2	3.9	3.0	4.9	9.8	266	510	252	8.4	6.7	5.1	7.9	6.7
3	3.8	4.7	4.9	8.5	249	447	189	9.2	7.0	4.9	7.1	7.0
4	3.6	12	5.3	7.9	855	635	160	9.6	6.1	4.8	7.1	8.0
5	3.4	8.2	4.7	7.3	680	440	142	9.4	6.6	4.6	7.6	7.7
6	3.1	6.6	6.9	7.0	558	667	134	8.8	6.0	3.8	8.3	7.7
7	3.2	12	7.1	6.6	954	691	126	9.1	5.2	4.4	9.1	7.2
8	3.2	9.3	6.4	17	624	483	106	9.3	5.5	4.9	8.5	6.7
9	3.2	6.2	4.2	101	452	360	104	9.2	5.8	5.8	8.3	6.6
10	6.5	18	3.6	97	1,730	309	102	8.8	6.3	6.4	7.7	6.9
11	12	39	3.2	523	1,490	362	95	8.2	6.5	5.7	7.4	6.8
12	11	15	3.0	644	695	289	88	8.4	7.2	5.9	7.7	7.0
13	7.3	9.6	2.7	187	485	246	85	8.3	7.3	4.8	7.6	7.5
14	5.7	134	4.3	84	797	214	88	8.6	7.2	4.4	6.9	7.0
15	6.2	73	4.8	92	808	191	83	8.3	6.9	4.3	6.7	7.3
16	5.5	109	5.8	2,910	454	178	78	9.4	6.6	3.9	6.5	7.1
17	5.6	38	160	1,870	338	174	71	9.4	6.4	3.4	6.5	7.2
18	5.1	23	117	1,950	283	168	63	7.0	5.8	3.0	7.4	8.3
19	5.0	30	167	1,130	245	162	52	5.7	5.7	2.9	7.7	8.2
20	5.1	18	55	513	214	253	40	8.7	5.4	3.1	7.2	9.6
21	5.1	12	35	385	186	279	29	10	5.2	6.1	8.0	7.6
22	5.1	9.5	27	303	169	338	20	7.8	6.0	7.6	8.4	7.6
23	5.1	6.0	20	238	158	251	16	6.7	5.8	8.1	8.3	8.3
24	4.8	5.0	28	201	175	199	11	7.7	6.5	8.7	7.8	8.2
25	4.8	4.4	21	393	301	175	7.4	7.8	6.2	8.4	7.5	7.5
26	5.0	3.9	17	404	292	160	6.0	8.0	6.7	9.1	7.4	7.2
27	5.0	3.7	16	278	1,500	153	9.2	7.6	6.2	8.0	7.0	7.1
28	4.9	3.3	19	218	1,900	138	8.4	6.9	6.6	7.6	6.4	6.9
29	4.9	4.2	15	223	------	120	8.4	6.4	5.3	7.8	6.4	7.1
30	4.7	5.0	13	961	------	135	9.1	7.6	5.4	7.5	6.3	7.6
31	3.7	------	12	529	------	564	------	8.0	------	8.2	6.2	------
TOTAL	159.4	628.7	798.8	14,309.1	17,217	9,999	2,599.5	256.6	188.4	178.3	231.0	222.1
MEAN	5.14	21.0	25.8	462	615	323	86.7	8.28	6.28	5.75	7.45	7.40
MAX	12	134	167	2,910	1,900	708	417	10	8.3	9.1	9.1	9.6
MIN	3.1	3.0	2.7	6.6	158	120	6.0	5.7	5.2	2.9	6.2	6.5
AC-FT	316	1,250	1,580	28,380	34,150	19,830	5,160	509	374	354	458	441

CAL YR 1972 TOTAL 3,555.9 MEAN 9.72 MAX 167 MIN 1.8 AC-FT 7,050
WTR YR 1973 TOTAL 46,787.9 MEAN 128 MAX 2,910 MIN 2.7 AC-FT 92,800

11421000 YUBA RIVER NEAR MARYSVILLE, CALIF.

LOCATION.--Lat 39°10'33", long 121°31'26", in New Helvetia Grant, Yuba County, on left bank 4.2 miles northeast of Marysville, and 5 miles downstream from Dry Creek.

DRAINAGE AREA.--1,339 sq mi.

PERIOD OF RECORD.--Water years 1940-43, 1945 (low-water periods only), October 1940 to current year. Published as "at Marysville" October 1940 to September 1957. Records published for two sites August 1954 to September 1955. Yearly discharge for the 1945 water year published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 2.95 ft below mean sea level. Prior to August 1954 and Oct. 1, 1956, to Sept. 30, 1957, at Simpson Lane Bridge in Marysville 4.2 miles downstream at same datum. Sept. 3, 1963, to Sept. 23, 1968, auxiliary water-stage recorder at Simpson Lane Bridge in Marysville 4.2 miles downstream at same datum.

AVERAGE DISCHARGE.--30 years (1943-73), 2,546 cfs (1,845,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,400 cfs Jan. 16 (gage height, 70.04 ft); minimum daily, 449 cfs May 13.
Period of record: Maximum discharge (1943 to current year), 180,000 cfs Dec. 22, 1964 (gage height, 90.15 ft, from floodmarks), from rating curve extended above 91,000 cfs on basis of Corps of Engineers flood routing study; minimum recorded, 10 cfs July 2, 1959.

REMARKS.--Records good. Flow regulated by several reservoirs above station. Many diversions above station for power. Diversions for irrigation of about 13,000 acres between stations at Englebright Dam and near Marysville. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1715: 1956(M). WSP 1931: Drainage area. WRD Calif. 1965: 1960.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,610	2,610	2,810	3,100	4,920	5,990	4,310	1,480	619	555	1,390	1,550
2	2,610	2,580	2,800	3,140	4,750	5,750	4,180	1,420	624	548	1,390	1,560
3	2,600	2,530	2,790	3,150	4,670	5,620	3,970	1,400	632	550	1,380	1,570
4	2,540	2,640	2,830	3,160	6,180	6,330	3,880	1,360	633	561	1,380	1,580
5	2,520	2,590	2,810	3,160	5,610	5,620	3,830	1,320	610	566	1,360	1,580
6	2,550	2,550	2,830	3,160	5,420	5,910	3,810	1,300	595	558	1,360	1,600
7	2,560	2,640	2,800	3,150	6,000	5,830	3,810	1,160	581	556	1,360	1,600
8	2,550	2,700	2,760	3,140	5,560	5,600	3,790	550	576	559	1,370	1,620
9	2,550	2,710	2,740	3,950	5,260	5,320	3,370	505	572	555	1,380	1,650
10	2,600	2,820	2,740	4,320	7,840	5,180	2,280	474	574	556	1,410	1,640
11	2,680	3,120	2,740	5,720	7,630	5,410	2,240	456	561	565	1,380	1,660
12	2,670	2,900	2,400	10,800	6,020	5,130	2,200	453	549	564	1,380	1,660
13	2,610	2,850	2,300	7,850	5,610	5,010	2,140	449	561	565	1,380	1,670
14	2,590	3,700	2,300	4,960	6,260	4,870	2,040	455	570	564	1,400	1,660
15	2,620	3,390	2,300	4,520	6,160	2,650	2,000	462	570	572	1,380	1,660
16	2,600	3,810	2,290	12,500	5,500	4,510	1,970	455	572	629	1,350	1,680
17	2,610	3,250	2,290	10,800	5,230	4,760	1,890	463	580	1,290	1,030	1,690
18	2,610	3,070	2,290	8,970	5,080	4,730	1,850	471	575	1,330	1,020	1,700
19	2,600	3,040	2,920	7,510	4,960	4,700	1,820	468	572	1,340	1,030	1,700
20	2,600	2,950	3,750	5,750	4,880	4,970	1,820	466	570	1,340	1,380	1,720
21	2,600	2,870	4,080	5,430	4,830	4,950	1,820	471	567	1,330	1,410	1,730
22	2,600	2,870	3,690	5,100	4,770	5,030	1,780	580	552	1,350	1,440	1,740
23	2,600	2,850	3,240	4,900	4,730	4,840	1,730	593	559	1,350	1,460	1,760
24	2,610	2,880	3,220	4,770	4,610	4,730	1,650	593	578	1,370	1,470	1,750
25	2,640	2,880	3,160	5,100	4,950	4,670	1,630	610	551	1,380	1,480	1,760
26	2,660	2,880	3,190	5,040	5,000	4,640	1,580	613	545	1,400	1,480	1,740
27	2,660	2,860	3,210	4,760	7,300	4,370	1,570	626	556	1,450	1,500	1,740
28	2,670	2,840	3,200	4,640	8,280	3,910	1,540	646	553	1,020	1,520	1,730
29	2,600	2,850	3,180	4,610	------	3,860	1,500	646	551	478	1,520	1,730
30	2,580	2,850	3,150	6,100	------	3,880	1,480	638	551	1,370	1,530	1,710
31	2,600	------	3,130	5,260	------	4,500	------	615	------	1,350	1,550	------
TOTAL	80,700	87,080	89,940	168,520	158,010	153,270	73,480	22,198	17,259	28,171	42,870	50,140
MEAN	2,603	2,903	2,901	5,436	5,643	4,944	2,449	716	575	909	1,383	1,671
MAX	2,680	3,810	4,080	12,500	8,280	6,330	4,310	1,480	633	1,450	1,550	1,760
MIN	2,520	2,530	2,290	3,100	4,610	2,650	1,480	449	545	478	1,020	1,550
AC-FT	160,100	172,700	178,400	334,300	313,400	304,000	145,700	44,030	34,230	55,880	85,030	99,450

CAL YR 1972 TOTAL 588,310 MEAN 1,607 MAX 4,430 MIN 270 AC-FT 1,167,000
WTR YR 1973 TOTAL 971,638 MEAN 2,662 MAX 12,500 MIN 449 AC-FT 1,927,000

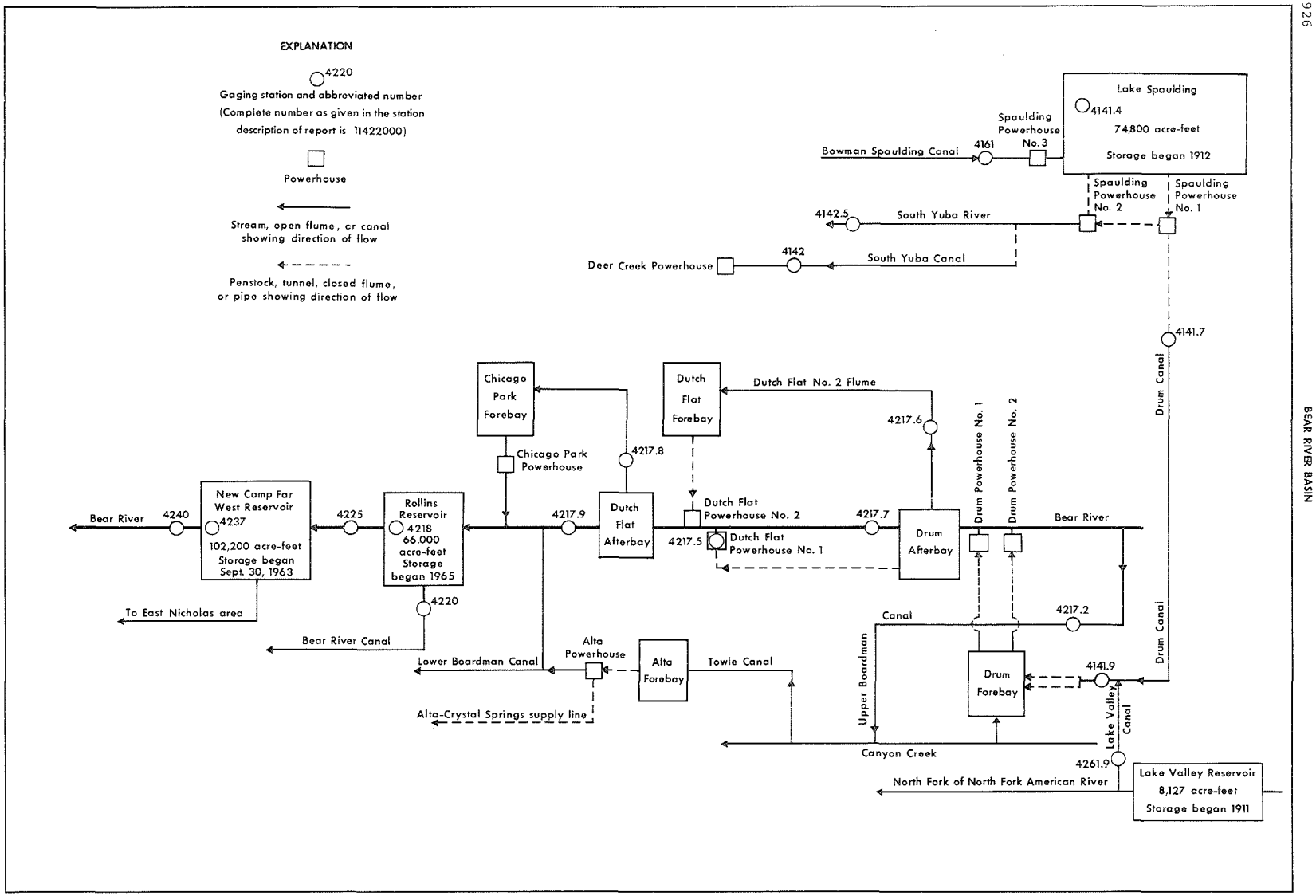

FIGURE 15.--Schematic diagram showing diversion and storage in Bear River basin.

11421700 FEATHER RIVER BELOW SHANGHAI BEND, NEAR OLIVEHURST, CALIF.

LOCATION.--Lat 39°04'44", long 121°36'08", in New Helvetia Grant, Sutter County, on right bank 1.5 miles downstream from Shanghai Bend, 3.0 miles southeast of Olivehurst, and 3.4 miles south of Yuba City.

DRAINAGE AREA.--5,334 sq mi.

PERIOD OF RECORD.--June 1944 to September 1969 in reports of California Department of Water Resources, October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.01 ft below mean sea level (levels by California Department of Water Resources).

EXTREMES.--Current year: Maximum daily discharge, 62,100 cfs Jan. 19; minimum daily, 2,880 cfs June 19.

REMARKS.--Flow regulated by many reservoirs and powerplants. See schematic diagrams of South Fork Feather River, North Fork Feather River, and Yuba River basins and Feather River at Lake Oroville.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,660	5,410	5,020	5,550	14,000	28,500	6,280	4,480	4,200	3,490	5,610	4,700
2	5,640	4,960	5,020	5,530	13,400	24,700	5,770	4,500	3,770	3,470	6,490	4,660
3	5,670	4,740	5,010	5,510	13,100	23,100	5,590	4,560	3,650	3,500	6,980	4,860
4	5,630	4,710	5,020	6,070	14,700	23,700	5,390	4,610	3,610	3,550	6,440	5,120
5	5,640	4,640	5,060	6,610	14,800	22,400	5,270	4,530	3,560	3,500	6,350	5,200
6	5,670	4,600	5,240	6,740	15,100	22,000	5,130	4,450	3,530	3,550	6,350	5,220
7	5,680	4,700	5,240	7,600	17,300	23,400	4,920	4,420	3,460	3,630	6,360	5,240
8	5,650	4,810	5,470	8,980	17,100	22,500	4,830	3,750	3,410	3,590	6,160	5,250
9	5,630	4,830	5,680	11,200	16,200	21,600	4,660	3,620	3,400	3,620	5,930	5,200
10	5,800	5,000	5,710	14,900	20,500	19,000	3,570	3,570	3,350	3,610	5,960	5,200
11	5,910	5,380	5,690	14,800	25,600	17,100	3,500	3,590	3,350	3,550	5,900	5,290
12	5,900	5,330	5,610	26,900	24,000	13,500	3,450	3,600	3,360	3,640	5,860	5,350
13	5,840	5,140	5,300	49,000	21,900	10,500	3,410	3,440	3,310	3,680	5,890	5,450
14	5,810	5,930	5,250	38,000	20,400	8,580	3,460	3,250	3,320	3,650	5,580	5,470
15	5,790	6,660	5,270	25,000	20,300	6,230	4,180	3,270	3,010	3,680	5,380	5,470
16	5,750	6,970	5,330	30,000	17,800	6,560	4,810	3,210	2,940	3,760	5,380	5,410
17	5,760	6,610	6,680	60,000	16,600	7,040	4,840	3,150	2,950	4,750	5,020	5,440
18	5,690	5,860	7,930	55,000	15,900	6,760	4,810	3,220	2,930	4,920	4,900	5,470
19	5,710	5,530	9,120	62,100	15,600	6,570	5,580	4,020	2,880	5,000	4,860	5,500
20	5,730	5,410	8,710	54,100	15,100	6,820	5,730	4,140	2,910	5,030	5,270	5,560
21	5,700	5,230	8,170	32,700	11,500	7,610	5,710	4,200	2,910	5,050	5,060	5,530
22	5,620	5,120	7,520	21,300	10,800	12,800	5,600	5,420	2,910	5,060	4,630	5,580
23	5,560	5,070	6,650	15,200	9,860	13,900	5,580	7,770	3,270	5,040	4,570	5,620
24	5,520	5,050	6,400	13,000	8,890	10,300	5,520	6,900	3,440	5,040	4,510	5,540
25	5,610	5,060	6,250	12,600	8,840	8,570	5,500	5,990	3,410	5,070	4,510	5,560
26	5,620	5,030	6,130	12,600	7,890	8,160	5,500	5,050	3,410	5,070	4,500	5,590
27	5,670	5,030	6,080	12,200	13,700	6,950	5,500	4,730	3,430	5,090	4,510	5,490
28	5,670	5,020	6,040	11,500	29,700	6,150	5,440	4,760	3,400	4,820	4,590	5,180
29	5,530	5,030	5,980	11,200	------	5,970	5,080	4,640	3,420	4,180	4,620	5,020
30	5,500	5,030	5,840	12,000	------	5,790	4,500	4,640	3,480	4,920	4,600	4,980
31	5,580	------	5,660	15,000	------	6,250	------	4,610	------	5,040	4,650	------
TOTAL	176,140	157,890	188,080	662,890	450,580	413,010	149,110	136,090	99,980	131,550	167,420	159,150
MEAN	5,682	5,263	6,067	21,380	16,090	13,320	4,970	4,390	3,333	4,244	5,401	5,305
MAX	5,910	6,970	9,120	62,100	29,700	28,500	6,280	7,770	4,200	5,090	6,980	5,620
MIN	5,500	4,600	5,010	5,510	7,890	5,790	3,410	3,150	2,880	3,470	4,500	4,660
AC-FT	349,400	313,200	373,100	1,315M	893,700	819,200	295,800	269,900	198,300	260,900	332,100	315,700

CAL YR 1972 TOTAL 1,702,380 MEAN 4,651 MAX 13,400 MIN 1,640 AC-FT 3,377,000
WTR YR 1973 TOTAL 2,891,890 MEAN 7,923 MAX 62,100 MIN 2,880 AC-FT 5,736,000

11421720 BOARDMAN CANAL NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°17'49", long 120°42'08", in SE¼NE¼ sec.35, T.17 N., R.11 E., Placer County, on right bank 0.4 mile downstream from Boardman diversion dam, and 1.8 miles west of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 5,020 ft (from topographic map). Prior to June 14, 1967, water-stage recorder 0.2 mile downstream at different datum.

AVERAGE DISCHARGE.--9 years, 23.2 cfs (16,810 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 43 cfs Dec. 21, 1964; no flow for several days in most years.

REMARKS.--Water is diverted from Bear River to be used for power development and irrigation in the Bear River basin. See schematic diagram of Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	23	22	22	18	19	17	18	28	34	34	33
2	0	24	23	22	18	19	17	18	28	34	34	33
3	0	24	23	21	18	19	17	18	28	34	34	33
4	0	25	24	22	20	19	17	18	28	34	34	33
5	0	25	23	19	20	18	17	18	28	34	34	33
6	0	24	23	23	20	18	17	18	28	34	34	33
7	0	25	23	23	21	18	17	17	28	34	34	33
8	0	25	23	23	20	18	17	17	28	34	34	33
9	0	25	23	23	19	18	17	17	28	34	34	33
10	0	25	22	23	21	18	17	17	28	34	34	33
11	0	25	23	26	20	19	17	25	28	32	34	33
12	0	25	23	22	19	18	19	25	28	34	34	33
13	0	25	23	15	19	18	20	25	28	34	34	33
14	0	25	23	16	19	18	20	25	28	31	34	33
15	0	25	23	14	19	18	20	25	28	34	34	33
16	0	25	23	16	18	18	20	25	28	34	34	33
17	0	24	26	14	18	18	20	25	28	34	33	33
18	0	24	26	18	18	18	19	25	28	34	33	33
19	0	23	26	15	18	18	20	28	28	34	33	34
20	.52	22	24	15	18	18	19	28	27	34	32	34
21	1.5	22	23	15	18	18	19	28	27	34	32	33
22	1.5	22	23	16	18	18	19	28	27	34	31	33
23	1.5	20	22	18	18	18	19	28	27	33	31	33
24	23	20	22	18	19	18	19	28	27	34	31	33
25	23	21	22	18	19	18	19	28	29	34	31	33
26	23	22	22	18	19	18	19	28	32	34	31	29
27	23	23	21	17	20	18	19	28	32	34	31	22
28	23	23	21	17	20	18	19	28	33	34	31	22
29	23	22	21	17	------	18	18	28	34	33	30	21
30	23	22	22	17	------	17	18	28	34	34	32	8.6
31	23	------	23	20	------	17	------	28	------	34	33	------
TOTAL	202.02	705	711	583	532	561	552	740	861	1,047	1,019	929.6
MEAN	6.52	23.5	22.9	18.8	19.0	18.1	18.4	23.9	28.7	33.8	32.9	31.0
MAX	23	25	26	26	21	19	20	28	34	34	34	34
MIN	0	20	21	14	18	17	17	17	27	31	30	8.6
AC-FT	401	1,400	1,410	1,160	1,060	1,110	1,090	1,470	1,710	2,080	2,020	1,840

CAL YR 1972 TOTAL 8,100.02 MEAN 22.1 MAX 35 MIN 0 AC-FT 16,070
WTR YR 1973 TOTAL 8,442.62 MEAN 23.1 MAX 34 MIN 0 AC-FT 16,750

11421750 DUTCH FLAT NO. 1 POWERPLANT NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°13'02", long 120°50'04", in SW¼SE¼ sec.27, T.16 N., R.10 E., Placer County, at powerplant 0.8 mile north of Dutch Flat.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Recorded powerplant output.

EXTREMES.--Period of record: Maximum daily discharge, 548 cfs for several days in January, February, April 1965; no flow for many days in each year.

REMARKS.--Water is diverted from Drum Afterbay through a tunnel to Dutch Flat No. 1 powerplant and returned to Dutch Flat Afterbay. See schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co. in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	307	331	0	315	374	0	250	365	383	202	307	299
2	374	348	0	315	357	233	218	410	401	263	292	307
3	374	331	0	357	357	299	185	410	348	249	340	315
4	233	128	114	357	392	218	263	383	357	179	315	315
5	348	117	193	292	383	517	271	392	410	383	348	315
6	323	299	218	348	383	466	226	401	410	226	340	263
7	323	323	185	256	348	517	307	401	392	365	357	340
8	323	348	121	331	323	525	299	365	383	307	340	307
9	249	340	147	348	401	392	348	374	401	292	292	292
10	374	323	45	331	419	323	263	357	365	307	323	315
11	348	128	202	249	383	525	340	410	374	357	315	299
12	374	117	105	241	365	525	365	428	401	357	323	278
13	307	226	0	307	299	525	383	323	401	307	292	307
14	90	438	0	323	357	525	383	485	348	278	307	45
15	0	365	117	383	323	525	374	485	307	357	331	0
16	340	357	105	331	285	525	383	410	256	357	307	0
17	307	271	0	307	171	525	383	428	299	218	249	0
18	340	179	263	331	193	525	401	401	138	241	307	0
19	348	307	365	365	241	480	401	374	193	292	315	0
20	185	323	323	392	278	147	419	357	193	307	278	0
21	128	307	365	374	323	117	392	392	202	307	285	0
22	90	285	348	357	307	105	505	401	193	299	315	0
23	105	0	307	348	278	90	340	392	218	278	292	0
24	278	0	392	357	292	138	438	410	226	348	263	0
25	292	147	348	340	193	128	428	401	210	315	271	0
26	226	90	323	374	72	164	438	383	233	292	292	0
27	495	256	348	323	0	202	476	401	210	271	299	0
28	271	171	323	348	0	202	374	365	202	285	292	156
29	357	171	315	340	------	171	374	357	193	374	292	241
30	315	164	331	340	------	171	392	456	193	292	307	233
31	323	------	331	357	------	185	------	383	------	299	315	------
TOTAL	8,747	7,190	6,234	10,337	8,097	9,990	10,619	12,300	8,840	9,204	9,501	4,627
MEAN	282	240	201	333	289	322	354	397	295	297	306	154
MAX	495	438	392	392	419	525	505	485	410	383	357	340
MIN	0	0	0	241	0	0	185	323	138	179	249	0
AC-FT	17,350	14,260	12,370	20,500	16,060	19,820	21,060	24,400	17,530	18,260	18,850	9,180

CAL YR 1972 TOTAL 77,893.00 MEAN 213 MAX 515 MIN 0 AC-FT 154,500
WTR YR 1973 TOTAL 105,686.00 MEAN 290 MAX 525 MIN 0 AC-FT 209,600

11421760 DUTCH FLAT NO. 2 FLUME NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'16", long 120°46'28", in SE¼NE¼ sec.18, T.16 N., R.11 E., Placer County, on left bank 600 ft downstream from Drum Afterbay, and 3.6 miles west of Blue Canyon.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,348.09 ft above mean sea level (levels by Nevada Irrigation District).

AVERAGE DISCHARGE.--7 years, 406 cfs (294,100 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 610 cfs Mar. 1, 1968; no flow many days in each year.

REMARKS.--Records good except flows below 40 cfs, which are estimated. Water is diverted from Drum Afterbay through the flume to Dutch Flat No. 2 powerplant and thence to Dutch Flat Afterbay. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	398	424	203	468	448	590	374	519	518	324	463	433
2	426	428	8.5	463	443	590	330	509	484	413	456	431
3	425	403	167	555	452	451	333	490	486	441	449	412
4	425	207	450	447	433	150	422	502	500	455	430	423
5	457	266	381	403	462	0	400	499	498	585	424	445
6	419	381	420	435	442	0	417	536	462	460	401	460
7	420	420	374	434	514	0	427	483	447	436	380	461
8	408	423	381	436	481	0	426	484	449	454	440	444
9	473	416	267	434	512	0	440	569	475	467	434	431
10	416	376	308	470	478	0	493	541	477	458	444	463
11	433	132	365	428	490	0	452	447	458	436	469	469
12	419	187	257	555	475	0	481	517	468	462	407	431
13	422	355	271	528	480	0	515	491	468	451	429	468
14	259	461	281	495	457	0	470	443	465	446	424	295
15	271	441	173	553	436	0	467	491	460	440	460	17
16	339	434	223	547	407	0	471	487	465	446	464	0
17	440	411	332	522	330	0	474	480	467	445	464	0
18	497	251	434	534	304	0	476	541	418	446	470	0
19	412	313	552	492	251	232	522	528	410	460	468	0
20	352	484	416	473	363	362	507	545	376	449	467	25
21	195	436	474	480	420	377	546	510	355	428	466	0
22	158	373	504	472	438	369	539	495	350	434	464	0
23	227	86	470	463	438	291	505	510	350	429	457	0
24	411	255	487	455	434	247	515	476	366	431	465	0
25	425	225	485	456	405	244	521	509	334	418	462	0
26	461	103	461	503	459	316	519	500	342	478	473	0
27	478	354	466	435	588	389	518	504	294	460	449	183
28	400	322	463	440	590	443	488	505	379	436	458	345
29	424	415	466	431	------	392	479	491	350	444	466	377
30	513	401	467	454	------	282	478	495	382	457	465	294
31	399	------	464	434	------	346	------	505	------	459	430	------
TOTAL	12,202	10,183	11,470.5	14,695	12,430	6,071	14,005	15,602	12,753	13,849	13,898	7,307
MEAN	394	339	370	474	444	196	467	503	425	447	448	244
MAX	513	484	552	555	590	590	546	569	518	585	473	469
MIN	158	86	8.5	403	251	0	330	443	294	324	380	0
AC-FT	24,200	20,200	22,750	29,150	24,650	12,040	27,780	30,950	25,300	27,470	27,570	14,490

CAL YR 1972 TOTAL 135,454.20 MEAN 370 MAX 561 MIN 0 AC-FT 268,700
WTR YR 1973 TOTAL 144,465.50 MEAN 396 MAX 590 MIN 0 AC-FT 286,500

11421770 BEAR RIVER BELOW DRUM AFTERBAY, NEAR BLUE CANYON, CALIF.

LOCATION.--Lat 39°15'16", long 120°46'26", in SW¼NW¼ sec.17, T.16 N., R.11 E., Placer County, on left bank 60 ft below Drum Afterbay Dam, and 3.5 miles west of Blue Canyon.

DRAINAGE AREA.--12.3 sq mi.

PERIOD OF RECORD.--April 1966 to current year, low flows only April to September 1966.

GAGE.--Water-stage recorder and 4-foot steel Cipolletti weir set in a concrete broad-crested weir. Altitude of gage is 3,300 ft (from topographic map). April 1966 to May 25, 1967, water-stage recorder at present site at different datum, May 26, 1967, to Feb. 11, 1968, water-stage recorder at site 1,000 ft downstream at different datum.

AVERAGE DISCHARGE.--7 years, 15.6 cfs (11,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 480 cfs Jan. 17 (gage height, 2.39 ft); minimum daily, 5.2 cfs Oct. 9, 18, Nov. 7, 13, Feb. 22, 23.
Period of record: Maximum discharge, 2,880 cfs Jan. 21, 1970 (gage height, 3.68 ft), from rating curve extended above 900 cfs; minimum daily, 1.0 cfs Dec. 9, 1967.

REMARKS.--Water for Dutch Flat No. 1 powerplant (see sta 11421750) and Dutch Flat No. 2 flume (see sta 11421760) is diverted from Drum Afterbay just upstream from station. See schematic diagram of Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	5.4	5.8	5.3	6.3	10	12	11	10	11	10	8.9
2	8.4	5.4	6.1	5.3	6.4	12	10	11	11	11	11	9.2
3	5.4	5.4	6.1	5.3	6.1	14	10	11	10	11	9.7	9.0
4	5.5	5.6	5.7	5.4	6.4	14	10	11	10	11	8.8	9.0
5	5.3	5.5	5.7	5.5	5.9	12	10	11	10	11	8.9	9.3
6	5.3	5.3	5.3	5.5	6.1	10	10	11	10	10	9.1	10
7	5.3	5.2	5.6	5.6	6.4	11	10	10	10	11	8.8	12
8	5.3	5.5	5.5	5.7	6.1	11	10	10	11	10	9.0	12
9	5.2	5.8	5.6	5.9	5.6	11	10	10	10	10	9.2	12
10	5.4	5.7	5.6	5.4	5.5	12	10	10	10	10	9.2	12
11	5.5	5.6	5.5	6.0	5.4	12	10	11	10	11	9.0	12
12	5.3	5.5	5.5	5.4	5.5	13	10	10	11	11	9.2	12
13	5.4	5.2	5.8	5.4	5.5	12	10	10	10	11	9.2	12
14	5.6	5.8	6.0	5.7	5.4	11	10	11	10	11	9.3	11
15	5.6	5.8	5.9	5.5	5.4	10	10	11	10	11	9.3	11
16	5.5	5.6	6.7	7.8	5.3	10	10	11	10	11	9.1	12
17	5.7	5.4	5.9	25	5.3	10	10	11	10	11	9.1	11
18	5.2	5.7	5.9	13	5.3	10	10	11	10	11	8.9	11
19	5.3	5.8	5.6	12	5.3	10	10	10	11	10	8.9	11
20	5.5	5.3	5.7	8.5	5.3	10	11	10	11	10	8.7	11
21	5.7	5.3	5.7	6.1	5.4	10	10	11	11	11	8.7	11
22	5.8	5.4	5.4	6.4	5.2	10	10	11	11	11	8.6	11
23	5.7	5.6	5.4	6.3	5.2	11	10	11	11	11	8.8	10
24	5.7	5.9	5.6	6.1	5.3	11	10	11	11	11	9.1	10
25	5.3	5.6	5.4	6.4	5.4	11	10	10	11	11	9.1	10
26	5.7	5.3	5.4	6.0	5.9	12	10	10	11	11	9.1	11
27	5.3	5.6	5.5	6.3	6.7	14	10	10	11	11	8.8	12
28	5.5	5.8	5.4	6.3	9.5	14	10	11	11	11	8.7	11
29	5.7	5.8	5.4	6.3	------	14	11	11	11	11	8.8	10
30	5.9	5.5	5.5	6.4	------	13	11	11	11	11	8.9	11
31	5.9	------	5.3	6.6	------	14	------	11	------	10	8.9	------
TOTAL	178.9	166.3	175.5	218.4	163.1	359	305	330	315	334	281.9	324.4
MEAN	5.77	5.54	5.66	7.05	5.83	11.6	10.2	10.6	10.5	10.8	9.09	10.8
MAX	11	5.9	6.7	25	9.5	14	12	11	11	11	11	12
MIN	5.2	5.2	5.3	5.3	5.2	10	10	10	10	10	8.6	8.9
AC-FT	355	330	348	433	324	712	605	655	625	662	559	643

CAL YR 1972 TOTAL 5,821.5 MEAN 15.9 MAX 234 MIN 5.2 AC-FT 11,550
WTR YR 1973 TOTAL 3,151.5 MEAN 8.63 MAX 25 MIN 5.2 AC-FT 6,250

11421780 CHICAGO PARK FLUME NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°12'55", long 120°50'23", in NW¼NE¼ sec.34, T.16 N., R.10 E., Nevada County, on left bank 670 ft downstream from Dutch Flat Afterbay, and 0.6 mile north of Dutch Flat.

PERIOD OF RECORD.--November 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,600 ft (from topographic map). Prior to Sept. 8, 1968, at site 420 ft upstream at same datum.

AVERAGE DISCHARGE.--7 years, 645 cfs (467,300 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,050 cfs many days in 1971, 1973; no flow for several days in each year.

REMARKS.--Records fair except flows below 70 cfs, which are estimated. Flow regulated by Dutch Flat Afterbay. See See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	782	760	227	795	825	687	643	978	919	482	809	764
2	705	798	19	835	876	891	612	940	921	768	818	765
3	754	779	241	824	907	805	578	970	919	723	835	732
4	752	465	707	849	898	628	767	942	930	589	844	826
5	767	370	534	786	956	675	681	963	933	983	816	733
6	723	742	589	809	901	599	757	993	892	887	741	778
7	737	774	574	800	1,050	732	744	990	939	711	833	803
8	713	769	554	787	778	688	811	879	888	893	862	793
9	732	788	441	856	1,050	456	822	979	1,010	814	818	767
10	775	779	427	936	1,050	492	863	987	832	733	821	783
11	770	201	554	851	1,050	665	844	980	893	806	855	752
12	770	366	386	1,040	1,010	689	934	1,020	921	754	800	782
13	730	596	341	963	936	692	1,050	989	918	819	822	765
14	244	856	342	872	874	659	916	891	848	770	812	683
15	398	881	371	1,050	1,050	666	944	968	840	793	804	34
16	647	953	352	1,050	810	666	966	931	793	808	808	1.4
17	767	766	580	1,050	537	665	954	931	783	787	765	0
18	870	465	689	1,050	557	641	886	1,050	577	810	770	0
19	667	598	1,040	1,050	513	565	1,050	1,010	617	840	832	0
20	607	922	851	984	620	459	1,050	930	603	855	881	0
21	207	784	954	956	745	609	1,050	924	570	760	775	0
22	252	770	981	914	940	510	1,010	963	567	822	817	0
23	434	0	873	884	703	617	1,040	947	562	814	786	0
24	660	363	866	909	782	311	1,020	1,050	520	788	776	0
25	745	353	897	786	499	378	1,020	876	563	806	774	0
26	765	173	828	969	658	505	1,020	998	550	783	788	0
27	773	532	843	815	825	680	1,030	960	526	825	773	0
28	715	497	848	820	736	675	953	937	535	743	811	196
29	757	562	908	837	------	655	919	968	568	820	780	656
30	825	590	817	880	------	542	901	880	608	803	797	537
31	735	------	852	851	------	565	------	991	------	825	757	------
TOTAL	20,778	18,252	19,486	27,858	23,136	19,067	26,835	29,815	22,545	24,414	24,980	12,150.4
MEAN	670	608	629	899	826	615	895	962	752	788	806	405
MAX	870	953	1,040	1,050	1,050	891	1,050	1,050	1,010	983	881	826
MIN	207	0	19	786	499	311	578	876	520	482	741	0
AC-FT	41,210	36,200	38,650	55,260	45,890	37,820	53,230	59,140	44,720	48,430	49,550	24,100

CAL YR 1972 TOTAL 227,116.80 MEAN 621 MAX 1,040 MIN 0 AC-FT 450,500
WTR YR 1973 TOTAL 269,316.40 MEAN 738 MAX 1,050 MIN 0 AC-FT 534,200

11421790 BEAR RIVER BELOW DUTCH FLAT AFTERBAY, NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°12'55", long 120°50'23", in NE¼NW¼ sec.34, T.16 N., R.10 E., Placer County, at the left bank downstream end of spillway on Dutch Flat Afterbay Dam, 0.6 mile north of Dutch Flat.

DRAINAGE AREA.--21.5 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,600 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 32.9 cfs (23,840 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 109 cfs Sept. 16; minimum daily, 3.8 cfs Apr. 5-13, 20-23. Period of record: Maximum daily discharge, 1,500 cfs Jan. 20, 1969; minimum daily, 0.08 cfs Mar. 8-19, 1968.

REMARKS.--Records good. Water is imported from South Yuba River basin via South Yuba Canal (see sta 11414200) and Drum Canal above forebay (see sta 11414190). Chicago Park flume (see sta 11421780) diverts above station to Chicago Park powerplant. Records include spill over Dutch Flat Afterbay Dam. This station measures flow from Dutch Flat Afterbay in connection with a Federal Power Commission project. See schematic diagram of Bear River basin.

COOPERATION.--Records of spill for Dutch Flat Afterbay furnished by Nevada Irrigation District.

REVISIONS (WATER YEARS).--WRD Calif. 1967: 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	5.8	4.2	4.2	4.4	4.4	4.2	5.8	7.4	7.4	7.6	7.8
2	7.8	4.4	4.2	4.2	4.4	4.4	4.2	7.4	7.4	7.4	7.6	7.8
3	7.8	4.4	4.2	4.2	4.4	4.4	4.2	7.4	7.4	7.4	7.6	7.8
4	7.8	4.2	4.4	4.4	4.4	4.4	4.0	7.4	7.4	7.4	7.6	7.8
5	7.8	4.2	4.4	4.4	4.4	4.4	3.8	7.4	7.4	7.4	7.6	7.6
6	7.8	4.2	4.4	4.4	4.4	4.4	3.8	7.4	7.4	7.4	7.6	7.6
7	7.8	4.4	4.4	4.4	4.2	4.4	3.8	7.4	7.4	7.4	7.6	7.6
8	7.8	4.4	4.4	4.4	4.2	4.4	3.8	7.4	7.1	7.6	7.6	7.6
9	7.8	4.4	4.4	4.2	4.2	4.4	3.8	7.4	7.1	7.6	7.8	7.6
10	7.8	4.4	4.4	4.2	4.2	4.2	3.8	7.4	7.1	7.6	7.8	7.6
11	7.8	4.4	4.4	4.2	4.2	4.2	3.8	7.4	7.1	7.6	7.8	7.6
12	7.8	4.4	4.4	103	4.2	4.0	3.8	7.4	7.1	7.6	7.8	7.6
13	7.8	4.4	4.4	4.2	4.2	4.0	3.8	7.4	7.1	7.6	7.8	7.6
14	8.1	4.4	4.4	4.2	4.4	4.0	4.0	7.4	7.1	7.6	7.8	7.6
15	8.1	4.2	4.4	4.2	4.2	4.0	4.0	7.4	7.1	7.6	7.8	7.4
16	8.1	4.2	4.4	108	4.2	4.0	4.0	7.4	7.1	7.6	7.8	109
17	7.8	4.2	4.4	4.2	4.4	4.2	4.0	7.4	7.1	7.6	7.8	56
18	7.8	4.2	4.4	4.2	4.4	4.2	4.0	7.4	7.1	7.6	7.8	45
19	7.8	4.2	4.4	4.2	4.4	4.2	4.0	7.4	7.1	7.6	7.8	38
20	7.6	4.2	4.4	4.2	4.4	4.2	3.8	7.4	7.1	7.6	7.8	38
21	7.6	4.2	4.4	4.2	4.6	4.2	3.8	7.4	7.1	7.6	7.8	25
22	7.6	4.2	4.4	4.2	4.4	4.2	3.8	7.4	7.1	7.6	7.8	8.8
23	7.6	4.2	4.2	4.2	4.4	4.4	3.8	7.4	7.1	7.6	7.8	15
24	7.4	4.2	4.2	4.2	4.2	4.4	4.0	7.4	7.1	7.6	7.8	17
25	7.4	4.2	4.2	4.4	4.2	4.4	4.0	7.4	7.1	7.6	7.8	8.3
26	7.4	4.2	4.2	4.4	4.4	4.4	4.0	7.4	7.4	7.6	7.8	8.3
27	7.6	4.2	4.2	4.4	4.2	4.4	4.0	7.4	7.4	7.6	7.8	8.3
28	7.6	4.2	4.2	4.4	4.4	4.2	4.0	7.4	7.4	7.6	7.8	7.8
29	7.6	4.2	4.2	4.4	------	4.2	4.0	7.4	7.4	7.6	7.8	6.9
30	7.8	4.2	4.2	4.4	------	4.2	4.2	7.4	7.4	7.6	7.8	6.9
31	7.6	------	4.2	4.4	------	4.2	------	7.4	------	7.6	7.8	------
TOTAL	239.7	129.6	134.0	335.2	121.0	132.0	118.2	227.8	216.6	234.2	240.2	512.9
MEAN	7.73	4.32	4.32	10.8	4.32	4.26	3.94	7.35	7.22	7.55	7.75	17.1
MAX	8.1	5.8	4.4	108	4.6	4.4	4.2	7.4	7.4	7.6	7.8	109
MIN	7.4	4.2	4.2	4.2	4.2	4.0	3.8	5.8	7.1	7.4	7.6	6.9
AC-FT	475	257	266	665	240	262	234	452	430	465	476	1,020

CAL YR 1972 TOTAL 2,704.2 MEAN 7.39 MAX 33 MIN 4.2 AC-FT 5,360
WTR YR 1973 TOTAL 2,641.4 MEAN 7.24 MAX 109 MIN 3.8 AC-FT 5,240

11421800 ROLLINS RESERVOIR NEAR COLFAX, CALIF.

LOCATION.--Lat 39°08'05", long 120°56'54", in NE¼SE¼ sec.22, T.15 N., R.9 E., Placer County, on left bank just upstream from Rollins Dam on Bear River, 2.3 miles north of Colfax.

DRAINAGE AREA.--104 sq mi.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Nevada Irrigation District).

EXTREMES.--Current year: Maximum contents, 68,100 acre-ft Jan. 11 (elevation, 2,173.5 ft); minimum, 49,300 acre-ft Sept. 30 (elevation, 2,148.7 ft).
Period of record: Maximum contents, 70,100 acre-ft Jan. 21, 1970 (elevation, 2,175.8 ft); minimum since reservoir first filled, 28,100 acre-ft Mar. 7, 1965 (elevation, 2,110.0 ft).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1964. Usable capacity, 65,720 acre-ft between elevations 1,970.0 ft (invert of outlet tunnel) and 2,171.0 ft (spillway crest) above mean sea level. Dead storage, 270 acre-ft. Several diversions into and out of basin upstream for power development and irrigation. Stored water is released into Bear River, part of which is diverted to Pacific Gas and Electric's Bear River Canal for power development. Water is later used for irrigation. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Bear River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

2,050	8,940	2,140	43,800
2,060	11,200	2,160	57,300
2,080	16,800	2,176	70,200
2,120	32,700		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59,400	66,600	65,300	66,600	66,800	67,100	66,700	66,700	66,700	65,400	66,400	66,400
2	59,900	66,600	64,500	66,700	66,800	67,100	66,700	66,700	66,700	65,700	66,400	66,400
3	60,400	66,700	64,200	66,700	66,900	67,200	66,700	66,700	66,700	66,000	66,500	66,400
4	60,900	66,300	64,800	66,700	67,100	66,800	66,700	66,700	66,700	66,000	66,500	66,500
5	61,500	66,200	65,000	66,600	67,000	66,900	66,700	66,700	66,700	66,500	66,500	66,400
6	61,900	66,500	65,300	66,600	67,000	66,900	66,700	66,700	66,700	66,500	66,400	66,500
7	62,300	66,700	65,700	66,600	67,100	66,900	66,700	66,700	66,700	66,400	66,400	66,500
8	62,800	66,700	65,700	66,700	66,900	66,800	66,700	66,700	66,700	66,500	66,400	66,500
9	63,200	66,700	65,600	67,000	67,100	66,700	66,700	66,700	66,700	66,500	66,400	66,500
10	63,900	66,700	65,500	66,900	67,400	66,900	66,700	66,700	66,600	66,400	66,400	66,500
11	64,500	66,200	65,600	68,100	67,300	66,800	66,800	66,700	66,700	66,500	66,400	66,400
12	65,100	66,200	65,400	67,700	67,200	66,800	66,800	66,700	66,700	66,400	66,400	66,500
13	65,500	66,500	65,100	67,200	67,100	66,800	66,800	66,700	66,600	66,500	66,400	66,400
14	64,900	66,800	64,800	67,000	67,100	66,700	66,700	66,700	66,600	66,400	66,400	66,200
15	64,700	66,800	64,500	67,200	67,100	66,700	66,700	66,700	66,600	66,400	66,400	65,100
16	64,900	66,800	64,300	67,900	66,900	66,700	66,800	66,700	66,600	66,500	66,400	64,000
17	65,500	66,700	65,900	67,300	66,800	66,700	66,700	66,700	66,500	66,400	66,300	62,900
18	66,200	66,500	66,900	67,500	66,800	66,700	66,700	66,700	66,200	66,400	66,300	61,700
19	66,400	66,600	67,000	67,200	66,700	66,700	66,800	66,700	66,200	66,500	66,400	60,500
20	66,300	66,700	66,800	67,000	66,800	66,700	66,700	66,700	66,200	66,400	66,400	59,400
21	65,700	66,700	66,700	67,000	66,900	66,700	66,800	66,700	66,200	66,400	66,300	58,200
22	65,100	66,700	66,800	66,900	66,900	66,600	66,800	66,700	66,100	66,400	66,300	56,900
23	64,800	65,700	66,700	66,800	66,800	66,700	66,800	66,700	66,000	66,400	66,300	55,700
24	65,100	65,500	66,700	66,800	66,900	66,500	66,800	66,700	66,000	66,400	66,300	54,400
25	65,300	65,400	66,700	66,700	66,700	66,600	66,800	66,700	66,000	66,500	66,300	53,200
26	65,800	64,900	66,700	66,700	66,900	66,700	66,800	66,700	65,900	66,400	66,300	52,000
27	66,200	65,200	66,700	66,700	67,200	66,700	66,800	66,700	65,900	66,500	66,500	50,700
28	66,400	65,300	66,700	66,700	67,100	66,700	66,700	66,700	65,800	66,400	66,400	49,500
29	66,500	65,500	66,700	66,800	------	66,700	66,700	66,700	65,700	66,500	66,400	49,500
30	66,500	65,800	66,600	66,800	------	66,700	66,700	66,700	65,700	66,400	66,400	49,300
31	66,500	------	66,700	66,800	------	66,700	------	66,700	------	66,500	66,500	------
MAX	66,500	66,800	67,000	68,100	67,400	67,200	66,800	66,700	66,700	66,500	66,500	66,500
MIN	59,400	64,900	64,200	66,600	66,700	66,500	66,700	66,700	65,700	65,400	66,300	49,300
(a)	2,171.6	2,170.8	2,171.8	2,172.0	2,172.3	2,171.8	2,171.9	2,171.8	2,170.6	2,171.6	2,171.6	2,148.7
(b)	+7,600	-700	+900	+100	+300	-400	0	0	-1,000	+800	0	-17,200

CAL YR 1972 b +10,700
WTR YR 1973 b -9,600

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11422000 BEAR RIVER CANAL INTAKE NEAR COLFAX, CALIF.

LOCATION.--Lat 39°07'58", long 120°57'12", in SW¼SE¼ sec.22, T.15 N., R.9 E., Placer County, on right bank 600 ft downstream from canal inlet, 0.2 mile below Rollins Dam, and 2.2 miles north of Colfax.

PERIOD OF RECORD.--January 1912 to September 1953, October 1964 to current year. Monthly discharge only for some periods published in WSP 1315-A. Prior to 1913, published as Pacific Gas and Electric Co.'s Canal near Colfax.

GAGE.--Water-stage recorder. Altitude of gage is 1,980 ft (from topographic map). Prior to Mar. 25, 1946, water-stage recorder at site 1.5 miles downstream at different datum.

AVERAGE DISCHARGE.--50 years (1912-53, 1964-73), 284 cfs (205,800 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 499 cfs Apr. 20-22, 1966, Aug. 1-3, 1967; no flow at times in most years.

REMARKS.--Canal diverts from left bank of Bear River. Water is first used to develop power at Halsey and Wise powerhouse, part of it is then distributed for irrigation and part is eventually spilled into North Fork American River. See schematic diagram showing diversion and storage in Bear River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460	417	415	430	409	418	427	442	452	453	437	444
2	460	415	416	430	409	411	427	442	452	453	437	445
3	458	414	416	430	410	411	431	442	452	453	437	445
4	457	413	417	430	412	412	435	442	452	454	437	446
5	456	411	416	430	411	412	436	441	452	454	437	445
6	455	410	417	429	411	412	436	441	452	453	436	446
7	454	410	417	429	412	410	434	441	452	452	436	446
8	453	410	418	429	412	405	435	441	452	451	436	446
9	450	409	417	431	412	409	435	441	453	450	436	446
10	447	409	417	432	415	414	434	440	453	450	436	447
11	446	390	418	390	416	414	434	445	452	449	436	447
12	445	385	418	250	412	414	433	447	452	449	436	448
13	445	397	419	351	411	414	433	446	452	448	436	448
14	444	398	419	405	412	414	433	446	452	447	436	448
15	443	394	420	383	412	414	432	446	452	450	437	448
16	442	381	419	308	412	414	432	445	452	450	437	448
17	432	394	421	343	412	420	432	445	452	450	436	448
18	426	406	422	345	412	425	432	450	452	450	436	448
19	426	408	426	366	412	425	432	455	452	450	436	448
20	432	408	425	402	419	426	431	455	453	450	436	448
21	436	409	426	403	431	426	431	453	453	450	436	447
22	435	409	428	403	431	426	431	453	453	450	441	447
23	434	409	428	403	431	426	431	453	453	450	443	447
24	432	409	428	417	432	426	431	452	453	437	444	447
25	432	409	428	433	432	426	431	452	453	437	444	447
26	431	410	428	354	432	426	438	452	453	437	444	447
27	427	319	429	432	416	427	443	452	453	437	444	447
28	421	414	429	432	408	426	443	452	454	437	444	447
29	420	415	430	418	------	426	442	452	454	437	444	448
30	420	416	430	409	------	427	442	452	454	437	444	448
31	419	------	430	409	------	427	------	452	------	437	444	------
TOTAL	13,638	12,098	13,087	12,356	11,656	12,983	13,017	13,868	13,576	13,862	13,599	13,407
MEAN	440	403	422	399	416	419	434	447	453	447	439	447
MAX	460	417	430	433	432	427	443	455	454	454	444	448
MIN	419	319	415	250	408	405	427	440	452	437	436	444
AC-FT	27,050	24,000	25,960	24,510	23,120	25,750	25,820	27,510	26,930	27,500	26,970	26,590

CAL YR 1972 TOTAL 161,019.13 MEAN 440 MAX 490 MIN 0 AC-FT 319,400
WTR YR 1973 TOTAL 157,147.00 MEAN 431 MAX 460 MIN 250 AC-FT 311,700

11422500 BEAR RIVER BELOW ROLLINS DAM, NEAR COLFAX, CALIF.

LOCATION.--Lat 39°07'53", long 120°57'29", in SE¼SW¼ sec.22, T.15 N., R.9 E., Nevada County, on right bank 65 ft downstream from highway bridge, 0.5 mile downstream from Rollins Dam, and 2.2 miles north of Colfax.

DRAINAGE AREA.--105 sq mi.

PERIOD OF RECORD.--January 1912 to September 1913, October 1913 to July 1915 (gage heights and discharge measurements only), August 1915 to June 1917, November 1949 to September 1953, August 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-A. Prior to August 1964, published as Bear River near Colfax. Records for November and December 1911 include diversion to Bear River Canal and are not equivalent.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,927.41 ft above mean sea level. Prior to Aug. 8, 1915, nonrecording gages at several sites above diversion dam 0.3 mile upstream at different datums. Aug. 8, 1915, to June 30, 1917, nonrecording gage 0.7 mile downstream at different datum. Nov. 1, 1949, to Sept. 30, 1953, at site 0.2 mile downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--14 years (1912-13, 1915-16, 1950-53, 1964-73), 380 cfs (275,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,760 cfs Jan. 12 (gage height, 8.07 ft); minimum daily, 16 cfs Dec. 11.

Period of record: Maximum discharge (prior to construction of Rollins Dam in 1964), 9,620 cfs Nov. 20, 1950 (gage height, 21.40 ft, site and datum then in use), from rating curve extended above 3,600 cfs on basis of slope-area measurement of maximum flow; no flow at times in 1912, 1952. Maximum discharge since construction of Rollins Dam, 12,700 cfs Jan. 21, 1970 (gage height, 11.72 ft), from rating curve extended above 6,000 cfs; minimum daily, 0.5 cfs Nov. 17, 1964.

REMARKS.--Records good. Flow regulated by Rollins Reservoir (see sta 11421800) beginning Dec. 15, 1964. Bear River Canal (see sta 11422000) diverts above station. See schematic diagram of Bear River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	289	22	435	735	921	447	657	504	118	322	274
2	71	336	20	410	685	1,060	470	620	495	118	303	272
3	71	322	20	421	787	983	374	638	485	118	307	259
4	70	461	20	453	1,170	1,080	514	637	492	118	332	331
5	70	93	22	415	1,100	738	499	656	489	234	304	247
6	69	81	22	418	1,030	819	519	661	460	382	259	271
7	69	306	22	406	1,310	846	543	658	497	297	291	294
8	70	379	22	427	985	769	581	557	452	340	357	288
9	69	374	22	699	1,110	586	615	615	555	335	282	268
10	68	434	22	1,070	1,710	433	665	634	394	298	303	268
11	70	235	16	1,590	2,010	809	586	626	430	296	338	268
12	70	60	23	4,410	1,670	722	691	645	466	271	279	276
13	71	90	23	1,950	1,330	641	855	633	466	311	297	286
14	71	644	23	1,180	1,210	598	714	534	418	319	293	315
15	71	717	23	1,210	1,320	551	718	584	386	281	286	144
16	71	887	24	3,480	1,060	529	734	560	336	297	311	137
17	73	578	24	2,510	620	476	736	543	322	301	253	134
18	85	198	235	2,340	569	484	649	648	298	312	266	133
19	107	189	1,290	1,950	515	420	792	607	132	334	310	139
20	229	496	811	1,360	490	498	798	527	112	358	361	140
21	86	395	740	1,170	592	471	788	505	123	290	289	136
22	73	393	873	1,010	792	476	739	547	138	324	304	133
23	78	134	720	889	567	402	774	533	123	316	281	131
24	78	23	656	839	647	262	747	632	123	300	267	137
25	78	23	580	731	564	208	740	479	121	335	293	139
26	78	23	510	955	442	240	742	588	118	251	276	136
27	84	24	504	655	958	420	736	552	118	313	268	138
28	190	21	510	636	1,240	538	663	515	118	283	302	138
29	238	21	530	653	------	486	611	541	118	290	309	137
30	298	21	450	789	------	323	578	464	118	306	286	137
31	287	------	469	776	------	432	------	554	------	309	283	------
TOTAL	3,183	8,247	9,248	36,237	27,218	18,221	19,618	18,150	9,407	8,755	9,212	6,106
MEAN	103	275	298	1,169	972	588	654	585	314	282	297	204
MAX	298	887	1,290	4,410	2,010	1,080	855	661	555	382	361	331
MIN	68	21	16	406	442	208	374	464	112	118	253	131
AC-FT	6,310	16,360	18,340	71,880	53,990	36,140	38,910	36,000	18,660	17,370	18,270	12,110

CAL YR 1972 TOTAL 93,857 MEAN 256 MAX 2,210 MIN 16 AC-FT 186,200
WTR YR 1973 TOTAL 173,602 MEAN 476 MAX 4,410 MIN 16 AC-FT 344,300

11423700 NEW CAMP FAR WEST RESERVOIR NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°03'01", long 121°18'53", in NE¼SW¼ sec.21, T.14 N., R.6 E., on Yuba-Placer County line, in center of New Camp Far West Dam on the Bear River, 6.4 miles east of Wheatland, and 11.8 miles northeast of Sheridan.

DRAINAGE AREA.--283 sq mi.

PERIOD OF RECORD.--October 1966 to current year. October 1963 to September 1966 in reports of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by South Sutter Water District).

EXTREMES.--Current year: Maximum contents, 115,000 acre-ft Jan. 16 (elevation, 304.94 ft); minimum, 26,100 acre-ft Oct. 7-9 (elevation, 240.35 ft).
Period of record: Maximum contents, 120,200 acre-ft Jan. 21, 1970 (elevation, 307.3 ft); minimum, 2,200 acre-ft Oct. 11, 1968 (elevation, 175.0 ft), may have been lower during period of no record Oct. 12-16, 1968.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began Sept. 30, 1963. Usable capacity, 102,200 acre-ft between elevations 175.0 (bottom of lowest river outlet) and 300.0 ft (crest of spillway). Dead storage, 2,200 acre-ft. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Bear River basin.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

170	1,400	250	34,200
180	3,000	260	44,000
190	4,800	270	55,500
200	7,000	280	69,500
210	9,800	290	85,600
220	14,000	300	104,400
230	19,400	320	151,000
240	25,800		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26,500	30,100	65,700	104,600	107,000	108,100	106,100	106,000	105,700	90,200	71,900	60,800
2	26,500	30,500	66,700	105,500	106,800	107,900	106,100	106,100	105,700	89,200	71,300	61,000
3	26,400	31,300	67,500	105,700	107,600	107,900	106,100	106,100	105,500	88,200	70,900	61,100
4	26,400	33,300	68,400	105,700	108,500	107,900	106,400	106,100	105,300	86,700	70,500	61,100
5	26,300	34,200	68,700	105,700	108,000	107,900	106,500	106,100	105,200	86,200	69,800	61,200
6	26,300	34,700	68,800	105,700	108,000	107,900	106,400	106,100	105,100	85,600	69,400	61,400
7	26,100	35,400	68,900	105,700	108,400	107,700	106,400	106,100	104,800	85,300	68,700	61,500
8	26,100	36,600	69,100	105,900	107,900	107,700	106,200	106,100	104,600	84,600	68,200	61,400
9	26,100	37,700	69,200	105,900	107,900	107,200	106,100	106,100	104,600	84,200	67,800	61,500
10	26,200	39,100	69,400	105,900	110,300	107,000	106,100	106,100	104,400	83,800	67,400	61,500
11	26,600	41,800	69,500	113,300	110,500	107,000	106,100	106,100	104,200	83,300	67,000	61,700
12	26,900	42,900	69,600	113,900	109,000	106,800	106,200	106,100	104,000	82,700	66,600	61,800
13	27,000	43,500	69,700	111,100	108,100	106,600	106,400	106,100	104,000	81,900	66,000	61,800
14	27,100	46,200	69,800	109,600	109,200	106,600	106,400	106,100	103,800	81,400	65,600	61,900
15	27,200	49,200	70,000	109,400	108,300	106,600	106,400	106,000	103,500	80,800	65,000	61,800
16	27,300	53,900	70,300	115,000	107,700	106,600	106,400	106,000	103,000	80,300	64,600	61,900
17	27,400	56,300	73,200	113,000	107,000	106,600	106,400	105,900	102,600	79,800	64,200	61,700
18	27,600	57,900	75,000	110,900	106,600	106,600	106,200	106,000	102,100	79,300	63,800	61,700
19	27,900	58,700	79,500	109,200	106,400	106,600	106,400	105,900	101,600	78,700	63,200	61,400
20	28,100	59,800	83,000	108,100	106,000	106,600	106,400	105,900	100,600	78,200	62,900	61,100
21	28,300	61,100	84,800	107,700	106,300	106,800	105,900	105,900	99,900	77,900	62,600	61,200
22	28,500	62,200	88,200	107,400	106,400	106,800	106,100	105,800	98,800	77,400	62,400	61,200
23	28,700	63,200	90,700	107,200	106,300	106,600	106,400	105,900	97,800	76,900	61,900	61,400
24	28,900	63,600	93,300	107,000	106,300	106,400	106,400	105,900	97,100	76,400	61,500	61,400
25	29,000	63,900	95,200	107,200	106,400	106,100	106,400	105,900	96,100	75,900	61,100	61,400
26	29,200	64,200	96,700	107,200	106,600	106,100	106,400	105,900	95,200	75,300	60,800	61,500
27	29,200	64,500	98,300	106,800	109,600	106,100	106,400	105,900	94,200	74,700	60,500	61,700
28	29,400	64,700	99,900	106,800	106,300	106,100	106,400	105,900	93,100	74,200	60,400	61,700
29	29,600	64,900	101,400	106,800	------	106,100	106,100	105,900	92,200	73,500	60,500	62,100
30	29,700	65,200	102,500	107,200	------	106,100	105,900	105,900	91,100	72,900	60,700	62,400
31	29,900	------	103,500	107,200	------	106,100	------	105,900	------	72,400	60,700	------
MAX	29,900	65,200	103,500	115,000	110,500	108,100	106,500	106,100	105,700	90,200	71,900	62,400
MIN	26,100	30,100	65,700	104,600	106,000	106,100	105,900	105,800	91,100	72,400	60,400	60,800
(a)	244.87	276.93	299.51	301.31	301.86	300.80	300.69	300.68	292.91	281.83	273.72	274.90
(b)	+3,400	+35,300	+38,300	+3,700	-900	-200	-200	0	-14,800	-18,700	-11,700	+1,700

CAL YR 1972 b +7,800
WTR YR 1973 b +35,900

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11424000 BEAR RIVER NEAR WHEATLAND, CALIF.

LOCATION.--Lat 39°00'01", long 121°24'21", in SE¼SW¼ sec.3, T.13 N., R.5 E., Yuba County, on right bank 100 ft downstream from bridge on U.S. Highway 99E, 1 mile southeast of Wheatland, and 6.5 miles downstream from Rock Creek.

DRAINAGE AREA.--292 sq mi.

PERIOD OF RECORD.--October 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 71.92 ft above mean sea level. Prior to July 17, 1929, nonrecording gage at about same site at datum 9.58 ft higher. July 17, 1929, to Oct. 22, 1943, water-stage recorder at several sites within 300 ft of present site at datum 9.58 ft higher. Oct. 23, 1943, to June 23, 1964, at site 100 ft upstream at datum 7.00 ft higher. June 23, 1964, to May 28, 1970, at present site at datum 5.00 ft higher.

AVERAGE DISCHARGE (adjusted for diversions and change in contents in New Camp Far West Reservoir since 1966).--44 years, 450 cfs (326,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 16,600 cfs Jan. 12 (gage height, 16.45 ft); minimum daily, 8.2 cfs Oct. 24.
Period of record: Maximum discharge, 33,000 cfs Dec. 22, 1955 (gage height, 19.30 ft, site and datum then in use); maximum gage height, 20.83 ft Nov. 21, 1950, site and datum then in use; no flow at times.

REMARKS.--Records good. Natural flow of stream affected by inflow from Yuba River and American River basins. Flow regulated by Lake Combie (usable capacity, 7,840 acre-ft), Rollins Reservoir since December 1964 (see sta 11421800), and New Camp Far West Reservoir since October 1963 (see sta 11423700). Many diversions for irrigation and power. See schematic diagram of Bear River basin. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	21	25	41	1,410	2,700	822	206	126	20	19	24
2	14	22	25	241	1,290	2,150	714	189	126	20	19	19
3	12	25	26	366	1,240	2,050	660	149	111	19	20	14
4	14	28	26	402	2,540	2,620	580	131	85	22	21	22
5	11	23	26	475	2,310	2,100	625	146	65	18	18	17
6	12	23	27	475	2,000	1,950	847	172	37	22	18	23
7	11	26	26	470	2,190	2,020	767	166	47	18	20	24
8	14	24	25	490	2,240	1,840	684	154	66	14	29	16
9	11	24	25	917	1,980	1,530	702	108	27	14	24	16
10	17	29	25	2,540	3,180	1,240	732	108	67	15	26	16
11	20	33	25	3,320	6,170	1,360	726	118	29	14	26	20
12	32	28	25	13,800	4,560	1,390	678	118	16	16	28	17
13	18	27	25	7,430	2,970	1,240	726	134	17	13	29	16
14	20	39	25	3,220	2,700	1,110	854	124	15	14	32	12
15	25	36	26	3,000	2,930	1,040	792	64	14	22	32	10
16	24	58	27	7,120	2,330	938	774	47	15	24	37	12
17	24	34	48	7,620	1,800	882	714	47	20	20	34	15
18	20	29	43	5,360	1,370	840	655	41	18	18	33	14
19	16	30	74	4,660	1,140	810	600	106	17	20	27	16
20	17	29	37	3,010	1,000	994	610	120	14	19	23	29
21	16	27	34	2,220	938	1,040	788	88	16	16	23	45
22	14	27	33	1,830	987	1,130	540	79	17	15	29	23
23	10	27	32	1,570	1,060	1,010	503	89	18	15	25	22
24	8.2	27	34	1,430	994	875	532	104	17	15	25	22
25	14	27	32	1,450	1,040	696	515	170	17	19	26	16
26	17	27	31	1,450	1,010	590	496	139	22	19	27	17
27	18	27	32	1,350	1,940	565	475	156	16	24	24	14
28	22	27	35	1,180	4,070	625	464	159	17	32	13	15
29	22	27	32	1,150	------	650	449	142	24	28	14	22
30	23	26	31	1,410	------	650	408	134	19	24	21	18
31	22	------	31	1,430	------	882	------	98	------	23	23	------
TOTAL	529.2	857	968	81,427	59,389	39,517	19,432	3,806	1,115	592	765	566
MEAN	17.1	28.6	31.2	2,627	2,121	1,275	648	123	37.2	19.1	24.7	18.9
MAX	32	58	74	13,800	6,170	2,700	854	206	126	32	37	45
MIN	8.2	21	25	41	938	565	408	41	14	13	13	10
AC-FT	1,050	1,700	1,920	161,500	117,800	78,380	38,540	7,550	2,210	1,170	1,520	1,120
(a)	991	0	0	0	0	0	7,352	26,883	28,047	29,847	26,759	12,051

CAL YR 1972 TOTAL 58,768.4 MEAN 161 MAX 2,650 MIN 5.8 AC-FT 116,600 MEAN b 344 AC-FT b 249,800
WTR YR 1973 TOTAL 208,963.2 MEAN 573 MAX 13,800 MIN 8.2 AC-FT 414,500 MEAN b 804 AC-FT b 582,300

a Diversion, in acre-feet, to Camp Far West North and South Canals and South Sutter conveyance canal, furnished by South Sutter Water District.
b Adjusted for diversions and change in contents in New Camp Far West Reservoir.

11424600 WELLMAN CREEK NEAR SMARTVILLE, CALIF.

LOCATION.--Lat 39°11'37", long 121°20'23", in SW¼SE¼ sec.31, T.16 N., R.6 E., Yuba County, on right bank 4 ft upstream from culvert on Smartville-Hammonton Road, 2.3 miles southwest of Smartville.

DRAINAGE AREA.--0.59 sq mi.

PERIOD OF RECORD.--Water years 1960-67 (annual maximum), October 1967 to September 1973 (discontinued).

GAGE.--Water-stage recorder with tipping-bucket rain gage, crest-stage gages, and culvert control. Altitude of gage is 495 ft (from topographic map).

AVERAGE DISCHARGE.--6 years, 0.51 cfs (369 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 220 cfs Feb. 27 (gage height, 14.74 ft); no flow for several months. Period of record: Maximum discharge, 467 cfs Jan. 20, 1964 (gage height, 15.66 ft), from rating curve extended above 40 cfs on basis of computation of flow through culverts and over roadway at gage heights 12.39, 12.65, 13.94. 14.46, and 15.66 ft; no flow for several months in each year.

REMARKS.--Records good. No regulation or diversion above station. Small ditch diverts some flow into basin at gage during heavy storms.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.02	.01	.37	1.5	.27	.08	.01			
2		0	.01	.01	.27	1.1	.21	.07	.01			
3		0	.01	.01	4.2	8.5	.18	.08	0			
4		0	.02	.01	5.8	4.3	.18	.08	0			
5		0	.02	.01	.82	.82	.18	.08	0			
6		0	.07	.01	5.7	5.0	.16	.08	0			
7		0	.29	.01	4.2	.88	.16	.08	0			
8		0	.10	1.7	.76	2.7	.16	.08	0			
9		0	.05	8.2	7.2	.64	.16	.07	0			
10		.01	.04	1.7	26	.64	.16	.07	0			
11		1.4	.03	30	4.4	.54	.16	.06	0			
12		.56	.02	20	1.5	.41	.16	.05	0			
13		.37	.02	1.8	1.2	.33	.16	.04	0			
14		7.2	.02	.59	9.8	.30	.16	.04	0			
15		5.6	.03	6.6	1.7	.30	.14	.04	0			
16		.50	.36	21	1.0	.30	.14	.03	0			
17		.38	8.5	3.1	.76	.30	.14	.03	0			
18		.30	8.0	11	.64	.27	.14	.02	0			
19		.98	5.8	.69	.59	.37	.14	.02	0			
20		.30	.59	.30	.54	.41	.14	.02	0			
21		.16	.24	1.2	.50	1.4	.12	.02	0			
22		.09	.16	.24	.50	.41	.10	.02	0			
23		.04	.10	.16	.45	.30	.10	.02	0			
24		.02	.66	.70	.64	.27	.08	.03	0			
25		.02	.14	3.5	.54	.24	.08	.04	0			
26		.01	.08	.45	2.6	.24	.08	.03	0			
27		.01	.37	.27	30	.33	.08	.02	0			
28		.02	.30	.18	2.7	.24	.08	.01	0			
29		.02	.10	3.6	------	.21	.08	0	0			
30		.02	.04	4.6	------	.54	.08	0	0			
31		------	.03	.54	------	.50	------	.01	------			------
TOTAL	0	18.01	26.22	122.19	115.38	34.29	4.18	1.32	.02	0	0	0
MEAN	0	.60	.85	3.94	4.12	1.11	.14	.043	.0007	0	0	0
MAX	0	7.2	8.5	30	30	8.5	.27	.08	.01	0	0	0
MIN	0	0	.01	.01	.27	.21	.08	0	0	0	0	0
AC-FT	0	36	52	242	229	68	8.3	2.6	.04	0	0	0
(a)	2.0	6.35	3.9	11.2	9.7	4.2	.2	0	0	0	0	0

CAL YR 1972 TOTAL 52.83 MEAN .14 MAX 8.5 MIN 0 AC-FT 105
WTR YR 1973 TOTAL 321.61 MEAN .88 MAX 30 MIN 0 AC-FT 638

a Precipitation, in inches.

11425000 FEATHER RIVER AT NICOLAUS, CALIF.

LOCATION.--Lat 38°54'01", long 121°35'00", in New Helvetia Grant, T.12 N., R.3 E., Sutter County, on left bank at highway bridge at Nicolaus, 2.9 miles downstream from Bear River, and at mile 9.4.

DRAINAGE AREA.--5,920 sq mi.

PERIOD OF RECORD.--June 1921 to December 1942 (low-water periods only), April 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.30 ft below mean sea level. Prior to November 1931, on middle fender pier of bridge 0.3 mile upstream at same datum. Since June 1960 auxiliary water-stage recorder at various sites near highway bridge for low-water periods.

AVERAGE DISCHARGE.--30 years (1943-73), 8,112 cfs (5,877,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 72,000 cfs Jan. 17; minimum daily, 2,630 cfs May 17, 18. Period of record: Maximum discharge (1943 to current year), 357,000 cfs Dec. 23, 1955; maximum gage height, 51.60 ft Dec. 23, 1955; no flow Aug. 2-18, 1924, July 11-22, 24, 26, Aug. 1, 1931.

REMARKS.--Records good. Flow partly regulated by many reservoirs (total capacity, 6,868,000 acre-ft), the largest of which are Lake Oroville (see sta 11406800) completed in 1968, Lake Almanor (see sta 11399000) completed in 1913, and New Bullards Bar Reservoir (see sta 11413515) completed in 1969. Diversions for irrigation of about 87,000 acres between stations at Oroville and at Nicolaus. Records of water temperatures near this station for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,090	5,950	5,250	6,460	17,100	35,000	8,140	4,830	4,250	3,400	4,890	4,420
2	6,030	5,650	5,220	6,540	16,400	31,000	7,600	4,720	3,790	3,400	5,510	4,440
3	6,000	5,390	5,130	6,820	16,000	26,700	7,330	4,730	3,560	3,390	6,190	4,420
4	5,970	5,280	5,170	7,330	18,900	28,500	7,040	4,730	3,450	3,370	6,510	4,580
5	5,960	5,220	5,160	8,110	19,900	27,700	6,880	4,730	3,400	3,370	6,330	4,700
6	5,950	5,160	5,210	8,260	18,500	24,900	6,840	4,590	3,380	3,310	6,220	4,800
7	5,990	5,120	5,320	8,940	20,600	27,100	6,590	4,590	3,370	3,300	6,210	4,890
8	5,980	5,140	5,510	10,400	21,100	26,000	6,370	4,040	3,350	3,310	6,180	4,950
9	5,950	5,180	5,760	12,700	19,300	24,700	6,250	3,630	3,370	3,290	5,900	4,960
10	5,950	5,260	5,800	18,800	23,900	22,100	5,290	3,460	3,350	3,290	5,770	4,950
11	6,060	5,420	5,750	20,200	33,000	19,400	5,000	3,420	3,370	3,300	5,760	4,980
12	6,160	5,750	5,730	39,100	31,000	16,800	4,790	3,420	3,380	3,330	5,700	5,040
13	6,170	5,730	5,330	59,200	28,100	13,800	4,740	3,320	3,390	3,400	5,690	5,100
14	6,150	5,790	5,250	41,900	23,900	11,500	4,740	2,890	3,390	3,450	5,640	5,180
15	6,130	6,550	5,240	29,700	25,400	9,410	4,960	2,860	3,270	3,470	5,340	5,230
16	6,110	7,260	5,300	28,000	21,900	7,890	5,950	2,690	2,950	3,510	5,250	5,230
17	6,080	7,900	6,140	72,000	20,000	8,750	6,110	2,630	2,930	3,740	5,140	5,240
18	6,060	8,350	8,880	68,000	18,700	8,610	5,930	2,630	2,940	4,530	4,910	5,270
19	6,040	7,880	10,100	69,000	18,100	8,510	6,500	2,780	2,940	4,980	4,830	5,280
20	6,030	6,630	10,900	58,000	17,600	8,790	6,820	3,320	2,930	4,990	4,850	5,240
21	6,040	5,920	9,260	39,000	14,600	9,480	6,820	3,610	2,910	5,010	4,960	5,320
22	6,030	5,790	8,520	27,500	13,400	14,100	6,650	3,820	2,900	5,010	4,730	5,360
23	6,000	5,680	7,570	20,000	12,800	16,900	6,300	6,780	2,900	5,000	4,520	5,440
24	5,970	5,550	7,120	16,800	11,800	13,400	6,360	6,990	3,080	4,990	4,480	5,410
25	5,950	5,480	7,120	16,400	11,100	10,600	6,260	5,990	3,260	4,990	4,420	5,420
26	5,970	5,420	7,020	16,600	10,200	10,000	6,140	5,080	3,330	5,030	4,400	5,400
27	5,990	5,390	7,120	15,800	14,200	9,030	6,090	4,530	3,370	5,050	4,380	5,410
28	6,020	5,330	7,070	14,800	38,000	7,870	6,010	4,510	3,380	5,070	4,370	5,190
29	6,030	5,300	6,940	14,300	------	7,640	5,740	4,490	3,370	4,530	4,400	5,020
30	5,940	5,280	6,740	16,700	------	7,440	4,960	4,420	3,370	4,410	4,410	4,950
31	5,920	------	6,590	18,100	------	7,530	------	4,390	------	4,710	4,370	------
TOTAL	186,720	175,750	203,220	795,460	555,500	501,150	185,200	128,620	98,630	125,930	162,260	151,820
MEAN	6,023	5,858	6,555	25,660	19,840	16,170	6,173	4,149	3,288	4,062	5,234	5,061
MAX	6,170	8,350	10,900	72,000	38,000	35,000	8,140	6,990	4,250	5,070	6,510	5,440
MIN	5,920	5,120	5,130	6,460	10,200	7,440	4,740	2,630	2,900	3,290	4,370	4,420
AC-FT	370,400	348,600	403,100	1,578M	1,102M	994,000	367,300	255,100	195,600	249,800	321,800	301,100

CAL YR 1972 TOTAL 1,820,880 MEAN 4,975 MAX 13,800 MIN 1,790 AC-FT 3,612,000
WTR YR 1973 TOTAL 3,270,260 MEAN 8,960 MAX 72,000 MIN 2,630 AC-FT 6,487,000

11425500 SACRAMENTO RIVER AT VERONA, CALIF.

LOCATION.--Lat 38°46'51", long 121°36'12", in SW¼SE¼ sec.23, T.11 N., R.3 E., Sutter County, on left bank 0.8 mile southeast of Verona, 1 mile downstream from Feather River, 6.2 miles east of Knights Landing, and at mile 19.6 upstream from Sacramento.

DRAINAGE AREA.--21,257 sq mi.

PERIOD OF RECORD.--May 1926 to September 1929 (low-water periods only), October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.00 ft below mean sea level.

AVERAGE DISCHARGE.--44 years (1929-73), 18,650 cfs (13,510,000 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 65,800 cfs Jan. 20; minimum daily, 10,300 cfs June 22, 23. Period of record: Maximum discharge, 79,200 cfs Mar. 1, 1940 (gage height, 41.20 ft); minimum daily, 304 cfs July 23, 24, 1931; maximum reverse flow, 16,800 cfs Dec. 4, 1950, backwater from American River. Maximum combined discharge of Sacramento River at Verona and Fremont weir, about 322,000 cfs Dec. 25, 1964.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, return flow from irrigated areas, and bypassing for flood control. When discharge exceeds about 55,000 cfs, flow begins over Fremont weir (just upstream) into Yolo Bypass (see sta 11453000). Gage height of crest of Fremont weir is 33.5 ft. ~~Records of chemical analyses for the current year are published in Part 2 of this report.~~

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14,700	13,500	21,800	23,200	55,900	63,000	24,800	13,200	16,500	11,100	14,200	15,300
2	14,500	13,000	21,500	23,600	54,600	63,600	24,600	13,000	15,900	11,100	15,000	14,900
3	14,200	12,800	20,700	23,700	52,400	63,300	23,700	12,500	15,600	11,100	15,600	14,800
4	14,100	13,000	20,000	23,700	51,000	63,400	22,800	12,200	14,900	11,000	15,300	14,700
5	14,000	13,000	19,200	24,100	51,800	62,800	22,000	11,900	14,100	11,000	14,900	14,700
6	13,600	13,600	18,900	24,300	51,900	61,900	21,600	11,800	13,400	11,100	14,800	14,700
7	13,200	14,100	18,300	24,400	55,400	61,900	21,100	12,000	12,600	11,100	14,800	14,800
8	13,100	13,700	17,800	25,300	58,400	61,800	20,600	11,600	12,200	11,300	14,500	15,000
9	13,000	13,300	17,600	27,000	60,400	61,500	20,400	10,900	12,000	11,300	14,100	15,100
10	13,100	13,800	17,400	33,300	63,000	60,200	19,300	10,900	11,600	11,500	14,100	14,900
11	13,700	14,800	16,900	41,600	65,000	58,800	18,000	11,000	11,200	11,500	14,300	15,000
12	14,100	16,800	16,800	51,300	65,400	57,000	17,900	11,100	11,000	11,500	14,500	15,300
13	14,600	19,800	16,300	58,100	64,400	54,300	18,100	11,400	10,700	11,600	14,500	15,700
14	14,600	20,900	16,000	59,800	63,900	50,300	18,000	12,000	10,600	11,700	14,200	15,900
15	14,700	25,000	15,600	58,900	63,900	45,200	18,400	12,500	10,700	11,900	13,800	16,200
16	14,800	31,000	15,600	60,400	63,100	39,100	19,000	12,800	10,600	12,100	13,900	16,200
17	15,400	33,900	16,400	64,200	62,300	35,600	18,800	13,000	10,800	12,500	14,000	16,200
18	16,000	34,300	22,300	64,300	61,400	32,500	18,400	13,900	10,900	13,400	13,900	16,500
19	15,900	31,200	32,700	65,300	60,400	29,900	18,300	15,100	10,700	13,600	14,100	16,600
20	15,500	28,900	38,200	65,800	59,200	28,300	18,200	16,400	10,600	13,700	14,300	16,500
21	15,000	27,600	39,000	65,700	57,200	29,200	17,700	16,400	10,400	13,800	14,600	16,400
22	14,700	26,500	37,700	64,800	54,400	34,900	17,100	16,600	10,300	14,000	14,400	16,400
23	14,500	25,300	34,900	63,600	50,800	39,800	16,200	18,400	10,300	14,000	14,200	16,700
24	14,300	24,400	34,100	62,600	46,200	39,800	15,500	19,700	10,800	14,100	14,200	16,700
25	14,000	23,800	32,800	62,000	43,500	35,800	14,900	19,400	11,400	14,100	14,300	16,900
26	14,000	23,400	30,800	61,600	42,600	32,000	14,200	19,100	11,600	14,100	14,700	16,700
27	14,000	23,000	28,400	60,600	44,900	29,000	13,700	19,500	11,500	14,100	14,900	16,400
28	14,000	22,600	26,400	59,000	56,600	26,500	13,900	19,100	11,400	14,200	15,100	15,800
29	13,900	22,300	24,900	57,100	------	25,000	14,100	18,400	11,200	13,800	15,300	15,300
30	13,600	22,000	23,900	56,100	------	24,200	13,600	17,700	11,000	13,600	15,400	15,100
31	13,500	------	23,400	56,300	------	24,100	------	17,100	------	14,100	15,500	------
TOTAL	442,300	631,300	736,300	1,511.7M	1,580.0M	1,394.7M	554,900	450,600	356,500	389,000	451,400	471,400
MEAN	14,270	21,040	23,750	48,760	56,430	44,990	18,500	14,540	11,880	12,550	14,560	15,710
MAX	16,000	34,300	39,000	65,800	65,400	63,600	24,800	19,700	16,500	14,200	15,600	16,900
MIN	13,000	12,800	15,600	23,200	42,600	24,100	13,600	10,900	10,300	11,000	13,800	14,700
AC-FT	877,300	1,252M	1,460M	2,998M	3,134M	2,766M	1,101M	893,800	707,100	771,600	895,400	935,000

CAL YR 1972 TOTAL 5,877,740 MEAN 16,060 MAX 39,000 MIN 8,650 AC-FT 11,660,000
WTR YR 1973 TOTAL 8,970,100 MEAN 24,580 MAX 65,800 MIN 10,300 AC-FT 17,790,000

11426000 SACRAMENTO WEIR SPILL TO YOLO BYPASS, NEAR SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'25", long 121°33'15", (unsurveyed), Sacramento County, 2 gages on right bank, one 100 ft upstream from weir and one 100 ft downstream from weir, 3.2 miles upstream from American River, 4 miles northwest of Sacramento, and at mile 4.2 upstream from Sacramento.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for water years 1940-51, published in WSP 1735. Published as Sacramento weir near Sacramento 1939-61. Gage-height records collected at same site February 1926 to September 1934 and major flood flows only October 1934 to September 1939 are contained in reports of California Department of Water Resources.

GAGE.--Water-stage recorders and concrete weir crest. Datum of gage is 3.00 ft below mean sea level. October 1939 to September 1942, October 1959 to September 1963, water-stage recorder or nonrecording gage at downstream end of weir. October 1942 to September 1959, water-stage recorder on left bank at Sacramento River opposite center of weir. Since February 1963, water-stage recorders on right bank 100 ft upstream and 100 ft downstream from ends of weir.

AVERAGE DISCHARGE.--34 years, 224 cfs (162,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,270 cfs Jan. 19, 1973; no flow most of year.
Period of record: Maximum discharge, 118,000 cfs Mar. 26, 1928; maximum gage height, 33.01 ft Dec. 23, 1955; no flow during all or most of each year.

REMARKS.--Crest of weir is at gage height 22.0 ft and top of moveable gates at 28.0 ft. Weir consists of 48 gates each 38.1 ft long. Flow over weir enters Yolo Bypass by way of Sacramento Bypass. Flow regulated by weir gates. Flow for the current year consisted of leakage through weir gates only. Since February 1963, stage is obtained by averaging the stage obtained at sites above and below the weir.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	152						
2				0	0	170						
3				0	0	162						
4				0	0	164						
5				0	0	152						
6				0	0	129						
7				0	0	124						
8				0	0	132						
9				0	24	123						
10				0	150	85						
11				0	216	36						
12				0	222	0						
13				253	230	0						
14				356	246	0						
15				355	241	0						
16				302	181	0						
17				312	139	0						
18				367	116	0						
19				1,070	89	0						
20				372	53	0						
21				316	0	0						
22				242	0	0						
23				185	0	0						
24				142	0	0						
25				124	0	0						
26				116	0	0						
27				67	0	0						
28				0	22	0						
29				0	------	0						
30				0	------	0						
31		------		0	------	0	------		------			------
TOTAL	0	0	0	4,579	1,929	1,429	0	0	0	0	0	0
MEAN	0	0	0	148	68.9	46.1	0	0	0	0	0	0
MAX	0	0	0	1,070	246	170	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	9,080	3,830	2,830	0	0	0	0	0	0

CAL YR 1972 TOTAL 0 MEAN 0 MAX 0 MIN 0 AC-FT 0
WTR YR 1973 TOTAL 7,937 MEAN 21.7 MAX 1,070 MIN 0 AC-FT 15,740

11426150 ONION CREEK NEAR SODA SPRINGS, CALIF.

LOCATION.--Lat 39°16'02", long 120°21'50", in SE¼NE¼ sec.11, T.16 N., R.14 E., Placer County, Tahoe National Forest, on right bank 0.3 mile upstream from unnamed tributary, 1 mile upstream from mouth, and 4.0 miles south of Soda Springs.

DRAINAGE AREA.--3.58 sq mi.

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,900 ft (from topographic map).

AVERAGE DISCHARGE.--14 years, 9.63 cfs (6,980 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 159 cfs May 16 (gage height, 2.54 ft); minimum daily, 0.10 cfs Sept. 6, 13-15.
Period of record: Maximum discharge, 1,750 cfs Dec. 23, 1964 (gage height, 4.98 ft in gage well, 6.82 ft, from floodmarks), from rating curve extended above 40 cfs on basis of slope-area measurement of maximum flow; minimum daily, 0.1 cfs for several days in 1959, 1961, 1973.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	.59	2.9	3.6	3.9	5.1	5.5	43	32	2.7	.38	.19
2	.76	.59	2.7	3.4	3.9	4.8	5.5	46	26	1.7	.44	.19
3	.59	2.3	1.8	3.3	3.9	5.1	5.5	51	22	1.5	.38	.19
4	.51	5.9	1.7	3.2	3.9	4.8	7.3	41	21	1.7	.38	.16
5	.51	3.3	1.7	3.2	3.6	4.5	10	32	20	1.5	.38	.13
6	.51	2.5	1.6	3.1	3.6	4.2	15	32	18	1.4	.44	.10
7	.51	2.9	1.6	3.0	3.6	4.2	16	41	15	1.2	.38	.13
8	.67	1.7	1.5	2.9	3.6	4.2	18	46	15	1.5	.33	.13
9	.98	1.5	1.5	2.8	3.6	4.2	21	51	13	1.2	.29	.13
10	3.9	1.4	1.5	2.9	3.6	4.2	24	58	13	1.4	.25	.13
11	4.2	1.4	1.4	4.2	3.6	4.2	28	71	12	2.1	.25	.13
12	1.2	1.4	1.4	43	3.3	3.9	31	80	10	1.8	.25	.13
13	.86	1.4	1.2	13	3.3	3.9	25	97	8.9	.98	.25	.10
14	.67	1.8	1.2	8.3	3.3	3.9	21	105	8.3	.98	.25	.10
15	.76	1.5	1.2	7.8	3.3	4.2	20	97	7.8	.76	.22	.10
16	1.1	1.5	1.4	8.3	3.1	4.5	18	107	7.3	.67	.22	.13
17	2.3	1.4	20	7.3	3.3	5.1	19	107	8.3	.59	.22	.13
18	3.1	1.4	17	6.3	3.6	4.8	18	92	9.5	.59	.22	.13
19	1.4	1.5	24	5.9	3.6	4.8	18	80	4.5	.59	.25	.16
20	1.1	1.5	12	5.5	3.6	4.5	18	63	4.2	.76	.22	.67
21	.86	1.4	13	5.1	3.9	4.5	20	56	3.6	.76	.22	.25
22	.76	1.4	16	4.8	3.6	4.2	24	51	3.3	.76	.19	.22
23	.76	1.5	8.9	4.8	3.9	4.2	32	46	3.3	.67	.19	.29
24	.76	1.7	7.3	4.8	4.2	5.1	36	46	3.3	.59	.22	.29
25	.67	2.9	5.9	4.8	4.2	6.3	42	42	3.1	.59	.29	.29
26	.67	3.6	6.3	4.5	4.2	7.3	54	33	3.9	.51	.44	.22
27	.67	2.7	5.1	4.2	4.2	7.3	63	32	2.9	.51	.44	.22
28	.67	2.7	4.5	4.2	4.8	6.8	62	33	2.3	.51	.29	.22
29	.59	2.7	4.2	4.2	------	6.3	51	32	2.1	.51	.22	.22
30	.51	2.7	4.2	4.5	------	5.9	45	31	2.3	.44	.19	.25
31	.51	------	3.8	3.9	------	5.9	------	39	------	.44	.19	------
TOTAL	33.73	60.78	178.5	190.8	104.2	152.9	772.8	1,781	305.9	31.91	8.88	5.73
MEAN	1.09	2.03	5.76	6.15	3.72	4.93	25.8	57.5	10.2	1.03	.29	.19
MAX	4.2	5.9	24	43	4.8	7.3	63	107	32	2.7	.44	.67
MIN	.51	.59	1.2	2.8	3.1	3.9	5.5	31	2.1	.44	.19	.10
AC-FT	67	121	354	378	207	303	1,530	3,530	607	63	18	11

CAL YR 1972 TOTAL 2,831.86 MEAN 7.74 MAX 42 MIN .16 AC-FT 5,620
WTR YR 1973 TOTAL 3,627.13 MEAN 9.94 MAX 107 MIN .10 AC-FT 7,190

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	0800	2.18	63	5-16	1700	2.54	159
1-12	0600	2.53	156	5-31	1100	2.21	69
4-27	1800	2.36	105				

11426190 LAKE VALLEY CANAL NEAR EMIGRANT GAP, CALIF.

LOCATION.--Lat 39°17'58", long 120°39'11", in NE¼NW¼ sec.32, T.17 N., R.12 E., Placer County, Tahoe National Forest, on right bank 0.2 mile upstream from inlet to Carpenter Flat siphon, and 1 mile east of Emigrant Gap.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,360 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 12.3 cfs (8,910 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 39 cfs May 14, 15, June 1, 1972; no flow for several months in each year.

REMARKS.--Canal diverts from right bank of the North Fork of North Fork American River, 2.7 miles downstream from Lake Valley Reservoir to the Drum Canal in the Bear River basin. See schematic diagram of Bear River and Yuba River basins.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	24					0	33	35	35	34	33
2	33	24					0	33	35	35	34	33
3	31	26					0	33	35	35	34	33
4	29	33					0	33	35	35	34	33
5	29	31					0	32	35	34	33	33
6	28	29					0	32	32	34	33	32
7	28	29					0	32	28	34	33	32
8	28	29					0	33	26	34	33	29
9	29	29					0	30	23	34	33	29
10	31	29					20	30	20	34	33	24
11	34	29					19	31	18	34	33	21
12	30	27					19	32	17	34	32	18
13	29	28					18	33	11	32	33	14
14	29	14					18	34	9.8	32	35	12
15	30	0					17	35	8.7	32	35	.13
16	31	0					20	35	11	32	35	.09
17	31	0					20	35	19	35	35	.09
18	31	0					24	34	11	35	35	.09
19	29	0					24	34	20	35	35	.28
20	28	0					23	34	35	34	35	.09
21	27	0					25	34	34	34	35	.06
22	27	0					27	33	34	34	35	.07
23	28	0					29	32	35	34	35	.07
24	32	0					30	31	36	33	34	.08
25	27	0					31	31	36	34	35	.04
26	25	0					34	32	36	34	35	.05
27	25	0					34	33	35	36	34	8.4
28	25	0					35	34	35	35	34	29
29	24	0			------		34	35	35	34	34	31
30	24	0			------		34	35	35	34	33	31
31	24	------			------		------	35	------	34	33	------
TOTAL	887	381	0	0	0	0	535	1,023	815.5	1,055	1,054	476.54
MEAN	28.6	12.7	0	0	0	0	17.8	33.0	27.2	34.0	34.0	15.9
MAX	34	33	0	0	0	0	35	35	36	36	35	33
MIN	24	0	0	0	0	0	0	30	8.7	32	32	.04
AC-FT	1,760	756	0	0	0	0	1,060	2,030	1,620	2,090	2,090	945

CAL YR 1972 TOTAL 6,577.46 MEAN 18.0 MAX 39 MIN 0 AC-FT 13,050
WTR YR 1973 TOTAL 6,227.04 MEAN 17.1 MAX 36 MIN 0 AC-FT 12,350

11426200 NORTH FORK FORBES CREEK NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°08'37", long 120°45'30", in NW¼SE¼ sec.17, T.15 N., R.11 E., Placer County, Tahoe National Forest, on right bank 0.2 mile downstream from Big Reservoir, and 6.0 miles southeast of Dutch Flat.

DRAINAGE AREA.--1.68 sq mi.

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,980 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 4.61 cfs (3,340 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 90 cfs Jan. 17 (gage height, 3.36 ft); minimum daily, 0.40 cfs Aug. 6.
Period of record: Maximum discharge, 377 cfs Jan. 22, 1970 (gage height, 4.76 ft); no flow many days in 1964-66.
Maximum stage known, 6.40 ft probably Dec. 23, 1955, from floodmarks (discharge unknown).

REMARKS.--Flow regulated by Big Reservoir (capacity, 2,200 acre-ft). Some diversion above station for mining.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.8	1.5	3.9	9.1	37	.90	14	1.0	.70	.60	4.7
2	.90	1.8	1.5	3.9	8.3	37	.90	8.7	1.0	.60	.60	4.7
3	1.0	1.9	1.6	4.0	8.7	33	.90	5.9	1.0	.60	.50	4.6
4	1.0	2.2	1.6	4.0	12	31	.90	4.6	1.0	.60	.50	4.6
5	1.1	1.9	1.5	4.0	12	26	.90	4.1	.90	.60	.50	4.6
6	1.1	1.8	1.5	4.0	13	24	1.0	3.3	.90	.60	.40	4.5
7	1.0	1.9	1.5	4.1	21	21	1.8	2.6	.90	.60	1.0	4.5
8	1.1	1.8	1.5	4.1	23	19	2.5	2.3	.90	.50	.90	4.5
9	1.0	1.8	1.5	4.3	25	17	1.8	2.2	.90	.50	.50	4.5
10	.50	1.8	1.5	4.4	37	17	1.1	2.1	.90	.50	.70	4.6
11	.60	2.0	1.4	5.5	40	19	1.1	2.0	.80	.50	1.0	4.5
12	1.1	1.9	1.4	7.4	37	16	1.1	1.8	.80	.50	1.0	4.2
13	1.8	1.8	1.4	17	31	15	1.2	1.7	.80	.50	1.0	4.2
14	1.8	2.2	1.3	33	29	14	1.2	1.7	.90	.50	1.0	4.2
15	1.8	2.0	1.2	31	26	13	1.3	1.6	.80	.50	1.0	4.2
16	1.8	2.0	1.3	55	22	12	1.5	1.4	.80	.50	1.1	4.2
17	1.8	1.8	2.2	74	20	12	1.9	1.3	.80	.50	1.1	4.1
18	1.8	1.7	2.0	63	18	11	2.3	1.3	.80	.50	1.2	4.1
19	1.8	1.7	2.2	45	16	10	2.7	1.3	.70	.50	1.2	4.1
20	1.8	1.7	1.7	34	15	13	2.4	1.3	.70	.50	1.2	4.3
21	1.8	1.6	1.6	27	13	11	2.8	1.2	.70	.50	2.9	4.2
22	1.9	1.6	1.8	21	11	9.8	2.5	1.2	.70	.50	5.1	4.2
23	1.9	1.6	1.7	18	11	4.4	2.4	1.2	.70	.50	5.2	4.2
24	1.9	1.6	1.6	16	13	.80	2.2	1.2	.70	.60	5.2	4.1
25	1.9	1.6	1.5	15	14	.80	2.3	1.2	.70	.60	5.1	4.1
26	1.9	1.5	1.5	13	16	.80	2.2	1.1	.70	.60	4.9	4.1
27	1.9	1.5	2.8	12	25	.80	2.6	1.1	.70	.60	4.8	4.1
28	1.9	1.5	4.2	10	34	.90	2.4	1.1	.70	.60	4.8	4.1
29	1.9	1.5	4.0	10	------	.90	2.6	1.0	.70	.60	4.7	4.1
30	1.9	1.5	3.9	11	------	.90	10	1.0	.70	.60	4.7	4.1
31	1.8	------	3.9	10	------	.90	------	1.0	------	.60	4.7	------
TOTAL	46.40	53.0	59.8	568.6	560.1	429.00	61.40	77.5	24.30	17.10	69.10	129.2
MEAN	1.50	1.77	1.93	18.3	20.0	13.8	2.05	2.50	.81	.55	2.23	4.31
MAX	1.9	2.2	4.2	74	40	37	10	14	1.0	.70	5.2	4.7
MIN	.50	1.5	1.2	3.9	8.3	.80	.90	1.0	.70	.50	.40	4.1
AC-FT	92	105	119	1,130	1,110	851	122	154	48	34	137	256

CAL YR 1972 TOTAL 608.70 MEAN 1.66 MAX 13 MIN .30 AC-FT 1,210
WTR YR 1973 TOTAL 2,095.50 MEAN 5.74 MAX 74 MIN .40 AC-FT 4,160

11426400 NORTH SHIRTTAIL CREEK NEAR DUTCH FLAT, CALIF.

LOCATION.--Lat 39°07'49", long 120°47'44", in NW¼SE¼ sec.24, T.15 N., R.10 E., Placer County, Tahoe National Forest, on right bank 200 ft downstream from Forbes Creek, and 7.0 miles southeast of Dutch Flat.

DRAINAGE AREA.--9.10 sq mi.

PERIOD OF RECORD.--July 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,500 ft (from topographic map).

AVERAGE DISCHARGE.--17 years, 20.9 cfs (15,140 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 529 cfs Jan. 16 (gage height, 4.29 ft); minimum daily, 0.20 cfs Aug. 16, 17.
Period of record: Maximum discharge, 1,780 cfs Dec. 22, 1964 (gage height, 7.56 ft), from rating curve extended above 590 cfs on basis of slope-area measurement at gage height 6.36 ft; minimum daily, 0.10 cfs many days in 1970.
Flood of Dec. 23, 1955, reached a stage of 7.30 ft, from floodmarks (discharge, 1,650 cfs).

REMARKS.--Flow slightly regulated by Big Reservoir (capacity, 2,200 acre-ft).

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	2.2	4.6	19	45	142	35	18	4.3	.90	.40	.60
2	.50	2.2	4.5	18	41	133	31	15	3.9	.90	.40	.60
3	.40	4.9	6.4	18	47	119	29	13	3.6	.90	.40	.60
4	.40	19	6.4	18	81	113	27	13	3.1	.90	.30	.50
5	.40	8.4	6.0	17	75	102	26	13	2.9	.90	.30	.50
6	.30	5.1	5.5	17	83	98	24	12	2.7	.80	.30	.50
7	.70	9.2	5.5	16	112	91	24	11	2.6	.80	.30	.50
8	.60	10	5.0	16	103	85	23	9.6	2.2	.80	.60	.50
9	.70	6.0	5.0	28	102	78	22	7.2	2.1	.80	.40	.40
10	1.3	8.0	5.5	42	177	84	20	6.8	1.9	.70	.30	.40
11	3.0	17	6.0	150	161	94	19	6.6	1.9	.70	.30	.40
12	1.7	11	6.3	349	153	83	18	6.3	1.9	.60	.30	.40
13	2.4	8.7	6.3	176	126	76	19	6.0	2.0	.60	.30	.50
14	2.4	30	6.3	129	123	69	18	5.8	2.1	.50	.30	.40
15	2.6	21	6.1	117	109	65	18	5.8	2.1	.50	.30	.50
16	2.7	29	6.6	336	98	61	18	5.6	2.1	.60	.20	.50
17	3.0	17	52	255	90	59	19	5.5	2.0	.60	.20	.50
18	3.0	12	56	244	84	54	18	5.3	1.8	.60	.30	.60
19	2.6	13	89	180	78	53	17	5.2	1.7	.60	.30	.60
20	2.5	11	50	250	72	61	16	5.1	1.5	.60	.40	3.2
21	2.5	9.5	34	127	68	55	16	5.0	1.4	.60	1.4	1.1
22	2.5	8.2	53	101	63	52	15	4.9	1.4	.60	1.0	.90
23	2.4	7.3	37	85	60	47	14	4.8	1.3	.60	.90	1.1
24	2.3	6.7	33	74	66	38	13	4.9	1.3	.50	.90	1.3
25	2.2	6.3	27	67	70	35	13	5.3	1.3	.50	.90	1.0
26	2.3	5.8	24	61	87	34	12	4.8	1.2	.50	.90	.80
27	2.3	5.4	23	55	134	34	12	4.5	1.1	.50	.90	.70
28	2.3	5.1	23	50	163	33	12	4.2	.90	.50	.80	.70
29	2.3	4.9	22	47	------	31	12	4.0	.90	.40	.80	.70
30	2.2	4.8	20	51	------	32	15	3.8	.90	.40	.70	.70
31	2.2	------	19	49	------	38	------	4.0	------	.40	.70	------
TOTAL	57.10	308.7	654.0	3,162	2,671	2,149	575	225.4	60.10	19.80	16.50	21.70
MEAN	1.84	10.3	21.1	102	95.4	69.3	19.2	7.27	2.00	.64	.53	.72
MAX	3.0	30	89	349	177	142	35	18	4.3	.90	1.4	3.2
MIN	.30	2.2	4.5	16	41	31	12	3.8	.90	.40	.20	.40
AC-FT	113	612	1,300	6,270	5,300	4,260	1,140	447	119	39	33	43

CAL YR 1972 TOTAL 4,907.10 MEAN 13.4 MAX 160 MIN .20 AC-FT 9,730
WTR YR 1973 TOTAL 9,920.30 MEAN 27.2 MAX 349 MIN .20 AC-FT 19,680

11427000 NORTH FORK AMERICAN RIVER AT NORTH FORK DAM, CALIF.

LOCATION.--Lat 38°56'10", long 121°01'22", in SW¼NW¼ sec.31, T.13 N., R.9 E., Placer County, 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.--342 sq mi.

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Datum of gage is 715.0 ft above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--32 years, 825 cfs (597,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 16,900 cfs Jan. 12 (gage height, 6.19 ft); minimum daily, 40 cfs Sept. 9, 16.
Period of record: Maximum discharge, 65,400 cfs Dec. 23, 1964 (gage height, 11.87 ft), from rating curve extended above 24,000 cfs on basis of computed flow over spillway of dam at gage height 10.22 ft; no flow Aug. 27-30, Sept. 2-11, 1944, Oct. 5, 6, 1963, Nov. 7-10, 1965, caused by operation of valve in North Fork Dam.

REMARKS.--Records good. Minor regulation by Lake Clementine (usable capacity, 12,800 acre-ft) formed by North Fork Dam. Storage in Big Reservoir and Lake Valley Reservoir (combined capacity, 10,300 acre-ft) above station. Lake Valley Canal (see sta 11426190) diverts from North Fork of North Fork American River into Bear River basin for power development in powerhouses of Pacific Gas and Electric Co. Combined storage and diversion have small effect on natural flow. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	61	206	521	1,090	2,420	1,010	1,680	1,620	188	61	46
2	58	61	200	494	1,020	2,240	904	1,720	1,320	176	61	46
3	58	65	200	521	1,000	2,000	850	1,900	1,080	165	58	46
4	55	759	325	468	1,580	2,030	850	1,920	959	160	58	43
5	52	788	284	426	1,610	1,850	937	1,500	882	155	58	43
6	49	334	263	408	1,530	1,780	1,090	1,250	860	150	58	46
7	49	244	270	392	1,980	1,700	1,320	1,330	790	145	58	43
8	49	325	256	385	1,900	1,580	1,210	1,640	722	141	58	43
9	58	244	225	834	1,640	1,420	1,370	1,740	722	136	58	40
10	69	231	225	1,410	2,680	1,360	1,540	1,830	665	131	58	43
11	121	451	219	2,530	3,830	1,770	1,630	2,170	593	121	58	43
12	160	355	213	12,100	3,080	1,520	1,770	2,550	548	106	55	46
13	101	250	206	5,600	2,360	1,400	1,860	2,880	460	101	55	43
14	81	569	200	3,080	2,200	1,250	1,420	3,120	442	101	52	43
15	81	645	206	2,180	2,060	1,150	1,320	3,040	392	101	52	43
16	97	782	219	7,750	1,770	1,090	1,210	2,920	362	101	49	40
17	126	560	1,800	6,330	1,570	1,090	1,260	3,060	332	97	49	43
18	145	378	2,540	4,850	1,420	1,020	1,330	2,900	311	93	49	43
19	131	340	4,570	3,900	1,300	992	1,200	2,430	297	89	46	43
20	116	332	2,590	2,620	1,190	1,180	1,100	2,300	284	85	46	65
21	101	284	1,570	2,130	1,130	1,100	1,060	1,900	277	85	46	126
22	89	256	2,680	1,740	1,060	1,100	1,160	1,800	263	85	46	85
23	81	244	1,920	1,520	992	1,080	1,430	1,720	256	85	46	69
24	77	225	1,400	1,360	1,010	1,000	1,700	1,720	250	81	46	69
25	69	213	1,080	1,330	1,200	992	1,830	1,880	231	81	46	69
26	69	219	915	1,210	1,260	1,000	2,030	1,600	225	77	49	69
27	65	250	830	1,090	1,940	1,080	2,360	1,310	225	73	49	65
28	65	250	790	1,020	3,210	1,060	2,470	1,340	225	73	55	61
29	61	231	684	992	------	959	2,220	1,540	213	69	52	61
30	61	219	620	1,130	------	926	1,860	1,600	200	65	49	58
31	61	------	575	1,160	------	1,070	------	1,440	------	65	46	------
TOTAL	2,510	10,165	28,281	71,481	48,612	42,209	43,301	61,730	16,006	3,381	1,627	1,623
MEAN	81.0	339	912	2,306	1,736	1,362	1,443	1,991	534	109	52.5	54.1
MAX	160	788	4,570	12,100	3,830	2,420	2,470	3,120	1,620	188	61	126
MIN	49	61	200	385	992	926	850	1,250	200	65	46	40
AC-FT	4,980	20,160	56,100	141,800	96,420	83,720	85,890	122,400	31,750	6,710	3,230	3,220

CAL YR 1972 TOTAL 226,917 MEAN 620 MAX 4,570 MIN 34 AC-FT 450,100
WTR YR 1973 TOTAL 330,926 MEAN 907 MAX 12,100 MIN 40 AC-FT 656,400

PEAK DISCHARGE (BASE, 4,300 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	2000	3.51	4,350	1-12	0830	6.19	16,900
12-19	0500	4.06	6,230	1-16	1900	5.46	12,800

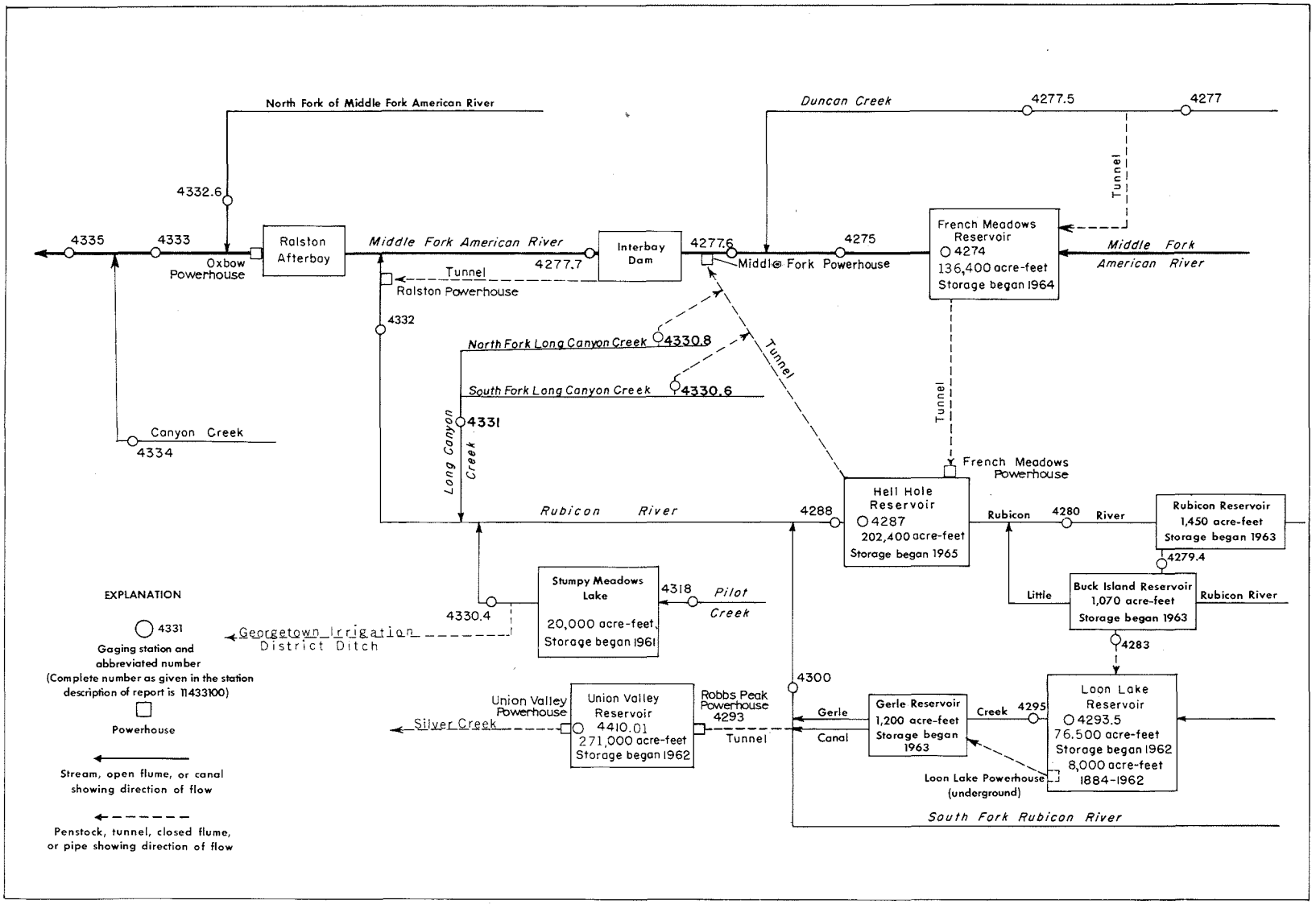

FIGURE 16.--Schematic diagram showing diversions and storage in Middle Fork American and Rubicon river basins.

11427400 FRENCH MEADOWS RESERVOIR NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°06'32", long 120°25'49", in SW¼NE¼ sec.32, T.15 N., R.14 E., Placer County, Tahoe National Forest, on left bank 2.2 miles upstream from dam on Middle Fork American River, 6.9 miles upstream from Chipmunk Creek, and 21 miles northeast of Foresthill.

DRAINAGE AREA.--47.0 sq mi.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Placer County Water Agency).

EXTREMES.--Current year: Maximum contents, 129,423 acre-ft June 18 (elevation, 5,257.82 ft); minimum, 39,483 acre-ft Mar. 15 (elevation, 5,173.20 ft).
Period of record: Maximum contents, 137,700 acre-ft May 19, 1966 (elevation, 5,263.9 ft); minimum since reservoir first filled, 39,483 acre-ft Mar. 15, 1973 (elevation, 5,173.20 ft).

REMARKS.--Reservoir is formed by rockfill dam with earth core. Storage began Dec. 21, 1964. Usable capacity, 125,601 acre-ft between elevations 5,125 ft (minimum operating level) and 5,263 ft (top of radial gates). Dead storage, 10,804 acre-ft. Reservoir is used to store water for hydroelectric power. Up to 400 cfs is diverted in reservoir through tunnel from Duncan Creek. Water is released through tunnel to French Meadows powerplant and then into Hell Hole Reservoir on Rubicon River; releases began Dec. 13, 1965. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS (WATER YEARS).--WRD Calif. 1966: 1965.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,125	10,804	5,200	62,447
5,130	13,075	5,230	94,074
5,150	23,743	5,270	146,502
5,170	37,085		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107,575	88,003	71,039	62,067	53,415	40,070	43,396	71,080	123,538	127,531	110,997	89,838
2	106,983	87,311	70,424	61,632	52,816	40,085	43,612	72,503	124,387	127,315	110,343	89,205
3	106,318	86,798	69,911	61,151	52,290	40,131	43,828	73,992	125,087	127,109	109,716	88,598
4	105,668	87,131	69,360	60,560	51,724	40,131	44,124	75,307	125,679	126,893	108,966	87,481
5	105,020	86,565	68,712	59,905	51,124	40,101	44,920	76,287	126,292	126,687	108,344	87,590
6	104,373	85,977	68,226	59,440	50,582	40,047	44,495	77,180	126,823	126,462	107,724	87,223
7	103,766	85,500	67,671	58,847	50,050	39,979	45,633	78,331	127,270	126,241	106,983	86,831
8	103,136	84,905	67,050	58,331	49,453	39,904	46,231	79,715	127,744	125,998	106,367	86,443
9	102,567	84,291	66,392	57,688	48,851	39,818	46,991	81,187	128,187	125,508	105,667	86,065
10	101,976	83,741	65,748	57,194	48,403	39,767	47,866	82,954	128,503	125,052	104,996	85,777
11	101,363	83,150	65,097	57,140	47,866	39,765	48,876	84,949	128,749	124,343	104,312	85,412
12	100,740	82,519	64,372	59,108	47,282	39,718	49,982	87,154	128,969	123,702	103,607	85,037
13	100,119	81,987	63,708	61,029	46,667	39,635	50,987	89,668	129,106	123,152	102,918	84,663
14	99,463	81,479	63,034	59,719	46,074	39,544	51,741	92,345	129,175	122,511	102,241	84,322
15	98,810	80,907	62,379	59,656	45,388	39,483	52,439	94,654	129,203	122,099	101,555	83,978
16	98,229	80,321	61,816	59,656	44,819	39,521	53,088	97,168	129,203	121,381	100,836	83,587
17	97,628	79,715	62,449	60,128	44,173	39,742	53,902	99,725	129,147	120,758	100,131	83,205
18	97,109	79,128	62,930	60,111	43,532	39,940	54,625	102,000	129,423	120,124	99,475	82,845
19	96,476	78,543	64,232	59,812	42,896	40,170	55,258	104,045	129,094	119,492	98,786	82,497
20	95,963	77,908	64,494	59,459	42,288	40,415	55,870	105,754	129,038	118,810	97,840	82,200
21	95,387	77,314	64,584	59,023	42,296	40,646	56,512	107,612	128,941	118,156	97,356	81,868
22	94,736	76,644	65,543	58,561	42,045	40,811	57,340	108,842	128,845	117,478	96,639	81,500
23	94,074	76,016	65,621	58,101	41,443	41,025	58,423	110,569	128,735	116,815	95,927	81,110
24	93,381	75,359	65,505	57,596	40,939	41,226	59,680	112,235	128,639	116,284	95,236	80,875
25	92,725	74,746	65,204	57,140	40,508	41,482	61,123	113,917	128,488	115,508	94,538	80,350
26	92,093	74,115	64,845	56,594	40,193	41,786	62,923	115,226	128,379	114,864	93,971	79,990
27	91,429	73,507	64,526	56,051	40,063	42,074	64,845	116,400	128,242	114,251	93,325	79,608
28	90,769	72,892	64,100	55,510	40,040	42,359	66,795	117,673	128,598	113,609	92,647	79,288
29	90,065	72,279	63,641	55,016	------	42,595	68,574	119,117	127,928	112,959	91,975	78,862
30	89,386	71,658	63,172	54,552	------	42,888	69,771	120,520	127,736	112,310	91,245	78,490
31	88,688	------	62,628	53,982	------	43,150	------	122,281	------	111,666	90,518	------
MAX	107,575	88,003	71,039	62,067	53,415	43,150	69,771	122,281	129,423	127,531	110,997	89,838
MIN	88,688	71,658	61,816	53,982	40,040	39,483	43,396	71,080	123,538	111,666	90,518	78,490
(a)	5,225.28	5,209.37	5,200.19	5,190.79	5,173.93	5,177.92	5,207.50	5,252.73	5,256.77	5,244.55	5,226.90	5,215.95
(b)	-19,470	-17,030	-9,030	-8,646	-13,942	+3,110	+26,621	+52,510	+5,455	-16,070	-21,148	-12,028

CAL YR 1972 b +10,354
WTR YR 1973 b -29,668

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11427500 MIDDLE FORK AMERICAN RIVER AT FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°06'35", long 120°28'49", in SW¼NW¼ sec.36, T.15 N., R.13 E., Placer County, Tahoe National Forest, on left bank 0.6 mile downstream from French Meadows Dam, 4.1 miles upstream from Chipmunk Creek, and 14 miles south of Cisco.

DRAINAGE AREA.--47.9 sq mi.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,920 ft (from topographic map). Prior to Oct. 1, 1962, at site 0.8 mile upstream at different datum.

AVERAGE DISCHARGE.--13 years (1951-64, prior to regulation by French Meadows Reservoir), 149 cfs (107,900 acre-ft per year); 9 years (1964-73), 26.8 cfs (19,420 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 68 cfs Jan. 16 (gage height, 4.91 ft); minimum daily, 4.3 cfs May 22.
Period of record: Maximum discharge, 21,500 cfs Jan. 31, 1963 (gage height, 14.20 ft), from rating curve extended above 1,100 cfs on basis of maximum flow at former site; minimum, 0.3 cfs Oct. 4, 5, 21-25, 1960, Oct. 5, 6, 1961. Maximum discharge since construction of French Meadows Dam in 1964, 1,310 cfs Apr. 30, 1965 (gage height, 7.68 ft); minimum daily, 0.8 cfs Oct. 22, 25, 1964.

REMARKS.--Flow regulated by French Meadows Reservoir 0.6 mile upstream beginning in December 1964 (see sta 11427400). Diversions from Duncan Creek to French Meadows Reservoir since December 1964 and from French Meadows Reservoir to Hell Hole Reservoir since December 1965. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1953-54. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	7.1	7.6	8.2	8.7	11	10	7.5	7.4	7.1	6.4	6.2
2	7.9	7.1	7.6	8.1	8.5	10	9.5	7.7	7.2	7.1	6.4	6.2
3	7.9	7.6	7.7	8.1	8.4	9.4	9.4	7.5	7.0	7.3	6.4	6.2
4	7.9	11	8.0	8.1	8.4	8.7	10	7.3	6.9	6.8	6.4	6.0
5	7.9	8.4	7.7	8.1	8.4	8.4	11	6.7	6.9	6.6	6.4	5.9
6	7.9	7.8	7.6	8.0	8.6	8.2	12	6.5	6.9	6.5	6.4	5.9
7	8.1	7.8	7.6	7.9	9.2	7.9	12	6.5	6.9	6.6	6.4	5.9
8	8.1	8.0	7.6	7.9	9.1	7.6	13	6.4	6.9	6.6	6.4	5.9
9	8.1	7.9	7.6	7.9	9.0	7.4	13	6.3	6.8	6.6	6.4	5.9
10	8.2	7.6	7.6	7.9	9.1	8.0	14	6.3	6.6	6.6	6.4	5.9
11	8.2	7.6	7.6	15	8.8	9.3	14	6.2	6.6	6.6	6.4	5.9
12	8.1	7.6	7.5	37	8.5	8.4	15	6.2	7.3	6.6	6.4	5.9
13	7.9	7.6	7.3	18	8.4	8.3	14	6.3	7.3	6.6	6.3	5.8
14	7.9	8.1	7.3	14	8.4	7.9	13	6.2	7.3	6.8	6.2	5.7
15	7.9	8.1	7.3	13	8.4	8.1	12	5.8	7.3	6.[illegible]	6.2	5.7
16	7.9	8.2	7.4	35	8.2	8.2	12	5.6	7.3	6.9	6.2	5.7
17	7.9	8.1	15	18	8.1	8.4	13	5.3	7.3	6.9	6.2	5.7
18	7.9	7.9	15	16	8.1	8.5	13	5.0	7.3	6.7	6.2	5.7
19	7.6	7.9	20	13	8.1	8.4	12	4.8	7.3	6.6	6.2	5.7
20	7.6	7.9	14	12	8.1	8.4	11	4.7	7.1	6.6	6.2	6.2
21	7.6	7.8	12	11	8.1	8.4	11	4.5	6.9	6.6	6.2	5.9
22	7.6	7.6	20	11	8.1	8.5	12	4.3	6.9	6.6	6.2	5.9
23	7.5	7.6	13	10	8.1	8.5	13	5.5	6.9	6.6	6.2	5.9
24	7.3	7.6	11	9.7	8.9	8.7	13	7.4	6.9	6.6	6.2	5.9
25	7.3	7.6	10	9.6	10	8.8	13	7.6	6.9	6.6	6.2	5.9
26	7.3	7.6	9.8	9.3	9.6	9.1	12	7.3	7.0	6.6	6.4	5.9
27	7.3	7.6	9.5	9.1	11	9.8	9.5	7.1	7.8	6.6	6.2	5.9
28	7.3	7.6	9.2	9.0	11	9.9	9.4	7.1	7.1	6.6	6.2	5.9
29	7.3	7.6	8.8	9.0	------	9.4	9.3	7.0	7.1	6.5	6.2	5.9
30	7.3	7.6	8.7	9.1	------	9.3	8.2	6.9	7.1	6.4	6.2	5.7
31	7.2	------	8.5	8.7	------	10	------	7.5	------	6.4	6.2	------
TOTAL	240.0	235.5	305.5	376.7	245.3	270.9	353.3	197.0	212.2	207.1	194.9	176.8
MEAN	7.74	7.85	9.85	12.2	8.76	8.74	11.8	6.35	7.07	6.68	6.29	5.89
MAX	8.2	11	20	37	11	11	15	7.7	7.8	7.3	6.4	6.2
MIN	7.2	7.1	7.3	7.9	8.1	7.4	8.2	4.3	6.6	6.4	6.2	5.7
AC-FT	476	467	606	747	487	537	701	391	421	411	387	351
(a)	20,620	20,410	21,150	22,130	18,010	3,490	0	32	6,750	17,310	21,150	10,660

CAL YR 1972 TOTAL 3,721.6 MEAN 10.2 MAX 21 MIN 7.1 AC-FT 7,380
WTR YR 1973 TOTAL 3,015.2 MEAN 8.26 MAX 37 MIN 4.3 AC-FT 5,980

a Diversion, in acre-feet, from French Meadows Reservoir to Hell Hole Reservoir through French Meadows powerplant.

11427700 DUNCAN CREEK NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°08'09", long 120°28'39", in NE¼NW¼ sec.24, T.15 N., R.13 E., Placer County, Tahoe National Forest, on left bank 0.2 mile upstream from diversion dam, 0.5 mile downstream from Little Duncan Creek, 2 miles northwest of French Meadows, and 20 miles northeast of Foresthill.

DRAINAGE AREA.--9.94 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,270 ft (from topographic map). Prior to Sept. 3, 1965, at site 150 ft upstream at datum 9.56 ft higher.

AVERAGE DISCHARGE.--13 years, 36.1 cfs (26,150 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 479 cfs Jan. 12 (gage height, 7.77 ft); maximum gage height, 8.13 ft Dec. 17 (backwater from ice); minimum daily discharge, 0.54 cfs Aug. 21-24.
Period of record: Maximum discharge, 3,650 cfs Dec. 22, 1964 (gage height, 10.6 ft, from floodmarks), from rating curve extended above 400 cfs on basis of computation of flow over diversion dam; minimum daily, 0.2 cfs Sept. 23-25, 1964.

REMARKS.--No storage or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by the Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1963.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.6	11	27	25	30	23	135	156	7.2	1.2	.73
2	1.7	1.8	10	25	25	28	22	141	130	6.7	1.1	.71
3	1.6	6.2	9.6	25	24	28	23	146	111	6.3	1.1	.66
4	1.4	100	9.2	24	23	27	27	132	97	6.2	.97	.66
5	1.3	29	8.8	23	22	25	36	104	91	5.6	.97	.60
6	1.3	15	8.4	22	23	25	47	98	84	5.3	.97	.60
7	1.8	12	8.0	21	23	24	49	114	74	5.1	.89	.60
8	2.5	12	7.7	20	22	23	54	132	69	4.6	.89	.60
9	2.2	10	7.5	19	22	23	64	146	63	4.3	.89	.66
10	5.6	9.5	7.4	18	22	24	73	168	56	4.0	.88	.60
11	8.4	9.5	7.4	89	21	24	86	204	49	3.6	.81	.60
12	4.2	8.8	7.3	336	20	23	94	233	43	3.4	.80	.60
13	2.9	8.9	7.3	189	19	23	88	265	38	3.2	.73	.60
14	2.7	8.9	7.1	127	19	22	72	279	34	3.2	.72	.66
15	4.1	8.9	7.0	99	19	22	70	278	30	3.4	.66	.66
16	8.8	8.9	8.7	104	18	24	63	289	28	3.3	.60	.66
17	8.8	8.4	168	80	19	24	70	297	25	2.8	.60	.66
18	8.5	8.9	129	69	19	22	68	278	23	2.6	.60	.66
19	5.9	8.4	199	57	19	22	64	256	21	2.4	.60	.71
20	4.7	7.7	106	50	20	22	63	222	20	2.3	.59	5.1
21	3.7	7.7	84	46	21	21	67	195	18	2.2	.54	2.3
22	3.2	7.7	156	43	20	21	79	185	17	2.0	.54	1.5
23	2.8	8.1	90	40	21	21	98	180	15	2.0	.54	1.7
24	2.5	7.3	67	36	22	23	116	187	14	1.8	.54	2.0
25	2.3	9.7	54	34	22	25	130	191	13	1.7	.58	2.1
26	2.2	13	46	33	22	27	158	157	12	1.6	.96	1.5
27	2.0	13	42	31	26	29	181	143	11	1.5	2.7	1.3
28	1.9	12	37	29	28	26	185	153	9.6	1.4	1.1	1.3
29	1.8	11	33	28	------	25	165	165	8.6	1.4	.89	1.2
30	1.8	11	31	28	------	24	144	159	7.8	1.3	.78	1.2
31	1.6	------	28	26	------	24	------	169	------	1.2	.73	------
TOTAL	105.6	384.9	1,402.4	1,798	606	751	2,479	5,801	1,368.0	103.6	26.47	33.43
MEAN	3.41	12.8	45.2	58.0	21.6	24.2	82.6	187	45.6	3.34	.85	1.11
MAX	8.8	100	199	336	28	30	185	297	156	7.2	2.7	5.1
MIN	1.3	1.6	7.0	18	18	21	22	98	7.8	1.2	.54	.60
AC-FT	209	763	2,780	3,570	1,200	1,490	4,920	11,510	2,710	205	53	66

CAL YR 1972 TOTAL 11,316.18 MEAN 30.9 MAX 199 MIN .52 AC-FT 22,450
WTR YR 1973 TOTAL 14,859.40 MEAN 40.7 MAX 336 MIN .54 AC-FT 29,470

PEAK DISCHARGE (BASE, 250 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
12-17	1130	7.32	297	1-12	0430	7.77	479
12-18	2200	7.32	297	5-16	1815	7.43	336

11427750 DUNCAN CREEK BELOW DIVERSION DAM, NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°07'59", long 120°28'58", in NE¼SE¼ sec.23, T.15 N., R.13 E., Placer County, Tahoe National Forest, on right bank 800 ft downstream from unnamed right bank tributary, 1,000 ft downstream from Duncan Creek diversion dam, and 20 miles northeast of Foresthill.

DRAINAGE AREA.--10.5 sq mi.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,210 ft (from topographic map).

AVERAGE DISCHARGE.--9 years, 15.4 cfs (11,160 acre-ft per year).

EXTREMES.--Current year: Maximum daily discharge, 200 cfs Jan. 12; minimum daily, 0.60 cfs Sept. 9, 10.
Period of record: Maximum discharge, 3,640 cfs Dec. 22, 1964 (gage height, 8.74 ft, in gage well, 10.0 ft, from floodmarks), from rating curve extended above 400 cfs on basis of computation of flow over diversion dam of maximum flow; no flow at times in 1965-66.

REMARKS.--Flow is diverted above station through Duncan Creek diversion tunnel to French Meadows Reservoir (see sta 11427400). Maximum design flow of tunnel is 400 cfs. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.7	11	13	9.9	10	4.5	14	7.8	.88	1.3	.73
2	1.2	1.7	9.8	13	9.9	10	4.3	16	7.6	.84	1.2	.77
3	1.1	3.1	9.4	12	9.8	10	4.5	17	7.4	.84	1.1	.77
4	.89	22	9.0	11	9.9	9.9	5.5	14	7.4	.80	1.1	.71
5	.89	13	8.6	10	9.9	9.6	8.2	12	7.3	.77	1.1	.66
6	.84	12	8.2	10	9.9	9.6	12	12	7.2	.75	1.1	.66
7	1.2	11	7.8	9.0	10	9.3	14	12	7.1	.71	1.0	.65
8	2.1	11	7.5	9.0	9.9	6.6	14	17	7.0	.71	.99	.65
9	1.4	9.6	7.3	8.0	9.7	3.8	16	22	6.9	.71	.95	.60
10	5.0	9.1	7.2	8.0	9.4	4.0	16	42	5.9	.70	.93	.60
11	6.1	8.9	7.2	30	9.4	4.1	17	84	4.8	.65	.91	.65
12	3.8	8.1	7.1	200	9.2	3.9	17	90	4.1	.65	.86	.65
13	2.1	8.8	7.1	100	9.1	3.8	16	100	3.3	.65	.84	.65
14	1.8	9.2	6.9	90	9.1	3.6	14	110	2.8	.65	.77	.62
15	3.2	8.8	6.8	85	8.8	3.8	13	110	2.4	.64	.77	.62
16	5.2	8.8	8.5	80	8.8	4.1	12	120	2.1	2.2	.71	.69
17	6.7	8.6	27	71	8.8	4.3	13	130	2.0	3.0	.71	.71
18	7.5	8.9	55	55	8.8	4.0	13	115	1.8	2.8	.68	.71
19	5.5	8.6	130	39	9.1	4.1	12	100	1.6	2.6	.68	.71
20	4.3	7.7	41	31	9.3	4.0	12	95	1.5	2.5	.65	3.8
21	3.2	7.7	20	26	9.4	3.8	12	100	1.5	2.4	.65	2.2
22	2.5	7.7	43	22	9.5	3.6	14	85	1.4	2.3	.65	1.3
23	2.2	7.3	20	19	9.6	3.8	20	34	1.3	2.2	.65	1.7
24	1.9	7.6	18	17	9.8	4.1	28	8.8	1.3	2.1	.68	1.9
25	1.7	9.2	16	15	9.9	4.7	22	8.9	1.2	2.0	.73	2.0
26	1.7	12	16	13	9.7	5.7	20	8.5	1.1	1.8	1.1	1.3
27	1.5	12	15	12	10	6.3	32	8.2	1.1	1.7	2.6	1.4
28	1.5	11	15	11	10	5.5	34	8.1	.99	1.6	1.1	1.1
29	1.5	11	14	11	------	5.0	19	8.0	.96	1.5	.85	.99
30	1.4	11	13	11	------	4.8	15	7.8	.91	1.4	.80	.99
31	1.4	------	13	11	------	4.7	------	8.0	------	1.3	.77	------
TOTAL	82.42	277.1	585.4	1,052.0	266.6	174.5	454.0	1,517.3	109.76	44.35	28.93	31.49
MEAN	2.66	9.24	18.9	33.9	9.52	5.63	15.1	48.9	3.66	1.43	.93	1.05
MAX	7.5	22	130	200	10	10	34	130	7.8	3.0	2.6	3.8
MIN	.84	1.7	6.8	8.0	8.8	3.6	4.3	7.8	.91	.64	.65	.60
AC-FT	163	550	1,160	2,090	529	346	901	3,010	218	88	57	62

CAL YR 1972 TOTAL 3,268.03 MEAN 8.93 MAX 130 MIN .46 AC-FT 6,480
WTR YR 1973 TOTAL 4,623.85 MEAN 12.7 MAX 200 MIN .60 AC-FT 9,170

11427760 MIDDLE FORK AMERICAN RIVER ABOVE MIDDLE FORK POWERHOUSE, NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'31", long 120°35'40", in NW¼NW¼ sec.36, T.14 N., R.12 E., Placer County, Tahoe National Forest, on right bank 300 ft upstream from Middle Fork powerhouse, 3.7 miles upstream from Big Mosquito Creek, and 11 miles east of Foresthill.

DRAINAGE AREA.--87.8 sq mi.

PERIOD OF RECORD.--August 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,540 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 101 cfs (73,170 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,410 cfs Jan. 12 (gage height, 5.52 ft); minimum daily, 14 cfs Sept. 4, 5, 9, 10.
Period of record: Maximum discharge, 3,900 cfs Jan. 21, 1970 (gage height, 8.00 ft); minimum daily, 12 cfs Aug. 31, 1966.

REMARKS.--Records good. Flow regulated by French Meadows Reservoir (see sta 11427400). See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	34	74	124	241	145	222	78	28	19	15
2	19	16	34	71	119	233	137	216	69	28	18	15
3	17	18	35	72	119	220	134	214	65	28	18	15
4	17	113	34	63	131	216	137	212	61	27	18	14
5	16	63	36	59	135	199	151	189	59	26	18	14
6	16	39	33	60	139	191	175	174	57	26	18	15
7	17	42	31	54	172	179	194	172	57	25	17	15
8	18	49	31	60	169	170	196	175	55	25	17	15
9	20	37	31	77	160	155	217	181	53	25	17	14
10	24	36	30	75	201	149	230	194	51	24	17	14
11	27	44	30	219	208	190	245	236	48	24	17	16
12	26	36	30	1,020	203	170	258	279	47	23	17	16
13	21	36	30	634	183	161	267	321	46	24	16	16
14	21	62	30	428	177	153	235	353	45	25	16	16
15	24	51	31	343	166	146	225	331	43	24	16	17
16	25	67	34	735	155	143	210	334	42	23	15	17
17	28	50	198	573	147	144	224	348	41	24	15	17
18	30	42	192	483	142	139	220	320	40	24	15	16
19	27	44	447	377	137	135	207	276	38	23	15	16
20	24	39	225	296	133	143	198	235	37	23	15	23
21	21	35	164	253	131	131	193	200	35	23	15	23
22	20	34	295	219	129	125	197	174	35	23	15	20
23	18	32	202	199	127	122	215	145	34	23	15	19
24	17	31	163	183	134	122	238	101	34	22	15	20
25	16	31	136	174	160	125	249	102	33	21	15	20
26	17	34	121	157	168	132	261	90	32	21	15	18
27	17	37	112	145	195	146	281	85	32	20	15	17
28	16	36	104	136	256	143	288	79	31	20	15	17
29	16	35	92	133	------	136	273	75	30	20	15	16
30	16	34	85	141	------	140	243	72	29	19	16	16
31	16	------	79	133	------	153	------	80	------	19	15	------
TOTAL	625	1,239	3,129	7,646	4,420	4,952	6,443	6,185	1,357	730	500	502
MEAN	20.2	41.3	101	247	158	160	215	200	45.2	23.5	16.1	16.7
MAX	30	113	447	1,020	256	241	288	353	78	28	19	23
MIN	16	16	30	54	119	122	134	72	29	19	15	14
AC-FT	1,240	2,460	6,210	15,170	8,770	9,820	12,780	12,270	2,690	1,450	992	996

CAL YR 1972 TOTAL 26,849 MEAN 73.4 MAX 447 MIN 15 AC-FT 53,250
WTR YR 1973 TOTAL 37,728 MEAN 103 MAX 1,020 MIN 14 AC-FT 74,830

11427770 MIDDLE FORK AMERICAN RIVER BELOW INTERBAY DAM, NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'35", long 120°36'09", in SW¼SE¼ sec.26, T.14 N., R.12 E., Placer County, Tahoe National Forest, on right bank 500 ft downstream from Interbay Dam, 3.3 miles upstream from Big Mosquito Creek, and 10.6 miles east of Foresthill.

DRAINAGE AREA.--89.1 sq mi.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 2,470 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 56.0 cfs (40,570 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,230 cfs Jan. 12 (gage height, 4.40 ft); minimum daily, 18 cfs many days in December, June, and July.
Period of record: Maximum discharge, 3,770 cfs Jan. 21, 1970 (gage height, 6.95 ft, revised); minimum daily, 1.0 cfs Oct. 25-30, 1966, Jan. 19, 1967.

REMARKS.--Flow regulated by French Meadows Reservoir (see sta 11427400) and after Aug. 22, 1966, by Interbay Reservoir (capacity, 130 acre-ft between normal operating limits of 2,502.0 and 2,526.0 ft). Water is diverted from Hell Hole Reservoir through tunnel to Middle Fork powerplant and re-diverted to Ralston powerplant. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	19	20	22	23	162	21	20	19	20	21
2	20	20	19	21	22	22	152	21	20	18	20	20
3	20	20	19	21	22	23	152	21	20	18	20	21
4	20	20	18	21	22	23	152	20	21	18	20	21
5	20	20	18	21	22	23	171	20	20	18	20	21
6	20	20	18	21	22	23	116	20	20	18	20	21
7	20	20	18	21	22	23	23	20	21	18	20	21
8	20	20	18	22	22	23	23	19	21	18	20	20
9	20	20	18	22	22	23	24	19	21	18	20	20
10	20	20	18	22	22	23	24	19	20	18	20	20
11	20	20	18	23	22	23	24	19	20	19	20	20
12	20	20	18	386	22	23	24	19	20	19	20	20
13	20	20	18	149	22	23	24	19	20	19	20	20
14	20	20	19	23	22	23	24	20	19	18	20	20
15	20	20	19	23	22	23	23	63	19	18	21	20
16	20	20	19	106	22	23	23	20	19	19	21	20
17	20	20	19	24	22	23	23	20	19	19	21	20
18	20	19	19	24	22	23	23	20	20	19	21	20
19	20	19	20	24	22	23	23	20	20	19	21	20
20	20	19	20	24	22	23	23	20	20	19	21	20
21	20	19	20	24	22	23	23	20	20	18	21	20
22	20	19	20	24	22	23	22	20	20	20	21	20
23	20	19	20	24	22	23	22	20	19	20	21	20
24	20	19	20	24	22	23	22	20	19	20	21	20
25	20	19	20	24	22	23	22	20	18	20	21	20
26	20	19	20	24	22	97	22	20	18	20	20	20
27	20	19	20	23	22	165	22	20	18	20	21	20
28	20	19	20	23	22	158	22	20	18	20	21	20
29	20	19	20	23	------	165	22	20	19	20	21	20
30	20	19	20	23	------	155	21	20	19	20	21	20
31	20	------	20	22	------	165	------	25	------	20	21	------
TOTAL	619	587	592	1,276	616	1,479	1,453	665	588	587	636	606
MEAN	20.0	19.6	19.1	41.2	22.0	47.7	48.4	21.5	19.6	18.9	20.5	20.2
MAX	20	20	20	386	22	165	171	63	21	20	21	21
MIN	19	19	18	20	22	22	21	19	18	18	20	20
AC-FT	1,230	1,160	1,170	2,530	1,220	2,930	2,880	1,320	1,170	1,160	1,260	1,200
(a)	46,420	31,890	35,710	55,630	51,100	39,100	12,180	11,620	4,030	19,960	31,360	33,590

CAL YR 1972 TOTAL 8,756 MEAN 23.9 MAX 60 MIN 15 AC-FT 17,370
WTR YR 1973 TOTAL 9,704 MEAN 26.6 MAX 386 MIN 18 AC-FT 19,250

a Diversion, in acre-feet, to Ralston powerplant.

11427940 RUBICON-ROCKBOUND TUNNEL NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 38°59'20", long 120°13'31", in NE¼SE¼ sec.8, T.13 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank at tunnel intake 100 ft upstream from diversion dam on Rubicon River, 2.5 miles upstream from Rubicon Springs, and 6.5 miles southwest of Meeks Bay.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,533.23 ft above mean sea level (levels by Sacramento Municipal Utility District). Auxiliary water-stage recorder since Aug. 26, 1966, 300 ft downstream from tunnel outlet at different datum.

AVERAGE DISCHARGE.--10 years, 106 cfs (76,800 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,120 cfs Dec. 23, 1964; no flow at times in most years.

REMARKS.--Records good. Tunnel diverts water from Rubicon River to Rockbound Lake. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	1.8	23	29	20	20	19	221	579	100	9.0	.85
2	14	1.8	22	26	18	17	19	275	523	81	8.1	.75
3	20	5.9	21	25	17	17	17	338	421	75	6.9	.75
4	17	244	20	21	17	17	18	306	391	73	6.3	.75
5	12	158	21	17	17	16	34	176	415	35	5.1	.75
6	8.1	85	26	17	17	16	70	127	460	4.8	3.8	.75
7	9.7	54	23	15	17	15	101	194	430	3.6	3.0	.75
8	27	46	26	15	17	15	94	304	415	11	1.6	.75
9	26	38	26	17	16	14	114	388	454	33	1.4	.75
10	53	33	23	20	20	15	122	460	415	45	1.4	.75
11	73	32	19	44	21	19	140	582	367	45	1.4	13
12	50	30	17	331	23	20	163	664	351	44	1.4	17
13	30	30	15	306	22	16	158	704	304	40	1.4	9.0
14	18	32	14	138	20	18	98	732	221	44	1.4	3.8
15	16	38	14	76	17	14	74	744	163	39	1.4	1.1
16	25	36	14	63	16	16	63	820	149	34	1.4	.17
17	39	32	576	54	15	18	79	844	125	33	1.4	.05
18	77	28	741	45	16	17	73	852	127	29	1.2	0
19	81	28	823	37	16	17	64	836	149	26	1.2	0
20	75	24	465	37	16	17	61	724	165	23	1.2	0
21	55	23	217	32	19	16	67	576	187	19	1.2	0
22	35	22	217	27	16	19	103	544	204	16	1.2	0
23	26	20	140	24	16	16	176	572	185	14	1.1	0
24	21	20	95	23	16	17	254	644	149	12	1.1	0
25	15	21	69	22	16	28	287	684	152	12	1.1	0
26	11	30	56	21	15	33	327	424	167	11	1.2	0
27	9.0	35	50	20	16	38	385	379	192	11	.95	0
28	6.9	30	45	20	19	33	427	492	177	11	.85	0
29	5.7	28	36	20	------	24	365	656	174	11	.85	0
30	3.4	24	34	20	------	20	254	724	138	11	.85	0
31	2.0	------	29	21	------	19	------	600	------	9.8	.85	------
TOTAL	874.8	1,230.5	3,917	1,583	491	597	4,226	16,586	8,349	956.2	71.25	51.72
MEAN	28.2	41.0	126	51.1	17.5	19.3	141	535	278	30.8	2.30	1.72
MAX	81	244	823	331	23	38	427	852	579	100	9.0	17
MIN	2.0	1.8	14	15	15	14	17	127	125	3.6	.85	0
AC-FT	1,740	2,440	7,770	3,140	974	1,180	8,380	32,900	16,560	1,900	141	103

CAL YR 1972 TOTAL 35,620.97 MEAN 97.3 MAX 823 MIN 0 AC-FT 70,650
WTR YR 1973 TOTAL 38,933.47 MEAN 107 MAX 852 MIN 0 AC-FT 77,220

11428000 RUBICON RIVER AT RUBICON SPRINGS, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°01'10", long 120°14'46", in SW¼NE¼ sec.31, T.14 N., R.16 E., El Dorado County, El Dorado National Forest, 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.

PERIOD OF RECORD.--February 1910 to March 1914 (published as "at Rubicon Springs"), October 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,052.97 ft above mean sea level. Feb. 1, 1910, to Mar. 31, 1914, nonrecording gage or water-stage recorder at site 0.4 mile downstream at different datum.

AVERAGE DISCHARGE (adjusted for diversion to Rubicon-Rockbound tunnel).--20 years (1910-13, 1956-73), 121 cfs (87,660 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 606 cfs Dec.17 (gage height, 4.94 ft); minimum daily, 1.3 cfs Oct. 6.
Period of record: Maximum discharge, 11,500 cfs Feb. 1, 1963 (gage height, 14.28 ft), from rating curve extended above 1,200 cfs on basis of slope-conveyance computation of maximum flow; no flow at times in some years.
Flood of December 1955 reached a stage of 13.0 ft, from floodmarks, present site and datum (discharge, 9,270 cfs).

REMARKS.--Records fair. Low summer flow, beginning in 1950, augmented by release from streamflow maintenance dams on Lakes Clyde, Lois, Middle Velma, and Schmidell (total controlled capacity, 555 acre-ft). Flow below 1,200 cfs controlled by Rubicon diversion dam 5.5 miles upstream. Diversion to Rubicon-Rockbound tunnel began Dec. 26, 1963. (See sta 11427940). See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.5	9.3	11	12	18	19	52	30	5.1	5.1	4.9
2	2.6	4.5	9.0	11	12	17	17	67	25	4.9	4.9	4.9
3	2.0	6.0	9.3	10	12	16	17	71	15	4.9	4.9	4.9
4	1.7	67	10	9.9	12	15	23	52	12	4.9	5.1	4.9
5	1.4	21	9.6	9.5	12	14	38	32	11	4.9	4.5	4.9
6	1.3	12	10	9.5	12	14	58	33	10	6.5	3.9	4.9
7	1.8	10	10	9.2	12	13	54	55	9.1	6.7	4.1	3.5
8	3.0	11	10	9.3	12	13	52	63	8.2	7.0	5.5	3.3
9	3.2	10	9.6	9.8	12	12	61	63	8.1	7.3	5.5	3.3
10	5.0	9.0	9.6	9.6	12	14	57	71	8.0	7.3	5.8	3.5
11	4.3	10	9.3	14	12	16	66	76	7.7	7.3	5.8	3.5
12	2.5	9.3	9.3	181	12	14	67	78	7.5	7.0	5.5	3.7
13	1.9	9.6	9.0	74	12	13	54	81	7.3	7.3	5.3	3.5
14	4.1	12	9.0	35	12	13	34	78	7.2	7.3	5.3	3.5
15	5.2	11	9.0	27	11	13	36	69	6.9	7.5	5.3	3.3
16	6.5	11	9.3	69	11	14	32	73	6.7	7.3	5.3	3.3
17	8.2	11	265	36	12	15	47	100	6.6	7.3	5.1	3.3
18	14	12	116	24	12	14	36	146	6.4	7.3	5.1	3.3
19	7.9	11	142	20	12	14	30	91	6.2	7.0	5.1	3.3
20	8.6	10	57	17	13	14	27	38	6.1	7.0	5.1	4.1
21	6.1	9.6	45	16	13	13	32	31	6.0	7.0	5.1	3.5
22	5.4	9.6	89	15	13	13	51	28	5.6	7.0	4.9	3.5
23	5.1	9.0	33	14	13	13	73	25	5.5	7.0	4.9	3.5
24	4.8	9.0	23	14	13	16	80	24	5.5	6.5	4.9	3.3
25	4.7	10	18	14	13	22	79	23	5.3	4.3	4.9	3.2
26	4.7	12	16	13	13	28	86	17	5.3	4.1	8.7	3.2
27	4.7	12	15	13	14	32	90	15	5.3	4.1	7.0	3.2
28	4.6	11	14	13	18	26	80	15	5.3	4.1	5.3	3.2
29	4.6	11	13	13	------	21	64	15	5.3	4.1	5.3	3.2
30	4.5	10	12	13	------	19	50	15	5.1	4.9	5.1	3.2
31	4.5	------	11	12	------	19	------	19	------	4.9	4.9	------
TOTAL	140.3	365.1	1,020.3	745.8	349	508	1,510	1,616	259.2	189.8	163.2	110.8
MEAN	4.53	12.2	32.9	24.1	12.5	16.4	50.3	52.1	8.64	6.12	5.26	3.69
MAX	14	67	265	181	18	32	90	146	30	7.5	8.7	4.9
MIN	1.3	4.5	9.0	9.2	11	12	17	15	5.1	4.1	3.9	3.2
AC-FT	278	724	2,020	1,480	692	1,010	3,000	3,210	514	376	324	220
MEAN a	32.8	53.1	159	75.1	30.1	35.6	191	587	287	37.1	7.56	5.43
AC-FT a	2,020	3,160	9,790	4,620	1,670	2,190	11,380	36,110	17,070	2,280	465	323

CAL YR 1972 TOTAL 6,436.33 MEAN 17.6 MAX 265 MIN .74 AC-FT 12,770 MEAN a 115 AC-FT a 83,390
WTR YR 1973 TOTAL 6,977.50 MEAN 19.1 MAX 265 MIN 1.3 AC-FT 13,840 MEAN a 126 AC-FT a 91,080

a Adjusted for diversion to Rubicon-Rockbound tunnel.

11428300 BUCK-LOON TUNNEL NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'15", long 120°15'20", in SE¼NW¼ sec.6, T.13 N., R.16 E., El Dorado County, Eldorado National Forest, on right bank at tunnel intake near left abutment of diversion dam, 7.6 miles southwest of Meeks Bay.

PERIOD OF RECORD.--November 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,425.0 ft above mean sea level (levels by Sacramento Municipal Utility District).

AVERAGE DISCHARGE.--10 years, 136 cfs (98,530 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,240 cfs Dec. 23, 1964; no flow many days in each year.

REMARKS.--Records good. Tunnel diverts water from Buck Island Lake and discharges into Loon Lake. Gates are closed in the tunnel entrance during the summer and opened each fall to raise the level of Buck Island Lake for recreation purposes. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	4.0	31	33	26	28	28	283	717	131	.70	0
2	18	3.6	30	30	24	28	25	324	682	101	.45	0
3	16	4.5	29	31	24	26	23	414	532	85	.20	0
4	19	227	33	29	26	27	23	425	474	77	0	0
5	18	264	36	25	25	24	30	268	478	39	0	0
6	13	147	36	22	24	24	59	172	543	0	0	0
7	9.4	87	40	20	27	22	112	209	528	0	0	4.6
8	20	64	40	20	25	21	117	355	484	0	0	4.4
9	31	53	36	26	23	19	134	476	535	0	0	.52
10	52	45	32	28	29	20	149	560	510	0	0	0
11	88	42	28	39	32	27	166	731	450	.64	0	0
12	80	40	24	372	34	26	193	862	420	16	0	0
13	52	38	22	495	32	24	216	963	370	23	0	.18
14	34	45	20	237	28	21	151	1,020	285	26	0	1.1
15	24	46	19	126	26	19	106	1,030	213	29	0	1.2
16	28	48	19	101	23	20	83	1,110	175	25	0	.95
17	50	44	449	80	21	24	92	1,130	153	20	0	.88
18	79	40	1,070	72	22	24	100	1,130	147	16	0	1.0
19	111	38	1,080	57	22	23	85	1,120	160	13	0	.88
20	98	34	794	48	22	24	79	1,020	181	11	0	.75
21	81	32	346	44	22	23	76	791	204	8.4	0	.63
22	58	31	312	38	23	23	103	696	226	6.6	0	.46
23	42	28	215	32	22	21	187	704	222	4.8	0	.31
24	32	27	137	30	23	21	301	780	182	3.0	0	.18
25	26	27	94	29	22	26	351	897	170	2.2	0	.15
26	20	32	74	29	23	34	397	623	177	2.0	0	.11
27	18	40	63	27	26	43	480	454	208	1.8	0	.08
28	13	41	57	26	29	44	554	540	205	1.6	0	.05
29	10	38	49	26	------	37	496	750	200	1.4	0	.03
30	8.2	34	43	30	------	32	352	903	174	1.2	0	.03
31	4.8	------	40	28	------	30	------	812	------	1.0	0	------
TOTAL	1,178.4	1,644.1	5,298	2,230	705	805	5,268	21,552	10,005	646.64	1.35	18.49
MEAN	38.0	54.8	171	71.9	25.2	26.0	176	695	334	20.9	.044	.62
MAX	111	264	1,080	495	34	44	554	1,130	717	131	.70	4.6
MIN	4.8	3.6	19	20	21	19	23	172	147	0	0	0
AC-FT	2,340	3,260	10,510	4,420	1,400	1,600	10,450	42,750	19,840	1,280	2.7	37

CAL YR 1972 TOTAL 45,682.10 MEAN 125 MAX 1,080 MIN 0 AC-FT 90,610
WTR YR 1973 TOTAL 49,351.98 MEAN 135 MAX 1,130 MIN 0 AC-FT 97,890

11428700 HELL HOLE RESERVOIR NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°03'54", long 120°24'50", in SE¼NW¼ sec.16, T.14 N., R.14 E., Placer County, Eldorado National Forest, on right bank 0.3 mile upstream from Hell Hole Dam on Rubicon River, and 15.6 miles west of Meeks Bay.

DRAINAGE AREA.--114 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Placer County Water Agency).

EXTREMES.--Current year: Maximum contents, 177,797 acre-ft July 8 (elevation, 4,605.22 ft); minimum, 37,499 acre-ft Mar. 23 (elevation, 4,428.28 ft).
Period of record: Maximum contents, 209,500 acre-ft June 17, 1967 (elevation, 4,631.5 ft); minimum since reservoir first filled, 37,499 acre-ft Mar. 23, 1973 (elevation, 4,428.28 ft).

REMARKS.--Reservoir is formed by rockfill dam with earth core. Storage began Dec. 6, 1965. Usable capacity, 202,370 acre-ft between elevations 4,340.0 ft (minimum operating level) and 4,630.0 ft (crest of ogee spillway) above mean sea level. Dead storage, 248 acre-ft. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,340	5,220	4,500	83,025
4,360	9,835	4,550	122,720
4,380	16,250	4,600	171,865
4,400	24,160	4,650	233,420
4,450	49,610		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86,981	62,095	58,408	68,545	71,054	57,347	41,208	76,845	153,538	175,600	172,247	161,956
2	86,181	61,284	58,983	67,711	70,459	56,697	41,525	78,808	156,155	176,319	171,798	162,301
3	85,429	60,582	59,651	66,944	69,921	56,007	41,820	80,930	157,805	176,582	171,595	162,171
4	84,694	62,259	59,760	66,052	69,451	55,216	42,117	82,819	159,161	176,868	171,371	161,740
5	83,984	63,089	59,864	65,151	68,997	54,330	42,680	84,014	160,880	176,934	171,865	160,987
6	83,292	62,753	59,935	64,256	68,478	53,457	43,358	85,110	162,053	177,106	171,753	159,896
7	82,672	62,207	59,935	63,347	68,148	52,480	44,244	86,659	163,371	177,454	170,855	158,673
8	81,777	61,780	59,948	62,555	67,753	51,473	45,035	88,648	164,657	177,797	170,185	157,331
9	80,886	61,089	60,206	61,840	67,331	50,551	45,730	90,743	164,657	177,315	169,951	156,241
10	79,464	60,711	60,413	61,082	67,134	49,640	47,450	93,278	165,870	177,029	169,471	156,303
11	78,546	61,219	60,413	61,571	66,884	48,801	48,430	95,869	166,819	176,491	168,882	154,473
12	77,497	61,793	60,393	67,235	66,531	47,857	50,121	99,083	167,830	176,274	168,206	153,554
13	76,631	61,317	60,335	68,960	66,247	46,815	51,584	103,098	168,206	176,285	167,631	152,458
14	75,643	60,841	60,409	70,445	65,816	45,743	52,492	107,261	169,572	176,308	167,233	151,600
15	74,656	60,530	60,409	71,000	65,312	44,657	53,346	111,916	170,307	176,949	166,782	150,790
16	73,668	59,649	61,016	73,605	64,776	43,448	54,133	114,974	170,954	176,686	166,309	150,151
17	72,686	58,891	65,211	74,663	64,276	42,227	55,073	118,931	171,594	176,376	165,760	149,167
18	72,336	58,983	67,391	75,591	63,724	40,860	56,164	122,338	172,202	176,285	165,681	148,507
19	71,987	58,727	70,826	75,932	63,175	39,675	56,987	125,843	172,642	175,563	165,257	147,541
20	71,258	59,165	71,590	75,932	62,601	39,130	57,702	128,560	173,192	175,156	164,846	147,170
21	70,424	58,010	71,813	75,911	61,395	38,558	58,312	130,915	173,068	175,703	164,275	146,680
22	70,459	57,820	73,387	75,719	60,472	37,980	59,240	133,184	172,743	176,307	163,806	145,865
23	69,976	57,461	73,507	75,364	59,851	37,499	60,756	135,443	173,206	175,989	163,058	145,030
24	69,018	57,455	73,289	75,002	59,438	37,786	62,588	137,887	173,670	175,509	162,711	144,240
25	67,309	57,975	72,861	74,875	59,047	38,137	63,744	140,332	173,715	174,610	163,177	143,425
26	66,402	58,554	72,336	74,274	58,548	38,627	66,534	140,097	174,112	173,986	163,872	142,673
27	65,816	58,580	71,778	73,668	58,185	39,199	69,176	143,765	174,259	173,262	163,771	141,809
28	65,258	58,560	71,346	73,406	57,886	39,621	71,848	145,744	174,656	173,636	163,101	140,807
29	64,143	58,535	70,924	72,672	------	39,991	74,514	147,859	175,031	173,398	162,495	140,191
30	63,479	58,485	70,196	72,168	------	40,400	75,179	149,719	175,383	173,014	162,171	139,341
31	62,838	------	69,389	71,618	------	40,828	------	152,017	------	172,563	161,740	------
MAX	86,981	63,089	73,507	75,932	71,054	57,347	75,179	152,017	175,383	177,797	172,247	162,301
MIN	62,838	57,455	58,408	61,082	57,886	37,499	41,208	76,845	153,538	172,563	161,740	139,341
(a)	4,471.13	4,464.42	4,480.85	4,484.07	4,463.48	4,434.54	4,489.14	4,581.53	4,603.11	4,600.62	4,590.80	4,568.60
(b)	-24,794	-4,353	+10,904	+2,229	-13,732	-17,058	+34,351	+76,838	+23,366	-2,820	-10,823	-23,399

CAL YR 1972 b -12,117
WTR YR 1973 b +51,709

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11428800 RUBICON RIVER BELOW HELL HOLE DAM, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°03'24", long 120°24'25", in NE¼NE¼ sec.21, T.14 N., R.14 E., Placer County, Eldorado National Forest, on right bank 600 ft downstream from outlet of dam, and 15.3 miles west of Meeks Bay.

DRAINAGE AREA.--114 sq mi.

PERIOD OF RECORD.--November 1965 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 4,231.52 ft above mean sea level (levels by Placer County Water Agency).

AVERAGE DISCHARGE.--7 years, 29.6 cfs (21,450 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 64 cfs Jan. 12 (gage height, 4.60 ft); minimum daily, 6.8 cfs Sept. 30.
Period of record: Maximum discharge, 2,290 cfs June 18, 1967, including flow over spillway; no flow Aug. 25 to Sept. 11, 1966.

REMARKS.--Flow regulated by Hell Hole Reservoir beginning December 1965 (see sta 11428700). Water is diverted out of the basin above the station through Buck-Loon tunnel (see sta 11428300). Water is diverted from Middle Fork American River basin by tunnel from French Meadows Reservoir (see sta 11427400) to Hell Hole Reservoir. Water is diverted from Hell Hole Reservoir through a tunnel to Middle Fork powerplant. Diversion began Sept. 8, 1966. During years when Hell Hole Dam spills, records include flow which bypasses the station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.7	12	11	13	19	19	16	23	23	17	13	8.2
2	8.9	12	11	13	19	19	16	23	21	17	13	8.2
3	8.9	12	11	13	19	18	16	23	20	17	11	8.5
4	10	16	12	13	20	18	16	23	20	17	8.3	8.5
5	12	13	11	13	19	18	16	22	20	17	8.2	8.4
6	12	12	11	13	19	18	17	22	20	17	8.2	8.3
7	12	13	11	13	21	17	17	23	19	17	8.2	8.2
8	12	13	11	13	20	17	17	23	19	17	8.2	8.2
9	12	12	11	13	19	17	18	23	19	17	8.2	8.2
10	12	12	11	13	20	17	18	24	19	17	8.2	8.2
11	12	13	11	23	19	18	19	25	19	17	8.2	8.2
12	12	12	11	41	19	17	20	26	19	17	8.2	7.9
13	12	12	11	24	19	17	21	28	19	17	8.2	7.8
14	12	14	11	20	19	16	21	29	19	17	8.5	7.8
15	12	13	11	20	19	16	21	28	19	17	8.5	7.8
16	12	13	12	32	19	16	20	28	19	17	8.5	7.3
17	12	12	21	21	19	16	21	28	19	17	8.5	7.2
18	11	12	17	22	19	16	21	28	19	17	8.5	7.1
19	9.5	12	20	20	18	16	20	28	18	17	8.5	7.1
20	9.3	12	15	19	18	16	20	27	18	17	8.5	7.1
21	9.3	12	14	19	18	16	20	27	18	17	8.5	7.1
22	9.1	11	17	18	18	16	20	26	18	16	8.5	7.1
23	8.9	11	15	18	18	16	21	26	17	16	8.5	7.1
24	9.0	11	15	18	19	16	22	26	17	16	8.5	7.0
25	9.2	11	14	17	19	16	23	26	17	15	8.5	7.1
26	9.3	11	14	17	19	16	24	25	17	13	8.4	7.1
27	9.3	11	14	17	21	16	25	25	17	13	8.5	7.1
28	9.3	11	14	17	21	16	25	26	17	13	8.4	7.0
29	9.1	11	13	17	------	16	24	26	17	13	8.2	6.9
30	8.9	11	13	18	------	16	23	25	17	13	8.2	6.8
31	10	------	13	19	------	17	------	27	------	13	8.2	------
TOTAL	323.7	363	407	567	536	519	598	789	560	498	271.0	228.5
MEAN	10.4	12.1	13.1	18.3	19.1	16.7	19.9	25.5	18.7	16.1	8.74	7.62
MAX	12	16	21	41	21	19	25	29	23	17	13	8.5
MIN	8.7	11	11	13	18	16	16	22	17	13	8.2	6.8
AC-FT	642	720	807	1,120	1,060	1,030	1,190	1,560	1,110	988	538	453
(a)	44,800	28,940	29,750	41,920	43,220	30,990	1,820	1,260	2,760	19,990	31,860	34,090

CAL YR 1972 TOTAL 5,833.5 MEAN 15.9 MAX 28 MIN 5.9 AC-FT 11,570
WTR YR 1973 TOTAL 5,660.2 MEAN 15.5 MAX 41 MIN 6.8 AC-FT 11,230

a Diversion, in acre-feet, from Hell Hole Reservoir to Middle Fork powerplant, furnished by Placer County Water Agency.

11429300 ROBBS PEAK POWERPLANT NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°53'46", long 120°22'40", in SE¼SW¼ sec.11, T.12 N., R.14 E., El Dorado County, Eldorado National Forest, in powerhouse on shore of Union Valley Reservoir, 9.5 miles northwest of Kyburz.

PERIOD OF RECORD.--October 1962 to current year. Prior to October 1965, published as Robbs Peak tunnel near Riverton.

GAGE.--Discharge computed from powerplant output. Altitude of gage is 4,880 ft (from topographic map). Prior to October 1965, water-stage recorder and concrete control in abandoned section of canal 0.5 mile upstream at different datum.

AVERAGE DISCHARGE.--11 years, 238 cfs (172,400 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 1,440 cfs Dec. 22-24, 1964; no flow many days during 1965-73.

REMARKS.--Tunnel diverts at South Fork Rubicon River diversion dam in NE¼ sec.27, T.13 N., R.14 E., and discharges into Union Valley Reservoir (see sta 11441001). Water is imported from Rubicon River basin via Rubicon-Rockbound tunnel and Buck-Loon tunnel to Loon Lake, thence via Loon Lake powerplant or Gerle Creek to Robbs Peak tunnel and powerplant. The water is later used in the South Fork American River basin for power development. See schematic diagrams of Middle Fork American and Rubicon River basins and South Fork American River basin.

COOPERATION.--Records furnished by Sacramento Municipal Utility District, rounded to Geological Survey standards.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	286	67	357	399	130	383	571	106	283	34
2	0	0	335	493	268	509	90	476	607	255	298	0
3	0	0	105	590	314	350	120	522	412	285	37	0
4	0	207	283	563	89	161	83	364	507	74	219	233
5	0	79	336	561	75	314	191	318	502	184	32	173
6	0	25	386	572	64	223	284	253	557	272	234	248
7	0	74	333	138	321	205	321	369	502	266	273	241
8	0	45	338	481	525	250	598	454	504	7.0	270	110
9	0	39	243	603	466	222	382	494	557	263	298	0
10	0	42	11	389	407	216	391	542	147	250	286	0
11	0	0	293	415	148	179	409	624	463	251	284	0
12	0	60	328	841	423	196	447	622	408	218	26	0
13	0	18	356	666	381	206	437	668	312	79	249	0
14	0	61	326	368	713	194	278	699	318	0	249	0
15	0	62	343	457	854	222	293	573	308	0	294	0
16	0	38	361	493	838	159	253	600	306	0	296	0
17	0	88	480	472	834	149	354	760	146	91	279	0
18	0	0	555	343	227	98	351	515	188	0	264	0
19	0	49	757	394	102	218	270	450	309	0	13	0
20	0	41	439	379	647	216	310	393	231	0	250	0
21	0	39	487	189	840	121	308	415	266	0	247	0
22	0	0	637	306	770	62	293	404	192	0	265	0
23	0	32	435	366	674	75	498	501	245	197	288	0
24	0	62	273	542	669	98	583	519	74	538	255	0
25	0	0	88	577	209	129	602	587	197	528	230	0
26	219	83	434	565	542	153	678	319	373	533	43	0
27	126	102	423	561	564	169	744	599	551	549	249	0
28	0	0	415	137	598	169	690	291	584	535	306	0
29	0	0	395	526	------	129	555	468	570	93	272	0
30	84	62	390	509	------	124	423	538	563	446	270	0
31	0	------	163	548	------	85	------	614	------	546	262	------
TOTAL	429	1,308	11,034	14,111	12,919	6,000	11,366	15,334	11,470	6,566.0	7,121	1,039
MEAN	13.8	43.6	356	455	461	194	379	495	382	212	230	34.6
MAX	219	207	757	841	854	509	744	760	607	549	306	248
MIN	0	0	11	67	64	62	83	253	74	0	13	0
AC-FT	851	2,590	21,890	27,990	25,620	11,900	22,540	30,410	22,750	13,020	14,120	2,060

CAL YR 1972 TOTAL 84,359.00 MEAN 230 MAX 757 MIN 0 AC-FT 167,300
WTR YR 1973 TOTAL 98,697.00 MEAN 270 MAX 854 MIN 0 AC-FT 195,800

11429350 LOON LAKE NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'17", long 120°18'30", in SW¼NW¼ sec.4, T.13 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank at Loon Lake Dam on Gerle Creek, 2.3 miles upstream from Jerrett Creek, and 11 miles southwest of town of Meeks Bay.

DRAINAGE AREA.--7.94 sq mi.

PERIOD OF RECORD.--December 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 72,800 acre-ft June 13-15, 17 (elevation, 6,407.6 ft); minimum, 6,020 acre-ft Mar. 20 (elevation, 6,337.2 ft).
Period of record: Maximum contents, 77,700 acre-ft June 6, 1969 (elevation, 6,411.1 ft); minimum since reservoir first filled, 3,690 acre-ft Nov. 3, 1970 (elevation, 6,330.3 ft).

REMARKS.--Reservoir is formed by an earthfill dam completed Dec. 27, 1963. Storage began Dec. 5, 1963. Usable capacity, 74,100 acre-ft between elevations 6,325 ft (invert of fishwater release valve) and 6,410 ft (crest of spillway) above mean sea level. Dead storage, 2,360 acre-ft. Prior to September 1962, reservoir was formed by granite-block dam built in 1884, capacity, 8,000 acre-ft. Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940 and 11428300). Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

6,330	3,600
6,340	7,200
6,350	12,500
6,360	19,600
6,370	28,500
6,390	50,000
6,412	79,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37,100	38,100	41,300	41,700	30,900	11,000	7,520	24,700	69,300	68,800	55,700	39,600
2	37,100	38,100	40,700	40,900	30,600	10,300	7,610	25,900	70,000	68,600	55,000	39,600
3	37,200	38,200	40,800	39,900	30,200	9,740	7,710	26,900	70,700	68,200	54,700	39,600
4	37,200	38,900	40,300	38,900	30,300	9,920	7,750	27,900	70,900	68,300	54,000	39,000
5	37,200	39,500	39,700	38,000	30,400	9,320	7,890	28,800	71,000	67,800	54,000	38,600
6	37,200	39,800	39,400	37,000	30,500	9,130	8,120	29,500	71,300	67,200	53,400	38,100
7	37,200	39,900	38,900	37,000	30,000	8,900	8,530	30,100	71,400	66,700	52,800	37,500
8	37,200	40,100	38,400	36,100	29,100	8,490	8,990	31,200	71,600	66,700	52,100	37,400
9	37,300	40,100	38,200	35,200	28,200	8,260	9,500	32,400	71,700	66,200	51,500	37,400
10	37,400	40,200	38,300	34,700	27,700	7,890	10,100	33,800	72,700	65,700	50,900	37,400
11	37,600	40,300	37,800	34,600	27,900	8,030	10,800	35,700	72,700	65,200	50,300	37,300
12	37,900	40,400	37,000	36,200	27,300	7,750	11,500	37,800	72,700	64,800	50,300	37,300
13	37,900	40,500	36,500	37,400	26,800	7,480	12,100	39,900	72,800	64,600	49,500	37,300
14	37,900	40,800	35,800	38,100	25,200	7,200	12,500	41,900	72,800	64,800	49,000	37,200
15	37,900	40,900	35,200	38,000	23,500	6,950	12,900	44,100	72,800	64,800	48,300	37,200
16	38,000	40,900	34,600	38,500	22,100	6,700	13,100	46,600	72,400	64,900	47,700	37,200
17	38,200	41,000	36,200	38,400	20,500	6,530	13,500	48,200	72,800	64,900	47,000	37,100
18	38,300	41,100	38,500	38,500	20,500	6,610	13,700	51,400	72,600	65,000	46,400	37,100
19	38,600	41,100	40,900	38,200	20,600	6,280	13,900	53,700	72,300	64,900	46,300	37,100
20	38,600	41,200	42,300	38,000	19,100	6,020	14,100	55,700	72,300	64,900	45,700	37,100
21	38,600	41,300	42,600	38,100	17,500	6,150	14,300	57,200	72,100	64,900	45,000	37,100
22	38,700	41,300	43,600	37,600	16,100	6,280	14,700	58,500	72,100	64,900	44,400	37,000
23	38,800	41,300	43,500	37,100	14,900	6,360	15,300	59,500	72,000	64,400	43,700	37,000
24	38,800	41,400	43,800	36,300	13,900	6,440	16,200	60,700	72,400	63,500	43,100	36,900
25	38,800	41,400	44,100	35,400	14,000	6,530	17,400	62,100	72,400	62,100	42,500	36,900
26	38,500	41,500	43,600	34,600	13,000	6,650	18,700	63,500	71,900	60,900	42,600	36,900
27	38,000	41,600	43,100	33,600	12,100	6,860	20,100	64,400	71,200	59,800	42,100	36,900
28	38,000	41,600	42,600	33,600	11,400	7,030	21,600	65,600	70,300	58,300	41,500	36,900
29	38,100	41,700	42,200	32,800	------	7,160	22,900	66,500	69,500	58,600	41,000	36,900
30	38,100	41,800	41,600	32,100	------	7,290	23,900	67,500	68,700	57,500	40,300	36,500
31	38,100	------	41,600	31,300	------	7,430	------	68,600	------	56,300	39,700	------
MAX	38,800	41,800	44,100	41,700	30,900	11,000	23,900	68,600	72,800	68,800	55,700	39,600
MIN	37,100	38,100	34,600	31,300	11,400	6,020	7,520	24,700	68,700	56,300	39,700	36,500
(a)	6,379.5	6,383.0	6,382.8	6,372.9	6,348.1	6,340.5	6,365.1	6,404.5	6,404.6	6,395.0	6,381.0	6,378.0
(b)	+1,000	+3,700	-200	-10,300	-19,900	-3,970	+16,470	+44,700	+100	-12,400	-16,600	-3,200

CAL YR 1972 b +6,700
WTR YR 1973 b -600

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11429500 GERLE CREEK BELOW LOON LAKE DAM, NEAR MEEKS BAY, CALIF.

LOCATION.--Lat 39°00'20", long 120°18'52", in NE¼NE¼ sec.5, T.13 N., R.15 E., El Dorado County, Eldorado National Forest, on right bank 0.3 mile downstream from Loon Lake Dam, and 11 miles southwest of Meeks Bay.
DRAINAGE AREA.--8.01 sq mi.
PERIOD OF RECORD.--July 1910 to April 1914 (fragmentary), August 1962 to current year. Prior to August 1962, published as "near Rubicon Springs."
GAGE.--Water-stage recorder and V-notch sharp-crested weir. Altitude of gage is 6,250 ft (from topographic map). Prior to August 1962, nonrecording gage at site about 1,400 ft upstream at different datum.
AVERAGE DISCHARGE (prior to diversion by Loon Lake powerplant).--9 years (1911, 1962-70), 132 cfs (95,630 acre-ft per year).
EXTREMES.--Current year: Maximum discharge, 20 cfs July 15 (gage height, 2.31 ft); minimum daily, 6.9 cfs Mar. 15-26.
Period of record: Maximum discharge, 3,240 cfs (unregulated) Feb. 1, 1963 (gage height, 12.65 ft), from rating curve extended above 600 cfs on basis of slope-area measurement of maximum flow; no flow Oct. 15, 1913. Maximum discharge since construction of Loon Lake Dam in 1963, 1,050 cfs June 5, 1969 (gage height, 6.45 ft); minimum daily, 6.0 cfs Dec. 2, 3, 1969, Oct. 8-10, 1971.
REMARKS.--Records excellent. Beginning in 1884, flow regulated by Loon Lake (see sta 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam which was completed Dec. 27, 1963. Storage began Dec. 5, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940 and 11428300). Diversion to Loon Lake powerplant starting August 1971, bypasses station and returns to Gerle Creek at Gerle Creek Dam. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	8.5	8.8	8.8	8.5	7.7	7.1	12	9.3	7.9	7.4	8.5
2	8.8	8.2	8.8	8.8	8.5	7.7	7.1	11	9.0	7.9	7.7	8.2
3	8.8	9.0	8.8	8.8	8.5	7.7	7.1	10	9.0	7.9	7.9	8.2
4	8.8	9.9	8.8	8.8	8.5	7.7	7.1	9.6	8.8	7.9	7.9	8.2
5	8.8	8.8	8.8	8.8	8.5	7.7	7.4	9.3	8.5	7.7	7.9	8.2
6	8.8	9.0	8.8	8.8	8.5	7.7	7.7	9.6	8.5	7.7	7.9	8.2
7	9.3	8.5	8.8	8.8	8.5	7.4	7.7	10	8.5	7.7	7.7	7.9
8	8.8	8.5	8.5	8.8	8.5	7.4	7.9	10	8.5	7.7	7.7	7.9
9	8.8	8.5	8.5	9.0	8.5	7.1	8.2	10	8.5	7.7	7.9	7.9
10	8.8	8.5	8.5	8.8	8.5	7.1	7.9	11	8.5	7.7	7.9	7.9
11	8.8	8.5	8.5	9.3	8.5	7.1	8.2	11	8.5	7.7	7.9	7.9
12	8.8	8.5	8.5	13	8.5	7.1	8.5	11	8.5	7.7	7.9	7.9
13	8.8	8.5	8.5	9.9	8.5	7.1	8.2	12	8.5	7.7	7.9	8.2
14	8.5	8.5	8.5	9.3	8.5	7.1	8.2	12	8.2	7.9	7.9	8.2
15	8.5	8.5	8.5	9.0	8.2	6.9	8.2	11	7.9	8.2	7.9	8.2
16	9.3	8.5	8.5	9.0	8.5	6.9	8.2	11	7.9	7.9	7.9	8.2
17	8.8	8.5	11	9.0	8.5	6.9	8.8	10	7.9	7.9	7.9	8.2
18	9.3	8.5	10	9.0	8.5	6.9	8.5	9.6	7.9	7.9	7.9	8.2
19	8.8	8.5	11	8.8	8.5	6.9	8.5	9.3	7.9	7.9	8.2	8.5
20	8.8	8.5	9.6	8.8	8.5	6.9	8.5	9.0	7.9	7.9	8.5	8.8
21	8.8	8.5	9.9	8.8	8.5	6.9	8.8	8.8	7.9	7.9	8.5	8.5
22	8.8	8.8	11	8.8	8.2	6.9	9.0	8.8	8.5	7.9	8.5	8.5
23	8.8	9.0	9.6	8.8	8.2	6.9	10	8.8	8.8	7.9	8.5	8.5
24	8.8	9.0	9.3	8.8	8.2	6.9	11	8.8	8.5	7.9	8.5	8.5
25	8.8	9.0	9.3	8.8	7.9	6.9	11	8.8	8.2	7.9	8.5	8.5
26	8.8	9.0	9.0	8.8	7.9	6.9	12	8.2	8.2	7.7	8.8	8.5
27	8.8	9.0	9.0	8.8	7.9	7.1	12	8.2	8.2	7.7	9.0	8.5
28	8.8	9.0	9.0	8.8	7.7	7.1	12	8.2	8.2	7.4	8.5	8.5
29	8.8	9.0	8.8	8.8	------	7.1	12	8.2	7.9	7.4	8.5	8.5
30	8.5	8.8	8.8	8.8	------	7.1	12	8.5	7.9	7.7	8.5	8.5
31	8.5	------	8.8	8.5	------	7.1	------	9.6	------	7.7	8.5	------
TOTAL	273.1	261.5	282.2	279.8	234.2	221.9	268.8	303.3	250.5	241.6	252.1	248.4
MEAN	8.81	8.72	9.10	9.03	8.36	7.16	8.96	9.78	8.35	7.79	8.13	8.28
MAX	9.3	9.9	11	13	8.5	7.7	12	12	9.3	8.2	9.0	8.8
MIN	8.5	8.2	8.5	8.5	7.7	6.9	7.1	8.2	7.9	7.4	7.4	7.9
AC-FT	542	519	560	555	465	440	533	602	497	479	500	493
(a)	895	120	13,106	17,458	21,052	5,489	231	3,577	19,614	14,311	15,479	2,336

CAL YR 1972 TOTAL 3,296.7 MEAN 9.01 MAX 11 MIN 7.7 AC-FT 6,540
WTR YR 1973 TOTAL 3,117.4 MEAN 8.54 MAX 13 MIN 6.9 AC-FT 6,180

Diversion, in acre-feet, to Loon Lake powerplant, August 1971 to September 1972
(not previously published)

Aug.	1,614	Mar.	2
Sept.	25,328	Apr.	207
Oct.	16	May	7,176
Nov.	5,163	June	24,939
Dec.	10,202	July	11,517
Jan.	22,028	Aug.	13,186
Feb.	54	Sept.	0

a Diversion, in acre-feet, to Loon Lake powerplant, furnished by Sacramento Municipal Utility District.

11430000 SOUTH FORK RUBICON RIVER BELOW GERLE CREEK, NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°57'17", long 120°24'02", in SW¼SW¼ sec.22, T.13 N., R.14 E., El Dorado County, Eldorado National Forest, on left bank 600 ft downstream from Gerle Creek, and 18 miles east of Georgetown.

DRAINAGE AREA.--47.6 sq mi.

PERIOD OF RECORD.--February 1910 to June 1914 (published as Little South Fork Rubicon River below Gerle Creek near Quintette), August 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,970 ft (from topographic map). Feb. 1, 1910, to June 21, 1914, nonrecording gage at site about 700 ft downstream at different datum.

AVERAGE DISCHARGE (unadjusted).--11 years (1962-73), 23.1 cfs (16,740 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,390 cfs Jan. 12 (gage height, 6.56 ft); minimum daily, 4.4 cfs Dec. 2.
Period of record: Maximum discharge, 11,500 cfs Jan. 31, 1963 (gage height, 12.32 ft), from rating curve extended above 2,500 cfs on basis of slope-area measurement of maximum flow; minimum, 0.8 cfs Sept. 21, 1962.

REMARKS.--Records good. Beginning in 1884, flow regulated by Loon Lake (see sta 11429350). Original dam was dismantled during September and October 1962 to permit construction of a new earthfill dam which was completed Dec. 27, 1963. Loon Lake receives water from Rubicon River via Rubicon-Rockbound tunnel to Buck Island Lake and from Buck Island Lake to Loon Lake via Buck-Loon tunnel (see sta 11427940 and 11428300). Prior to Dec. 3, 1961, water was diverted out of the basin in Georgetown Divide ditch. Robbs Peak tunnel 1.2 miles upstream (see sta 11429800) began diversion of up to 1,320 cfs to Silver Creek basin October 1962. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.7	5.8	5.4	5.2	8.6	6.9	14	9.5	8.3	10	10
2	48	6.5	4.4	5.3	5.0	8.3	6.2	5.9	9.5	8.4	11	10
3	41	7.0	4.6	5.5	5.1	7.4	6.3	6.9	9.4	8.6	11	10
4	8.3	11	5.0	5.9	5.4	6.8	6.8	5.7	9.4	9.2	10	9.9
5	11	7.5	4.5	6.0	5.4	6.3	7.6	5.3	9.4	9.2	10	9.7
6	10	6.7	5.5	6.0	5.5	6.0	8.3	5.1	9.6	9.7	10	9.6
7	10	7.5	5.5	5.8	6.6	5.7	8.4	5.0	9.5	9.7	11	9.5
8	11	7.2	5.6	6.4	6.2	5.7	8.4	5.4	9.6	9.4	11	15
9	11	6.7	5.6	6.7	5.9	5.7	8.9	7.1	9.8	9.2	11	11
10	12	6.7	5.9	6.3	7.4	6.5	8.9	8.7	9.9	9.2	12	10
11	14	6.8	6.5	14	6.4	7.5	9.0	9.4	9.2	9.3	11	9.7
12	14	6.7	9.5	677	5.9	6.5	9.1	9.3	9.1	9.1	10	9.6
13	13	6.9	6.6	202	5.7	6.2	9.2	9.3	9.0	9.2	10	9.4
14	13	8.9	7.4	9.3	6.0	6.2	8.2	9.1	9.4	9.5	11	9.4
15	13	7.4	5.9	8.5	5.9	6.9	8.3	8.8	10	9.7	11	9.4
16	16	6.3	4.5	28	5.7	6.1	8.0	8.7	9.8	9.7	10	9.4
17	25	5.7	9.8	14	5.7	6.0	9.4	9.0	10	9.6	9.8	9.2
18	28	5.5	7.4	13	5.6	5.6	8.6	8.6	9.8	9.4	9.9	9.2
19	21	5.4	26	11	5.5	5.9	7.9	8.4	11	9.3	10	9.2
20	7.8	5.3	8.1	9.5	5.7	5.7	7.5	8.3	11	9.3	10	9.8
21	7.0	5.2	7.3	9.0	5.7	5.4	7.5	8.2	11	9.3	10	9.9
22	7.0	5.1	13	18	5.7	5.3	7.8	8.2	10	9.3	10	9.8
23	7.0	5.0	8.4	13	5.7	5.4	8.2	8.1	10	9.3	10	9.7
24	7.1	5.0	7.2	30	6.6	5.5	7.7	8.4	17	9.8	10	9.7
25	7.0	5.0	6.6	6.2	7.0	5.7	7.7	8.5	7.8	9.7	10	9.7
26	7.3	12	6.3	5.8	7.8	6.2	7.8	8.1	7.8	9.9	11	9.6
27	6.9	4.6	6.2	5.9	9.2	6.9	7.8	7.9	7.8	10	10	9.4
28	6.8	4.5	6.1	5.4	9.3	6.5	7.5	7.9	8.0	10	10	9.4
29	7.0	5.7	5.8	5.4	------	6.0	7.1	8.0	8.1	10	10	9.4
30	7.0	10	5.6	6.0	------	6.1	6.5	8.1	8.1	10	10	9.2
31	6.8	------	5.5	5.3	------	6.9	------	10	------	11	10	------
TOTAL	415.0	200.5	222.1	1,155.6	172.8	195.5	237.5	249.4	289.5	293.3	320.7	294.8
MEAN	13.4	6.68	7.16	37.3	6.17	6.31	7.92	8.05	9.65	9.46	10.3	9.83
MAX	48	12	26	677	9.3	8.6	9.4	14	17	11	12	15
MIN	6.8	4.5	4.4	5.3	5.0	5.3	6.2	5.0	7.8	8.3	9.8	9.2
AC-FT	823	398	441	2,290	343	388	471	495	574	582	636	585

CAL YR 1972 TOTAL 3,060.6 MEAN 8.36 MAX 48 MIN 3.3 AC-FT 6,070
WTR YR 1973 TOTAL 4,046.7 MEAN 11.1 MAX 677 MIN 4.4 AC-FT 8,030

11431800 PILOT CREEK ABOVE STUMPY MEADOWS LAKE, CALIF.

LOCATION.--Lat 38°53'41", long 120°34'02", in NE¼NW¼ sec.18, T.12 N., R.13 E., El Dorado County, on right bank 2.1 miles upstream from Stumpy Meadows Dam, and 12.5 miles east of Georgetown.

DRAINAGE AREA.--11.7 sq mi.

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1971, published as "above Stumpy Meadows Reservoir."

GAGE.--Water-stage recorder. Altitude of gage is 4,280 ft (from topographic map).

AVERAGE DISCHARGE.--13 years, 24.7 cfs (17,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 455 cfs Jan. 16 (gage height, 3.51 ft); minimum daily, 3.0 cfs Sept. 14, 15.
Period of record: Maximum discharge, 2,380 cfs Dec. 23, 1964 (gage height, 5.92 ft, in gage well, 6.6 ft, from floodmarks), from rating curve extended above 170 cfs on basis of slope-area measurement of maximum flow; maximum gage height, 8.05 ft Jan. 31, 1963; minimum daily discharge, 1.9 cfs Aug. 20-26, Sept. 4-7, 10, 1966.

REMARKS.--Records good. No regulation or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	4.2	6.4	13	24	71	42	53	21	8.7	5.0	3.8
2	6.7	4.3	6.1	12	24	67	39	51	19	8.6	4.7	3.7
3	4.5	5.4	7.1	12	24	63	38	51	18	8.1	4.7	3.7
4	4.1	26	13	12	26	59	39	50	17	7.8	4.6	3.5
5	4.1	17	11	12	25	53	42	46	17	7.7	4.7	3.4
6	3.9	10	9.5	12	26	51	46	43	16	7.5	4.6	3.5
7	4.1	12	8.0	12	36	46	49	43	16	7.4	4.8	3.5
8	4.5	13	7.0	13	34	43	50	43	15	7.3	4.7	3.4
9	4.7	9.6	6.8	15	34	40	54	42	15	7.1	4.7	3.2
10	7.7	9.6	6.7	16	52	43	58	42	14	6.8	4.6	3.2
11	6.4	12	6.8	46	51	51	60	43	14	6.6	4.6	3.3
12	5.0	10	6.9	189	49	44	64	44	14	6.5	4.5	3.3
13	4.7	10	7.0	110	45	42	68	43	14	6.3	4.3	3.3
14	5.4	20	7.1	70	45	39	62	43	14	6.7	4.2	3.0
15	7.0	17	7.3	57	41	38	61	41	14	6.6	4.1	3.0
16	5.7	18	7.9	254	39	37	58	39	13	6.5	4.0	3.2
17	5.7	14	39	189	37	37	61	37	13	6.3	3.9	3.2
18	9.0	12	27	138	35	36	60	35	12	6.2	4.1	3.2
19	6.4	12	46	102	33	36	56	32	12	6.0	4.0	3.2
20	6.0	11	29	78	32	36	53	30	11	6.2	3.9	7.4
21	5.4	9.6	23	63	31	34	51	28	11	6.1	3.6	5.7
22	4.7	9.0	39	53	30	34	51	27	11	6.1	3.6	4.7
23	4.5	8.3	31	46	29	33	54	25	11	5.9	3.7	4.9
24	4.5	7.9	25	41	32	33	58	25	11	5.7	3.9	5.4
25	4.2	7.5	21	38	37	33	60	26	10	5.8	4.0	5.4
26	4.3	7.3	19	34	48	34	64	23	9.9	5.5	4.4	4.5
27	4.3	7.3	18	31	65	38	68	22	9.6	5.3	5.7	4.3
28	4.3	7.0	17	29	73	38	68	21	9.4	5.1	4.5	4.2
29	4.3	6.7	15	28	------	36	64	20	9.1	5.1	4.1	4.0
30	4.3	6.4	14	28	------	37	59	20	8.8	4.9	3.9	4.0
31	4.3	------	14	26	------	42	------	23	------	4.8	3.7	------
TOTAL	159.7	324.1	501.6	1,779	1,057	1,324	1,657	1,111	399.8	201.2	133.8	118.1
MEAN	5.15	10.8	16.2	57.4	37.8	42.7	55.2	35.8	13.3	6.49	4.32	3.94
MAX	9.0	26	46	254	73	71	68	53	21	8.7	5.7	7.4
MIN	3.9	4.2	6.1	12	24	33	38	20	8.8	4.8	3.6	3.0
AC-FT	317	643	995	3,530	2,100	2,630	3,290	2,200	793	399	265	234

CAL YR 1972 TOTAL 5,892.3 MEAN 16.1 MAX 100 MIN 2.3 AC-FT 11,690
WTR YR 1973 TOTAL 8,766.3 MEAN 24.0 MAX 254 MIN 3.0 AC-FT 17,390

PEAK DISCHARGE (BASE, 100 CFS).--Jan. 12 (0730) 251 cfs (2.97 ft); Jan. 16 (1600) 455 cfs (3.51 ft).

11433040 PILOT CREEK BELOW MUTTON CANYON, NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°55'25", long 120°38'27", in NE¼NW¼ sec.4, T.12 N., R.12 E., El Dorado County, Eldorado National Forest, on left bank 450 ft downstream from Mutton Canyon, 500 ft downstream from Georgetown Divide diversion dam, 2.5 miles downstream from Stumpy Meadows Dam, and 10 miles east of Georgetown.

DRAINAGE AREA.--21.1 sq mi.

PERIOD OF RECORD.--June 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 3,760 ft (from topographic map).

AVERAGE DISCHARGE.--12 years, 29.5 cfs (21,370 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 183 cfs Feb. 27 (gage height, 4.49 ft); minimum daily, 1.4 cfs Oct. 1, 3, 5-8, Oct. 29 to Nov. 2.
Period of record: Maximum discharge, 5,430 cfs Dec. 22, 1964 (gage height, 9.60 ft), from rating curve extended above 150 cfs on basis of slope-area measurement at gage height 5.00 ft; maximum gage height, 10.06 ft Dec. 23, 1964; minimum daily discharge, 0.20 cfs Sept. 24, Nov. 1-5, 1966.

REMARKS.--Records good. Flow regulated by Stumpy Meadows Lake (usable capacity, 20,000 acre-ft) completed in November 1961. Georgetown Irrigation District ditch (capacity, about 20 cfs) diverts water out of Pilot Creek, 500 ft above station. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1962.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.4	1.8	2.6	51	140	79	50	9.1	4.5	3.9	3.9
2	1.5	1.4	1.8	2.6	46	135	72	45	4.1	4.5	3.8	3.8
3	1.4	2.8	2.3	2.7	48	132	68	44	3.0	4.4	4.0	3.8
4	1.6	14	4.4	2.5	60	131	67	45	2.9	4.3	4.6	3.8
5	1.4	5.2	2.3	2.4	53	113	68	43	5.0	4.4	4.6	3.8
6	1.4	2.3	2.2	2.4	55	110	71	37	4.1	4.4	4.6	3.8
7	1.4	2.8	2.1	2.4	88	99	75	36	4.6	4.4	4.5	3.8
8	1.4	2.9	2.1	2.6	75	92	76	34	6.0	4.3	4.5	3.8
9	2.1	2.1	1.9	5.5	76	83	79	32	5.8	4.3	4.5	3.8
10	2.1	2.5	1.9	7.7	141	90	82	31	5.7	4.4	4.4	3.8
11	2.7	3.7	1.9	32	137	114	84	31	5.7	4.9	4.3	3.8
12	1.6	2.8	1.8	102	132	93	87	31	5.7	4.8	4.3	3.8
13	1.5	2.8	1.8	49	113	85	105	30	5.8	4.7	4.2	3.8
14	2.1	8.3	1.8	35	111	80	99	29	5.7	4.7	4.2	3.8
15	2.1	4.2	1.8	33	102	75	93	29	5.7	4.6	4.1	3.9
16	1.8	5.8	1.9	104	90	73	86	27	5.6	4.6	4.1	3.9
17	2.0	3.6	12	75	83	73	88	24	5.6	4.4	4.0	3.9
18	2.2	3.0	7.0	77	78	70	86	22	5.4	4.7	4.0	3.9
19	1.6	3.1	21	60	73	69	79	19	5.2	4.9	3.8	3.9
20	1.6	2.7	7.2	52	69	85	75	16	5.1	4.9	3.6	3.9
21	1.6	2.4	4.3	46	65	77	71	14	5.0	4.9	3.6	5.1
22	1.5	2.3	11	40	62	70	69	12	5.0	4.8	3.8	4.3
23	1.5	2.1	5.8	35	59	64	69	10	5.3	4.7	4.2	4.1
24	1.5	2.1	5.0	31	66	61	67	11	5.2	4.7	4.2	3.9
25	1.5	2.0	3.6	28	75	61	64	14	5.0	4.4	4.2	3.9
26	1.5	1.9	3.3	25	94	62	63	9.1	4.9	4.2	4.2	3.9
27	1.5	1.9	3.2	22	135	67	62	6.9	4.8	4.1	4.2	3.8
28	1.5	1.8	3.0	25	152	67	64	6.3	4.8	4.1	4.1	3.7
29	1.4	1.8	2.8	51	------	64	63	4.6	4.6	4.0	4.0	3.7
30	1.4	1.8	2.8	75	------	66	57	4.2	4.6	3.9	3.9	3.7
31	1.4	------	2.6	61	------	83	------	10	------	3.9	3.9	------
TOTAL	51.2	97.5	128.4	1,091.4	2,389	2,684	2,268	757.1	155.0	138.8	128.3	116.8
MEAN	1.65	3.25	4.14	35.2	85.3	86.6	75.6	24.4	5.17	4.48	4.14	3.89
MAX	2.7	14	21	104	152	140	105	50	9.1	4.9	4.6	5.1
MIN	1.4	1.4	1.8	2.4	46	61	57	4.2	2.9	3.9	3.6	3.7
AC-FT	102	193	255	2,160	4,740	5,320	4,500	1,500	307	275	254	232

CAL YR 1972 TOTAL 4,125.3 MEAN 11.3 MAX 82 MIN 1.4 AC-FT 8,180
WTR YR 1973 TOTAL 10,005.5 MEAN 27.4 MAX 152 MIN 1.4 AC-FT 19,850

11433060 SOUTH FORK LONG CANYON CREEK DIVERSION TUNNEL NEAR VOLCANOVILLE, CALIF.

LOCATION.--Lat 39°03'04", long 120°28'14", in SW¼NE¼ sec.24, T.14 N., R.13 E., Placer County, Eldorado National Forest, on right bank at diversion dam, 3.3 miles upstream from confluence with North and South Forks Long Canyon Creek, and 17.2 miles east of Volcanoville.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,630 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 9.57 cfs (6,930 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 166 cfs Apr. 18, 1969; no flow for part of each year.

REMARKS.--Tunnel completed in September 1965; diversion began in February 1966. Flow is diverted from South Fork Long Canyon Creek to a tunnel from Hell Hole Reservoir to Middle Fork powerplant on the Middle Fork American River. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	4.5	15	31	16	50	32			
2		0	0	4.0	14	27	15	53	27			
3		0	0	3.3	14	24	16	54	23			
4		10	.09	2.8	15	21	18	50	20			
5		1.9	0	2.4	16	19	22	44	18			
6		0	0	2.4	16	18	29	41	16			
7		.75	0	1.5	16	16	30	43	13			
8		0	0	1.5	19	15	30	45	11			
9		0	0	1.8	18	14	37	47	11			
10		0	0	2.2	19	16	39	48	9.3			
11		0	0	32	18	20	43	51	8.0			
12		0	0	35	16	16	47	58	7.4			
13		.20	0	21	15	16	45	66	6.5			
14		3.0	0	18	15	14	38	71	6.2			
15		.43	0	18	14	15	37	68	5.3			
16		.54	0	23	13	16	34	68	4.8			
17		0	29	35	13	16	45	67	4.5			
18		0	26	53	14	15	41	64	3.3			
19		0	49	41	14	14	36	59	2.6			
20		0	24	33	14	13	34	53	2.2			
21		0	19	30	15	12	34	48	1.4			
22		0	50	26	14	12	38	45	1.2			
23		0	21	24	15	12	45	41	.84			
24		0	16	22	18	14	50	43	.65			
25		0	12	20	21	16	54	45	.84			
26		0	10	19	22	18	62	36	.54			
27		0	9.3	17	27	21	65	32	.54			
28		0	8.7	17	32	18	66	31	0			
29		0	7.4	16	------	16	61	30	0			
30		0	6.2	16	------	16	53	28	0			
31		------	8.7	15	------	18	------	35	------			------
TOTAL	0	16.82	296.39	557.4	472	529	1,180	1,514	237.11	0	0	0
MEAN	0	.56	9.56	18.0	16.9	17.1	39.3	48.8	7.90	0	0	0
MAX	0	10	50	53	32	31	66	71	32	0	0	0
MIN	0	0	0	1.5	13	12	15	28	0	0	0	0
AC-FT	0	33	588	1,110	936	1,050	2,340	3,000	470	0	0	0

CAL YR 1972 TOTAL 3,565.20 MEAN 9.74 MAX 73 MIN 0 AC-FT 7,070
WTR YR 1973 TOTAL 4,802.72 MEAN 13.2 MAX 71 MIN 0 AC-FT 9,530

11433080 NORTH FORK LONG CANYON CREEK DIVERSION TUNNEL NEAR VOLCANOVILLE, CALIF.

LOCATION.--Lat 39°02'57", long 120°28'56", in SW¼NW¼ sec.24, T.14 N., R.13 E., Placer County, Eldorado National Forest, on left bank at diversion dam, 3.2 miles upstream from confluence of North and South Forks Long Canyon Creek, and 16.9 miles east of Volcanoville.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 4,700 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 3.81 cfs (2,760 acre-ft per year).

EXTREMES.--Period of record: Maximum daily discharge, 54 cfs May 27, 1967; no flow for part of each year.

REMARKS.--No regulation or diversion above station. Tunnel completed in September 1965 and diversions began in February 1966. Flow is diverted from North Fork Long Canyon Creek to a tunnel from Hell Hole Reservoir to Middle Fork powerplant on the Middle Fork American River. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.3	.26	2.8	9.0	4.6	27	7.1	.21	.08	.05
2		0	1.3	.26	2.8	6.5	4.0	28	4.8	.21	.08	.05
3		0	1.2	.21	2.8	5.1	4.5	29	3.6	.26	.12	.05
4		0	1.2	.21	2.8	3.3	7.1	24	2.7	.26	.12	.05
5		0	.86	.21	2.2	2.5	12	20	2.3	.26	.12	.05
6		0	.68	.21	.77	2.1	17	19	2.0	.26	.12	.05
7		.60	.38	.21	1.4	1.4	15	22	1.6	.26	.12	.05
8		1.3	.38	.21	1.6	1.3	18	24	1.4	.26	.12	.05
9		1.3	.38	.21	1.4	1.2	22	24	1.1	.26	.12	.05
10		1.1	.38	.21	1.7	1.9	23	26	.77	.26	.12	.05
11		1.1	.38	3.4	1.4	3.0	25	29	.68	.26	.12	.05
12		.96	.38	11	.86	2.2	26	32	.60	.26	.12	.08
13		.96	.38	8.8	.52	1.7	23	34	.38	.26	.08	.12
14		1.4	.38	7.1	.52	1.5	18	34	.26	.26	.08	.12
15		1.3	.38	6.7	.38	1.8	17	32	.26	.26	.08	.12
16		1.3	.52	6.5	.38	2.4	16	30	.26	.21	.08	.12
17		1.3	11	3.8	.45	2.3	20	29	.26	.21	.08	.12
18		1.3	3.4	3.4	.52	1.8	20	26	.21	.21	.08	.12
19		1.2	2.6	3.3	.60	2.8	19	23	.21	.21	.08	.08
20		1.1	7.9	3.2	1.1	3.2	18	19	.21	.21	.08	.08
21		.96	12	3.0	1.2	2.8	18	16	.21	.21	.08	.08
22		.96	29	3.0	1.1	2.7	21	14	.21	.16	.08	.08
23		.86	7.8	3.0	1.4	3.0	27	12	.21	.16	.08	.08
24		.86	3.3	3.0	1.8	3.9	29	14	.21	.12	.08	.08
25		1.1	1.6	3.0	3.0	5.0	32	14	.21	.12	.08	.08
26		1.4	.96	3.0	3.8	7.3	35	10	.21	.12	.08	.08
27		1.5	.60	3.0	7.1	7.5	33	8.5	.21	.08	.08	.08
28		1.4	.45	3.0	10	6.5	32	9.2	.21	.08	.08	.08
29		1.4	.38	3.0	------	5.1	31	5.3	.21	.08	.08	.08
30		1.3	.32	3.0	------	4.5	29	4.2	.21	.08	.08	.08
31		------	.26	2.9	------	4.8	------	7.5	------	.08	.08	------
TOTAL	0	27.96	92.05	92.30	56.40	110.1	616.2	645.7	32.80	6.14	2.88	2.31
MEAN	0	.93	2.97	2.98	2.01	3.55	20.5	20.8	1.09	.20	.093	.077
MAX	0	1.5	29	11	10	9.0	35	34	7.1	.26	.12	.12
MIN	0	0	.26	.21	.38	1.2	4.0	4.2	.21	.08	.08	.05
AC-FT	0	55	183	183	112	218	1,220	1,280	65	12	5.7	4.6

CAL YR 1972 TOTAL 1,632.81 MEAN 4.46 MAX 40 MIN 0 AC-FT 3,240
WTR YR 1973 TOTAL 1,684.84 MEAN 4.62 MAX 35 MIN 0 AC-FT 3,340

11433100 LONG CANYON CREEK NEAR FRENCH MEADOWS, CALIF.

LOCATION.--Lat 39°01'16", long 120°30'53", in SE¼NW¼ sec.34, T.14 N., R.13 E., Placer County, Eldorado National Forest, on right bank 75 ft downstream from North Fork Long Canyon, 6.5 miles south of French Meadows, and 18 miles east of Foresthill.

DRAINAGE AREA.--18.0 sq mi.

PERIOD OF RECORD.--August 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (from topographic map).

AVERAGE DISCHARGE (since diversion to Middle Fork American River powerplant).--7 years (1966-73), 31.2 cfs (22,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 962 cfs Jan. 12 (gage height, 7.20 ft); minimum daily, 0.90 cfs Sept. 11-14.
Period of record: Maximum discharge, 4,690 cfs Dec. 23, 1964 (gage height, 11.20 ft), from rating curve extended above 300 cfs on basis of slope-area measurements at gage heights 6.62 and 10.27 ft; minimum daily, 0.08 cfs Sept. 27, 28, 1968.

REMARKS.--Water is diverted above this station to a diversion tunnel from Hell Hole Reservoir to Middle Fork American River powerplant via South Fork and North Fork Long Canyon diversion tunnels (see sta 11433060 and 11433080); diversions began in February 1966. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.7	9.8	25	30	87	47	38	19	5.6	1.6	1.4
2	1.6	1.8	9.3	24	29	77	44	36	18	5.3	1.6	1.4
3	1.3	2.9	9.6	23	30	70	43	34	17	5.3	1.6	1.4
4	1.1	50	16	22	36	64	43	35	16	4.9	1.6	1.3
5	1.1	29	13	20	37	58	44	34	16	4.6	1.6	1.3
6	1.1	15	11	19	43	55	47	32	15	4.6	1.6	1.2
7	1.1	16	10	20	57	51	48	31	14	4.2	1.6	1.2
8	1.2	18	9.4	21	55	49	47	30	14	4.0	1.5	1.1
9	1.4	13	8.8	22	52	47	49	29	13	4.0	1.5	1.1
10	2.2	12	8.6	24	70	53	50	29	13	3.7	1.5	1.0
11	2.5	14	8.5	97	62	62	52	29	12	3.5	1.5	.90
12	2.2	11	8.4	595	57	54	52	28	12	3.5	1.5	.90
13	1.7	13	8.4	227	52	51	55	30	12	3.2	1.5	.90
14	1.9	29	8.4	130	52	48	52	30	12	3.0	1.5	.90
15	2.4	22	8.6	107	50	46	52	27	11	3.0	1.5	1.0
16	2.7	25	10	446	48	46	49	27	11	2.8	1.5	1.0
17	4.7	20	90	243	47	46	51	25	11	2.6	1.4	1.1
18	6.3	18	67	151	46	44	48	25	10	2.6	1.4	1.1
19	4.0	18	107	106	45	43	45	24	9.8	2.5	1.3	1.1
20	3.5	15	55	82	45	43	43	23	9.3	2.3	1.3	1.3
21	2.8	13	41	68	45	40	41	22	9.0	2.3	1.2	1.2
22	2.4	12	67	56	44	39	40	22	8.8	2.1	1.2	1.1
23	2.1	11	50	50	43	39	40	21	8.6	2.0	1.1	1.1
24	1.9	10	43	46	50	39	41	22	8.3	2.0	1.1	1.1
25	1.8	10	38	43	62	41	41	22	7.2	1.8	1.0	1.1
26	1.8	13	36	39	70	42	43	21	6.9	1.7	1.8	1.1
27	1.7	13	34	36	90	46	48	20	6.8	1.7	1.5	1.1
28	1.7	12	32	34	97	45	49	20	6.5	1.7	1.5	1.1
29	1.7	11	29	33	------	43	46	19	6.4	1.7	1.5	1.1
30	1.7	10	28	32	------	44	41	19	6.1	1.7	1.4	1.1
31	1.7	------	26	31	------	48	------	21	------	1.7	1.4	------
TOTAL	66.4	459.4	900.8	2,872	1,444	1,560	1,391	825	339.7	95.6	44.8	33.70
MEAN	2.14	15.3	29.1	92.6	51.6	50.3	46.4	26.6	11.3	3.08	1.45	1.12
MAX	6.3	50	107	595	97	87	55	38	19	5.6	1.8	1.4
MIN	1.1	1.7	8.4	19	29	39	40	19	6.1	1.7	1.0	.90
AC-FT	132	911	1,790	5,700	2,860	3,090	2,760	1,640	674	190	89	67

CAL YR 1972 TOTAL 6,493.35 MEAN 17.7 MAX 126 MIN .57 AC-FT 12,880
WTR YR 1973 TOTAL 10,032.40 MEAN 27.5 MAX 595 MIN .90 AC-FT 19,900

11433200 RUBICON RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 38°59'33", long 120°43'14", in SE¼NW¼ sec.11, T.13 N., R.11 E., Placer County, Eldorado National Forest, on right bank 0.6 mile upstream from Ralston powerhouse, 1.2 miles upstream from confluence of Rubicon River and Middle Fork American River, and 5.6 miles southeast of Foresthill.

DRAINAGE AREA.--315 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,200 ft (from topographic map). October 1958 to May 17, 1963, at site 2.0 miles upstream, 150 ft downstream from Ralston Bridge, and May 17, 1963, to Mar. 30, 1965, at site 2.1 miles upstream, 100 ft upstream from Ralston Bridge at datum 1,362.20 ft above mean sea level.

AVERAGE DISCHARGE (prior to construction of Hell Hole Dam).--7 years (1958-65), 609 cfs (440,900 acre-ft per year); 8 years (1965-73), 295 cfs (214,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 4,000 cfs Jan. 16 (gage height, 11.03 ft); minimum daily, 44 cfs on several days.

Period of record: Maximum discharge, unknown Dec. 23, 1964 (gage height, 55.4 ft, from floodmarks), caused by overtopping of the partly constructed Hell Hole Dam; next highest peak discharge, 83,000 cfs Feb. 1, 1963 (gage height, 35.0 ft, former site and datum); minimum daily, 10 cfs Sept. 20-27, 1962. Maximum discharge since construction of Hell Hole Dam in 1965, 15,100 cfs Jan. 21, 1970 (gage height, 14.60 ft); minimum daily, 24 cfs Sept. 12, 1966.

Floods of December 1937, November 1950, and December 1955, had approximate discharges of 44,000, 56,000, and 73,000 cfs respectively, on basis of 1958-64 stage-discharge relation and U.S. Forest Service floodmarks.

REMARKS.--Flow regulated by Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), and Stumpy Meadows Lake (capacity, 20,000 acre-ft). Water is imported from French Meadows Reservoir on Middle Fork American River through tunnel to French Meadows powerplant on shore of Hell Hole Reservoir. Water is diverted from Hell Hole Reservoir through tunnel to Middle Fork powerplant on Middle Fork American River. Robbs Peak tunnel and powerplant (see sta 11429800) divert water to South Fork American River basin. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1968: 1967(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	44	77	107	399	978	501	432	219	85	57	46
2	54	45	73	103	375	888	460	422	180	85	57	46
3	99	49	72	107	380	851	437	412	165	81	54	46
4	76	253	121	94	476	852	428	415	157	81	54	46
5	45	202	102	84	490	762	435	391	151	81	53	46
6	49	113	90	85	494	743	451	360	147	78	51	46
7	49	95	96	80	772	687	475	347	143	78	51	44
8	52	140	96	89	716	647	468	345	141	77	51	44
9	56	106	79	196	627	601	487	339	137	74	49	45
10	71	92	74	243	1,090	619	509	335	134	74	49	48
11	71	134	74	547	1,180	791	522	342	130	71	49	46
12	68	119	74	3,140	1,140	670	542	340	127	71	51	44
13	63	99	74	1,590	933	622	615	342	125	71	49	44
14	61	196	74	809	867	579	582	350	125	68	49	44
15	73	179	74	596	779	544	568	331	122	68	49	44
16	67	222	77	2,360	686	524	544	317	122	68	48	44
17	68	162	379	1,690	625	514	551	306	122	68	46	44
18	94	129	394	1,450	583	497	548	288	118	68	46	44
19	90	122	567	1,120	545	488	499	271	115	68	46	44
20	75	115	362	817	512	552	476	255	111	65	46	57
21	54	103	230	684	488	507	450	237	107	65	44	62
22	50	94	349	576	466	477	443	225	104	65	44	51
23	49	89	293	510	447	464	458	213	104	65	44	49
24	46	84	229	469	469	451	478	205	104	65	44	49
25	46	81	189	446	544	441	471	223	107	65	44	50
26	46	79	167	397	641	443	491	204	96	65	48	50
27	46	86	150	366	896	472	519	190	95	61	52	46
28	46	80	142	347	1,150	469	527	184	92	59	55	46
29	46	75	129	364	------	443	518	177	89	57	51	46
30	44	74	121	456	------	439	480	171	88	57	49	46
31	44	------	114	430	------	500	------	181	------	57	46	------
TOTAL	1,850	3,461	5,142	20,352	18,770	18,515	14,933	9,150	3,777	2,161	1,526	1,407
MEAN	59.7	115	166	657	670	597	498	295	126	69.7	49.2	46.9
MAX	99	253	567	3,140	1,180	978	615	432	219	85	57	62
MIN	44	44	72	80	375	439	428	171	88	57	44	44
AC-FT	3,670	6,860	10,200	40,370	37,230	36,720	29,620	18,150	7,490	4,290	3,030	2,790

CAL YR 1972 TOTAL 64,003 MEAN 175 MAX 895 MIN 42 AC-FT 126,900
WTR YR 1973 TOTAL 101,044 MEAN 277 MAX 3,140 MIN 44 AC-FT 200,400

11433260 NORTH FORK OF MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°01'27", long 120°43'03", in NE¼NW¼ sec.35, T.14 N., R.11 E., Placer County, Tahoe National Forest, on right bank 1.0 mile downstream from El Dorado Canyon, and 4.8 miles east of Foresthill.

DRAINAGE AREA.--88.9 sq mi.

PERIOD OF RECORD.--July 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,300 ft (from topographic map).

AVERAGE DISCHARGE.--8 years, 257 cfs (186,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,410 cfs Jan. 12 (gage height, 9.98 ft); minimum daily, 25 cfs Sept. 14, 15.
Period of record: Maximum discharge, 13,600 cfs Jan. 21, 1970 (gage height, 12.80 ft in gage well, 13.5 ft, from floodmarks); minimum daily, 17 cfs Oct. 23 to Nov. 5, 1966.

REMARKS.--No storage or diversion above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	34	66	210	339	970	458	560	203	68	37	28
2	40	34	64	200	322	858	421	523	178	68	36	28
3	36	37	66	210	327	766	406	521	164	66	36	28
4	33	379	139	180	401	704	412	516	153	65	35	27
5	32	197	83	160	433	625	444	438	143	63	35	27
6	32	94	82	139	450	582	512	397	136	61	34	27
7	31	82	84	123	627	531	572	399	128	60	34	27
8	37	103	84	139	611	498	555	425	123	59	34	27
9	37	83	73	216	546	464	608	439	117	59	33	26
10	50	81	68	283	901	484	647	450	113	57	33	26
11	68	110	68	1,030	958	689	681	495	109	55	33	26
12	58	93	68	4,370	875	567	707	524	105	53	32	26
13	44	83	68	1,900	708	522	730	540	101	52	31	26
14	40	170	68	1,210	641	474	601	535	101	52	30	25
15	52	174	68	918	572	443	560	503	99	53	30	25
16	51	226	70	2,960	518	433	517	486	101	53	29	26
17	54	165	440	1,850	480	434	547	485	104	50	29	26
18	54	120	1,000	1,480	458	411	544	450	101	47	29	26
19	50	133	1,500	1,220	440	406	505	409	96	46	29	26
20	47	121	910	899	427	418	475	369	92	45	28	54
21	43	100	460	726	420	390	457	329	89	45	28	57
22	40	87	850	600	407	370	469	302	86	45	28	35
23	39	78	670	518	397	362	522	287	85	44	28	34
24	37	73	500	461	418	365	587	281	85	43	29	36
25	35	69	397	440	500	379	619	285	82	42	29	39
26	35	70	336	398	592	395	698	249	80	41	30	35
27	35	73	302	364	863	439	740	224	77	40	34	32
28	35	72	278	340	1,150	433	745	215	75	39	35	31
29	34	70	250	334	------	405	667	212	72	39	31	31
30	34	68	240	369	------	403	591	202	69	39	29	31
31	34	------	220	360	------	474	------	201	------	38	28	------
TOTAL	1,280	3,279	9,572	24,607	15,781	15,694	16,997	12,251	3,267	1,587	976	918
MEAN	41.3	109	309	794	564	506	567	395	109	51.2	31.5	30.6
MAX	68	379	1,500	4,370	1,150	970	745	560	203	68	37	57
MIN	31	34	64	123	322	362	406	201	69	38	28	25
AC-FT	2,540	6,500	18,990	48,810	31,300	31,130	33,710	24,300	6,480	3,150	1,940	1,820

CAL YR 1972 TOTAL 73,224 MEAN 200 MAX 1,500 MIN 23 AC-FT 145,200
WTR YR 1973 TOTAL 106,209 MEAN 291 MAX 4,370 MIN 25 AC-FT 210,700

11433300 MIDDLE FORK AMERICAN RIVER NEAR FORESTHILL, CALIF.

LOCATION.--Lat 39°00'23", long 120°45'40", in NW¼NW¼ sec.4, T.13 N., R.11 E., Placer County, Tahoe National Forest, on right bank 1.7 miles downstream from Oxbow powerhouse, and 3.2 miles east of Foresthill.

DRAINAGE AREA.--524 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,060 ft (from topographic map). Prior to Oct. 22, 1965, at site 3.2 miles downstream at different datum.

AVERAGE DISCHARGE.--15 years, 1,090 cfs (789,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 13,500 cfs Jan. 12 (gage height, 13.42 ft); minimum daily, 68 cfs July 15.
Period of record: Maximum discharge, 310,000 cfs Dec. 23, 1964 (gage height, 69.0 ft, from floodmarks, site and datum then in use), caused by overtopping the partly constructed Hell Hole Dam on the Rubicon River, from rating curve extended above 28,000 cfs on basis of slope-area measurement at gage height 38.0 ft, and slope-conveyance study at gage height 69.0 ft at site and datum then in use; next highest peak, 113,000 cfs Feb. 1, 1963 (gage height, 38.00 ft, site and datum then in use); minimum, 35 cfs Oct. 19, 20, 1961.

REMARKS.--Flow regulated by French Meadows Reservoir (see sta 11427400), Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), Stumpy Meadows Lake (usable capacity, 20,000 acre-ft), and Ralston and Oxbow powerplants. Robbs Peak tunnel (see sta 11429800) and Georgetown Divide ditch (capacity, about 25 cfs) divert water out of basin above station. See schematic diagram of Middle Fork American and Rubicon River basins.

COOPERATION.--Records collected by Placer County Water Agency, under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	809	835	640	1,330	1,830	3,000	1,220	1,230	537	188	751	254
2	838	889	351	1,310	1,780	2,820	1,130	1,200	445	227	472	91
3	899	895	301	1,340	1,780	2,710	1,080	1,200	469	192	549	620
4	865	997	709	1,290	1,940	2,660	1,080	1,190	443	217	441	512
5	811	642	686	1,250	1,990	2,500	1,140	1,080	386	267	170	653
6	792	836	665	1,260	2,010	2,440	1,160	958	409	179	734	763
7	699	993	666	1,230	2,490	2,340	1,350	955	361	191	870	903
8	1,090	985	647	1,270	2,410	2,270	1,370	977	351	232	611	923
9	1,050	1,000	520	1,500	2,260	2,180	1,370	992	439	456	657	820
10	1,030	897	520	1,630	3,100	2,220	1,420	1,000	309	680	645	713
11	1,030	532	580	2,670	3,260	2,580	1,640	1,220	330	840	837	718
12	1,070	385	590	9,340	3,130	2,350	1,540	1,220	301	740	690	763
13	1,100	838	590	4,680	2,730	2,260	1,640	1,220	306	880	632	814
14	1,010	1,260	590	2,990	2,550	2,170	1,490	1,260	314	70	708	757
15	991	1,260	590	2,420	2,440	2,100	1,460	1,190	293	68	638	669
16	1,050	1,290	350	6,590	2,270	2,070	1,320	1,180	281	600	686	605
17	818	1,220	1,230	4,760	2,200	2,160	1,350	1,320	304	670	638	769
18	782	792	1,920	4,100	2,120	2,020	1,350	1,210	280	660	408	637
19	933	833	3,020	3,490	2,070	1,900	1,260	985	336	710	657	735
20	783	1,050	2,280	2,840	2,000	1,660	1,190	882	616	680	676	579
21	938	704	1,670	2,530	1,960	1,590	1,230	791	696	130	808	615
22	817	794	2,210	2,340	1,920	1,530	1,250	746	235	300	769	729
23	935	788	1,960	2,160	1,870	1,410	1,240	679	246	680	797	757
24	891	651	1,710	2,050	1,930	970	1,330	620	466	846	600	713
25	894	367	1,560	2,050	2,100	1,010	1,410	650	269	719	127	740
26	851	340	1,470	1,940	2,340	1,060	1,670	586	381	792	97	696
27	771	623	1,440	1,830	2,850	1,180	1,570	537	228	718	392	763
28	846	656	1,390	1,780	3,350	1,160	1,580	519	231	163	774	757
29	876	645	1,160	1,780	------	1,110	1,510	587	209	552	746	691
30	807	642	1,360	1,940	------	1,090	1,490	464	220	709	626	685
31	763	------	1,350	1,880	------	1,240	------	525	------	549	642	------
TOTAL	27,839	24,639	34,725	79,570	64,680	59,760	40,840	29,173	10,691	14,905	18,848	20,444
MEAN	898	821	1,120	2,567	2,310	1,928	1,361	941	356	481	608	681
MAX	1,100	1,290	3,020	9,340	3,350	3,000	1,670	1,320	696	880	870	923
MIN	699	340	301	1,230	1,780	970	1,080	464	209	68	97	91
AC-FT	55,220	48,870	68,880	157,800	128,300	118,500	81,010	57,860	21,210	29,560	37,390	40,550

CAL YR 1972 TOTAL 321,061 MEAN 877 MAX 3,020 MIN 88 AC-FT 636,800
WTR YR 1973 TOTAL 426,114 MEAN 1,167 MAX 9,340 MIN 68 AC-FT 845,200

11433400 CANYON CREEK NEAR GEORGETOWN, CALIF.

LOCATION.--Lat 38°56'03", long 120°52'21", in SW¼NW¼ sec.33, T.13 N., R.10 E., El Dorado County, Eldorado National Forest, on right bank 0.7 mile downstream from West Canyon, and 2.6 miles northwest of Georgetown.

DRAINAGE AREA.--12.5 sq mi.

PERIOD OF RECORD.--July 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,995 ft (from topographic map).

AVERAGE DISCHARGE.--7 years, 20.6 cfs (14,920 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,210 cfs Jan. 12 (gage height, 10.86 ft); minimum daily, 2.1 cfs Aug. 30, 31.
Period of record: Maximum discharge, 1,300 cfs Jan. 21, 1970 (gage height, 11.01 ft); minimum daily, 1.8 cfs Oct. 1, 4-12, 1966.

REMARKS.--Records good. Small diversions above station for irrigation and domestic purposes. See schematic diagram of Middle Fork American and Rubicon River basins. Records of water temperatures for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	3.9	3.8	10	39	61	30	15	7.9	4.2	2.6	2.2
2	2.8	4.0	3.6	11	34	50	27	13	7.5	4.3	2.6	2.2
3	3.9	5.2	4.0	14	37	56	24	13	7.3	4.5	2.6	2.3
4	4.8	46	8.8	11	46	73	24	13	7.0	4.4	2.6	2.8
5	4.1	26	5.9	9.5	41	57	25	15	6.5	4.2	2.6	2.9
6	4.6	5.9	5.7	10	45	62	24	14	6.3	4.2	2.8	3.2
7	4.4	5.9	5.2	8.8	81	58	24	14	6.1	4.1	2.8	3.2
8	4.2	6.4	5.0	11	60	53	23	15	6.0	4.1	2.8	3.1
9	4.1	5.1	4.8	90	53	47	21	13	5.9	4.0	2.8	3.0
10	5.1	8.2	4.4	106	190	52	19	14	5.8	3.8	3.6	3.6
11	7.5	41	5.7	228	234	65	21	14	5.7	3.6	3.1	3.8
12	4.5	15	4.6	556	157	51	21	13	5.7	3.5	3.5	4.0
13	4.1	9.5	5.0	116	96	45	24	13	5.9	3.4	3.3	4.1
14	3.0	37	4.6	52	100	41	23	12	6.3	3.4	2.8	5.0
15	3.5	17	5.2	47	80	39	22	12	6.9	3.4	2.7	4.7
16	4.2	45	6.9	328	68	36	21	11	6.9	3.3	2.5	4.2
17	4.0	13	80	137	58	34	22	8.9	6.8	3.3	2.5	4.2
18	3.9	8.5	57	190	50	33	21	8.6	6.5	3.3	2.4	4.3
19	3.3	8.3	91	107	45	34	20	8.3	6.4	3.2	2.3	4.3
20	2.8	8.2	33	63	40	50	19	8.2	6.1	3.3	2.3	7.7
21	2.7	7.1	18	49	37	53	19	8.2	5.9	3.3	2.2	3.9
22	2.6	6.3	37	39	34	51	20	8.1	5.8	3.3	2.3	4.0
23	2.6	5.6	23	33	32	43	19	8.0	6.0	3.3	2.4	5.0
24	2.6	5.2	21	29	32	38	17	8.4	6.0	3.2	2.4	5.5
25	2.7	5.3	19	34	30	36	18	10	5.6	3.0	2.4	5.6
26	2.7	5.0	16	31	43	34	21	10	5.4	2.9	2.4	5.0
27	2.8	4.6	15	29	71	33	19	9.7	4.7	2.9	2.3	4.9
28	2.9	4.4	15	27	108	31	17	9.1	4.4	2.9	2.3	4.7
29	3.0	4.0	13	27	------	29	17	8.5	4.2	2.8	2.2	4.7
30	3.1	4.0	12	65	------	30	16	7.8	4.2	2.8	2.1	4.6
31	3.4	------	11	49	------	33	------	8.1	------	2.6	2.1	------
TOTAL	112.4	370.6	544.2	2,517.3	1,941	1,408	638	343.9	181.7	108.5	80.3	122.7
MEAN	3.63	12.4	17.6	81.2	69.3	45.4	21.3	11.1	6.06	3.50	2.59	4.09
MAX	7.5	46	91	556	234	73	30	15	7.9	4.5	3.6	7.7
MIN	2.5	3.9	3.6	8.8	30	29	16	7.8	4.2	2.6	2.1	2.2
AC-FT	223	735	1,080	4,990	3,850	2,790	1,270	682	360	215	159	243

CAL YR 1972 TOTAL 3,702.6 MEAN 10.1 MAX 124 MIN 2.2 AC-FT 7,340
WTR YR 1973 TOTAL 8,368.6 MEAN 22.9 MAX 556 MIN 2.1 AC-FT 16,600

PEAK DISCHARGE (BASE, 170 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0430	10.86	1,210	2-11	0200	8.18	323
1-16	1430	9.32	586	2-28	0030	7.30	198
1-18	1330	8.09	308				

11433420 MAINE BAR CANYON CREEK NEAR GREENWOOD, CALIF.

LOCATION.--Lat 38°55'34", long 120°56'51", in NW¼NW¼ sec.2, T.12 N., R.9 E., El Dorado County, on right bank 2.8 miles northwest of Greenwood, and 4.5 miles northeast of Cool.

DRAINAGE AREA.--0.76 sq mi.

PERIOD OF RECORD.--March to September 1972 (discharge measurements only), October 1972 to September 1973.

GAGE.--Water-stage recorder. Altitude of gage is 1,520 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 79 cfs Jan. 12 (gage height, 1.82 ft); minimum daily, 0.01 cfs July 10-12, July 28 to Aug. 2.

REMARKS.--Records good. No diversion or regulation above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.09	.24	.38	2.0	4.6	1.3	.24	.14	.07	.01	.07
2	.11	.09	.20	.57	1.8	3.4	1.0	.24	.14	.07	.01	.07
3	.11	.31	.28	1.2	3.5	5.3	.93	.20	.14	.05	.02	.06
4	.11	.94	.33	.83	5.0	5.0	.83	.24	.09	.03	.02	.06
5	.09	.17	.24	.65	3.2	3.7	.74	.24	.09	.03	.02	.05
6	.09	.14	.28	.65	4.6	4.6	.74	.24	.09	.03	.03	.05
7	.09	.33	.33	.65	4.6	3.4	.65	.24	.09	.03	.03	.05
8	.09	.28	.33	.83	3.4	3.2	.65	.24	.09	.03	.03	.05
9	.11	.20	.33	5.9	3.2	2.5	.65	.24	.09	.02	.03	.05
10	.20	.50	.28	2.9	9.7	2.9	.65	.24	.09	.01	.05	.05
11	.24	1.5	.28	23	13	2.7	.57	.24	.09	.01	.05	.05
12	.14	.50	.28	39	8.3	2.1	.57	.24	.07	.01	.05	.05
13	.11	.44	.24	9.2	5.0	1.8	.74	.24	.09	.02	.05	.06
14	.11	1.2	.24	4.6	8.8	1.7	.74	.24	.09	.02	.05	.07
15	.14	.93	.24	6.2	5.7	1.4	.65	.24	.07	.03	.05	.07
16	.14	1.5	.44	24	3.7	1.3	.57	.24	.07	.03	.03	.06
17	.49	.57	6.8	10	2.9	1.4	.65	.20	.07	.03	.03	.05
18	.20	.38	3.9	9.7	2.3	1.3	.57	.17	.07	.03	.05	.05
19	.17	.33	4.0	6.1	1.8	1.5	.57	.17	.05	.07	.03	.05
20	.17	.33	1.7	3.4	1.5	2.9	.50	.17	.05	.07	.02	.07
21	.14	.28	1.0	3.2	1.4	3.4	.50	.17	.05	.07	.02	.06
22	.14	.28	1.7	2.1	1.3	2.9	.38	.17	.07	.05	.02	.06
23	.14	.24	1.0	1.8	1.0	2.1	.38	.17	.09	.05	.03	.06
24	.11	.24	1.3	1.7	1.3	1.8	.38	.20	.09	.03	.03	.06
25	.11	.24	.93	2.9	1.0	1.5	.33	.20	.07	.02	.03	.05
26	.11	.24	.74	2.7	2.8	1.4	.33	.17	.05	.02	.03	.05
27	.11	.24	.65	2.1	6.1	1.5	.33	.14	.05	.02	.05	.05
28	.11	.24	.74	1.7	5.7	1.2	.33	.11	.07	.01	.05	.04
29	.11	.24	.57	1.8	------	1.0	.33	.11	.07	.01	.05	.04
30	.11	.24	.50	3.4	------	1.8	.28	.11	.07	.01	.07	.04
31	.09	------	.50	2.5	------	2.0	------	.14	------	.01	.07	------
TOTAL	4.28	13.21	30.59	175.66	114.6	77.3	17.84	6.20	2.45	.99	1.11	1.65
MEAN	.14	.44	.99	5.67	4.09	2.49	.59	.20	.082	.032	.036	.055
MAX	.49	1.5	6.8	39	13	5.3	1.3	.24	.14	.07	.07	.07
MIN	.09	.09	.20	.38	1.0	1.0	.28	.11	.05	.01	.01	.04
AC-FT	8.5	26	61	348	227	153	35	12	4.9	2.0	2.2	3.3

WTR YR 1973 TOTAL 445.88 MEAN 1.22 MAX 39 MIN .01 AC-FT 884

PEAK DISCHARGE (BASE, 20 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-23	0200	1.82	79	2-10	1730	1.00	22
1-16	1100	1.49	52	2-27	1730	1.00	22

NOTE.--No gage-height record Aug. 31 to Sept. 30.

11433500 MIDDLE FORK AMERICAN RIVER NEAR AUBURN, CALIF.

LOCATION.--Lat 38°55'05", long 121°00'51", in NE¼SW¼ sec.6, T.12 N., R.9 E., Placer County, on right bank at Mountain Quarry Co. plant, 1.4 miles upstream from mouth, and 3.3 miles northeast of Auburn.

DRAINAGE AREA.--614 sq mi.

PERIOD OF RECORD.--October 1911 to current year. Prior to October 1934, published as "near East Auburn."

GAGE.--Water-stage recorder. Datum of gage is 552.35 ft above mean sea level (levels by Murray Engineers). Prior to December 1930, nonrecording gages near present site at different datums. December 1930 to Mar. 1, 1963, water-stage recorder at site 0.4 mile upstream at different datum.

AVERAGE DISCHARGE.--62 years, 1,336 cfs (967,900 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 17,600 cfs Jan. 12 (gage height, 18.63 ft); minimum daily, 90 cfs July 16.
Period of record: Maximum discharge, 253,000 cfs Dec. 23, 1964 (gage height, 60.4 ft, from floodmarks), from rating curve extended above 69,000 cfs on basis of slope-area measurement of maximum flow (caused by overtopping of the partly constructed Hell Hole Dam); next highest peak, 121,000 cfs Feb. 1, 1963 (gage height, 43.1 ft, from floodmarks, site and datum then in use); minimum, 20 cfs Sept. 6, 1931, Sept. 19, 1934.

REMARKS.--Records good. Natural flow of stream affected by French Meadows Reservoir (see sta 11427400), Hell Hole Reservoir (see sta 11428700), Loon Lake (see sta 11429350), Stumpy Meadows Lake (usable capacity, 20,000 acre-ft), diversion dams on Rubicon and Little Rubicon River, and Ralston and Oxbow powerplants. Robbs Peak powerplant (see sta 11429300) diverts water out of basin. See schematic diagram of Middle Fork American and Rubicon River basins.

REVISIONS (WATER YEARS).--WSP 861: 1928. WSP 1315-A: 1913-15, 1919, 1921, 1923(M), 1929(M), 1930. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	781	834	608	1,330	2,040	3,450	1,330	1,290	556	171	559	515
2	811	807	433	1,320	1,950	3,210	1,230	1,230	474	177	694	121
3	842	871	287	1,360	1,960	3,030	1,160	1,220	428	176	488	292
4	867	1,120	567	1,300	2,270	3,150	1,140	1,210	427	165	593	599
5	796	790	668	1,270	2,290	2,880	1,170	1,140	424	199	267	632
6	775	684	688	1,270	2,310	2,810	1,370	1,030	375	217	243	725
7	597	995	669	1,250	2,880	2,670	1,440	989	369	162	805	900
8	1,050	981	649	1,280	2,890	2,560	1,380	1,010	335	172	817	880
9	1,050	984	536	1,760	2,610	2,430	1,390	1,020	407	416	550	790
10	981	939	536	2,060	4,020	2,390	1,480	1,030	315	562	697	757
11	1,010	797	602	2,970	4,900	2,860	1,610	1,170	303	816	684	712
12	1,050	470	616	12,700	4,420	2,590	1,620	1,270	288	691	766	696
13	1,040	603	609	6,240	3,540	2,450	1,680	1,230	281	826	744	769
14	1,040	1,320	602	3,700	3,400	2,320	1,600	1,280	285	604	620	771
15	889	1,310	623	2,960	3,140	2,220	1,510	1,220	278	93	651	746
16	1,070	1,420	464	8,310	2,820	2,170	1,420	1,180	276	90	655	554
17	848	1,260	1,300	6,500	2,600	2,150	1,400	1,330	262	548	688	656
18	790	984	2,090	5,290	2,450	2,100	1,430	1,270	275	669	513	673
19	827	660	3,480	4,490	2,330	2,070	1,330	1,040	295	657	549	606
20	843	1,140	2,480	3,400	2,230	1,930	1,260	935	334	666	570	673
21	859	620	1,870	2,920	2,170	1,800	1,250	824	642	405	652	623
22	785	810	2,460	2,550	2,110	1,730	1,290	762	513	150	759	657
23	898	796	2,210	2,330	2,050	1,710	1,290	705	233	342	731	714
24	876	695	1,870	2,160	2,060	1,330	1,340	620	284	767	744	653
25	879	442	1,680	2,180	2,210	1,210	1,430	653	368	789	338	725
26	831	311	1,570	2,060	2,340	1,190	1,560	605	292	737	118	720
27	780	497	1,510	1,950	3,080	1,170	1,630	547	278	774	161	601
28	790	632	1,460	1,880	4,190	1,280	1,590	520	213	561	752	818
29	846	620	1,240	1,880	------	1,200	1,540	577	194	200	762	727
30	791	612	1,360	2,170	------	1,190	1,540	495	179	599	619	438
31	769	------	1,350	2,140	------	1,330	------	460	------	765	632	------
TOTAL	27,061	25,004	37,087	94,980	77,260	66,580	42,410	29,862	10,183	14,166	18,421	19,743
MEAN	873	833	1,196	3,064	2,759	2,148	1,414	963	339	457	594	658
MAX	1,070	1,420	3,480	12,700	4,900	3,450	1,680	1,330	642	826	817	900
MIN	597	311	287	1,250	1,950	1,170	1,140	460	179	90	118	121
AC-FT	53,680	49,600	73,560	188,400	153,200	132,100	84,120	59,230	20,200	28,100	36,540	39,160

CAL YR 1972 TOTAL 327,542 MEAN 895 MAX 3,480 MIN 136 AC-FT 649,700
WTR YR 1973 TOTAL 462,757 MEAN 1,268 MAX 12,700 MIN 90 AC-FT 917,900

11433800 NORTH FORK AMERICAN RIVER BELOW AUBURN DAMSITE, NEAR AUBURN, CALIF.

LOCATION.--Lat 38°52'20", long 121°03'18", in SE¼SW¼ sec.23, T.12 N., R.8 E., Placer County, on right bank 1,080 ft upstream from Knickerbocker Creek, and 2.0 miles southeast of Auburn.

DRAINAGE AREA.--973 sq mi.

PERIOD OF RECORD.--May 1972 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum discharge, 33,800 cfs Jan. 12 (gage height, 79.25 ft); minimum daily, 190 cfs Sept. 2.
Period of record: Maximum discharge, 33,800 cfs Jan. 12, 1973 (gage height, 79.25 ft); minimum daily, 175 cfs Sept. 4, 1972.

REMARKS.--Records good. Natural flow of stream affected by many reservoirs and diversions (see REMARKS for sta 11427000, 11433500).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	849	884	846	2,070	4,100	6,490	2,340	2,890	2,180	380	657	566
2	898	877	632	2,030	4,170	5,940	2,150	2,830	1,790	357	805	190
3	912	996	408	2,100	3,910	5,350	2,030	3,000	1,510	359	575	246
4	964	2,030	870	2,000	4,720	5,350	1,990	3,020	1,390	339	674	646
5	856	1,780	1,030	1,920	4,750	4,910	2,070	2,550	1,310	325	414	668
6	828	1,160	1,020	1,900	4,690	4,760	2,390	2,210	1,240	403	315	739
7	640	1,420	1,010	1,860	5,560	4,500	2,700	2,250	1,160	309	899	931
8	1,120	1,480	969	1,870	5,540	4,310	2,550	2,540	1,060	301	934	907
9	1,200	1,390	751	2,670	5,090	3,990	2,690	2,650	1,130	476	641	793
10	1,120	1,320	758	3,640	7,000	3,860	2,960	2,730	980	710	798	781
11	1,240	1,480	814	4,740	9,160	4,660	3,220	3,230	896	957	752	727
12	1,340	919	842	24,400	8,150	4,220	3,320	3,630	836	835	858	691
13	1,250	889	821	11,900	6,710	3,880	3,460	3,850	741	958	851	769
14	1,240	2,140	808	7,280	6,300	3,640	3,080	4,160	727	833	709	799
15	1,010	2,230	821	5,630	5,940	3,430	2,760	4,070	670	204	745	775
16	1,300	2,490	681	15,900	5,340	3,280	2,600	3,920	638	195	736	468
17	1,060	2,080	2,270	11,900	4,920	3,240	2,570	4,160	594	660	766	658
18	1,030	1,590	4,480	10,700	4,650	3,140	2,690	4,000	586	786	698	703
19	1,000	1,080	6,920	9,120	4,430	3,050	2,460	3,390	592	774	581	614
20	1,060	1,680	4,820	7,040	4,250	3,100	2,320	3,110	618	771	659	769
21	964	980	3,610	6,080	4,130	2,920	2,270	2,600	919	541	724	769
22	919	1,180	4,720	5,340	4,000	2,850	2,380	2,450	776	234	848	751
23	1,040	1,140	4,120	4,780	3,880	2,790	2,600	2,340	489	388	815	787
24	1,010	972	3,390	4,470	3,950	2,370	2,930	2,260	534	873	842	727
25	1,000	660	2,970	4,440	4,210	2,200	3,130	2,480	599	915	408	817
26	933	457	2,710	4,230	4,320	2,150	3,460	2,210	517	842	207	805
27	870	730	2,570	4,080	5,510	2,190	3,890	1,860	577	895	210	686
28	863	926	2,500	3,900	7,870	2,310	3,970	1,860	447	688	835	906
29	940	891	2,170	3,860	------	2,150	3,690	2,120	429	299	847	829
30	877	863	2,150	4,250	------	2,110	3,300	2,100	395	703	691	490
31	863	------	2,150	4,260	------	2,390	------	1,900	------	863	685	------
TOTAL	31,196	38,714	64,631	180,360	147,250	111,530	83,970	88,370	26,330	18,173	21,082	21,119
MEAN	1,006	1,290	2,085	5,818	5,259	3,598	2,799	2,851	878	586	680	704
MAX	1,340	2,490	6,920	24,400	9,160	6,490	3,970	4,160	2,180	958	934	931
MIN	640	457	408	1,860	3,880	2,110	1,990	1,860	395	195	207	190
AC-FT	61,880	76,790	128,200	357,700	292,100	221,200	166,600	175,300	52,230	36,050	41,820	41,890

CAL YR 1972	TOTAL	--	MEAN	--	MAX	--	MIN	--	AC-FT	--		
WTR YR 1973	TOTAL	832,725	MEAN	2,281	MAX	24,400	MIN	190	AC-FT	1,652,000		

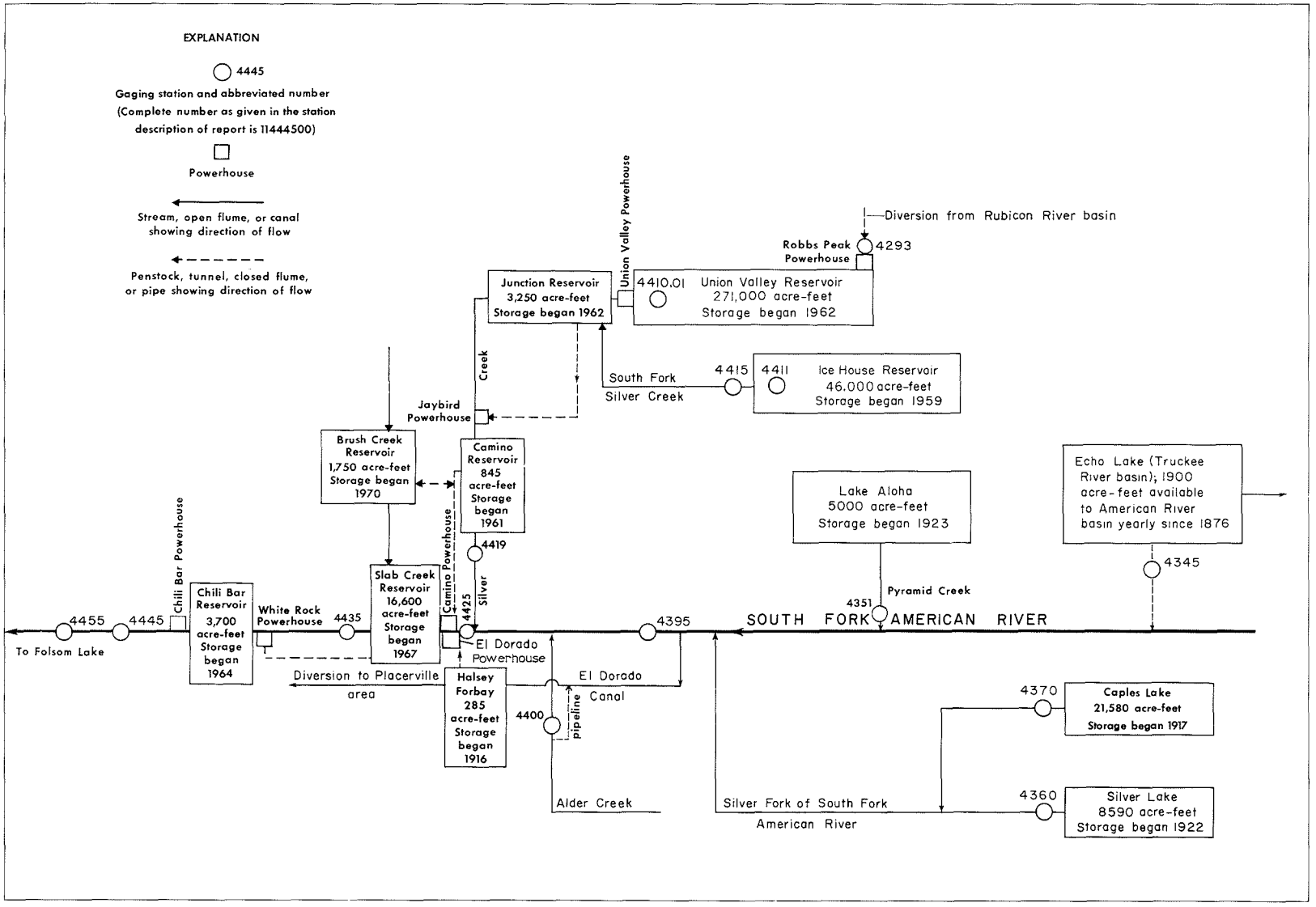

FIGURE 17.--Schematic diagram showing diversions and storage in South Fork American River basin.

11434500 ECHO LAKE CONDUIT NEAR PHILLIPS, CALIF.

LOCATION.--Lat 38°49'52", long 120°02'12", in NW¼ sec.6, T.11 N., R.18 E., El Dorado County, Eldorado National Forest, on right bank in Berkeley Municipal Camp, 0.5 mile downstream from intake, and 2.4 miles northeast of Phillips.

PERIOD OF RECORD.--August 1923 to current year (diversion seasons only). Monthly discharge only for July 1933, published in WSP 1315-A. Published as Echo Lake flume near Vade prior to 1943 and as Echo Lake conduit near Vade for seasons 1944-53.

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (from topographic map). Prior to July 16, 1929, nonrecording gage at site 0.4 mile upstream at different datum.

EXTREMES.--Period of record: Maximum daily discharge, 31 cfs Sept. 10, 1963, Sept. 13-15, 1971; no flow most of each year.

REMARKS.--No flow except during diversion season for which discharge is published. Conduit diverts from Echo Lake (capacity, 1,900 acre-ft) in Truckee River basin into basin of South Fork American River for power and irrigation. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, SEPTEMBER TO NOVEMBER 1973

DAY	SEP	OCT	NOV
1	0	14	5.8
2	0	12	5.3
3	0	11	4.5
4	16	10	4.2
5	11	9.2	4.7
6	0	8.3	6.5
7	0	3.4	9.5
8	0	0	14
9	0	0	14
10	14	0	14
11	25	0	19
12	26	0	19
13	26	0	11
14	26	0	8.8
15	26	0	7.8
16	26	0	5.3
17	25	0	4.0
18	25	3.2	2.4
19	25	9.5	2.1
20	24	8.8	2.5
21	23	8.3	3.0
22	23	7.6	2.1
23	23	8.7	1.7
24	22	8.6	3.4
25	21	8.4	1.8
26	20	8.0	2.0
27	19	7.6	3.4
28	18	7.2	1.6
29	17	6.7	.51
30	15	6.2	0
31	------	5.9	------
TOTAL	496	172.6	183.91
MEAN	16.5	5.57	6.13
MAX	26	14	19
MIN	0	0	0
AC-FT	984	342	365

11435100 PYRAMID CREEK AT TWIN BRIDGES, CALIF.

LOCATION.--Lat 38°48'57", long 120°06'58", in NW¼SW¼ sec.9, T.11 N., R.17 E., El Dorado County, Eldorado National Forest, on right bank 0.5 mile northeast of Twin Bridges, and 2.2 miles west of Phillips.

DRAINAGE AREA.--8.76 sq mi.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,320 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 262 cfs May 17 (gage height, 2.94 ft); minimum daily, 1.9 cfs Sept. 19.
Period of record: Maximum discharge, 858 cfs June 26, 1971 (gage height, 4.62 ft), from rating curve extended above 150 cfs; minimum daily, 0.22 cfs Sept. 25, 1972.

REMARKS.--Flow regulated by Lake Aloha (capacity, 5,000 acre-ft); no contents Sept. 30, 1971, and Sept. 30, 1972. Lake of the Woods, Ropi Lake, and Toem Lakes (unknown capacities) are also regulated at times. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	3.9	11	13	13	13	13	103	169	25	69	43
2	9.7	3.9	11	12	13	12	12	115	148	23	68	40
3	10	4.0	9.9	11	13	12	12	120	141	23	67	36
4	7.6	30	13	11	13	12	13	105	141	22	67	33
5	6.0	27	12	11	13	12	18	86	137	22	69	26
6	4.9	19	12	11	12	11	26	86	138	22	67	16
7	4.5	15	12	11	12	11	27	107	131	20	66	11
8	4.7	15	12	11	12	11	27	124	139	17	64	7.4
9	4.7	12	13	12	12	11	34	131	142	16	62	5.7
10	6.9	11	16	14	14	11	34	150	129	16	62	4.7
11	11	12	13	16	16	12	37	163	124	19	61	4.2
12	10	11	13	35	14	11	39	174	115	35	59	3.7
13	7.5	10	13	37	13	11	33	175	102	52	58	3.3
14	6.3	14	14	28	12	11	25	183	85	53	58	3.0
15	7.4	13	13	22	12	11	23	187	73	51	57	2.7
16	12	12	15	20	11	11	21	204	49	50	55	2.4
17	18	11	21	20	12	11	22	208	43	49	54	2.2
18	29	11	66	15	12	12	20	192	41	47	52	2.0
19	23	11	148	16	12	11	19	184	40	48	30	1.9
20	20	11	58	18	12	11	18	167	43	61	13	2.0
21	16	11	43	16	12	11	20	156	49	60	9.9	2.2
22	11	9.9	46	15	12	11	30	158	52	59	9.4	2.2
23	8.7	11	29	14	12	11	46	176	44	61	9.2	2.9
24	7.2	9.5	24	14	12	12	60	183	38	76	9.3	3.3
25	6.0	12	20	14	12	14	120	166	40	75	10	3.7
26	5.5	15	19	15	12	15	131	133	43	75	51	3.3
27	5.1	14	18	14	12	17	143	144	43	74	59	2.9
28	4.6	12	16	13	13	14	142	169	40	75	53	2.6
29	4.3	12	15	13	------	13	115	185	39	73	51	2.4
30	3.9	11	15	14	------	13	99	176	32	72	48	2.2
31	3.6	------	14	14	------	13	------	163	------	70	45	------
TOTAL	285.7	374.2	754.9	500	350	372	1,379	4,773	2,550	1,441	1,512.8	277.9
MEAN	9.22	12.5	24.4	16.1	12.5	12.0	46.0	154	85.0	46.5	48.8	9.26
MAX	29	30	148	37	16	17	143	208	169	76	69	43
MIN	3.6	3.9	9.9	11	11	11	12	86	32	16	9.2	1.9
AC-FT	567	742	1,500	992	694	738	2,740	9,470	5,060	2,860	3,000	551

CAL YR 1972 TOTAL 12,888.00 MEAN 35.2 MAX 150 MIN .22 AC-FT 25,560
WTR YR 1973 TOTAL 14,570.50 MEAN 39.9 MAX 208 MIN 1.9 AC-FT 28,900

11436000 SILVER LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.--Lat 38°40'17", long 120°07'18", in SW¼ sec.32, T.10 N., R.17 E., Amador County, Eldorado National Forest, on right bank 1,000 ft downstream from Silver Lake Dam, and 3.5 miles southwest of Kirkwood.

DRAINAGE AREA.--15.2 sq mi.

PERIOD OF RECORD.--September 1922 to current year. Records for water year 1923 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 7,199.5 ft above mean sea level, unadjusted.

AVERAGE DISCHARGE.--51 years, 34.3 cfs (24,850 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 388 cfs May 18 (gage height, 3.99 ft); minimum daily, 2.0 cfs Oct. 12.
Period of record: Maximum discharge, 676 cfs Nov. 21, 1950 (gage height, 6.03 ft), from rating curve extended above 290 cfs; no flow many days in February, March 1948, Jan. 13, 14, 1954, Nov. 3, 1959, to Feb. 5, 1960.

REMARKS.--Flow regulated by Silver Lake 1,000 ft upstream (capacity, 3,840 acre-ft at spillway level and 8,590 acre-ft with 11 ft of flashboards); contents in Silver Lake, 2,250 acre-ft Sept. 30, 1972, and 2,280 acre-ft Sept. 30, 1973. Some water, in addition to that released through dam and over spillway, escapes from Silver Lake through porous rock formation. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	23	7.5	3.3	4.3	4.3	4.6	92	281	5.6	3.5	3.8
2	2.4	21	7.4	3.3	4.3	4.3	4.6	97	264	3.8	3.7	3.6
3	2.3	19	7.4	3.3	4.3	4.3	4.6	115	237	3.6	4.1	3.5
4	2.3	19	7.4	3.3	4.3	4.3	4.7	124	181	3.5	4.3	24
5	2.2	19	7.4	11	4.3	4.3	4.9	115	127	3.4	3.6	68
6	2.2	18	7.4	23	4.3	4.3	4.9	98	104	3.3	3.4	81
7	2.2	17	7.4	23	4.3	4.3	4.9	93	112	3.3	3.3	83
8	2.1	16	7.4	23	4.3	4.3	4.9	112	118	3.2	3.6	81
9	2.1	14	7.4	23	4.3	4.3	5.1	137	127	4.1	3.8	80
10	2.1	12	7.4	23	4.3	4.3	5.2	161	131	4.1	3.8	79
11	2.1	11	7.4	16	4.3	4.3	5.3	163	116	3.3	3.6	77
12	2.0	10	7.4	3.9	4.3	4.3	5.6	184	100	3.8	3.5	76
13	16	10	7.4	3.9	4.3	4.3	6.1	229	53	4.5	3.4	74
14	45	11	7.4	3.9	4.3	4.3	9.6	261	15	3.9	3.8	72
15	43	12	7.4	3.9	4.3	4.3	22	281	20	3.8	4.1	69
16	42	12	7.4	3.9	4.3	4.3	22	300	19	3.8	3.5	67
17	41	11	7.4	4.0	4.3	4.3	3.5	318	19	3.6	3.9	65
18	40	9.9	9.0	4.1	4.3	4.3	3.5	352	22	3.5	4.1	63
19	39	9.5	10	4.2	4.3	4.3	3.5	378	25	3.5	4.0	62
20	39	8.9	11	4.3	4.3	4.3	3.4	361	32	3.5	3.9	61
21	38	8.4	11	4.3	4.3	4.3	3.3	331	39	3.5	3.8	60
22	37	7.7	11	4.3	4.3	4.3	3.5	308	38	3.5	3.8	59
23	36	7.5	11	4.3	4.3	4.3	3.5	299	34	3.6	3.7	58
24	35	7.2	11	4.3	4.3	4.3	3.7	297	30	3.4	3.6	56
25	33	6.8	11	4.3	4.3	4.3	4.0	261	23	3.2	3.5	55
26	32	6.9	11	4.3	4.3	4.3	4.3	201	19	3.0	3.6	54
27	31	7.2	11	4.3	4.3	4.3	17	167	19	3.1	3.4	52
28	30	7.5	11	4.3	4.3	4.4	63	187	19	3.4	3.3	51
29	28	7.6	7.4	4.3	------	4.6	94	218	18	3.1	3.3	50
30	26	7.6	3.1	4.3	------	4.6	96	272	11	3.4	3.2	48
31	24	------	3.2	4.3	------	4.6	------	284	------	3.9	3.3	------
TOTAL	702.0	357.7	257.6	238.6	120.4	134.3	425.2	6,796	2,353	112.2	113.4	1,735.9
MEAN	22.6	11.9	8.31	7.70	4.30	4.33	14.2	219	78.4	3.62	3.66	57.9
MAX	45	23	11	23	4.3	4.6	96	378	281	5.6	4.3	83
MIN	2.0	6.8	3.1	3.3	4.3	4.3	3.3	92	11	3.0	3.2	3.5
AC-FT	1,390	709	511	473	239	266	843	13,480	4,670	223	225	3,440

CAL YR 1972 TOTAL 9,850.43 MEAN 26.9 MAX 183 MIN .53 AC-FT 19,540
WTR YR 1973 TOTAL 13,346.30 MEAN 36.6 MAX 378 MIN 2.0 AC-FT 26,470

11437000 CAPLES LAKE OUTLET NEAR KIRKWOOD, CALIF.

LOCATION.--Lat 38°42'29", long 120°03'00", in SW¼SW¼ sec.18, T.10 N., R.18 E., Alpine County, Eldorado National Forest, on right bank 500 ft downstream from main dam and outlet gate of Twin Lakes, and 1.3 miles east of Kirkwood.

DRAINAGE AREA.--13.5 sq mi.

PERIOD OF RECORD.--September 1922 to current year. Records for water year 1945 incomplete, yearly estimate published in WSP 1315-A. Prior to October 1969, published as Twin Lakes Outlet near Kirkwood.

GAGE.--Water-stage recorder and concrete control for outlet, and water-stage recorder for spillway. Altitude of gage is 7,700 ft (from topographic map).

AVERAGE DISCHARGE (including flow over Caples Lake spillway).--51 years, 36.8 cfs (26,660 acre-ft per year).

EXTREMES.--Current year: Maximum combined daily discharge for outlet and spillway, 288 cfs June 2; minimum daily, 4.0 cfs Oct. 3-12.
Period of record: Maximum combined daily discharge for outlet and spillway, 669 cfs June 3, 1969; minimum daily, 0.1 cfs Mar. 25-31, 1944, Nov. 27, 28, 1956.

REMARKS.--Flow regulated by Caples Lake 500 ft upstream (capacity, 19,750 acre-ft spillway level, 21,580 acre-ft with 3 ft of flashboards), contents of which were 13,900 acre-ft on Sept. 30, 1972, and 14,800 acre-ft on Sept. 30, 1973. Flow over Caples Lake spillway occurred May 25 to July 28 and is included in table below. No diversion above station. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	112	57	5.5	5.5	5.1	8.1	6.6	279	50	37	75
2	4.3	110	56	5.5	5.5	5.4	8.5	7.0	288	37	39	78
3	4.0	110	56	5.5	5.5	5.5	6.3	7.0	285	33	44	86
4	4.0	82	56	5.5	5.5	5.5	6.5	6.8	252	33	43	54
5	4.0	56	56	5.5	5.5	5.5	8.1	6.8	201	31	42	11
6	4.0	56	55	5.5	5.5	5.5	8.3	7.0	182	33	41	22
7	4.0	62	55	5.5	5.5	5.5	5.9	7.1	163	35	44	37
8	4.0	71	55	5.8	5.5	5.5	6.1	7.7	151	35	50	46
9	4.0	73	55	5.9	5.5	5.8	6.1	7.8	154	35	51	45
10	4.0	81	54	5.9	5.5	5.9	6.2	7.6	157	31	56	37
11	4.0	87	54	5.9	5.5	6.1	6.1	7.1	169	26	60	26
12	4.0	86	54	5.9	5.5	5.4	6.0	7.2	170	22	58	30
13	5.6	86	54	5.9	5.5	5.5	5.8	7.3	116	17	62	35
14	8.6	86	53	5.9	5.5	5.2	5.5	7.3	76	16	66	40
15	8.6	85	53	5.9	5.5	5.3	5.5	7.5	43	17	65	45
16	8.7	78	53	5.9	5.5	5.5	5.5	7.5	18	17	67	45
17	6.8	71	27	5.9	5.5	5.5	5.5	7.8	20	18	72	49
18	4.9	71	5.9	5.9	5.5	5.5	5.5	8.1	88	21	62	52
19	21	71	6.1	5.9	5.8	5.5	5.5	8.0	91	20	5.7	52
20	35	77	5.9	5.6	5.9	5.5	5.5	8.0	52	20	5.5	49
21	35	84	5.9	5.8	6.1	5.5	5.6	8.1	60	23	5.3	56
22	57	89	5.9	5.8	6.5	5.5	6.1	8.1	74	22	5.1	58
23	77	92	5.9	5.9	6.1	5.5	6.2	9.1	82	18	4.9	58
24	83	96	5.7	5.9	5.1	5.5	6.3	13	82	12	24	58
25	88	102	5.5	5.9	5.1	5.5	6.5	92	82	17	73	57
26	94	101	5.5	5.7	5.1	5.7	6.6	143	79	21	72	60
27	98	72	5.5	5.5	5.1	6.1	6.7	144	86	26	40	64
28	98	47	5.5	5.5	5.1	6.9	6.7	148	95	32	35	70
29	98	52	5.5	5.5	------	6.2	6.4	154	93	31	62	77
30	106	57	5.5	5.5	------	6.5	6.3	221	69	30	68	76
31	113	------	5.5	5.5	------	7.4	------	261	------	33	75	------
TOTAL	1,094.8	2,403	982.8	177.3	154.9	176.5	189.9	1,348.5	3,757	812	1,434.5	1,548
MEAN	35.3	80.1	31.7	5.72	5.53	5.69	6.33	43.5	125	26.2	46.3	51.6
MAX	113	112	57	5.9	6.5	7.4	8.5	261	288	50	75	86
MIN	4.0	47	5.5	5.5	5.1	5.1	5.5	6.6	18	12	4.9	11
AC-FT	2,170	4,770	1,950	352	307	350	377	2,670	7,450	1,610	2,850	3,070

CAL YR 1972 TOTAL 9,631.1 MEAN 26.3 MAX 113 MIN 1.5 AC-FT 19,100
WTR YR 1973 TOTAL 14,079.2 MEAN 38.6 MAX 288 MIN 4.0 AC-FT 27,930

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°45'49", long 120°19'39", in SW¼SW¼ sec.29, T.11 N., R.15 E., El Dorado County, Eldorado National Forest, 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.

PERIOD OF RECORD.--August to December 1907, October 1922 to current year. Prior to October 1956, records for river and El Dorado Canal published separately; combined flow only, October 1956 to September 1960.

GAGE.--Water-stage recorder on river; water-stage recorder for canal diversion. Altitude of gage is 3,840 ft (from topographic map). Prior to Oct. 1, 1962, at datum 1.00 ft higher.

AVERAGE DISCHARGE (River only).--51 years (1922-73), 290 cfs (210,100 acre-ft per year).
(Combined river and diversion).--51 years (1922-73), 405 cfs (293,400 acre-ft per year).

EXTREMES (River only).--Current year: Maximum discharge, 4,130 cfs May 16 (gage height, 7.25 ft); minimum daily, 4.4 cfs Sept. 22, 24-30.
Period of record: Maximum discharge, 17,400 cfs Dec. 23, 1964 (gage height, 10.92 ft), from rating curve extended above 6,300 cfs on basis of contracted-opening measurement at gage height 10.40 ft; minimum daily, 0.3 cfs Nov. 9-11, 1928.
(Combined flow).--Current year: Maximum discharge, 4,280 cfs May 16; minimum daily, 31 cfs Oct. 6-9.
Period of record: Maximum discharge, 17,500 cfs Dec. 23, 1964; minimum daily, 10 cfs Oct. 17, 19, 1929.

REMARKS.--Flow at low and medium stages greatly regulated by four reservoirs since beginning of record (total usable capacity, 37,100 acre-ft). See schematic diagram of South Fork American River basin. For records of combined discharge of river and canal, see following page. Records of water temperatures for the current year are published in Part 2 of this report.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1445: 1923(M), 1925(M), 1927(M), 1928 (river only), 1935-37(M). WSP 1515: 1928 (combined). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	11	5.4	5.2	24	106	83	1,030	2,010	78	5.8	8.1
2	37	9.1	5.4	5.4	25	92	70	1,190	1,760	53	5.8	7.9
3	47	8.0	5.7	5.4	26	86	66	1,310	1,580	33	7.0	7.9
4	38	98	5.9	4.9	28	79	77	1,180	1,440	26	8.5	7.6
5	33	40	5.5	5.0	22	66	122	865	1,330	19	8.4	8.1
6	31	8.9	5.5	5.0	26	64	229	765	1,240	12	10	7.9
7	31	6.2	5.5	8.0	31	56	322	1,010	1,180	8.5	8.3	7.4
8	31	5.9	5.5	15	26	53	312	1,260	1,140	5.6	8.4	7.4
9	31	5.6	5.6	25	24	47	438	1,410	1,110	5.4	8.3	7.4
10	34	5.8	6.0	13	41	56	475	1,590	1,030	5.5	8.4	7.1
11	41	6.1	6.5	73	46	71	542	1,890	927	5.5	8.3	7.4
12	42	5.6	7.1	702	39	57	597	2,110	851	5.5	8.4	6.5
13	34	5.9	7.9	478	33	54	581	2,360	715	5.7	8.3	4.9
14	19	17	9.0	239	33	46	417	2,610	462	5.6	8.4	4.9
15	11	13	12	167	26	44	411	2,600	396	7.7	8.4	4.9
16	10	13	15	359	23	53	365	2,870	291	5.9	8.3	4.7
17	27	6.0	648	277	23	64	380	2,860	252	5.8	8.3	4.7
18	37	5.6	531	198	28	55	386	2,800	248	5.8	64	4.7
19	7.4	5.7	744	149	29	59	344	2,700	320	5.8	105	4.5
20	11	5.4	343	121	33	61	325	2,340	251	5.7	54	4.5
21	7.2	6.0	178	109	37	52	337	2,050	252	5.7	45	4.7
22	7.1	6.5	294	86	33	46	462	1,920	267	5.7	43	4.4
23	7.7	7.0	145	78	34	47	702	1,960	255	5.8	42	4.5
24	7.3	7.8	91	60	43	57	875	1,890	215	5.7	37	4.4
25	7.5	10	56	51	40	85	1,050	1,770	201	5.7	9.3	4.4
26	7.4	16	38	41	53	112	1,280	1,570	186	5.8	20	4.4
27	8.6	18	26	43	72	150	1,420	1,540	188	5.9	50	4.4
28	7.9	5.4	17	35	110	117	1,490	1,760	178	5.8	8.7	4.4
29	7.4	5.4	8.1	37	------	90	1,320	1,940	167	5.8	10	4.4
30	7.5	5.4	6.2	39	------	83	1,090	1,940	130	5.8	8.1	4.4
31	9.6	------	5.5	31	------	81	------	1,920	------	5.8	8.1	------
TOTAL	644.5	369.3	3,244.3	3,464.9	1,008	2,189	16,568	57,010	20,572	368.5	641.5	172.9
MEAN	20.8	12.3	105	112	36.0	70.6	552	1,839	686	11.9	20.7	5.76
MAX	47	98	744	702	110	150	1,490	2,870	2,010	78	105	8.1
MIN	6.9	5.4	5.4	4.9	22	44	66	765	130	5.4	5.8	4.4
AC-FT	1,280	733	6,440	6,870	2,000	4,340	32,860	113,100	40,800	731	1,270	343

CAL YR 1972 TOTAL 73,464.9 MEAN 201 MAX 1,270 MIN 5.1 AC-FT 145,700
WTR YR 1973 TOTAL 106,252.9 MEAN 291 MAX 2,870 MIN 4.4 AC-FT 210,800

PEAK DISCHARGE (BASE, 2,000 CFS).--May 16 (1930) 4,130 cfs (7.25 ft); June 1 (2015) 2,300 cfs (6.04 ft).

11439500 SOUTH FORK AMERICAN RIVER NEAR KYBURZ, CALIF.--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SOUTH FORK AMERICAN RIVER AND EL DORADO CANAL NEAR KYBURZ, CALIF., WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	175	126	130	164	246	230	1,180	2,160	243	158	157
2	43	173	125	137	165	231	216	1,340	1,910	216	155	152
3	47	171	129	125	166	226	213	1,460	1,730	198	160	158
4	38	262	139	117	168	219	224	1,330	1,590	191	160	155
5	33	204	122	131	162	206	269	1,010	1,480	184	158	160
6	31	162	134	159	166	204	376	911	1,390	177	167	145
7	31	152	132	160	171	196	469	1,160	1,330	174	154	146
8	31	161	143	158	167	193	459	1,410	1,290	166	159	158
9	31	153	144	152	165	187	585	1,560	1,260	159	159	153
10	34	155	144	145	181	197	622	1,740	1,180	156	156	150
11	41	168	119	206	186	211	689	2,040	1,070	142	165	146
12	42	160	131	831	179	198	744	2,260	998	150	160	151
13	34	163	136	606	173	195	724	2,510	862	161	156	155
14	83	181	145	368	173	187	556	2,760	620	168	163	153
15	110	177	142	294	166	185	551	2,750	561	170	162	159
16	112	177	125	480	163	194	505	3,020	456	165	158	156
17	126	157	764	397	164	205	520	3,010	417	159	161	153
18	149	153	671	318	168	196	526	2,950	413	154	155	159
19	138	153	898	270	169	200	484	2,850	485	149	110	157
20	169	143	496	242	173	202	465	2,490	416	154	59	157
21	154	155	328	230	177	192	477	2,200	417	157	50	153
22	140	161	446	206	173	187	602	2,070	432	154	48	158
23	172	157	291	201	175	188	842	2,110	420	150	47	162
24	167	161	235	194	183	198	1,020	2,040	380	155	48	159
25	171	172	199	191	180	225	1,190	1,920	366	152	88	155
26	167	180	185	181	193	253	1,430	1,720	351	154	151	149
27	173	180	176	183	212	291	1,570	1,690	353	154	215	153
28	171	123	165	174	250	257	1,640	1,910	343	161	127	150
29	164	120	142	177	------	234	1,470	2,090	332	163	145	159
30	159	125	145	179	------	230	1,240	2,090	295	157	150	155
31	174	------	127	171	------	228	------	2,070	------	155	159	------
TOTAL	3,242	4,934	7,404	7,513	4,932	6,561	20,908	61,651	25,307	5,148	4,263	4,633
MEAN	105	164	239	242	176	212	697	1,989	844	166	138	154
MAX	174	262	898	831	250	291	1,640	3,020	2,160	243	215	162
MIN	31	120	119	117	162	185	213	911	295	142	47	145
AC-FT	6,430	9,790	14,690	14,900	9,780	13,010	41,470	122,300	50,200	10,210	8,460	9,190

CAL YR 1972 TOTAL 122,492 MEAN 335 MAX 1,420 MIN 31 AC-FT 243,000
WTR YR 1973 TOTAL 156,496 MEAN 429 MAX 3,020 MIN 31 AC-FT 310,400

11440000 ALDER CREEK NEAR WHITE HALL, CALIF.

LOCATION.--Lat 38°45'19", long 120°22'17", in NE¼SE¼ sec.35, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on right bank 0.9 mile upstream from mouth, and 2.2 miles southeast of White Hall.

DRAINAGE AREA.--22.1 sq mi.

PERIOD OF RECORD.--October 1922 to current year (includes diversions by pipeline).

GAGE.--Water-stage recorder. Broad-crested weir with V-notch since Aug. 28, 1964. Altitude of gage is 3,840 ft (from topographic map). Prior to July 23, 1924, nonrecording gage at same site and datum.

AVERAGE DISCHARGE (including diversions by pipeline).--51 years, 37.5 cfs (27,170 acre-ft per year).

EXTREMES (Creek only).--Current year: Maximum discharge, 425 cfs occurred during period Jan. 11-16 (gage height, 3.95 ft, from peak-stage indicator); minimum daily, 0.02 cfs Oct. 26-31.
Period of record: Maximum discharge, 5,500 cfs Dec. 23, 1955 (gage height, 8.40 ft, from floodmarks), from rating curve extended above 600 cfs; no flow at times in several years.

REMARKS.--Records include flow diverted 1,300 ft above station by pipeline into El Dorado Canal from Oct. 14 to June 14.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS (WATER YEARS).--WSP 1215: 1928(M). WSP 1445: 1925(M), 1929, 1935-36(M), 1938(M), 1940-43(M), 1945(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.4	4.1	11	33	49	54	148	46	6.0	1.1	.74
2	7.3	1.4	4.2	16	32	45	50	145	38	5.8	1.1	.72
3	3.3	1.4	4.2	14	30	44	49	147	33	5.3	1.1	.72
4	1.6	15	7.9	5.7	29	44	53	149	30	4.9	1.1	.70
5	1.2	8.9	7.8	6.1	30	44	62	130	28	4.6	1.1	.69
6	1.1	6.0	6.1	6.1	29	46	77	118	26	4.2	1.1	.69
7	1.1	5.1	4.4	7.9	29	48	89	121	24	4.0	1.1	.69
8	1.1	5.9	4.2	14	32	50	95	128	22	3.8	1.1	.69
9	1.2	4.3	4.2	14	34	47	110	135	21	3.6	1.1	.69
10	2.4	5.0	4.2	14	34	47	120	143	17	2.8	1.1	.69
11	3.6	5.2	4.2	62	33	53	131	159	16	2.7	1.1	.67
12	2.1	4.9	4.1	125	33	52	142	174	14	2.5	1.1	.64
13	1.5	4.1	4.2	105	33	50	153	176	14	2.5	1.1	.68
14	1.6	11	4.4	95	32	47	138	181	13	2.4	1.0	.67
15	1.5	8.9	5.2	115	32	45	136	180	12	2.3	1.0	.70
16	1.5	8.7	15	125	32	45	126	181	11	2.2	1.0	.74
17	1.7	8.7	57	110	29	47	125	176	11	2.1	.98	.67
18	2.3	6.0	51	105	29	46	133	158	10	2.0	.96	.70
19	1.9	6.1	67	124	29	45	122	137	9.8	1.9	.94	.70
20	2.1	5.9	48	98	30	46	115	118	9.3	1.8	.92	.47
21	1.9	5.7	36	82	31	43	109	103	8.9	1.7	.90	.42
22	1.8	5.1	69	73	31	39	110	93	8.6	1.6	.90	.37
23	1.5	5.0	51	67	33	38	123	86	8.3	1.5	.88	.33
24	1.5	4.9	37	60	35	41	141	80	8.1	1.5	.86	.32
25	1.4	4.9	30	53	39	45	155	75	7.7	1.4	.84	.31
26	1.4	4.8	26	48	41	52	178	65	7.5	1.4	.82	.34
27	1.4	4.8	23	45	43	63	197	58	7.3	1.3	.82	.42
28	1.4	4.9	22	40	50	61	202	53	7.2	1.3	.80	.51
29	1.4	4.3	18	38	------	56	187	50	6.6	1.2	.78	.54
30	1.4	4.1	17	40	------	54	167	46	6.2	1.1	.76	.54
31	1.4	------	16	35	------	53	------	47	------	1.1	.76	------
TOTAL	59.6	172.4	656.4	1,753.8	927	1,485	3,649	3,760	481.5	82.5	30.22	17.76
MEAN	1.92	5.75	21.2	56.6	33.1	47.9	122	121	16.1	2.66	.97	.59
MAX	7.3	15	69	125	50	63	202	181	46	6.0	1.1	.74
MIN	1.1	1.4	4.1	5.7	29	38	49	46	6.2	1.1	.76	.31
AC-FT	118	342	1,300	3,480	1,840	2,950	7,240	7,460	955	164	60	35

CAL YR 1972 TOTAL 10,081.95 MEAN 27.5 MAX 159 MIN .41 AC-FT 20,000
WTR YR 1973 TOTAL 13,075.18 MEAN 35.8 MAX 202 MIN .31 AC-FT 25,930

PEAK DISCHARGE (BASE, 170 CFS, CREEK ONLY)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
(a)	unknown	3.95	425	5-14	1915	3.37	225
4-27	1945	3.32	210				

a Occurred during period Jan. 11-16.
NOTE.--No gage-height record Jan. 11-20, July 13 to Sept. 10.

11441001 UNION VALLEY RESERVOIR NEAR RIVERTON, CALIF.

LOCATION.--Lat 38°51'49", long 120°26'15", in NW¼NW¼ sec.29, T.12 N., R.14 E., El Dorado County, Eldorado National Forest, in valve control house near left bank at Union Valley Dam on Silver Creek, 0.7 mile upstream from Little Silver Creek, and 6.6 miles north of Riverton.

DRAINAGE AREA.--83.6 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 262,600 acre-ft June 12 (elevation, 4,866.9 ft); minimum, 134,800 acre-ft Dec. 16 (elevation, 4,809.9 ft).
Period of record: Maximum contents, 271,000 acre-ft June 26, 1971 (elevation, 4,870.0 ft); minimum since reservoir first filled, 90,900 acre-ft Jan. 27, 1967 (elevation, 4,782.1 ft).

REMARKS.--Reservoir is formed by earthfill dam completed in December 1962. Storage began in May 1962. Usable capacity, 264,000 acre-ft between elevations 4,645.0 ft (minimum operating level) and 4,870.0 ft (top of radial spillway gates) above mean sea level. Dead storage, 7,000 acre-ft. Reservoir receives water from the South Fork Rubicon River via Robbs Peak powerplant (see sta 11429800). Water is used for power development in the South Fork American River basin. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of Middle Fork American and Rubicon River basins and South Fork American River basin.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

4,700	25,000	4,800	117,000
4,720	35,000	4,820	153,000
4,740	48,000	4,840	196,000
4,760	65,000	4,870	271,000
4,780	88,000		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161,400	151,200	146,500	141,800	152,500	159,700	143,600	189,600	257,200	252,600	228,700	210,300
2	161,400	150,800	145,800	141,300	152,800	159,700	143,600	191,600	258,000	251,600	227,600	210,300
3	161,400	150,500	146,300	140,900	153,400	159,300	143,800	193,800	259,700	250,800	226,600	210,100
4	161,400	151,600	146,000	140,200	153,600	160,100	143,600	196,000	259,900	251,000	225,800	209,400
5	160,800	152,100	145,100	139,500	153,800	160,400	143,500	197,300	260,500	249,900	225,800	208,800
6	160,400	151,700	144,500	139,100	154,000	159,700	144,000	198,900	260,500	249,100	225,000	208,300
7	159,700	151,700	143,600	139,000	155,100	158,700	144,900	200,000	260,700	249,700	224,500	207,700
8	159,700	151,400	142,600	138,200	155,900	158,200	146,200	202,200	261,000	248,900	223,700	207,000
9	159,100	151,200	141,700	137,900	157,000	157,200	147,400	204,400	261,300	247,000	223,200	207,000
10	158,500	151,000	141,500	137,200	158,500	156,600	149,000	206,800	262,100	245,600	222,700	205,700
11	158,000	150,800	140,200	138,200	159,300	157,400	150,800	209,900	262,400	244,500	221,900	204,400
12	157,200	150,800	139,300	143,300	160,600	156,800	153,000	212,700	262,600	243,200	221,900	203,300
13	156,600	150,800	138,200	146,200	161,000	155,700	155,100	216,000	262,100	242,200	220,900	202,200
14	155,900	150,700	137,000	147,800	160,400	154,700	155,900	220,100	261,600	240,900	220,100	201,100
15	155,900	150,700	135,700	147,800	160,100	153,600	157,600	223,200	261,000	240,600	219,600	200,000
16	155,300	150,800	134,800	150,300	159,900	152,300	158,900	226,800	260,500	239,300	219,000	200,000
17	154,700	150,300	137,300	151,600	159,900	151,400	159,700	230,500	261,000	237,800	218,500	199,500
18	154,900	150,100	138,800	152,100	160,100	151,900	160,800	233,600	259,900	236,200	217,800	198,900
19	155,100	149,800	141,800	152,500	160,100	151,400	161,600	236,200	259,400	234,600	217,600	198,400
20	155,100	149,600	142,600	152,300	159,500	150,500	162,400	238,800	258,800	232,800	216,900	197,800
21	154,700	149,000	142,600	152,600	159,300	149,000	163,300	240,400	257,500	231,500	216,200	196,700
22	154,900	148,900	143,600	152,100	158,900	147,400	164,600	241,400	257,000	231,000	215,600	196,000
23	154,900	148,900	143,500	151,600	158,500	146,000	167,300	243,200	256,400	230,200	214,900	196,000
24	154,300	148,700	144,500	151,600	158,500	144,400	170,000	244,500	256,700	230,200	214,300	195,100
25	153,600	148,100	144,900	151,600	159,300	144,700	172,700	245,900	255,900	230,000	213,600	194,200
26	154,000	148,300	144,400	151,400	159,700	144,700	176,200	247,800	255,600	230,000	213,600	193,400
27	154,000	148,900	144,200	151,600	159,900	144,700	179,700	249,400	254,800	229,700	212,700	192,500
28	152,800	148,100	143,600	151,900	159,900	144,500	183,000	251,600	254,000	229,400	212,500	191,600
29	152,800	147,800	143,100	152,100	------	144,200	185,700	252,600	252,900	229,200	211,800	190,900
30	152,300	147,400	142,200	152,300	------	143,800	187,900	253,700	252,400	228,900	211,400	190,900
31	151,700	------	142,200	152,300	------	142,900	------	255,600	------	228,900	211,000	------
MAX	161,400	152,100	146,500	152,600	161,000	160,400	187,900	255,600	262,600	252,600	228,700	210,300
MIN	151,700	147,400	134,800	137,200	152,500	142,900	143,500	189,600	252,400	228,900	211,000	190,900
(a)	4,819.3	4,816.9	4,814.0	4,819.6	4,823.3	4,814.4	4,836.3	4,864.3	4,863.1	4,854.2	4,846.8	4,837.7
(b)	-9,500	-4,300	-5,200	+10,100	+7,600	-17,000	+45,000	+67,700	-3,200	-23,500	-17,900	-20,100

CAL YR 1972 b -9,400
WTR YR 1973 b +29,700

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11441100 ICE HOUSE RESERVOIR NEAR KYBURZ, CALIF.

LOCATION.--Lat 38°49'26", long 120°21'34", in SE¼SW¼ sec.1, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on left bank at Ice House Dam on South Fork Silver Creek, 0.5 mile upstream from Peavine Creek, and 4.8 miles northwest of Kyburz.

DRAINAGE AREA.--27.2 sq mi.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Sacramento Municipal Utility District).

EXTREMES.--Current year: Maximum contents, 43,900 acre-ft June 1 (elevation, 5,447.2 ft); minimum, 19,600 acre-ft Dec. 15, 16 (elevation, 5,404.3 ft).
Period of record: Maximum contents, 46,400 acre-ft June 27, 1971 (elevation, 5,450.6 ft); minimum since reservoir first filled, 1,740 acre-ft Oct. 5-9, 1962 (elevation, 5,349.85 ft).

REMARKS.--Reservoir is formed by earthfill dam. Storage began Dec. 15, 1959. Usable capacity, 45,800 acre-ft between elevations 5,327.5 ft (centerline of fishwater outlet) and 5,450.0 ft (top of spillway gates). Dead storage, 160 acre-ft. Reservoir is used to store water for power development. Records, including extremes, represent total contents at 2400 hours. See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 1931, WRD Calif. 1967: 1960. WRD Calif. 1970: 1969.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

5,349	1,600	5,400	17,600
5,350	1,760	5,420	27,400
5,360	3,840	5,450	46,000
5,380	9,600		

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27,000	24,100	21,200	20,700	22,600	24,600	21,900	25,200	43,900	42,200	42,600	38,500
2	26,300	24,000	21,000	20,600	22,600	24,800	21,800	25,700	43,800	42,200	42,400	38,300
3	25,700	24,000	21,000	20,600	22,700	24,800	21,800	26,200	43,600	42,300	42,300	38,100
4	25,200	24,000	20,800	20,500	22,800	24,900	21,600	26,600	43,500	42,400	42,200	37,900
5	24,900	23,900	20,800	20,500	22,800	25,000	21,600	27,000	43,500	42,400	42,000	37,700
6	25,000	23,800	20,600	20,400	23,000	25,000	21,400	27,200	43,600	42,400	41,900	37,400
7	24,900	23,700	20,600	20,400	23,000	25,100	21,400	27,600	43,600	42,500	41,800	37,200
8	24,900	23,600	20,400	20,400	23,100	25,200	21,400	28,200	43,500	42,600	41,700	37,000
9	24,800	23,500	20,400	20,400	23,200	25,200	21,200	28,800	43,500	42,600	41,500	36,800
10	24,800	23,400	20,200	20,400	23,300	25,300	20,800	29,600	43,300	42,600	41,400	36,500
11	24,800	23,300	20,100	20,600	23,400	25,400	20,300	30,400	43,200	42,600	41,300	36,300
12	24,800	23,200	20,000	21,100	23,400	25,400	20,000	31,400	43,200	42,600	41,200	36,100
13	24,800	23,100	19,800	21,600	23,600	25,400	19,900	32,400	43,200	42,700	41,100	35,800
14	24,800	23,000	19,800	21,800	23,600	25,600	20,200	33,600	43,200	42,800	40,900	35,500
15	24,800	23,000	19,600	22,000	23,700	25,600	20,400	34,600	43,100	42,800	40,800	35,300
16	24,800	22,800	19,600	22,300	23,800	25,700	20,400	35,900	43,000	42,800	40,700	35,000
17	24,800	22,800	19,800	22,500	23,800	25,700	20,400	37,200	43,000	42,800	40,500	34,800
18	24,900	22,600	20,200	22,600	23,900	25,800	20,400	38,300	43,000	42,800	40,400	34,600
19	24,900	22,600	20,700	22,800	24,000	25,800	20,400	39,500	43,000	42,800	40,200	34,400
20	25,000	22,400	20,900	22,900	24,000	25,900	20,500	40,400	43,000	42,800	40,100	34,200
21	25,000	22,300	21,000	23,000	24,000	26,000	20,700	41,300	42,900	42,800	40,000	34,000
22	25,000	22,200	21,100	23,000	24,200	26,000	21,000	41,800	42,800	42,800	39,800	33,700
23	25,000	22,000	21,200	23,000	24,200	26,100	21,200	42,400	42,800	42,800	39,600	33,500
24	25,000	22,000	21,200	22,900	24,200	26,200	21,400	42,600	42,700	42,800	39,500	33,300
25	24,900	21,800	21,100	22,800	24,300	25,900	21,800	42,800	42,700	42,800	39,400	33,100
26	24,800	21,800	21,000	22,800	24,400	25,000	22,400	42,800	42,600	42,800	39,200	32,800
27	24,700	21,600	21,000	22,700	24,500	24,200	23,000	42,800	42,600	42,800	39,100	32,700
28	24,600	21,600	20,900	22,600	24,600	23,200	23,800	43,000	42,500	42,800	39,100	32,500
29	24,400	21,400	20,800	22,600	------	22,600	24,300	43,300	42,500	42,800	39,000	32,200
30	24,400	21,300	20,800	22,600	------	21,800	24,800	43,500	42,400	42,800	38,900	32,000
31	24,300	------	20,800	22,600	------	21,800	------	43,700	------	42,700	38,700	------
MAX	27,000	24,100	21,200	23,000	24,600	26,200	24,800	43,700	43,900	42,800	42,600	38,500
MIN	24,300	21,300	19,600	20,400	22,600	21,800	19,900	25,200	42,400	42,200	38,700	32,000
(a)	5,413.8	5,407.8	5,406.7	5,410.3	5,414.4	5,408.9	5,414.7	5,446.9	5,444.8	5,445.3	5,439.1	5,428.5
(b)	-3,300	-3,000	-500	+1,800	+2,000	-2,800	+3,000	+18,900	-1,300	+300	-4,000	-6,700

CAL YR 1972 b -500
WTR YR 1973 b +4,400

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.

11441500 SOUTH FORK SILVER CREEK NEAR ICE HOUSE, CALIF.

LOCATION.--Lat 38°49'08", long 120°21'51", in NW¼NW¼ sec.12, T.11 N., R.14 E., El Dorado County, Eldorado National Forest, on right bank 300 ft upstream from Peavine Creek, 0.4 mile downstream from Ice House Dam, and 4.8 miles northwest of Kyburz.

DRAINAGE AREA.--27.5 sq mi.

PERIOD OF RECORD.--October 1924 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,290 ft (from topographic map). Prior to Oct. 1, 1959, at site 0.3 mile downstream at different datum.

AVERAGE DISCHARGE (adjusted for change in contents in Ice House Reservoir).--49 years, 74.9 cfs (54,270 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 494 cfs Mar. 26 (gage height, 4.49 ft); minimum daily, 4.9 cfs Feb. 1, 2.
Period of record: Maximum discharge, 3,940 cfs Dec. 23, 1955 (gage height, 6.71 ft, site and datum then in use), from rating curve extended above 540 cfs on basis of slope-area measurement at gage height 6.69 ft; no flow Oct. 31 to Nov. 9, 1958. Maximum discharge since construction of Ice House Dam in 1959, 1,800 cfs Jan. 22, 1970 (gage height, 5.66 ft), from rating curve extended above 620 cfs on basis of computation of flow over dam of peak flow; minimum daily, 1.2 cfs Mar. 17-19, 1960.

REMARKS.--Records excellent. Flow regulated by Ice House Reservoir beginning in December 1959 (see sta 11441100). See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 1395: 1928, 1938. WSP 1635: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	82	76	54	4.9	6.5	6.5	5.4	295	102	57	99
2	418	82	76	50	4.9	6.2	57	9.1	345	43	60	99
3	326	65	76	50	5.2	6.2	106	12	345	9.1	60	99
4	271	81	78	49	5.2	6.2	106	12	300	9.1	60	99
5	137	79	78	49	5.2	6.2	106	12	243	9.1	60	99
6	11	79	78	49	5.2	6.0	106	12	243	9.1	60	104
7	12	79	78	49	5.4	6.0	106	12	243	9.1	59	111
8	12	79	78	49	5.4	6.2	106	12	243	9.1	59	111
9	12	79	76	49	5.4	6.5	142	12	243	9.1	59	111
10	13	79	76	49	5.4	7.4	330	11	243	9.5	59	111
11	14	79	76	53	5.4	6.8	345	11	243	9.8	59	109
12	14	79	76	32	5.4	6.8	282	12	160	10	60	109
13	14	79	76	6.2	5.2	6.8	173	12	99	11	60	109
14	14	79	76	5.4	5.2	7.4	6.8	12	100	11	60	109
15	14	79	76	5.7	5.4	7.4	7.1	13	102	9.8	60	109
16	14	79	76	8.1	5.7	8.1	63	14	102	9.1	60	109
17	14	78	79	6.0	5.7	8.4	102	12	102	9.1	60	109
18	14	78	79	6.0	5.7	9.1	100	12	102	9.5	61	109
19	14	78	79	5.4	5.4	7.1	100	12	102	9.8	61	109
20	14	78	76	5.4	5.4	6.2	63	14	102	9.5	61	108
21	14	78	78	5.4	5.4	6.2	6.8	14	102	9.1	61	108
22	14	76	79	33	5.4	6.5	6.8	114	102	9.1	61	108
23	14	76	79	84	5.4	7.8	60	188	102	9.1	60	108
24	43	76	79	84	5.7	7.8	95	266	102	9.1	60	108
25	59	76	79	84	6.0	145	67	322	102	9.1	60	108
26	59	76	78	84	6.2	488	6.8	322	102	9.1	60	108
27	59	75	75	84	6.5	482	6.5	322	102	9.1	61	108
28	59	75	78	84	6.2	482	6.0	322	102	9.1	61	108
29	59	75	69	84	------	476	6.0	322	102	9.1	61	108
30	58	76	54	84	------	326	5.7	304	102	9.1	60	106
31	63	------	54	56	------	6.8	------	266	------	28	73	------
TOTAL	2,096	2,329	2,341	1,396.6	153.5	2,571.6	2,680.0	2,995.5	4,977	435.8	1,873	3,210
MEAN	67.6	77.6	75.5	45.1	5.48	83.0	89.3	96.6	166	14.1	60.4	107
MAX	418	82	79	84	6.5	488	345	322	345	102	73	111
MIN	11	65	54	5.4	4.9	6.0	5.7	5.4	99	9.1	57	99
AC-FT	4,160	4,620	4,640	2,770	304	5,100	5,320	5,940	9,870	864	3,720	6,370

CAL YR 1972 TOTAL 23,461.3 MEAN 64.1 MAX 418 MIN 5.4 AC-FT 46,540 MEAN a 63.4 AC-FT a 46,040
WTR YR 1973 TOTAL 27,059.0 MEAN 74.1 MAX 488 MIN 4.9 AC-FT 53,670 MEAN a 80.2 AC-FT a 58,080

a Adjusted for change in contents in Ice House Reservoir.

11441900 SILVER CREEK BELOW CAMINO DIVERSION DAM, CALIF.

LOCATION.--Lat 38°49'26", long 120°32'18", on line between secs.4 and 5, T.11 N., R.13 E., El Dorado County, Eldorado National Forest, on right bank 300 ft downstream from Round Tent Canyon, 0.4 mile downstream from diversion dam, and 5 miles northeast of Pollock Pines.

DRAINAGE AREA.--171 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,754.06 ft above mean sea level (Sacramento Municipal Utility District bench mark).

AVERAGE DISCHARGE (unadjusted).--13 years, 104 cfs (75,350 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 978 cfs Jan. 12 (gage height, 5.44 ft); minimum daily, 6.9 cfs Dec. 16.
Period of record: Maximum discharge, 19,300 cfs Jan. 31, 1963 (gage heights, 11.28 ft in gage well, 11.9 ft, from floodmarks), from rating curve extended above 1,500 cfs on basis of slope-area measurement of maximum flow; minimum daily, 4.6 cfs July 1, 1964.

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. Records not adjusted for diversions or changes in storage. See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WRD Calif. 1965: 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	14	11	11	16	39	27	11	21	20	21	20
2	14	12	10	10	16	37	25	13	21	20	20	21
3	14	9.9	10	10	16	34	24	14	21	20	20	20
4	15	15	12	9.7	19	32	23	15	21	20	20	20
5	15	12	11	9.4	19	29	22	14	21	20	21	20
6	13	11	10	9.3	20	27	21	14	21	20	21	20
7	13	11	11	9.1	29	25	21	15	21	20	20	20
8	13	11	11	9.5	28	24	20	15	21	20	20	20
9	13	10	10	11	28	23	20	16	21	21	20	20
10	13	11	11	13	43	24	19	18	22	23	20	20
11	13	12	11	48	44	30	19	20	21	23	20	20
12	13	11	11	484	41	27	18	20	21	22	20	20
13	13	11	11	86	36	25	19	20	21	20	20	20
14	13	14	11	48	34	23	19	22	20	20	20	20
15	13	13	7.2	37	31	22	20	22	20	20	20	20
16	14	14	6.9	76	28	21	19	22	20	20	20	20
17	14	13	31	64	27	20	20	22	19	20	20	20
18	13	12	27	55	26	20	19	21	15	20	20	20
19	14	12	37	43	25	19	18	21	12	20	20	20
20	14	12	26	35	23	19	17	21	12	20	20	21
21	13	12	22	30	23	18	16	21	14	20	20	20
22	14	11	31	26	22	18	16	21	18	20	20	20
23	14	11	25	24	21	19	15	21	20	20	20	20
24	13	11	22	22	22	19	14	22	20	20	20	20
25	13	11	18	20	23	19	13	25	20	20	20	20
26	13	10	16	18	29	20	13	23	19	20	20	20
27	14	9.8	15	17	36	21	12	21	19	20	20	20
28	14	9.7	14	16	40	21	12	21	19	20	20	20
29	13	9.5	13	16	------	20	12	21	20	20	20	20
30	11	9.6	12	16	------	20	11	21	20	20	20	20
31	14	------	11	16	------	27	------	21	------	20	20	------
TOTAL	417	345.5	485.1	1,299.0	765	742	544	594	581	629	623	602
MEAN	13.5	11.5	15.6	41.9	27.3	23.9	18.1	19.2	19.4	20.3	20.1	20.1
MAX	15	15	37	484	44	39	27	25	22	23	21	21
MIN	11	9.5	6.9	9.1	16	18	11	11	12	20	20	20
AC-FT	827	685	962	2,580	1,520	1,470	1,080	1,180	1,150	1,250	1,240	1,190

CAL YR 1972 TOTAL 5,610.6 MEAN 15.3 MAX 56 MIN 6.9 AC-FT 11,130
WTR YR 1973 TOTAL 7,626.6 MEAN 20.9 MAX 484 MIN 6.9 AC-FT 15,130

11442500 SOUTH FORK AMERICAN RIVER BELOW SILVER CREEK, NEAR POLLOCK PINES, CALIF.

LOCATION.--Lat 38°47'37", long 120°37'02", in NE¼NE¼ sec.22, T.11 N., R.12 E., El Dorado County, Eldorado National Forest, on right bank 350 ft upstream from El Dorado powerhouse, 2.4 miles downstream from Silver Creek, and 2.8 miles northwest of Pollock Pines.

DRAINAGE AREA.--449 sq mi.

PERIOD OF RECORD.--August to December 1923, November 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,862.79 ft above mean sea level. Aug. 11 to Dec. 16, 1923, nonrecording gage at same site at different datum.

EXTREMES.--Current year: Maximum discharge, 4,040 cfs May 16 (gage height, 10.26 ft); minimum daily, 26 cfs Oct. 30, 31.
Period of record: Maximum discharge, 22,200 cfs Jan. 21, 1970 (gage height, 15.22 ft); minimum daily; 23 cfs July 28-30, Aug. 27, 28, 1972.

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	29	27	57	198	529	352	1,180	1,990	140	31	36
2	54	33	27	60	186	482	317	1,290	1,790	107	31	37
3	77	30	34	55	183	456	293	1,460	1,580	85	31	37
4	77	175	53	33	241	450	292	1,430	1,440	64	31	36
5	67	172	41	34	236	391	353	1,090	1,320	57	34	38
6	60	60	40	44	222	377	479	926	1,240	49	35	38
7	57	46	45	54	392	345	641	1,050	1,190	42	37	38
8	56	52	42	98	346	325	622	1,330	1,120	40	34	37
9	60	37	29	188	304	299	755	1,530	1,120	37	34	36
10	66	36	53	157	565	302	813	1,680	1,040	38	33	36
11	65	54	71	425	613	431	884	2,010	950	37	33	36
12	71	47	103	2,460	569	355	938	2,230	890	36	33	36
13	70	38	142	1,300	458	323	1,010	2,390	818	31	33	36
14	66	78	135	736	419	295	789	2,530	575	32	32	33
15	51	83	133	540	366	269	789	2,570	500	34	32	33
16	34	94	111	1,310	317	265	734	2,820	408	34	32	33
17	37	66	546	1,110	289	276	696	2,860	347	33	31	34
18	69	47	890	878	272	267	718	2,800	315	33	31	34
19	62	45	962	690	258	263	640	2,680	391	32	143	34
20	33	44	640	523	245	298	600	2,390	335	32	113	42
21	36	38	367	470	238	267	590	2,080	315	32	87	41
22	31	38	535	371	229	240	646	1,940	331	32	79	38
23	30	38	404	328	218	260	848	1,940	331	32	76	36
24	30	34	270	291	226	252	1,080	1,960	294	31	75	37
25	30	36	191	265	249	286	1,220	1,830	276	31	69	38
26	28	41	155	229	291	327	1,480	1,610	252	31	42	37
27	28	47	119	198	439	399	1,660	1,500	245	31	79	35
28	29	49	109	203	605	384	1,760	1,690	242	31	66	34
29	29	30	79	192	------	332	1,630	1,900	230	31	41	34
30	26	27	78	223	------	311	1,330	1,960	203	32	40	34
31	26	------	69	220	------	354	------	1,880	------	31	36	------
TOTAL	1,485	1,644	6,500	13,742	9,174	10,410	24,959	58,536	22,078	1,338	1,534	1,084
MEAN	47.9	54.8	210	443	328	336	832	1,888	736	43.2	49.5	36.1
MAX	77	175	962	2,460	613	529	1,760	2,860	1,990	140	143	42
MIN	26	27	27	33	183	240	292	926	203	31	31	33
AC-FT	2,950	3,260	12,890	27,260	18,200	20,650	49,510	116,100	43,790	2,650	3,040	2,150
(a)	16,685	20,193	50,753	55,564	38,965	56,580	30,682	30,559	51,505	39,421	35,381	30,234
(b)	4,733	9,203	7,060	7,994	8,982	9,842	9,686	9,524	8,269	7,544	5,419	7,608

CAL YR 1972 TOTAL 109,018 MEAN 298 MAX 1,380 MIN 23 AC-FT 216,200
WTR YR 1973 TOTAL 152,484 MEAN 418 MAX 2,860 MIN 26 AC-FT 302,500

a Diversion, in acre-feet, to Camino powerplant, furnished by Sacramento Utility District.
b Diversion, in acre-feet, to El Dorado powerplant, furnished by Pacific Gas and Electric Co.

11443500 SOUTH FORK AMERICAN RIVER NEAR CAMINO, CALIF.

LOCATION.--Lat 38°46'23", long 120°42'02", in NE¼SW¼ sec.25, T.11 N., R.11 E., El Dorado County, on right bank 500 ft upstream from Iowa Canyon Creek, and 2.8 miles northwest of Camino.

DRAINAGE AREA.--493 sq mi.

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for October 1922, published in WSP 1315-A. Records for the river and the American River flume published separately October 1922 to September 1956, October 1962 to December 1964 when flume was destroyed. Records of river and flume combined October 1956 to September 1962.

GAGE.--Water-stage recorder. Altitude of gage is 1,620 ft (from topographic map). Nov. 1, 1950, to Dec. 5, 1951, nonrecording gage, Dec. 6, 1951, to May 27, 1964, water-stage recorder at site 100 ft downstream at different datum. May 28, 1964, to Oct. 11, 1966, at site 1,000 ft downstream at datum 11.37 ft lower.

AVERAGE DISCHARGE.--37 years (1922-59, prior to extensive regulation and transbasin diversion in South Fork American River basin), 961 cfs (695,700 acre-ft per year), combined flow of South Fork American River and American River flume.

EXTREMES.--Current year: Maximum discharge, 479 cfs July 12 (gage height, 8.43 ft); minimum daily, 12 cfs Feb. 20.
Period of record: Maximum discharge, 49,800 cfs Dec. 23, 1955 (gage height, 32.6 ft, from floodmarks, site and datum then in use), from rating curve extended above 24,000 cfs on basis of computation of maximum flow over dam; minimum daily, 1.3 cfs Aug. 24, 1931.

REMARKS.--Records good. Flow regulated principally by six reservoirs (total usable capacity, 347,000 acre-ft). Echo Lake conduit (see sta 11434500) imports up to 1,900 acre-ft each year from Truckee River basin. Variable amounts of El Dorado Canal water (up to 40 cfs, May to October, and about 7 cfs remainder of the year) diverted for irrigation and domestic use between Pollock Pines and Placerville. Water from Jenkinson Lake in North Fork Consumnes River basin diverted to Camino and substituted for flow from El Dorado Canal in some years. Since October 1962 water is imported from the Upper Rubicon River basin by way of Robbs Peak tunnel (see sta 11429800). See schematic diagram of South Fork American River basin.

REVISIONS (WATER YEARS).--WSP 931: 1928, 1938, 1940(M). WSP 1931: Drainage area at former site.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	24	14	17	14	17	79	79	71	40	35	36
2	29	14	14	17	14	17	80	79	73	37	35	35
3	29	15	14	17	14	17	79	79	74	38	36	35
4	29	15	14	17	14	17	78	78	73	39	35	35
5	29	14	14	17	14	17	77	77	72	39	35	36
6	29	14	14	17	14	17	77	78	74	38	36	36
7	29	14	14	17	15	17	75	80	77	38	36	35
8	29	14	14	17	14	17	75	80	79	38	36	35
9	29	14	14	18	13	17	77	80	82	38	36	35
10	29	14	14	18	14	17	77	80	83	38	35	36
11	29	14	14	19	14	17	77	80	83	40	35	36
12	30	14	14	20	13	17	78	81	82	161	35	35
13	30	14	14	18	13	17	77	83	81	38	36	35
14	30	14	14	17	13	17	77	79	81	36	36	34
15	30	14	14	16	13	17	77	79	80	36	36	34
16	30	14	14	18	13	17	77	79	79	36	36	34
17	30	14	14	17	13	17	76	81	78	36	36	34
18	30	14	15	17	13	17	76	79	78	36	35	34
19	30	14	15	17	13	17	77	78	79	36	35	34
20	30	14	14	16	12	16	77	76	79	35	35	34
21	30	14	13	15	15	16	76	72	81	35	36	33
22	30	14	18	14	19	16	77	72	82	35	36	32
23	30	14	23	14	19	16	79	73	80	35	36	30
24	30	14	23	14	19	16	79	71	80	35	36	30
25	30	14	23	14	19	16	80	70	81	35	35	30
26	31	14	22	15	19	17	80	69	80	34	35	29
27	31	14	20	15	19	17	80	69	80	34	35	29
28	31	14	18	15	18	17	79	70	79	34	35	29
29	31	14	17	14	------	17	80	72	79	34	36	28
30	32	14	17	15	------	17	80	72	79	34	36	28
31	32	------	16	14	------	40	------	71	------	35	36	------
TOTAL	927	432	492	506	417	544	2,333	2,366	2,359	1,253	1,102	996
MEAN	29.9	14.4	15.9	16.3	14.9	17.5	77.8	76.3	78.6	40.4	35.5	33.2
MAX	32	24	23	20	19	40	80	83	83	161	36	36
MIN	29	14	13	14	12	16	75	69	71	34	35	28
AC-FT	1,840	857	976	1,000	827	1,080	4,630	4,690	4,680	2,490	2,190	1,980

CAL YR 1972 TOTAL 12,240 MEAN 33.4 MAX 65 MIN 13 AC-FT 24,280
WTR YR 1973 TOTAL 13,727 MEAN 37.6 MAX 161 MIN 12 AC-FT 27,230

11444500 SOUTH FORK AMERICAN RIVER NEAR PLACERVILLE, CALIF.

LOCATION.--Lat 38°46'16", long 120°48'55", in NE¼SW¼ sec.25, T.11 N., R.10 E., El Dorado County, on right bank 700 ft downstream from Chili Bar Dam, 0.5 mile upstream from Big Canyon, and 2.5 miles north of Placerville.

DRAINAGE AREA.--598 sq mi.

PERIOD OF RECORD.--August 1911 to July 1920, July 1964 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 931.05 ft above mean sea level (levels by Pacific Gas and Electric Co.). Aug. 11, 1911, to July 31, 1920, nonrecording gage 0.6 mile downstream at different datum.

AVERAGE DISCHARGE (prior to extensive regulation and transbasin diversion).--9 years (1911-20), 1,132 cfs (820,100 acre-ft per year); 9 years (1964-73), 1,539 cfs (1,115,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 11,500 cfs Jan. 12 (gage height, 10.46 ft); minimum daily, 240 cfs Nov. 13.
Period of record: Maximum discharge, 47,300 cfs Dec. 23, 1964 (gage height, 17.4 ft, from floodmarks), from rating curve extended above 18,000 cfs on basis of computations of flow over dam of maximum flow; minimum daily, 0.2 cfs Nov. 12, 1964.

REMARKS.--Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Power Commission project.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	436	524	886	846	1,350	2,030	357	2,500	2,820	591	645	1,020
2	606	618	1,250	989	842	2,260	1,560	1,930	2,880	728	636	430
3	322	551	478	1,360	862	1,920	1,860	2,370	2,570	434	619	319
4	685	1,330	1,240	1,330	967	1,580	1,530	2,540	2,940	331	709	638
5	320	1,000	1,650	1,290	1,150	1,880	1,840	2,520	2,980	1,120	322	748
6	329	658	1,020	1,240	1,320	2,420	1,480	994	2,460	970	426	857
7	324	587	1,490	856	1,710	2,010	2,260	1,380	2,270	1,090	473	756
8	326	592	1,380	868	1,590	2,010	969	2,210	1,910	706	776	841
9	314	703	1,170	1,300	1,480	1,830	1,270	2,380	1,730	877	781	344
10	316	598	756	1,660	1,970	1,870	1,720	2,410	1,260	309	881	841
11	322	731	960	3,430	2,480	1,520	1,840	2,580	1,930	1,060	768	989
12	527	987	1,350	8,300	3,040	1,460	1,830	2,800	2,590	822	332	866
13	321	240	1,370	4,850	2,600	2,280	1,870	3,190	2,180	1,260	836	901
14	353	309	1,210	3,750	2,220	2,000	1,910	4,040	2,000	1,150	727	770
15	356	919	1,250	2,320	2,320	2,060	1,160	3,440	2,000	715	843	820
16	432	895	677	4,470	2,380	1,970	1,650	4,070	1,960	645	936	333
17	407	882	934	3,400	2,320	1,940	1,880	4,070	1,080	1,140	910	812
18	329	763	1,790	3,930	1,760	1,190	1,850	4,080	1,440	1,040	1,150	764
19	298	589	3,600	2,990	1,390	1,590	1,630	4,070	1,100	1,060	1,190	824
20	559	555	3,780	2,590	1,790	2,080	1,660	4,040	1,010	981	704	834
21	524	570	1,920	1,820	1,910	2,120	1,630	3,980	1,040	1,030	605	940
22	464	310	1,700	1,440	1,900	2,070	835	2,710	1,420	1,010	605	1,030
23	534	330	1,560	1,620	1,860	2,080	1,300	3,330	1,680	600	624	335
24	618	812	1,180	1,190	1,710	2,040	1,770	3,590	925	818	685	829
25	319	307	1,170	1,220	905	1,090	1,810	3,650	1,060	959	654	876
26	703	410	1,350	1,510	1,730	1,290	2,310	2,700	1,740	1,050	324	1,070
27	538	672	1,490	1,290	2,630	1,880	2,520	2,450	1,740	762	597	901
28	441	421	1,510	826	3,030	1,910	2,470	2,180	1,660	771	855	879
29	323	572	1,490	1,240	------	1,880	1,900	3,230	1,680	644	914	929
30	310	655	1,220	1,960	------	1,860	2,340	3,620	1,550	766	957	333
31	335	------	332	1,910	------	1,680	------	3,610	------	564	1,050	------
TOTAL	12,993	19,080	42,563	67,795	51,236	57,800	51,011	92,664	55,605	26,003	22,534	22,829
MEAN	419	636	1,373	2,187	1,830	1,865	1,700	2,989	1,854	839	727	761
MAX	703	1,330	3,780	8,300	3,040	2,420	2,520	4,080	2,980	1,260	1,190	1,070
MIN	298	240	332	826	842	1,090	357	994	925	309	322	319
AC-FT	25,770	37,850	84,420	134,500	101,600	114,600	101,200	183,800	110,300	51,580	44,700	45,280

CAL YR 1972 TOTAL 398,591 MEAN 1,089 MAX 3,780 MIN 240 AC-FT 790,600
WTR YR 1973 TOTAL 522,113 MEAN 1,430 MAX 8,300 MIN 240 AC-FT 1,036,000

11445500 SOUTH FORK AMERICAN RIVER NEAR LOTUS, CALIF.

LOCATION.--Lat 38°49'07", long 120°56'45", in NW¼SW¼ sec.11, T.11 N., R.9 E., El Dorado County, 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.

PERIOD OF RECORD.--May 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 635 ft (from topographic map).

AVERAGE DISCHARGE.--11 years (1951-62, prior to extensive regulation and transbasin diversion), 1,109 cfs (802,900 acre-ft per year); 11 years (1962-73), 1,496 cfs (1,084,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 19,400 cfs Jan. 12 (gage height, 13.00 ft); minimum daily, 225 cfs Nov. 14.
Period of record: Maximum discharge, 71,800 cfs Dec. 23, 1955 (gage height, 21.37 ft); minimum daily, 50 cfs Oct. 21, 22, 1964.
Maximum stage known since 1862 and prior to beginning of record, 20.4 ft, from floodmarks, Nov. 21, 1950 (discharge, 64,500 cfs).

REMARKS.--Records good. Flow regulated by storage, diversions, and powerplants. See schematic diagram of South Fork American River basin. Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS.--WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	517	445	823	883	1,850	2,380	638	2,510	2,840	741	697	983
2	577	628	1,170	843	1,060	2,490	1,310	2,050	2,840	445	713	489
3	436	651	654	1,500	1,170	2,350	2,100	2,280	2,560	674	755	314
4	666	1,030	1,080	1,420	1,280	2,190	1,660	2,560	2,870	320	873	605
5	350	1,340	1,760	1,400	1,260	1,910	1,980	2,530	2,910	886	354	694
6	327	833	1,090	1,390	1,590	2,830	1,600	1,530	2,460	1,090	622	826
7	332	685	1,580	1,100	2,130	2,440	2,240	1,040	2,250	1,040	721	723
8	330	619	1,470	737	1,950	2,410	1,580	2,060	2,050	918	818	728
9	322	725	1,370	1,790	1,770	2,080	1,040	2,390	1,790	619	744	430
10	326	632	894	2,110	3,090	2,240	1,830	2,340	1,230	518	790	783
11	334	906	795	4,950	3,940	1,940	1,960	2,520	1,780	902	760	934
12	538	847	1,420	13,400	3,840	1,640	1,930	2,540	2,590	870	349	861
13	331	620	1,450	5,790	3,140	2,300	1,820	2,830	2,170	966	776	838
14	332	225	1,270	4,030	2,810	2,310	2,140	3,910	2,010	1,230	692	778
15	388	843	1,310	2,820	2,800	2,230	1,540	3,110	1,980	814	771	752
16	413	1,210	1,010	6,580	2,740	2,200	1,290	3,130	1,970	426	897	388
17	361	895	1,040	4,500	2,600	2,140	2,170	3,120	1,280	1,140	876	746
18	412	961	1,700	5,040	2,090	1,690	1,960	3,920	1,320	1,080	942	750
19	314	714	3,310	3,750	1,610	1,340	1,730	3,910	1,300	990	799	815
20	374	619	3,960	3,020	1,950	2,380	1,750	3,890	1,020	998	1,200	792
21	675	599	2,130	2,310	2,080	2,410	1,900	3,870	1,010	956	569	939
22	405	375	2,000	1,780	2,050	2,390	1,020	2,670	1,080	922	567	989
23	500	347	1,390	1,840	2,020	2,330	1,070	3,270	1,850	538	593	404
24	718	809	1,880	1,630	1,870	2,270	1,840	3,450	1,110	619	642	780
25	368	391	1,020	1,260	1,030	1,620	1,850	3,560	707	1,050	621	858
26	567	431	1,460	1,790	1,660	1,210	2,170	2,810	1,770	1,170	321	833
27	583	690	1,620	1,630	2,940	2,060	2,530	2,450	1,710	748	559	1,080
28	470	469	1,650	1,130	3,610	2,060	2,490	2,140	1,610	780	780	831
29	409	581	1,600	1,290	------	2,070	2,160	3,070	1,660	640	874	924
30	319	658	1,360	2,220	------	2,070	2,250	3,520	1,680	683	909	422
31	324	------	571	2,270	------	2,090	------	3,530	------	676	952	------
TOTAL	13,318	20,778	45,837	86,203	61,930	66,070	53,548	88,510	55,407	25,449	22,536	22,289
MEAN	430	693	1,479	2,781	2,212	2,131	1,785	2,855	1,847	821	727	743
MAX	718	1,340	3,960	13,400	3,940	2,830	2,530	3,920	2,910	1,230	1,200	1,080
MIN	314	225	571	737	1,030	1,210	638	1,040	707	320	321	314
AC-FT	26,420	41,210	90,920	171,000	122,800	131,000	106,200	175,600	109,900	50,480	44,700	44,210

CAL YR 1972 TOTAL 412,318 MEAN 1,127 MAX 3,960 MIN 225 AC-FT 817,800
WTR YR 1973 TOTAL 561,875 MEAN 1,539 MAX 13,400 MIN 225 AC-FT 1,114,000

11446200 FOLSOM LAKE NEAR FOLSOM, CALIF.

LOCATION.--Lat 38°42'29", long 121°09'22", in NW¼NE¼ sec.24, T.10 N., R.7 E., Sacramento County, near center of dam on American River, 0.7 mile downstream from South Fork American River, and 2.3 miles northeast of Folsom.

DRAINAGE AREA.--1,861 sq mi.

PERIOD OF RECORD.--February 1955 to current year. Prior to October 1959, published as Folsom Reservoir near Folsom.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 994,200 acre-ft June 5 (elevation, 464.59 ft); minimum, 583,100 acre-ft Dec. 16 (elevation, 424.01 ft).
Period of record: Maximum contents, 1,024,400 acre-ft June 15, 1963 (elevation, 467.23 ft); minimum since storage pool first filled, 261,500 acre-ft Jan. 7, 1960 (elevation, 378.23 ft).

REMARKS.--Reservoir is formed by concrete gravity-type dam with rolled-earth-wing dams, auxiliary dams, and dikes, completed May 14, 1956; storage began Feb. 25, 1955. Total capacity, 1,010,300 acre-ft between elevations 205.5 ft (invert of lower tier of river outlets) and 466.0 ft (gross pool elevation), all of which is available for release. Spillway design flood pool elevation, 475.4 ft (capacity, 1,120,200 acre-ft). Records, including extremes, represent usable contents at 2400 hours. See schematic diagram of South Fork American River basin.

COOPERATION.--Records furnished by Bureau of Reclamation.

REVISIONS.--WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

370	222,300	420	548,300
380	270,700	440	732,900
390	327,800	460	942,600
400	393,300	480	1,176,000

CONTENTS, IN ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	655,800	606,100	587,700	626,300	594,600	609,200	644,600	797,100	991,800	920,800	808,400	768,200
2	652,600	605,600	586,800	621,500	591,900	611,000	647,200	802,900	993,100	914,900	807,100	765,800
3	649,600	606,100	584,900	621,300	590,000	614,100	650,900	808,700	993,200	908,700	805,500	762,800
4	647,600	609,000	583,800	623,100	590,000	616,600	653,800	815,600	993,700	901,400	804,300	761,300
5	645,700	611,900	584,600	624,800	589,800	617,200	657,400	820,900	994,200	894,600	802,000	759,600
6	643,500	612,200	584,600	624,700	590,800	620,700	661,300	824,600	993,400	889,000	799,200	758,800
7	640,900	613,200	585,200	623,600	596,400	622,300	666,900	826,500	992,300	883,000	798,300	758,100
8	639,000	613,700	585,700	622,400	600,400	623,500	671,300	830,900	990,500	877,200	797,400	757,400
9	637,300	614,400	585,200	628,200	602,400	622,500	674,400	836,500	988,000	870,700	795,800	756,000
10	635,500	615,500	584,300	636,700	613,000	621,300	679,600	841,900	984,200	864,800	794,700	755,000
11	633,700	617,700	583,200	656,800	632,100	621,600	685,600	848,500	980,900	859,700	793,400	754,700
12	632,400	618,300	583,400	736,600	643,800	619,300	692,100	856,200	979,400	854,700	791,800	755,300
13	630,900	618,300	583,700	717,100	636,000	617,600	698,600	864,700	978,000	849,900	790,700	754,500
14	629,000	619,700	583,700	678,400	627,400	615,400	705,000	876,500	976,200	846,500	789,300	753,900
15	627,100	621,500	583,600	640,700	620,500	612,700	709,600	886,300	974,300	841,300	787,900	753,100
16	625,500	623,600	583,100	668,400	620,000	614,900	713,400	896,300	972,300	834,900	786,900	751,400
17	622,600	622,200	586,800	675,000	619,800	617,100	719,400	906,600	969,000	830,900	786,000	750,100
18	620,500	619,400	596,600	667,600	617,700	618,000	724,800	917,300	965,500	827,400	784,800	749,300
19	617,900	615,300	616,200	647,500	613,900	618,200	729,000	927,400	962,300	825,500	783,500	748,400
20	616,000	612,100	631,500	629,500	609,800	621,100	733,000	937,300	958,400	823,300	783,500	748,100
21	614,700	607,400	636,400	620,300	607,100	623,700	736,400	945,500	955,100	821,800	782,100	747,600
22	614,000	604,100	641,900	613,900	603,400	626,100	739,400	950,900	951,800	819,900	781,600	747,400
23	613,800	601,500	644,500	610,400	599,000	627,700	742,300	956,100	949,300	817,900	781,200	746,400
24	613,500	600,600	646,200	605,900	595,500	628,800	747,600	961,600	945,700	817,200	779,900	745,400
25	613,000	599,000	644,500	601,200	590,300	627,700	753,100	968,000	941,200	817,300	777,700	745,000
26	612,200	596,500	643,300	596,500	587,600	625,400	759,800	972,200	938,600	817,100	774,800	744,400
27	611,700	595,000	642,200	595,500	594,100	625,000	768,100	974,900	935,900	816,100	772,400	744,200
28	610,800	593,200	640,800	593,600	605,900	627,000	776,900	977,000	932,200	815,100	771,700	743,800
29	609,800	591,500	638,200	591,400	------	631,800	784,000	981,300	928,900	812,800	771,100	743,700
30	608,400	589,500	635,300	592,900	------	636,600	790,600	986,600	926,000	810,800	770,200	742,200
31	607,100	------	631,100	594,600	------	642,400	------	989,800	------	809,900	769,100	------
MAX	655,800	623,600	646,200	736,600	643,800	642,400	790,600	989,800	994,200	920,800	808,400	768,200
MIN	607,100	589,500	583,100	591,400	587,600	609,200	644,600	797,100	926,000	809,900	769,100	742,200
(a)	426.70	424.73	429.33	425.30	426.56	430.55	445.74	464.20	458.49	447.62	443.63	440.94
(b)	-51,600	-17,600	+41,600	-36,500	+11,300	+36,500	+148,200	+199,200	-63,800	-116,100	-40,800	-26,900
(c)	1,850	500	220	420	590	1,430	3,770	6,010	7,270	7,300	6,630	4,270

CAL YR 1972 b +31,300
WTR YR 1973 b +83,500

a Elevation, in feet, at end of month.
b Change in contents, in acre-feet.
c Evaporation, in acre-feet.

11446500 AMERICAN RIVER AT FAIR OAKS, CALIF.

LOCATION.--Lat 38°38'08", long 121°13'36", in SE¼NE¼ sec.17, T.9 N., R.7 E., Sacramento County, 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 22.2.
DRAINAGE AREA.--1,888 sq mi.
PERIOD OF RECORD.--November 1904 to current year. Monthly discharge only for some periods, published in WSP 1315-A.
GAGE.--Water-stage recorder. Datum of gage is 71.53 ft above mean sea level. Prior to Nov. 7, 1930, nonrecording gages or water-stage recorders at several sites 2.2 miles downstream, all at datum 5.74 ft lower. Nov. 7, 1930, to Dec. 31, 1957, at site 2.2 miles downstream at datum 6.74 ft lower. Dec. 31, 1957, to July 15, 1970, at datum 6.00 ft higher.
AVERAGE DISCHARGE (adjusted for change in contents, diversions, and evaporation from Folsom Lake since 1955).--69 years, 3,780 cfs (2,739,000 acre-ft per year).
EXTREMES.--Current year: Maximum discharge, 32,700 cfs Jan. 14 (gage height, 15.42 ft); minimum daily, 1,370 cfs Sept. 12.
Period of record: Maximum discharge, 180,000 cfs Nov. 21, 1950 (gage height, 31.85 ft, site and datum then in use); minimum, 3.6 cfs Aug. 16, 1924. Maximum discharge since construction of Folsom Dam in 1953, 115,000 cfs Dec. 23-25, 1964 (gage height, 21.65 ft); minimum, 86 cfs Apr. 7, 1955.
REMARKS.--Records excellent. Flow regulated by Folsom Lake beginning Feb. 25, 1955 (see sta 11446200). Some minor regulation of high flows by temporary pondage during period of construction January 1953 to February 1955. Diurnal fluctuations from Folsom powerplant re-regulated by Nimbus Reservoir (capacity, 2,800 acre-ft between normal operating elevations 118.5 and 125.0 ft) and powerplant. Many diversions above station for irrigation, municipal, and domestic water supply. Diversions of San Juan Suburban Water District, Cordova Water Service, city of Folsom, and State of California are made at Folsom Dam. Some inflow from Bear and Yuba River basins. Records of water temperatures for the current year are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WSP 1181: 1928(M). WSP 1515: 1907(M), 1910, 1931(M), 1943(M). WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,010	2,010	2,570	5,200	5,820	8,000	2,570	2,630	4,130	3,630	2,100	2,040
2	3,030	2,020	2,560	5,160	5,950	8,000	2,590	2,520	4,130	3,700	2,100	2,010
3	3,010	2,040	2,560	4,150	6,010	7,620	2,590	2,500	4,150	4,150	2,100	2,010
4	2,530	2,040	2,570	2,690	6,040	7,680	2,590	2,530	4,150	4,190	2,120	2,020
5	2,520	2,000	2,570	2,540	6,010	7,580	2,590	2,490	4,150	4,210	2,130	2,010
6	2,520	1,980	2,520	3,430	6,040	7,500	2,600	2,490	4,170	4,230	2,060	2,020
7	2,540	1,980	2,570	3,500	5,970	7,480	2,630	2,490	4,190	4,230	2,100	2,020
8	2,570	1,980	2,570	3,460	6,060	7,550	2,530	2,470	4,190	4,250	2,100	2,010
9	2,600	1,980	2,490	3,520	6,200	7,550	2,540	2,520	4,190	4,250	2,100	2,010
10	2,590	1,980	2,470	3,550	7,980	7,580	2,540	2,530	4,190	4,230	2,100	2,010
11	2,600	2,040	2,460	3,680	8,180	7,580	2,560	2,500	4,190	4,230	2,100	1,900
12	2,600	1,980	2,460	8,780	8,060	7,580	2,490	2,500	4,130	4,230	2,050	1,370
13	2,600	2,000	2,460	30,800	14,800	7,580	2,500	2,520	3,610	4,190	2,050	2,010
14	2,660	2,020	2,520	31,900	15,100	7,580	2,500	2,520	3,610	3,680	2,050	2,040
15	2,690	2,570	2,570	28,000	12,900	7,450	2,500	2,530	3,610	3,680	2,050	2,050
16	2,690	3,950	2,520	16,300	8,720	5,220	2,530	2,530	3,610	3,650	2,050	2,040
17	2,620	4,070	2,530	17,400	7,800	5,130	2,570	2,530	3,610	3,630	2,050	2,050
18	2,570	4,090	2,490	23,100	7,800	5,130	2,530	2,530	3,610	3,590	2,050	2,060
19	2,570	4,090	2,460	24,800	7,820	5,110	2,530	2,530	3,610	2,680	2,050	2,060
20	2,520	4,150	2,520	19,500	7,850	5,130	2,560	2,530	3,610	2,620	2,050	2,060
21	2,470	4,070	3,970	13,500	7,450	5,130	2,530	2,530	3,610	2,130	1,620	2,080
22	2,000	3,500	5,050	10,100	7,420	5,130	2,530	2,560	3,610	2,140	1,550	2,080
23	1,970	3,010	5,070	8,060	7,450	4,980	2,530	3,030	3,610	2,130	1,550	2,120
24	1,980	2,540	5,130	7,980	7,420	5,070	2,530	3,010	3,610	2,120	2,010	2,090
25	2,010	2,520	5,160	7,980	7,450	5,090	2,520	3,030	3,610	2,100	2,040	2,090
26	2,010	2,490	5,160	7,920	7,380	5,070	2,530	3,030	3,630	2,100	2,050	2,100
27	2,010	2,520	5,130	6,010	7,350	5,070	2,520	3,030	3,630	2,100	2,040	2,100
28	2,010	2,570	5,180	5,820	7,620	4,010	2,520	3,030	3,630	2,100	2,020	2,100
29	2,010	2,600	5,270	5,820	------	2,700	2,530	3,030	3,630	2,090	2,010	2,100
30	2,020	2,600	5,270	5,820	------	2,560	2,500	3,110	3,610	2,090	2,010	2,090
31	2,010	------	5,180	5,820	------	2,570	------	4,090	------	2,100	2,040	------
TOTAL	75,540	79,390	106,010	326,290	220,650	187,410	76,280	83,870	115,020	100,450	62,500	60,750
MEAN	2,437	2,646	3,420	10,530	7,880	6,045	2,543	2,705	3,834	3,240	2,016	2,025
MAX	3,030	4,150	5,270	31,900	15,100	8,000	2,630	4,090	4,190	4,250	2,130	2,120
MIN	1,970	1,980	2,460	2,540	5,820	2,560	2,490	2,470	3,610	2,090	1,550	1,370
AC-FT	149,800	157,500	210,300	647,200	437,700	371,700	151,300	166,400	228,100	199,200	124,000	120,500
MEAN a	1,680	2,403	4,147	9,982	8,139	6,707	5,164	6,151	3,003	1,595	1,580	1,744
AC-FT a	103,300	143,000	255,000	613,800	452,000	412,400	307,300	378,200	178,700	98,060	97,160	103,800
(b)	3,290	2,588	2,839	2,716	2,427	2,735	4,062	6,562	7,177	7,657	7,333	5,935

CAL YR 1972 TOTAL 1,046,440 MEAN 2,859 MAX 5,270 MIN 1,480 AC-FT 2,076,000 MEAN a 3,037 AC-FT a 2,205,000
WTR YR 1973 TOTAL 1,494,160 MEAN 4,094 MAX 31,900 MIN 1,370 AC-FT 2,964,000 MEAN a 4,341 AC-FT a 3,143,000

a Adjusted for change in contents, diversions, and evaporation from Folsom Lake.
b Diversion, in acre-feet, to Cordova Water Service, city of Folsom, San Juan Suburban Water District, and to State of California, furnished by Bureau of Reclamation.

11447030 STRONG RANCH SLOUGH AT SACRAMENTO, CALIF.

LOCATION.--Lat 38°36'09", long 121°23'40", in NE¼SW¼ sec.29, T.9 N., R.5 E., Sacramento County, on right bank 3.0 miles upstream from mouth, and 1.2 miles east of Sacramento City limits.

DRAINAGE AREA.--5.02 sq mi.

PERIOD OF RECORD.--October 1972 to May 1973.

GAGE.--Water-stage recorder. Altitude of gage is 40 ft (from topographic map).

EXTREMES.--Maximum discharge during period, 708 cfs Feb. 27 (gage height, 7.74 ft); minimum daily, 0.01 cfs Oct. 18, 19.

REMARKS.--Records good. Records of chemical analyses for the 1972 and 1973 water years, specific conductance, and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1972 TO MAY 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.13	.30	.25	.82	1.2	2.7	.82				
2	2.3	.20	.36	.30	.60	.52	2.7	.82				
3	.58	6.9	.60	.30	26	19	2.7	.82				
4	.10	13	1.1	.30	19	5.1	3.1	.82				
5	.13	.04	.44	.30	2.3	3.1	3.6	.82				
6	.25	.03	9.7	.25	27	13	5.6	1.2				
7	.36	5.9	1.2	.25	5.8	20	4.8	1.2				
8	.36	.08	.52	27	2.7	30	4.0	1.2				
9	5.7	1.1	.82	103	40	7.9	3.2	1.2				
10	9.3	33	1.4	5.4	57	5.3	2.4	1.2				
11	25	30	.82	91	41	4.5	1.6	1.4				
12	.10	.08	.70	73	5.8	3.8	1.4	1.4				
13	.06	16	.82	10	3.3	4.3	29	1.4				
14	.16	23	.70	7.7	13	4.0	.82	1.6				
15	2.6	32	.70	16	3.8	3.8	.52	.94				
16	.73	41	19	116	1.8	4.0	.52	1.6				
17	.04	2.9	23	35	1.4	3.3	.20	.94				
18	.01	.44	19	128	1.2	3.1	.16	1.4				
19	.01	.52	9.2	3.1	1.6	21	.25	.82				
20	.02	.25	.94	2.2	1.6	11	.36	.52				
21	.02	.25	.52	6.5	1.8	18	.70	1.1				
22	.03	.20	.52	.94	1.6	6.6	.70	.82				
23	.03	.20	.53	.70	1.4	3.8	.70	.60				
24	.04	.20	4.2	1.3	9.6	4.0	.70	.60				
25	.04	.20	.36	12	3.1	4.0	.82	.44				
26	.10	.20	.30	1.4	34	4.0	1.1	.60				
27	.10	.44	1.1	.70	152	5.6	.94	.70				
28	.10	.36	.70	.52	6.9	4.0	.94	1.1				
29	.08	.25	.30	5.6	------	2.7	.82	1.8				
30	.10	.36	.30	4.8	------	7.9	.82	1.4				
31	.10	------	.25	2.5	------	4.0	------	.40	------			------
TOTAL	48.71	209.23	100.40	656.31	466.12	232.52	77.87	31.68				
MEAN	1.57	6.97	3.24	21.2	16.6	7.50	2.60	1.02				
MAX	25	41	23	128	152	30	29	1.8				
MIN	.01	.03	.25	.25	.60	.52	.16	.40				
AC-FT	97	415	199	1,300	925	461	154	63				

11447360 ARCADE CREEK NEAR DEL PASO HEIGHTS, CALIF.

LOCATION.--Lat 38°38'28", long 121°22'38", in Del Paso Grant, Sacramento County, on right bank 1,200 ft upstream from bridge on Interstate Highway 80, and 1.6 miles east of city limits of Del Paso Heights.

DRAINAGE AREA.--31.5 sq mi.

PERIOD OF RECORD.--July 1963 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 47.98 ft above mean sea level (levels by county of Sacramento).

AVERAGE DISCHARGE.--10 years, 17.3 cfs (12,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,170 cfs Feb. 27 (gage height, 14.29 ft); no flow Oct. 23 to Nov. 2. Period of record: Maximum discharge, 2,170 cfs Feb. 27, 1973 (gage height, 14.29 ft); maximum gage height, 14.42 ft Jan. 21, 1967; no flow for several days in 1963-66, 1971-73.

REMARKS.--Records fair. Low summer flow sustained by residential and industrial waste water.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	0	.60	1.7	11	21	2.5	3.7	4.0	3.2	4.3	2.2
2	.80	0	.48	1.5	6.1	12	1.8	3.6	4.1	3.7	4.3	2.1
3	3.5	9.3	.42	1.4	103	88	1.6	3.9	4.5	3.9	4.5	2.1
4	.18	87	1.8	1.4	323	99	1.5	3.4	4.8	4.0	4.4	3.0
5	.08	6.8	1.0	1.1	21	15	1.8	2.7	4.7	3.9	4.1	2.7
6	.09	1.6	38	1.1	92	68	2.2	3.8	4.7	4.0	3.7	2.0
7	.10	33	27	1.0	64	33	2.4	3.9	5.0	3.5	3.4	1.9
8	.16	8.5	6.7	71	17	259	2.5	3.6	5.7	5.0	3.5	1.8
9	2.2	1.9	3.3	579	37	22	2.5	3.6	4.9	5.8	3.6	1.6
10	25	115	2.7	185	353	11	1.8	4.2	4.2	4.9	3.7	2.2
11	114	212	2.6	440	450	11	2.5	4.1	4.0	4.3	3.8	1.6
12	21	18	2.9	771	40	6.1	3.8	4.1	3.7	4.5	3.3	1.8
13	3.6	47	2.2	89	26	4.4	52	4.5	3.9	4.5	2.9	2.0
14	2.0	159	2.2	20	123	3.6	9.8	4.6	3.2	3.9	3.5	1.5
15	5.9	69	2.0	27	42	3.2	2.5	3.6	3.7	3.7	3.6	1.3
16	4.6	330	43	703	12	3.0	1.8	4.2	3.1	3.6	3.6	1.5
17	3.1	62	137	170	7.7	2.9	2.0	4.6	2.9	4.0	3.4	1.5
18	1.0	10	64	653	5.9	2.8	2.9	5.1	2.9	4.1	3.3	1.5
19	1.2	4.4	156	59	4.7	24	2.3	4.2	3.0	4.2	3.2	1.6
20	.42	3.0	22	16	4.1	71	1.5	3.2	3.9	4.1	2.9	3.3
21	.15	2.1	8.3	36	3.9	65	1.9	3.8	4.6	4.0	3.4	3.7
22	.01	1.5	6.6	14	3.2	32	2.8	3.6	4.3	4.6	3.0	4.9
23	0	1.2	5.7	7.8	2.7	7.4	3.2	4.2	3.1	4.3	2.5	14
24	0	1.0	25	6.4	19	3.9	3.6	3.7	3.1	4.1	2.6	2.5
25	0	.96	7.4	66	13	2.8	4.1	2.9	4.0	4.9	3.0	1.2
26	0	.92	3.6	61	139	2.2	4.2	3.9	4.0	5.3	2.6	.50
27	0	.78	3.3	12	684	5.2	4.0	3.9	4.1	5.6	2.5	.53
28	0	.64	16	7.0	385	9.0	3.9	4.6	4.0	4.9	2.6	.93
29	0	.60	5.0	16	------	2.3	3.3	5.6	3.5	4.3	3.1	1.6
30	0	.57	2.7	42	------	6.3	3.9	6.1	3.1	4.9	3.1	1.3
31	0	------	2.0	23	------	7.5	------	4.7	------	4.7	2.8	------
TOTAL	189.42	1,187.77	601.50	4,083.4	2,992.3	903.6	136.6	125.6	118.7	134.4	104.2	70.36
MEAN	6.11	39.6	19.4	132	107	29.1	4.55	4.05	3.96	4.34	3.36	2.35
MAX	114	330	156	771	684	259	52	6.1	5.7	5.8	4.5	14
MIN	0	0	.42	1.0	2.7	2.2	1.5	2.7	2.9	3.2	2.5	.50
AC-FT	376	2,360	1,190	8,100	5,940	1,790	271	249	235	267	207	140

CAL YR 1972 TOTAL 3,423.00 MEAN 9.35 MAX 330 MIN 0 AC-FT 6,790
WTR YR 1973 TOTAL 10,647.85 MEAN 29.2 MAX 771 MIN 0 AC-FT 21,120

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-16	0530	9.72	504	1-18	1130	12.46	1,260
1-9	1830	11.97	1,070	2-4	0100	11.44	897
1-12	0330	11.56	933	2-11	0500	10.93	762
1-16	1030	12.51	1,280	2-27	2030	14.29	2,170

11447500 SACRAMENTO RIVER AT SACRAMENTO, CALIF.
(International Hydrological Decade River Station)

LOCATION.--Lat 38°35'12", long 121°30'16", Sacramento County, on left bank 1,000 ft upstream from I Street Bridge, in city of Sacramento, and 0.5 mile downstream from American River.

DRAINAGE AREA.--23,508 sq mi.

PERIOD OF RECORD.--January 1904 to July 1905 (gage heights only), June to November 1921, October 1948 to current year. Gage heights collected in this vicinity November 1879 to May 1888, December 1890 to September 1963 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to Oct. 15, 1912, nonrecording gage in vicinity of I Street Bridge. Oct. 15, 1912, to Nov. 16, 1956, water-stage recorder at various sites in vicinity of I Street Bridge. Prior to Nov. 16, 1956, datum of gages at low-water mark of Oct. 23, 1856, 0.12 ft above mean sea level. Auxiliary water-stage recorder on right bank 10.8 miles downstream near Freeport.

AVERAGE DISCHARGE.--25 years (1948-73), 23,850 cfs (17,279,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 93,400 cfs Jan. 19 (elevation, 26.74 ft); minimum daily, 12,600 cfs May 11.
Period of record (1948 to current year): Maximum discharge, 104,000 cfs Nov. 21, 1950 (elevation, 30.14 ft, site and datum then in use); minimum daily, 5,590 cfs July 20, 1949.
Maximum discharge known prior to Nov. 21, 1950, 103,000 cfs Jan. 17, 1909 (elevation, 29.6 ft, present datum), from reports of California Department of Water Resources.

REMARKS.--Records excellent. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. A portion of the flow bypasses station during flood periods through Yolo Bypass (see sta 11426000, 11453000). Records of chemical analyses, water temperatures, and suspended-sediment discharge at or near this gaging station for the current year are published in Part 2 of this report.

COOPERATION.--Records collected and prepared in cooperation with the California Department of Water Resources.

REVISIONS (WATER YEARS).--WRD Calif. 1971: 1966(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17,000	15,100	24,500	28,100	62,200	72,700	26,600	15,300	19,600	14,000	15,600	17,000
2	16,800	14,800	24,100	28,400	61,200	73,300	26,600	15,000	19,000	14,100	16,300	16,600
3	16,500	14,500	23,600	28,000	59,200	72,800	25,800	14,400	18,600	14,200	16,900	16,500
4	16,100	14,800	22,800	27,000	58,400	72,900	25,000	14,200	18,000	14,200	16,800	16,200
5	15,800	14,700	22,300	26,800	58,400	72,100	24,100	13,900	17,300	14,200	16,500	16,800
6	15,300	15,000	22,200	27,600	58,700	71,100	23,600	13,900	16,700	14,600	16,400	16,700
7	14,900	15,600	21,600	28,100	62,000	70,800	23,400	13,900	16,000	14,700	16,600	16,600
8	14,900	15,600	21,200	29,100	65,300	71,400	22,700	13,600	15,400	14,800	16,300	16,700
9	14,900	15,000	21,000	31,600	67,400	70,700	22,500	12,900	15,200	14,800	16,100	16,600
10	15,000	15,700	20,900	37,000	72,300	69,400	21,700	12,700	14,900	14,900	15,800	16,500
11	15,900	16,800	20,500	45,300	75,600	67,800	20,200	12,600	14,700	15,000	15,800	16,600
12	16,100	18,300	20,600	56,800	75,700	66,100	20,000	12,700	14,400	14,900	16,000	16,300
13	16,400	21,100	20,200	82,800	77,200	63,300	20,300	13,000	13,800	14,900	16,100	17,200
14	16,600	22,900	20,000	90,200	78,300	59,300	20,400	13,500	13,800	14,800	15,700	17,700
15	16,600	26,000	19,500	89,300	77,900	54,200	20,400	14,100	13,600	15,000	15,300	17,900
16	17,000	33,700	19,300	82,800	73,500	46,100	21,100	14,300	13,700	15,200	15,400	18,000
17	17,300	36,500	19,900	83,900	71,400	40,700	20,900	14,400	13,800	15,400	15,500	18,100
18	17,800	37,000	23,700	89,000	70,400	37,200	20,700	15,100	13,800	16,300	15,500	18,200
19	17,700	34,200	33,600	92,700	69,300	34,400	20,400	16,400	13,600	16,100	15,600	18,600
20	17,300	31,900	40,100	88,800	68,100	32,800	20,600	17,900	13,500	15,900	15,900	18,500
21	16,900	30,700	42,200	83,300	66,100	33,100	20,000	17,900	13,300	15,800	16,000	18,500
22	16,200	29,200	42,200	77,300	63,000	38,300	19,400	18,200	13,300	15,600	15,900	18,600
23	15,800	27,800	39,700	73,600	59,400	43,800	18,600	20,000	13,400	15,800	15,600	18,600
24	15,500	26,700	38,600	71,500	54,900	45,000	17,800	22,100	13,600	15,900	16,000	18,500
25	15,300	26,200	37,600	70,800	51,500	41,100	17,200	21,800	14,100	15,900	16,200	18,700
26	15,300	25,700	35,800	70,600	50,600	36,900	16,500	21,600	14,300	15,600	16,200	18,600
27	15,500	25,600	33,600	68,300	53,400	33,600	15,800	21,800	14,200	15,800	16,600	18,200
28	15,600	25,200	31,400	66,100	65,800	30,300	16,000	21,500	14,200	15,800	16,600	17,700
29	15,700	25,100	30,000	64,100	------	27,600	16,200	20,700	14,300	15,400	16,600	17,100
30	15,500	24,700	29,100	62,600	------	26,200	15,600	19,700	14,000	15,100	16,900	16,800
31	15,200	------	28,300	62,600	------	25,900	------	19,800	------	15,500	17,100	------
TOTAL	498,400	696,100	850,100	1,864.1M	1,827.2M	1,600.9M	620,100	508,900	448,100	470,200	499,800	524,600
MEAN	16,080	23,200	27,420	60,130	65,260	51,640	20,670	16,420	14,940	15,170	16,120	17,490
MAX	17,800	37,000	42,200	92,700	78,300	73,300	26,600	22,100	19,600	16,300	17,100	18,700
MIN	14,900	14,500	19,300	26,800	50,600	25,900	15,600	12,600	13,300	14,000	15,300	16,200
AC-FT	988,600	1,381M	1,686M	3,697M	3,624M	3,175M	1,230M	1,009M	888,800	932,600	991,400	1,041M

CAL YR 1972 TOTAL 6,708,700 MEAN 18,330 MAX 42,200 MIN 9,800 AC-FT 13,310,000
WTR YR 1973 TOTAL 10,408,500 MEAN 28,520 MAX 92,700 MIN 12,600 AC-FT 20,650,000

11448500 ADOBE CREEK NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°55'37", long 122°52'47", in SE¼SE¼ sec.32, T.13 N., R.9 W., Lake County, on left bank 2.3 miles upstream from Highland Creek, and 4.2 miles southwest of Kelseyville.

DRAINAGE AREA.--6.36 sq mi.

PERIOD OF RECORD.--October 1954 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,476.06 ft above mean sea level.

AVERAGE DISCHARGE.--19 years, 12.2 cfs (8,840 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,260 cfs Jan. 16 (gage height, 8.35 ft); no flow for several months. Period of record: Maximum discharge, 1,500 cfs Dec. 22, 1964, Jan. 23, 1970; maximum gage height, 9.22 ft Jan. 31, 1963; no flow at times in each year.

REMARKS.--Records good. Some regulation and diversions above station for irrigation of about 200 acres.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.19	.86	4.5	23	55	5.6	.77	.02			
2	0	.19	.81	4.1	19	40	4.9	.71	.02			
3	0	.69	.85	3.7	20	29	4.2	.76	.02			
4	0	2.9	.93	3.0	149	37	3.9	.77	.02			
5	0	1.1	1.0	2.7	88	30	3.7	.71	.01			
6	0	.66	8.0	2.7	84	24	3.5	.63	.01			
7	0	1.3	6.0	2.4	187	57	3.2	.56	.01			
8	0	1.1	3.0	8.9	70	39	2.9	.52	0			
9	0	1.1	2.1	305	73	33	2.8	.51	0			
10	0	8.8	1.6	64	102	24	3.4	.43	0			
11	.49	15	1.3	195	80	23	2.8	.40	0			
12	2.4	8.0	1.2	192	54	19	2.4	.31	0			
13	.85	94	1.0	68	40	15	2.5	.26	0			
14	.86	49	.87	35	54	13	2.3	.25	0			
15	5.3	55	1.3	61	40	11	2.0	.18	0			
16	2.6	35	39	472	31	9.8	2.0	.15	.01			
17	.88	20	123	114	25	8.4	1.9	.13	.01			
18	.54	7.4	49	288	21	7.3	1.8	.08	.01			
19	.36	5.0	40	75	18	22	1.7	0	0			
20	.29	4.2	23	41	16	29	1.5	0	0			
21	.20	3.5	16	42	15	31	1.4	0	0			
22	.19	2.8	33	26	14	25	1.3	.03	0			
23	.19	2.2	23	21	13	20	1.3	.05	0			
24	.14	1.8	21	20	223	16	1.2	.14	0			
25	.10	1.5	16	19	206	14	1.1	.18	0			
26	.10	1.3	13	15	104	12	1.0	.07	0			
27	.10	1.2	11	13	82	9.9	.98	.05	0			
28	.10	1.1	8.9	12	74	8.5	.95	.04	0			
29	.10	1.0	7.4	46	------	7.5	.95	.03	0			
30	.16	.94	5.8	48	------	8.2	.90	.02	0			
31	.19	------	4.9	32	------	6.9	------	.02	------			------
TOTAL	16.14	327.97	464.82	2,236.0	1,925	684.5	70.08	8.76	.14	0	0	0
MEAN	.52	10.9	15.0	72.1	68.8	22.1	2.34	.28	.005	0	0	0
MAX	5.3	94	123	472	223	57	5.6	.77	.02	0	0	0
MIN	0	.19	.81	2.4	13	6.9	.90	0	0	0	0	0
AC-FT	32	651	922	4,440	3,820	1,360	139	17	.3	0	0	0

CAL YR 1972 TOTAL 1,744.38 MEAN 4.77 MAX 123 MIN 0 AC-FT 3,460
WTR YR 1973 TOTAL 5,733.41 MEAN 15.7 MAX 472 MIN 0 AC-FT 11,370

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1130	7.04	671	1-18	0615	7.32	783
1-11	2300	6.36	438	2-4	1500	6.28	414
1-16	0515	8.35	1,260	2-24	2400	6.84	599

11448900 HIGHLAND CREEK ABOVE HIGHLAND CREEK DAM, CALIF.

LOCATION.--Lat 38°55'48", long 122°55'11", in NW¼SE¼ sec.36, T.13 N., R.10 W., Lake County, on left bank 100 ft downstream from Pipeline Creek, 1.7 miles upstream from Highland Creek Dam, and 5.7 miles southwest of Kelseyville.

DRAINAGE AREA.--11.9 sq mi.

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,490.07 ft above mean sea level.

AVERAGE DISCHARGE.--11 years, 20.8 cfs (15,070 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 2,390 cfs Jan. 16 (gage height, 9.66 ft); no flow many days. Period of record: Maximum discharge, 3,080 cfs Dec. 22, 1964 (gage height, 12.15 ft); no flow at times in each year.

REMARKS.--Records good. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WRD Calif. 1969: 1968(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.37	1.8	5.4	49	80	14	4.1	1.3	.13	0	0
2	.14	.39	1.6	5.1	38	49	13	4.1	1.2	.12	0	0
3	.09	.95	1.9	4.8	37	56	12	4.0	1.2	.11	0	0
4	.10	1.6	2.0	4.2	385	48	11	4.2	.95	.11	0	0
5	.18	1.0	2.0	4.0	187	42	10	4.0	.85	.10	0	0
6	.15	.85	12	3.8	195	76	9.5	3.8	.70	.10	0	0
7	.10	1.9	7.5	3.6	367	54	9.1	3.7	.62	.10	0	0
8	.14	1.6	5.1	6.0	140	44	8.6	3.6	.58	.10	0	0
9	.24	1.6	3.8	522	138	35	8.2	3.6	.53	.10	0	0
10	.30	7.8	3.4	150	220	32	8.2	3.4	.49	.10	0	0
11	1.0	16	2.8	364	174	29	8.2	3.2	.45	.06	0	0
12	6.0	3.0	2.8	423	122	26	7.5	3.0	.42	.07	0	0
13	1.2	167	2.6	140	90	23	7.8	3.0	.38	.07	0	0
14	1.2	92	2.4	67	106	21	7.2	3.0	.35	.05	0	0
15	8.2	96	2.8	114	75	19	6.9	2.8	.33	.05	0	0
16	3.8	52	87	959	56	18	6.6	2.4	.31	.06	0	0
17	1.2	15	219	322	41	17	6.6	2.4	.29	.07	0	0
18	.85	9.8	85	734	32	16	6.3	2.2	.27	.06	0	0
19	.60	9.4	60	204	27	58	6.0	2.0	.25	.04	0	0
20	.50	6.9	27	103	25	109	5.7	2.0	.24	.06	0	.15
21	.40	5.3	19	115	21	99	5.7	2.2	.23	.08	0	.11
22	.40	4.4	28	65	19	65	5.4	2.0	.21	.07	0	.17
23	.39	3.8	20	48	17	46	5.4	1.9	.20	.05	0	.19
24	.36	3.2	22	43	190	35	5.1	2.3	.19	.03	0	.18
25	.35	2.8	16	38	260	29	4.8	2.3	.18	.01	0	.17
26	.34	2.4	13	29	170	25	4.8	1.9	.17	0	.03	.13
27	.34	2.6	12	24	155	21	4.6	1.8	.16	0	.03	.10
28	.34	2.4	10	21	100	19	4.6	1.8	.15	0	.04	.10
29	.34	2.0	8.2	109	------	17	4.4	1.4	.14	0	0	.09
30	.37	1.8	6.9	115	------	19	4.4	1.3	.13	0	0	.09
31	.37	------	6.0	72	------	16	------	1.3	------	0	0	------
TOTAL	30.13	515.86	693.6	4,817.9	3,436	1,243	221.6	84.7	13.47	1.90	.10	1.48
MEAN	.97	17.2	22.4	155	123	40.1	7.39	2.73	.45	.061	.003	.049
MAX	8.2	167	219	959	385	109	14	4.2	1.3	.13	.04	.19
MIN	.09	.37	1.6	3.6	17	16	4.4	1.3	.13	0	0	0
AC-FT	60	1,020	1,380	9,560	6,820	2,470	440	168	27	3.8	.2	2.9

CAL YR 1972 TOTAL 2,942.12 MEAN 8.04 MAX 219 MIN 0 AC-FT 5,840
WTR YR 1973 TOTAL 11,059.74 MEAN 30.3 MAX 959 MIN 0 AC-FT 21,940

PEAK DISCHARGE (BASE, 1,200 CFS).--Jan. 16 (0530) 2,390 cfs (9.66 ft); Jan. 18 (0430) 1,660 cfs (8.43 ft).

NOTE.--No gage-height record June 8 to July 10.

11449010 HIGHLAND CREEK BELOW HIGHLAND CREEK DAM, NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°56'54", long 122°54'03", in NE¼ sec.30, T.13 N., R.9 W., Lake County, on left bank 500 ft downstream from Highland Creek Dam, and 4.0 miles southwest of Kelseyville.

DRAINAGE AREA.--14.2 sq mi.

PERIOD OF RECORD.--December 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,416.52 ft above mean sea level.

AVERAGE DISCHARGE (unadjusted).--7 years (1966-73), 24.9 cfs (18,040 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 495 cfs Jan. 16 (gage height, 4.80 ft); no flow many days. Period of record: Maximum discharge, 765 cfs Dec. 3, 1970 (gage height, 4.78 ft); maximum gage height, 4.99 ft Jan. 4, 1966; no flow many days in each year.

REMARKS.--Records good. Flow completely regulated by Highland Creek Dam 500 ft upstream (capacity, 3,500 acre-ft). No diversion above station. Records of chemical analyses, water temperatures, and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	0	1.6	6.3	50	90	18	4.6				0
2	.05	0	1.6	5.4	41	57	14	3.8				0
3	.01	0	1.8	5.4	37	69	12	3.5				0
4	0	0	2.2	5.0	256	58	12	3.5				0
5	0	0	2.4	5.0	274	49	12	3.5				0
6	0	0	9.4	4.6	171	96	10	3.2				0
7	0	0	9.4	4.2	339	58	8.6	3.0				0
8	0	0	6.3	9.0	135	58	8.6	1.1				0
9	0	0	4.2	321	124	47	8.6	0				0
10	0	0	3.5	286	212	45	8.6	0				0
11	0	0	2.8	265	165	44	8.6	0				0
12	0	0	2.5	426	119	34	9.4	0				0
13	0	46	2.3	173	87	31	9.4	0				0
14	0	126	2.2	74	99	28	10	0				0
15	0	64	2.4	83	72	26	8.6	0				0
16	0	72	20	470	57	24	8.6	0				.01
17	0	24	220	472	47	22	8.6	0				.01
18	0	12	120	482	40	20	8.6	0				.01
19	0	9.4	66	435	33	38	8.6	0				.03
20	0	7.3	35	119	29	95	8.6	0				.03
21	0	6.0	19	81	26	95	8.6	0				.03
22	0	4.2	32	57	22	66	8.6	0				.05
23	0	3.2	23	46	20	52	7.9	0				.05
24	0	2.4	26	40	272	41	8.6	0				.05
25	0	2.4	22	40	364	36	8.6	0				.05
26	0	2.2	18	32	205	31	7.9	0				.05
27	0	2.2	14	26	186	26	6.8	0				.05
28	0	2.2	14	22	115	22	6.3	0				.05
29	0	2.2	12	85	------	20	5.8	0				.05
30	0	2.0	8.6	98	------	20	5.4	0				.05
31	0	------	7.3	65	------	20	------	0	------			------
TOTAL	.11	388.7	711.5	4,242.9	3,597	1,418	275.9	26.2	0	0	0	.57
MEAN	.004	13.0	23.0	137	128	45.7	9.20	.85	0	0	0	.019
MAX	.05	126	220	482	364	96	18	4.6	0	0	0	.05
MIN	0	0	1.6	4.2	20	20	5.4	0	0	0	0	0
AC-FT	.2	771	1,410	8,420	7,130	2,810	547	52	0	0	0	1.1

CAL YR 1972 TOTAL 2,952.98 MEAN 8.07 MAX 220 MIN 0 AC-FT 5,860
WTR YR 1973 TOTAL 10,660.88 MEAN 29.2 MAX 482 MIN 0 AC-FT 21,150

11449100 SCOTTS CREEK NEAR LAKEPORT, CALIF.

LOCATION.--Lat 39°05'44", long 122°57'38", in NE¼NW¼ sec.3, T.14 N., R.10 W., Lake County, on left bank at upstream side of Eickhoff Road bridge, 0.9 mile downstream from small right-bank tributary, and 4.2 miles northwest of Lakeport.

DRAINAGE AREA.--55.2 sq mi.

PERIOD OF RECORD.--October 1960 to current year.

GAGE--Water-stage recorder. Altitude of gage is 1,400 ft (from topographic map). Prior to Oct. 1, 1968, at site 3.0 miles upstream at different datum.

AVERAGE DISCHARGE.--13 years, 79.4 cfs (57,530 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 3,370 cfs Jan. 16 (gage height, 12.66 ft); no flow for several months.
Period of record: Maximum discharge, 11,000 cfs (includes about 7,500 cfs bypassing gage) Jan. 23, 1970 (gage height, 12.10 ft); maximum gage height, 17.88 ft Dec. 22, 1964, site and datum then in use; no flow for several months in each year.

REMARKS.--Small diversions above station for irrigation.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.70	40	231	372	96	15	.90			
2		0	.60	38	210	282	85	14	.80			
3		0	.70	36	206	300	75	14	.70			
4		0	1.6	31	841	292	67	14	.70			
5		0	1.9	27	796	244	63	12	.60			
6		0	8.6	24	544	334	59	12	.50			
7		0	11	22	864	291	55	11	.40			
8		0	7.3	30	622	266	52	11	.20			
9		0	4.9	501	513	221	49	10	.10			
10		0	3.8	450	901	210	46	9.9	0			
11		11	3.2	2,030	760	201	44	9.4	0			
12		.10	2.8	2,090	585	169	41	7.9	0			
13		184	2.3	842	520	149	40	7.4	0			
14		238	1.7	406	499	131	41	7.8	0			
15		135	2.6	320	373	117	37	6.6	0			
16		196	198	2,100	301	105	36	2.6	0			
17		58	932	1,250	248	100	35	1.9	0			
18		27	393	1,700	213	92	32	1.8	0			
19		20	345	774	180	130	31	1.7	0			
20		15	171	443	154	277	28	1.7	0			
21		9.2	115	451	135	349	25	1.6	0			
22		6.7	204	332	121	321	24	1.3	0			
23		5.0	165	271	110	262	24	1.1	0			
24		3.6	164	256	364	211	23	1.1	0			
25		2.5	119	269	655	176	21	1.6	0			
26		1.9	93	228	546	148	20	1.5	0			
27		1.6	84	206	595	126	19	1.5	0			
28		1.1	72	186	512	111	18	1.4	0			
29		.90	57	239	------	98	18	1.2	0			
30		.70	50	293	------	115	18	1.1	0			
31		------	44	264	------	114	------	1.0	------			------
TOTAL	0	917.30	3,259.70	16,149	12,599	6,314	1,222	186.1	4.90	0	0	0
MEAN	0	30.6	105	521	450	204	40.7	6.00	.16	0	0	0
MAX	0	238	932	2,100	901	372	96	15	.90	0	0	0
MIN	0	0	.60	22	110	92	18	1.0	0	0	0	0
AC-FT	0	1,820	6,470	32,030	24,990	12,520	2,420	369	9.7	0	0	0

CAL YR 1972 TOTAL 11,225.10 MEAN 30.7 MAX 932 MIN 0 AC-FT 22,260
WTR YR 1973 TOTAL 40,652.00 MEAN 111 MAX 2,100 MIN 0 AC-FT 80,630

11449460 SEIGLER CREEK AT LOWER LAKE, CALIF.

LOCATION.--Lat 38°54'34", long 122°36'48", in NE¼NE¼ sec.10, T.12 N., R.7 W., Lake County, on left bank 400 ft upstream from highway bridge, and 0.2 mile southwest of Lower Lake.

DRAINAGE AREA.--12.5 sq mi.

PERIOD OF RECORD.--October 1965 to September 1973 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,364.75 ft above mean sea level.

AVERAGE DISCHARGE.--8 years, 11.3 cfs (8,190 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,200 cfs Jan. 18 (gage height, 7.33 ft), from rating curve extended above 430 cfs; no flow many days.
Period of record: Maximum discharge, 1,420 cfs Jan. 26, 1969 (gage height, 7.64 ft), from rating curve extended above 430 cfs; no flow many days in each year.

REMARKS.--Records good. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.27	1.2	2.0	17	52	11	3.4	1.2	.02	0	0
2	0	.28	1.2	2.0	14	41	11	3.1	1.0	.01	0	0
3	0	.37	1.2	2.0	23	49	11	3.1	.82	.01	0	0
4	0	.62	1.5	1.8	145	44	10	3.2	.68	0	0	0
5	0	.50	1.7	1.7	69	34	10	3.1	.68	0	0	0
6	0	.43	4.2	1.6	158	47	9.6	2.9	.65	0	0	0
7	0	1.4	3.2	1.5	193	34	9.2	2.8	.62	0	0	0
8	0	1.1	2.1	1.9	65	30	8.8	2.7	.50	0	0	0
9	.05	.74	1.4	126	74	27	8.4	2.5	.41	0	0	0
10	.16	2.0	1.3	53	127	24	8.2	2.4	.33	0	0	0
11	.62	3.5	1.2	249	83	24	7.9	2.4	.37	0	0	0
12	.71	1.4	1.3	165	72	21	7.6	2.1	.39	0	0	0
13	.82	56	1.3	37	77	19	7.4	1.8	.33	0	0	0
14	2.1	77	1.3	15	59	17	7.0	1.6	.37	0	0	0
15	3.5	103	1.4	44	41	15	6.8	1.5	.37	0	0	0
16	1.7	31	4.4	320	33	14	6.5	1.5	.35	0	0	0
17	1.1	7.9	51	85	28	14	6.2	1.5	.33	0	0	0
18	.74	4.4	22	332	25	13	6.0	1.5	.33	0	0	0
19	.59	3.3	19	61	23	60	5.8	1.2	.27	0	0	.01
20	.50	2.5	8.3	35	20	50	5.5	1.2	.21	0	0	.14
21	.43	2.0	5.5	50	18	36	5.3	1.3	.18	0	0	.11
22	.43	1.7	8.8	26	16	26	5.1	1.3	.16	0	0	.17
23	.43	1.6	5.9	21	15	22	5.0	1.3	.18	0	0	.20
24	.33	1.5	5.0	19	141	19	4.6	1.5	.22	0	0	.18
25	.25	1.4	3.8	21	114	17	4.4	1.7	.15	0	.01	.16
26	.21	1.3	3.2	15	108	15	4.2	1.5	.10	0	.02	.14
27	.21	1.3	3.4	13	111	14	3.8	1.4	.07	0	.02	.12
28	.22	1.2	3.6	11	77	13	3.5	1.3	.04	0	.01	.10
29	.21	1.2	2.7	50	------	13	3.4	1.2	.04	0	0	.09
30	.21	1.2	2.5	41	------	12	3.5	1.1	.03	0	0	.08
31	.24	------	2.3	22	------	12	------	1.0	------	0	0	------
TOTAL	15.76	312.11	176.9	1,825.5	1,946	828	206.7	60.1	11.38	.04	.06	1.50
MEAN	.51	10.4	5.71	58.9	69.5	26.7	6.89	1.94	.38	.01	.002	.050
MAX	3.5	103	51	332	193	60	11	3.4	1.2	.02	.02	.20
MIN	0	.27	1.2	1.5	14	12	3.4	1.0	.03	0	0	0
AC-FT	31	619	351	3,620	3,860	1,640	410	119	23	.08	.1	3.0

CAL YR 1972 TOTAL 1,040.47 MEAN 2.84 MAX 103 MIN 0 AC-FT 2,060
WTR YR 1973 TOTAL 5,384.05 MEAN 14.8 MAX 332 MIN 0 AC-FT 10,680

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-16	0530	7.18	1,110	2-6	2400	6.08	573
1-18	0600	7.33	1,200				

NOTE.--No gage-height record Aug. 21 to Sept. 30.

11449500 KELSEY CREEK NEAR KELSEYVILLE, CALIF.

LOCATION.--Lat 38°55'39", long 122°50'33", in SE¼SE¼ sec.34, T.13 N., R.9 W., Lake County, on left bank 1.6 miles downstream from Widow Creek, and 3.5 miles south of Kelseyville.

DRAINAGE AREA.--36.6 sq mi.

PERIOD OF RECORD.--October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,475.44 ft above mean sea level. Prior to July 16, 1955, at site 600 ft upstream at different datum.

AVERAGE DISCHARGE.--27 years, 73.6 cfs (53,320 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 6,440 cfs Jan. 16 (gage height, 11.90 ft); minimum daily, 1.7 cfs Aug. 3, 4.
Period of record: Maximum discharge, 8,800 cfs Dec. 21, 1955 (gage height, 12.80 ft); maximum gage height, 13.48 ft Jan. 5, 1965; minimum discharge, 0.5 cfs Sept. 1, 1950, but may have been less during August 1950.

REMARKS.--Records good except those for period of no gage-height record, which are fair. No regulation or diversion above station.

REVISIONS (WATER YEARS).--WSP 1285: 1947-48(M), 1950-52(P).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	9.3	12	30	149	240	67	18	8.9	4.6	2.6	3.1
2	3.0	9.5	11	28	133	202	62	17	8.6	4.5	2.4	2.7
3	2.9	11	12	25	142	249	59	16	8.2	4.4	1.7	2.9
4	3.0	21	17	23	573	210	56	16	7.8	4.3	1.7	3.0
5	3.1	15	13	20	381	183	55	17	7.5	4.2	2.4	3.1
6	3.1	12	36	19	557	261	52	16	7.3	4.1	2.3	3.0
7	3.0	14	32	18	862	194	50	15	7.1	4.1	2.8	3.3
8	4.0	17	18	27	365	182	48	15	6.8	4.1	3.1	2.8
9	4.6	14	14	1,050	397	159	46	14	6.3	4.3	2.9	2.3
10	5.2	28	14	358	704	152	45	14	6.3	4.1	2.2	2.6
11	11	70	12	892	426	142	44	13	6.6	3.9	2.5	3.3
12	15	32	13	1,090	352	127	41	13	6.6	4.0	3.0	3.5
13	13	249	12	423	327	115	44	13	6.6	3.8	2.2	3.2
14	13	353	12	230	322	106	43	12	6.8	3.7	2.3	3.1
15	42	245	12	303	241	99	40	12	7.1	3.6	2.1	2.9
16	29	177	112	2,700	206	94	38	12	7.1	4.0	2.1	2.9
17	17	81	500	649	182	90	37	11	7.1	3.7	2.0	3.2
18	13	56	236	1,800	161	85	36	11	6.8	3.6	2.6	3.3
19	11	47	200	538	144	112	34	11	6.4	4.1	2.8	3.8
20	9.5	38	116	290	132	162	32	10	6.0	4.0	2.0	5.3
21	8.9	30	85	274	119	146	31	10	5.8	4.0	2.3	5.1
22	8.5	26	170	199	111	126	30	10	5.6	3.8	3.0	5.1
23	8.5	21	119	170	105	112	27	10	5.9	3.7	3.4	5.6
24	8.2	18	105	162	830	104	25	11	5.8	3.4	4.6	5.3
25	8.2	16	79	162	781	96	23	12	5.5	3.2	5.3	5.2
26	8.5	15	64	138	509	90	22	10	5.4	3.2	4.9	4.8
27	8.9	14	59	124	406	85	20	10	4.7	2.8	4.8	4.5
28	8.9	13	53	111	302	78	20	9.7	4.8	2.6	4.6	4.4
29	9.2	13	44	243	------	74	20	9.4	4.8	3.0	4.3	4.1
30	9.3	12	40	226	------	80	19	9.1	4.6	2.8	3.6	4.1
31	9.3	------	35	177	------	76	------	8.9	------	3.1	3.3	------
TOTAL	304.9	1,676.8	2,257	12,499	9,919	4,231	1,166	386.1	194.8	116.7	91.8	111.5
MEAN	9.84	55.9	72.8	403	354	136	38.9	12.5	6.49	3.76	2.96	3.72
MAX	42	353	500	2,700	862	261	67	18	8.9	4.6	5.3	5.6
MIN	2.9	9.3	11	18	105	74	19	8.9	4.6	2.6	1.7	2.3
AC-FT	605	3,330	4,480	24,790	19,670	8,390	2,310	766	386	231	182	221

CAL YR 1972 TOTAL 11,949.0 MEAN 32.6 MAX 500 MIN 1.3 AC-FT 23,700
WTR YR 1973 TOTAL 32,954.6 MEAN 90.3 MAX 2,700 MIN 1.7 AC-FT 65,370

PEAK DISCHARGE (BASE, 2,400 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1145	9.15	2,610	1-18	unknown	10.65	4,510
1-16	unknown	11.90	6,440				

NOTE.--No gage-height record Jan. 16, 18.

11450000 CLEAR LAKE AT LAKEPORT, CALIF.

LOCATION.--Lat 39°02'21", long 122°54'44", in NE¼NE¼ sec.25, T.14 N., R.10 W., Lake County, on private pier at 410 Esplanada Street in Lakeport.

DRAINAGE AREA.--528 sq mi.

PERIOD OF RECORD.--1874-1900 (incomplete), January 1913 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,318.65 ft above mean sea level. Prior to July 8, 1947, nonrecording gage and July 8, 1947, to Mar. 17, 1949, at municipal wharf at foot of Third Street in Lakeport at datum 0.06 ft lower. Mar. 18, 1949, to Sept. 30, 1967, at private pier at foot of Fourth Street at datum 0.06 ft lower.

EXTREMES.--Current year: Maximum daily mean gage height, 7.75 ft Feb. 28; minimum, 0.63 ft Oct. 8.
Period of record: Maximum gage height observed, 11.12 ft Jan. 28, 1914; minimum observed, -3.50 ft Sept. 24-27, 1920.

REMARKS.--This natural lake is regulated by gates on a dam at outlet, completed in 1915. Capacity between gage heights 0.00 and 7.56 ft (limits stipulated by court decree of 1920), about 319,000 acre-ft. Water is released down natural channel of Cache Creek from which it is diverted for irrigation (see sta 11451000).

MEAN GAGE HEIGHT, IN FEET, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	.65	1.25	2.23	6.65	7.72	7.45	7.36	6.39	5.04	3.15	2.27
2	.69	.65	1.23	2.22	6.68	7.69	7.48	7.34	6.36	5.00	3.11	2.23
3	.67	.66	1.23	2.23	6.72	7.66	7.50	7.30	6.32	4.95	3.07	2.20
4	.67	.65	1.23	2.25	6.83	7.62	7.50	7.24	6.28	4.90	3.02	2.17
5	.67	.67	1.24	2.26	7.02	7.57	7.51	7.24	6.25	4.85	2.95	2.13
6	.66	.66	1.28	2.26	7.09	7.56	7.51	7.20	6.21	4.80	2.87	2.09
7	.64	.68	1.27	2.27	7.27	7.52	7.53	7.17	6.17	4.75	2.81	2.06
8	.63	.68	1.27	2.40	7.32	7.48	7.53	7.15	6.13	4.70	2.76	2.04
9	.64	.71	1.28	2.59	7.35	7.41	7.53	7.13	6.07	4.65	2.70	2.00
10	.64	.75	1.27	2.85	7.47	7.38	7.54	7.11	6.03	4.60	2.63	1.96
11	.69	.74	1.26	3.20	7.57	7.39	7.54	7.09	5.98	4.50	2.54	1.94
12	.73	.77	1.27	3.82	7.63	7.36	7.53	7.06	5.90	4.50	2.50	1.92
13	.71	.89	1.26	4.25	7.66	7.30	7.53	7.04	5.83	4.47	2.48	1.88
14	.75	1.04	1.27	4.42	7.64	7.31	7.53	7.01	5.77	4.42	2.44	1.85
15	.80	1.11	1.29	4.53	7.62	7.32	7.54	6.98	5.72	4.37	2.43	1.82
16	.78	1.19	1.33	4.68	7.57	7.31	7.54	6.96	5.65	4.33	2.43	1.79
17	.78	1.18	1.51	5.49	7.51	7.29	7.49	6.93	5.61	4.28	2.43	1.76
18	.75	1.19	1.65	6.05	7.44	7.33	7.48	6.90	5.58	4.22	2.43	1.74
19	.74	1.21	1.79	6.50	7.37	7.40	7.49	6.84	5.54	4.17	2.43	1.71
20	.75	1.22	1.86	6.60	7.30	7.46	7.51	6.82	5.51	4.11	2.42	1.69
21	.76	1.22	1.91	6.68	7.27	7.56	7.49	6.78	5.48	4.04	2.42	1.68
22	.75	1.23	1.96	6.71	7.25	7.56	7.48	6.74	5.42	3.98	2.42	1.65
23	.75	1.23	2.03	6.69	7.25	7.53	7.48	6.69	5.39	3.93	2.42	1.64
24	.75	1.23	2.07	6.62	7.36	7.50	7.49	6.66	5.34	3.89	2.41	1.61
25	.73	1.23	2.11	6.60	7.56	7.48	7.48	6.60	5.30	3.86	2.41	1.61
26	.72	1.24	2.13	6.56	7.64	7.47	7.47	6.58	5.27	3.82	2.41	1.60
27	.71	1.24	2.15	6.54	7.73	7.42	7.45	6.55	5.24	3.77	2.41	1.58
28	.67	1.24	2.17	6.48	7.75	7.41	7.43	6.53	5.19	3.71	2.40	1.57
29	.69	1.25	2.20	6.47	------	7.42	7.41	6.50	5.13	3.67	2.37	1.56
30	.66	1.25	2.21	6.55	------	7.42	7.39	6.47	5.08	3.43	2.33	1.53
31	.65	------	2.22	6.61	------	7.43	------	6.44	------	3.20	2.29	------
MEAN	.71	.99	1.62	4.70	7.34	7.46	7.49	6.92	5.74	4.29	2.58	1.84
MAX	.80	1.25	2.22	6.71	7.75	7.72	7.54	7.36	6.39	5.04	3.15	2.27
MIN	.63	.65	1.23	2.22	6.65	7.29	7.39	6.44	5.08	3.20	2.29	1.53

WTR YR 1973 MEAN 4.28 MAX 7.75 MIN .63

11451000 CACHE CREEK NEAR LOWER LAKE, CALIF.

LOCATION.--Lat 38°55'27", long 122°33'53", in sec.6, T.12 N., R.6 W., Lake County, on left bank 500 ft downstream from Clear Lake Dam, 1.9 miles downstream from Copsey Creek, and 2.5 miles northeast of Lower Lake.

DRAINAGE AREA.--528 sq mi.

PERIOD OF RECORD.--May 1944 to current year.

GAGE.--Water-stage recorder and rain gage. Datum of gage is 1,280.34 ft above mean sea level.

AVERAGE DISCHARGE (unadjusted).--29 years, 347 cfs (251,400 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 5,380 cfs Feb. 20 (gage height, 8.14 ft); minimum daily, 0.80 cfs Jan. 3-7.
Period of record: Maximum discharge, 8,000 cfs Feb. 24, 1958 (gage height, 9.40 ft); minimum recorded, 0.2 cfs Mar. 15-23, 1950.

REMARKS.--Records good. Flow completely regulated by Clear Lake 500 ft upstream (see sta 11450000).

REVISIONS (WATER YEARS).--WRD Calif. 1968: 1966-67.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.7	1.5	.9	517	2,850	120	421	530	592	487	335
2	3.0	1.6	1.5	.9	516	2,800	120	446	511	590	506	323
3	2.9	2.3	1.4	.8	516	2,800	120	468	481	587	504	304
4	3.0	3.6	1.6	.8	763	2,770	120	481	469	586	506	288
5	3.1	3.3	1.6	.8	1,850	2,680	117	451	468	608	491	279
6	3.2	3.9	1.6	.8	2,660	2,760	113	434	489	625	470	278
7	3.1	4.5	1.5	.8	3,030	2,710	112	441	516	599	459	273
8	3.3	4.2	1.4	.9	2,730	2,640	112	447	522	586	442	260
9	3.1	4.1	1.3	1.6	2,680	1,830	112	441	526	574	422	254
10	3.1	3.9	1.2	1.3	2,870	1,320	112	433	546	533	402	259
11	3.1	3.7	1.2	1.8	2,780	1,320	109	428	567	530	393	271
12	3.1	3.7	1.1	1.8	2,760	1,320	106	441	567	557	385	278
13	3.3	4.1	1.1	1.6	2,770	1,320	99	458	558	576	385	266
14	3.3	3.9	1.1	1.7	2,770	984	99	462	546	587	384	248
15	3.3	3.6	1.1	1.8	2,730	421	99	461	537	577	399	240
16	3.3	3.1	1.2	215	2,680	474	99	469	531	562	439	234
17	3.1	3.0	1.4	3.1	2,640	120	100	488	529	536	467	228
18	3.0	2.7	1.2	1,400	2,580	119	99	486	523	519	463	224
19	2.8	2.8	1.0	1,860	2,540	119	98	493	524	534	430	215
20	2.8	2.6	.91	2,030	1,770	119	98	517	510	546	391	201
21	2.6	2.3	.82	2,160	894	936	98	494	499	531	373	188
22	2.5	2.2	.82	2,140	1,270	1,960	98	421	515	496	357	168
23	2.3	2.2	.82	2,110	775	1,970	98	402	527	481	356	140
24	2.2	1.9	.82	2,100	1,240	1,480	120	439	520	489	351	121
25	1.9	1.8	.82	2,110	2,410	1,030	182	444	519	497	342	107
26	1.8	1.8	.82	2,080	3,050	1,010	244	413	529	517	329	98
27	1.8	1.7	.90	2,040	3,090	888	270	395	536	528	318	91
28	1.7	1.6	.90	2,020	2,920	590	326	393	555	518	317	91
29	1.7	1.5	.82	1,400	------	1,020	336	414	569	480	315	86
30	1.6	1.5	.82	519	------	295	370	459	578	449	320	81
31	1.7	------	.82	518	------	121	------	505	------	458	333	------
TOTAL	83.6	84.8	35.09	24,723.4	59,801	42,776	4,306	13,945	15,797	16,848	12,536	6,429
MEAN	2.70	2.83	1.13	798	2,136	1,380	144	450	527	543	404	214
MAX	3.3	4.5	1.6	2,160	3,090	2,850	370	517	578	625	506	335
MIN	1.6	1.5	.82	.80	516	119	98	393	468	449	315	81
AC-FT	166	168	70	49,040	118,600	84,850	8,540	27,660	31,330	33,420	24,870	12,750
(a)	2.00	7.08	3.13	11.78	10.20	3.00	.01	0	0	0	0	.52

CAL YR 1972 TOTAL 28,956.89 MEAN 79.1 MAX 487 MIN .82 AC-FT 57,440
WTR YR 1973 TOTAL 197,364.89 MEAN 541 MAX 3,090 MIN .80 AC-FT 391,500

a Precipitation, in inches.

11451100 NORTH FORK CACHE CREEK AT HOUGH SPRINGS, NEAR CLEARLAKE OAKS, CALIF.

LOCATION.--Lat 39°09'56", long 122°37'08", in SE¼NW¼ sec.10, T.15 N., R.7 W., Lake County, on right bank 0.5 mile upstream from Spanish Creek, 0.9 mile upstream from Hough Springs, and 10 miles northeast of Clearlake Oaks.

DRAINAGE AREA.--60.2 sq mi.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,840 ft (from topographic map). Recording rain gage 9 miles southwest of gage. Altitude of gage is 3,450 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 5,490 cfs Jan. 18 (gage height, 7.92 ft), from rating curve extended as explained below; minimum daily, 0.27 cfs Oct. 4.
Period of record: Maximum discharge, 5,490 cfs Jan. 18, 1973 (gage height, 7.92 ft), from rating curve extended above 2,400 cfs on basis of slope-area measurement of maximum flow; no flow for several days in 1972.

REMARKS.--Records fair. No regulation or diversion above station.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	2.8	9.9	37	230	570	145	33	12	3.3	.70	.45
2	.66	3.1	9.5	34	214	475	128	31	11	2.9	.70	.40
3	.46	3.4	11	31	210	450	118	31	10	2.9	.60	.45
4	.27	4.1	15	29	570	422	110	30	9.5	2.8	.60	.50
5	.46	4.9	16	27	790	374	104	30	9.0	2.7	.60	.40
6	.46	4.5	13	25	688	406	98	29	8.6	2.5	.60	.40
7	.46	6.0	11	24	964	386	90	28	8.2	2.3	.60	.45
8	.46	5.3	10	32	742	358	87	26	7.8	2.3	.60	.40
9	.89	5.6	8.6	245	635	326	82	25	7.0	2.2	.60	.35
10	1.6	14	9.4	720	910	310	78	24	6.6	2.1	.60	.30
11	4.5	63	9.2	2,200	868	302	76	23	6.6	2.0	.60	.35
12	5.3	19	8.8	2,700	694	262	72	22	6.2	2.0	.55	.35
13	3.4	142	8.6	900	640	230	70	21	6.2	2.0	.55	.45
14	7.2	310	8.2	450	570	202	69	20	6.2	1.9	.55	.40
15	9.1	144	8.8	320	490	181	65	19	6.2	1.7	.50	.45
16	6.4	217	90	1,880	426	163	61	18	6.2	1.7	.40	.45
17	4.5	131	475	1,030	366	153	59	18	5.8	1.7	.45	.45
18	3.4	80	260	2,890	314	135	56	17	5.8	1.6	.40	.55
19	12	63	420	1,000	270	181	54	15	5.4	1.4	.40	.60
20	6.4	56	195	540	226	286	53	15	4.8	1.4	.40	.80
21	2.8	35	112	420	194	250	50	15	4.5	1.4	.40	.60
22	2.8	24	188	330	178	234	47	14	4.5	1.4	.35	.90
23	2.8	22	150	290	163	218	46	14	4.5	1.4	.40	1.4
24	2.8	19	105	273	724	202	43	14	4.8	1.3	.45	1.3
25	2.4	16	93	286	898	190	42	16	4.2	1.3	.55	1.0
26	2.2	15	85	222	766	181	41	14	4.0	1.1	.60	1.1
27	2.2	14	66	181	760	166	40	13	3.5	1.1	.70	.90
28	2.2	12	57	172	676	160	37	13	3.3	1.0	.60	.80
29	2.2	11	52	270	------	145	36	12	3.1	.90	.60	.90
30	2.2	11	47	326	------	160	34	11	3.1	.80	.50	.80
31	2.4	------	43	270	------	169	------	11	------	.70	.45	------
TOTAL	95.58	1,457.7	2,595.0	18,154	15,176	8,247	2,091	622	188.6	55.80	16.60	18.65
MEAN	3.08	48.6	83.7	586	542	266	69.7	20.1	6.29	1.80	.54	.62
MAX	12	310	475	2,890	964	570	145	33	12	3.3	.70	1.4
MIN	.27	2.8	8.2	24	163	135	34	11	3.1	.70	.35	.30
AC-FT	190	2,890	5,150	36,010	30,100	16,360	4,150	1,230	374	111	33	37
(a)	9.36	8.13	5.00	12.66	8.63	5.31	.15	0	0	0	0	1.17

CAL YR 1972 TOTAL 16,963.05 MEAN 46.3 MAX 515 MIN 0 AC-FT 33,650
WTR YR 1973 TOTAL 48,717.93 MEAN 133 MAX 2,890 MIN .27 AC-FT 96,630

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-11	unknown	--	3,300	1-18	1100	7.92	5,490
1-16	0800	7.55	4,970				

a Precipitation, in inches.
NOTE.--No gage-height record Dec. 8 to Jan. 20.

11451500 NORTH FORK CACHE CREEK NEAR LOWER LAKE, CALIF.

LOCATION.--Lat 39°01'09", long 122°34'04", in NE¼ sec.31, T.14 N., R.6 W. (unsurveyed), Lake County, on right bank 500 ft upstream from Sweet Hollow Creek, 5 miles upstream from mouth, and 7 miles northeast of Lower Lake.

DRAINAGE AREA.--197 sq mi.

PERIOD OF RECORD.--July 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,035.60 ft above mean sea level. Prior to June 15, 1939, at datum 1.00 ft higher.

AVERAGE DISCHARGE.--43 years, 195 cfs (141,300 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 9,620 cfs Jan. 18 (gage height, 9.49 ft); minimum daily, 1.1 cfs Sept. 29.
Period of record: Maximum discharge, 20,300 cfs Dec. 11, 1937 (gage height, 13.98 ft, present datum, from floodmarks), from rating curve extended above 7,600 cfs on basis of slope-area measurement at gage height 13.9 ft for peak of Feb. 28, 1940; no flow at times in 1930-36, 1949-50, 1956-57.

REMARKS.--Records good. No regulation; several small diversions for irrigation of about 150 acres above station.

REVISIONS (WATER YEARS).--WSP 831: 1932(M). WSP 1315-A: 1935(M), 1937-38(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.3	25	75	563	1,110	322	91	37	8.9	3.6	2.3
2	1.6	2.3	24	70	532	898	297	83	37	8.6	3.5	5.1
3	1.5	2.4	24	66	503	840	272	81	36	8.2	3.6	3.8
4	1.4	2.6	32	61	856	760	255	85	33	7.1	3.5	3.7
5	1.6	2.3	33	56	1,230	670	242	81	31	6.7	3.5	2.9
6	1.6	2.3	38	53	1,160	765	229	76	29	8.3	3.1	2.8
7	1.7	2.8	37	51	2,260	725	213	73	27	7.8	3.2	3.0
8	2.0	2.6	32	58	1,590	658	202	70	26	6.9	3.1	2.3
9	2.3	2.7	23	615	1,410	596	193	69	24	6.8	3.3	1.6
10	2.7	9.0	25	821	2,230	561	185	67	23	6.1	3.1	2.0
11	3.4	57	20	3,480	1,860	552	178	68	22	5.4	3.0	2.0
12	3.1	51	21	4,500	1,470	518	171	66	21	4.0	2.9	2.0
13	3.0	127	20	2,140	1,440	480	171	64	22	4.3	3.1	1.8
14	3.8	833	20	1,230	1,240	439	166	61	21	7.3	3.0	1.9
15	5.2	327	22	786	1,020	406	156	59	21	5.5	2.6	2.1
16	3.7	496	56	4,540	874	385	152	57	19	5.1	2.5	1.7
17	3.3	200	932	2,550	757	371	146	56	20	5.1	2.4	1.3
18	2.9	121	693	5,070	670	355	139	54	20	4.5	2.5	1.7
19	2.8	92	811	2,260	606	381	135	51	19	4.6	2.1	2.0
20	2.7	85	387	1,390	553	564	129	49	18	5.0	1.9	3.6
21	3.9	70	260	1,080	512	530	123	49	17	5.1	1.8	2.7
22	2.6	60	336	786	469	513	121	48	16	4.6	2.1	2.9
23	2.4	53	312	669	430	477	118	45	15	4.5	2.3	3.4
24	2.3	48	270	622	1,180	449	113	49	15	4.5	2.7	2.7
25	2.3	42	215	631	1,670	431	108	47	14	4.7	3.0	2.6
26	2.3	37	175	575	1,500	411	105	47	13	4.6	3.0	1.6
27	2.3	34	155	528	1,590	387	102	41	11	3.9	2.5	1.3
28	2.3	32	141	492	1,440	360	99	40	10	3.7	2.6	1.5
29	2.3	30	116	589	------	338	97	36	9.8	3.6	2.1	1.1
30	2.3	26	99	675	------	345	94	38	8.8	3.8	2.3	1.2
31	2.3	------	86	601	------	363	------	40	------	3.6	1.8	------
TOTAL	79.3	2,852.3	5,440	37,120	31,615	16,638	5,033	1,841	635.6	172.8	85.7	70.6
MEAN	2.56	95.1	175	1,197	1,129	537	168	59.4	21.2	5.57	2.76	2.35
MAX	5.2	833	932	5,070	2,260	1,110	322	91	37	8.9	3.6	5.1
MIN	1.4	2.3	20	51	430	338	94	36	8.8	3.6	1.8	1.1
AC-FT	157	5,660	10,790	73,630	62,710	33,000	9,980	3,650	1,260	343	170	140

CAL YR 1972 TOTAL 28,298.85 MEAN 77.3 MAX 932 MIN .86 AC-FT 56,130
WTR YR 1973 TOTAL 101,583.30 MEAN 278 MAX 5,070 MIN 1.1 AC-FT 201,500

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-12	0500	8.33	6,220	1-18	0930	9.49	9,620
1-16	1000	9.43	9,430				

11451720 BEAR CREEK NEAR RUMSEY, CALIF.

LOCATION.--Lat 38°56'42", long 122°20'42", in NE¼SW¼ sec.30, T.13 N., R.4 W., Colusa County, on left bank 0.3 mile downstream from Brophy Canyon, 1.4 miles upstream from mouth, and 7.3 miles northwest of Rumsey.

DRAINAGE AREA.--100 sq mi.

PERIOD OF RECORD.--October 1958 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 750 ft (from topographic map).

AVERAGE DISCHARGE.--15 years, 47.5 cfs (34,410 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 7,100 cfs Jan. 18 (gage height, 10.63 ft); minimum daily, 0.50 cfs Aug. 17.
Period of record: Maximum discharge, 9,720 cfs Jan. 5, 1965 (gage height, 11.93 ft); no flow July 25, 26, Aug. 20, 1960, July 3 to Sept. 12, 1972.
Maximum stage known since 1955, 12.33 ft Feb. 24, 1958 (discharge, 9,350 cfs).

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

REVISIONS (WATER YEARS).--WSP 1931: Drainage area. WRD Calif. 1963: 1962(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.4	4.3	11	117	306	86	33	13	3.3	.80	.80
2	.80	1.5	4.4	11	105	252	81	32	13	3.2	.80	.80
3	.80	1.6	4.6	11	134	304	76	32	12	3.1	.70	.80
4	.80	2.0	5.1	11	344	268	74	32	11	2.9	.70	.90
5	.70	2.4	5.3	11	323	231	73	32	10	2.7	.70	.90
6	.70	2.0	7.2	12	1,450	367	71	30	9.7	2.5	.60	1.0
7	.60	2.8	6.9	13	1,910	367	69	29	8.8	2.4	.60	1.1
8	.60	3.7	6.0	18	541	249	67	29	8.3	2.4	.70	1.0
9	.80	3.3	4.8	401	710	200	63	28	7.5	2.4	.80	.70
10	1.1	6.3	4.6	728	1,260	181	61	27	6.9	2.3	.80	.60
11	2.7	12	4.5	2,420	622	168	60	27	6.8	2.2	.90	.80
12	3.8	7.8	4.5	1,900	446	150	59	26	6.4	2.1	.80	1.0
13	3.2	31	4.4	398	745	141	58	24	6.2	2.1	.80	1.1
14	4.2	648	4.6	168	441	129	56	23	6.5	2.1	.90	1.1
15	6.6	300	4.6	107	355	123	55	22	6.5	1.9	.80	1.1
16	8.4	343	6.7	2,260	278	119	53	21	6.3	1.9	.60	1.2
17	5.3	61	448	443	240	114	51	20	6.1	1.9	.50	1.3
18	3.7	26	190	2,330	210	110	49	20	6.2	1.9	.60	1.2
19	2.9	16	255	456	186	129	48	18	5.9	1.7	.60	1.2
20	2.5	10	74	330	171	380	47	17	5.5	1.7	.60	1.4
21	2.2	8.3	45	302	157	292	45	18	5.1	1.7	.60	1.6
22	2.0	7.0	40	211	144	224	43	17	5.1	1.7	.60	1.6
23	1.9	6.0	38	156	136	145	42	16	5.3	1.6	.60	1.6
24	1.8	5.5	29	137	753	127	40	17	5.7	1.5	.80	1.7
25	1.6	5.1	22	155	584	120	39	19	5.1	1.5	1.0	1.5
26	1.5	4.8	19	120	664	114	38	18	4.7	1.4	1.2	1.2
27	1.5	4.7	18	100	799	107	37	16	4.5	1.4	1.3	1.1
28	1.6	4.6	18	93	534	98	36	15	4.3	1.3	1.2	1.0
29	1.5	4.5	15	369	------	94	34	14	3.9	1.2	1.1	1.1
30	1.4	4.4	13	413	------	100	33	13	3.5	1.1	.90	1.3
31	1.4	------	12	153	------	96	------	13	------	1.0	.80	------
TOTAL	69.50	1,536.7	1,318.5	14,248	14,359	5,805	1,644	698	209.8	62.1	24.40	33.70
MEAN	2.24	51.2	42.5	460	513	187	54.8	22.5	6.99	2.00	.79	1.12
MAX	8.4	648	448	2,420	1,910	380	86	33	13	3.3	1.3	1.7
MIN	.60	1.4	4.3	11	105	94	33	13	3.5	1.0	.50	.60
AC-FT	138	3,050	2,620	28,260	28,480	11,510	3,260	1,380	416	123	48	67

CAL YR 1972 TOTAL 4,801.90 MEAN 13.1 MAX 648 MIN 0 AC-FT 9,520
WTR YR 1973 TOTAL 40,008.70 MEAN 110 MAX 2,420 MIN .50 AC-FT 79,360

11451760 CACHE CREEK ABOVE RUMSEY, CALIF.

LOCATION.--Lat 38°54'47", long 122°16'14", in NW¼SE¼ sec.2, T.12 N., R.4 W., Yolo County, on right bank 0.4 mile downstream from highway bridge, and 2.5 miles northwest of Rumsey.

DRAINAGE AREA.--955 sq mi.

PERIOD OF RECORD.--October 1960 to September 1962, June 1965 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (from topographic map).

AVERAGE DISCHARGE.--10 years (1960-62, 1965-73), 746 cfs (540,500 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 25,800 cfs Jan. 18 (gage height, 16.09 ft); minimum daily, 1.0 cfs Oct. 29.
Period of record: Maximum discharge, 43,400 cfs Jan. 24, 1970 (gage height, 19.59 ft), from rating curve extended above 14,000 cfs on basis of slope-area measurement at gage height 21.42 ft; minimum, 0.10 cfs Aug. 14-18, 1972.
Flood of Jan. 5, 1965, reached a stage of 21.42 ft, from floodmarks (discharge, 59,000 cfs, by slope-area measurement).

REMARKS.--Flow partly regulated by Clear Lake beginning in 1915 (see sta 11450000).

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.5	56	181	1,360	5,830	650	601	540	591	440	310
2	2.0	1.8	52	168	1,280	5,290	611	622	560	601	451	310
3	1.7	2.0	48	161	1,280	5,250	571	660	560	601	469	301
4	1.6	2.2	47	149	2,010	5,020	540	678	560	591	469	301
5	1.8	1.8	50	136	3,970	4,560	522	650	550	591	460	291
6	1.7	1.8	64	124	6,320	4,930	500	622	540	611	451	271
7	1.6	2.2	70	116	10,200	5,040	481	611	571	611	451	262
8	1.6	2.2	67	122	6,080	4,600	466	601	571	601	431	251
9	1.8	2.2	58	1,360	5,690	3,610	454	601	560	581	431	262
10	2.4	13	51	1,960	8,330	2,470	451	601	560	571	419	262
11	5.4	17	46	6,350	6,580	2,450	440	591	560	550	411	271
12	11	42	46	8,840	6,070	2,330	440	581	581	540	411	262
13	3.5	117	46	3,190	6,040	2,250	431	581	581	571	389	251
14	2.2	1,300	44	1,610	5,260	2,120	419	581	560	581	389	241
15	3.1	761	45	1,190	4,770	1,390	419	571	560	581	381	235
16	4.4	1,200	81	10,400	4,450	1,220	411	560	560	571	389	230
17	2.5	601	1,240	4,400	4,240	1,000	411	560	560	550	400	230
18	1.5	340	1,120	12,300	3,900	930	400	560	560	531	411	230
19	1.4	251	1,440	5,990	3,710	952	400	581	560	509	419	230
20	1.4	189	746	4,400	3,140	1,090	400	591	550	509	389	220
21	1.4	153	511	4,260	1,660	1,340	400	591	550	522	381	220
22	1.5	122	494	3,650	2,060	1,700	400	540	540	522	350	210
23	1.4	98	553	3,280	1,490	2,600	411	522	550	491	340	201
24	1.3	88	466	3,060	3,880	1,910	419	531	560	481	340	165
25	1.2	78	398	3,070	6,150	1,700	419	540	550	481	340	140
26	1.3	72	340	2,850	6,620	1,640	451	522	550	481	335	131
27	3.1	65	306	2,710	7,160	1,500	481	500	550	491	325	120
28	1.2	59	288	2,600	6,510	1,320	509	481	560	491	320	114
29	1.0	58	249	2,930	------	1,100	540	491	560	481	310	100
30	1.2	53	221	2,110	------	862	581	509	581	460	301	94
31	1.5	------	200	1,480	------	712	------	522	------	451	301	------
TOTAL	70.9	5,694.7	9,443	95,147	130,210	78,716	14,028	17,753	16,755	16,795	12,104	6,716
MEAN	2.29	190	305	3,069	4,650	2,539	468	573	559	542	390	224
MAX	11	1,300	1,440	12,300	10,200	5,830	650	678	581	611	469	310
MIN	1.0	1.5	44	116	1,280	712	400	481	540	451	301	94
AC-FT	141	11,300	18,730	188,700	258,300	156,100	27,820	35,210	33,230	33,310	24,010	13,320

CAL YR 1972 TOTAL 69,584.80 MEAN 190 MAX 1,440 MIN .10 AC-FT 138,000
WTR YR 1973 TOTAL 403,432.60 MEAN 1,105 MAX 12,300 MIN 1.0 AC-FT 800,200

11452000 CACHE CREEK NEAR CAPAY, CALIF.

LOCATION.--Lat 38°43'44", long 122°06'15", in Canada de Capay Grant, Yolo County, on right bank 1.8 miles upstream from diversion dam, 3.2 miles northwest of Capay, and 5.4 miles northwest of Esparto.

DRAINAGE AREA.--1,044 sq mi.

PERIOD OF RECORD.--May 1942 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 225 ft (from river-profile map).

AVERAGE DISCHARGE.--31 years, 660 cfs (478,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,100 cfs Feb. 7 (gage height, 15.13 ft); minimum daily, 0.68 cfs Oct. 3.
Period of record: Maximum discharge, 51,600 cfs Feb. 24, 1958 (gage height, 20.90 ft), from rating curve extended above 30,000 cfs; no flow Aug. 23 to Sept. 27, 1972.

REMARKS.--Records good. Flow partially regulated by Clear Lake beginning in 1915 (see sta 11450000). About 3,700 acre-ft diverted annually between stations above Rumsey and near Capay for irrigation of approximately 900 acres, from data furnished by U.S. Soil Conservation Service. Records of chemical analyses for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1395: 1943. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.4	48	141	1,650	5,200	809	579	585	581	437	309
2	.75	1.4	45	133	1,500	4,760	749	617	598	591	464	309
3	.68	1.6	44	126	1,420	4,600	694	624	567	589	469	300
4	.79	2.0	43	120	1,940	4,600	652	648	538	583	468	289
5	.91	1.5	43	114	3,800	4,310	628	658	527	579	473	275
6	.79	1.5	57	107	6,210	4,500	600	614	518	619	453	263
7	.80	2.0	62	102	12,600	4,520	569	601	546	612	447	259
8	.95	1.9	58	110	6,600	4,200	544	604	558	585	435	251
9	1.5	1.8	52	835	5,680	3,920	528	602	549	584	430	243
10	1.6	4.8	45	2,820	8,010	2,820	513	588	545	555	412	238
11	3.2	17	39	4,790	6,710	2,670	493	578	578	512	402	242
12	1.7	41	40	9,860	5,820	2,530	468	568	587	528	393	249
13	1.3	109	38	4,750	6,080	2,420	457	578	583	545	389	250
14	1.9	1,930	38	2,820	5,410	2,380	453	583	563	562	386	242
15	2.6	893	38	2,000	5,020	1,510	436	583	564	565	380	234
16	3.8	1,450	43	10,300	4,650	1,490	424	570	546	551	385	229
17	1.8	537	654	6,050	4,380	1,100	412	585	534	534	410	222
18	1.4	265	1,340	11,500	4,160	942	402	591	529	502	421	215
19	1.2	188	1,390	7,110	3,970	929	392	572	526	498	413	212
20	1.2	149	764	5,210	3,660	1,640	383	589	530	512	384	206
21	1.3	131	429	4,850	2,510	1,480	375	616	511	515	365	193
22	1.3	110	320	4,260	2,470	2,980	369	566	507	493	350	182
23	1.2	95	434	3,860	1,920	2,900	363	496	528	462	341	170
24	1.1	85	343	3,610	3,000	2,800	357	502	539	462	337	144
25	.99	76	300	3,550	5,230	2,030	368	538	522	463	334	131
26	1.2	69	252	3,380	5,500	1,900	407	521	529	475	331	115
27	2.7	63	223	3,210	6,470	1,840	454	485	530	490	320	108
28	1.0	58	207	3,070	6,550	1,620	481	469	543	491	311	101
29	.88	54	189	3,160	------	1,560	532	466	557	477	307	91
30	1.0	50	166	3,120	------	1,220	532	495	560	443	302	80
31	1.3	------	152	1,920	------	903	------	538	------	426	304	------
TOTAL	44.54	6,389.9	7,896	106,988	132,920	82,174	14,844	17,624	16,397	16,384	12,053	6,352
MEAN	1.44	213	255	3,451	4,747	2,651	495	569	547	529	389	212
MAX	3.8	1,930	1,390	11,500	12,600	5,200	809	658	598	619	473	309
MIN	.68	1.4	38	102	1,420	903	357	466	507	426	302	80
AC-FT	88	12,670	15,660	212,200	263,600	163,000	29,440	34,960	32,520	32,500	23,910	12,600

CAL YR 1972 TOTAL 65,071.06 MEAN 178 MAX 1,930 MIN 0 AC-FT 129,100
WTR YR 1973 TOTAL 420,066.44 MEAN 1,151 MAX 12,600 MIN .68 AC-FT 833,200

11452500 CACHE CREEK AT YOLO, CALIF.

LOCATION.--Lat 38°43'31", long 121°48'22", in Rio Jesus Maria Grant, Yolo County, on left bank 800 ft upstream from highway bridge, 0.5 mile south of Yolo, and 7.3 miles downstream from Moore Dam.

DRAINAGE AREA.--1,139 sq mi.

PERIOD OF RECORD.--January 1903 to current year. Records for water year 1903 incomplete, yearly estimate published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level. Prior to summer of 1930, nonrecording gage at datum 58.21 ft higher. Summer of 1930 to June 11, 1954, water-stage recorder at datum 56.24 ft higher. June 11, 1954, to July 16, 1965, at datum 52.24 ft higher. July 17, 1965, to Apr. 24, 1969, at datum 50.24 ft higher.

AVERAGE DISCHARGE.--71 years, 522 cfs (378,200 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 21,300 cfs Jan. 18 (gage height, 74.22 ft); no flow many days. Period of record: Maximum discharge, 41,400 cfs Feb. 25, 1958 (gage height, 85.35 ft, present datum); maximum stage observed, 88.44 ft (present datum) Mar. 10, 1904; no flow at times in each year.

REMARKS.--Records good above 10 cfs poor below. Flow regulated by Clear Lake beginning in 1915 (see sta 11450000). Diversions for irrigation of about 30,000 acres between stations near Capay and at Yolo, from data furnished by Clear Lake Water Co.

REVISIONS (WATER YEARS).--WSP 1315-A: 1914(M). WSP 1345: 1906. WSP 1445: 1955. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	104	1,410	5,510	1,270	0	0	7.0	2.0	0
2		0	0	89	1,270	4,930	1,050	0	1.0	10	2.0	0
3		0	0	78	1,190	4,640	882	0	12	3.0	4.0	0
4		0	0	71	1,410	4,980	766	0	11	0	5.0	0
5		0	0	59	2,940	4,400	676	0	10	0	8.4	0
6		0	0	46	5,210	4,060	615	0	10	0	4.0	1.0
7		0	0	39	15,000	4,950	545	0	7.6	0	1.0	.80
8		0	0	42	7,650	4,190	475	0	4.0	0	0	0
9		0	0	287	5,900	3,680	444	0	2.0	0	0	0
10		0	0	3,070	8,900	3,040	399	0	0	0	0	0
11		0	0	3,150	7,700	2,630	353	0	0	0	0	0
12		0	0	12,000	6,310	2,410	312	0	9.0	3.0	0	0
13		0	0	5,580	6,770	2,250	247	0	7.0	5.0	0	0
14		682	0	2,450	5,720	2,130	230	4.7	5.0	3.0	0	0
15		1,030	0	1,520	5,200	1,990	215	2.0	4.0	1.0	0	0
16		1,270	0	9,070	4,550	1,740	205	.90	2.0	11	0	0
17		640	0	8,450	4,010	1,560	190	0	1.0	14	0	0
18		230	1,090	10,900	3,620	1,320	175	0	0	13	0	0
19		119	1,100	9,220	3,350	1,180	165	0	0	5.0	0	0
20		70	905	4,910	3,110	1,150	160	0	0	2.0	0	0
21		41	489	4,260	2,560	1,180	146	0	0	0	0	0
22		27	334	3,650	1,960	2,350	130	0	0	0	0	0
23		11	362	3,230	2,020	2,900	120	0	0	0	0	0
24		.71	356	3,000	1,770	2,770	95	0	0	0	0	0
25		0	298	2,980	5,160	2,200	44	0	6.0	0	0	4.0
26		0	250	2,840	4,990	1,920	15	0	9.0	0	0	3.0
27		0	212	2,670	6,980	1,720	4.8	0	7.0	0	0	1.0
28		0	182	2,540	7,720	1,550	2.0	0	7.0	0	0	0
29		0	167	2,540	------	1,400	0	0	5.0	0	0	0
30		0	142	3,350	------	2,110	0	0	10	1.0	0	0
31		------	122	1,720	------	1,550	------	0	------	3.5	0	------
TOTAL	0	4,120.71	6,009	103,915	134,380	84,390	9,930.8	7.60	129.6	81.5	26.4	9.80
MEAN	0	137	194	3,352	4,799	2,722	331	.25	4.32	2.63	.85	.33
MAX	0	1,270	1,100	12,000	15,000	5,510	1,270	4.7	12	14	8.4	4.0
MIN	0	0	0	39	1,190	1,150	0	0	0	0	0	0
AC-FT	0	8,170	11,920	206,100	266,500	167,400	19,700	15	257	162	52	19

CAL YR 1972 TOTAL 18,588.21 MEAN 50.8 MAX 1,270 MIN 0 AC-FT 36,870
WTR YR 1973 TOTAL 343,000.41 MEAN 940 MAX 15,000 MIN 0 AC-FT 680,300

11453000 YOLO BYPASS NEAR WOODLAND, CALIF.

LOCATION.--Lat 38°40'40", long 121°38'35", (unsurveyed), Yolo County, on left bank 300 ft upstream from Sacramento and Woodland railroad bridge, 6 miles upstream from Sacramento Bypass, 6 miles downstream from Fremont weir, and 7 miles east of Woodland.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 3.41 ft below mean sea level. Prior to Dec. 17, 1941, nonrecording gage, and Dec. 18-31, 1941, water-stage recorder, at datum 0.73 ft higher. A supplementary water-stage recorder 6 miles downstream at different datum is used for records of low flow.

AVERAGE DISCHARGE.--34 years, 3,884 cfs (2,814,000 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 112,000 cfs Jan. 19 (gage height, 28.24 ft); minimum daily, 1.8 cfs Nov. 13.
Period of record: Maximum discharge, 272,000 cfs Feb. 8, 1942 (gage height, 32.00 ft); no flow at times in recent years.

REMARKS.--Records fair. Flow is from Cache Creek and Knights Landing Ridge Cut plus floodwater passing over Fremont weir; during the summer months, the flow consists largely of return water from irrigation. There is some diversion for irrigation between the main and supplementary gage which affects the low-flow record.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	2.7	63	140	6,480	25,200	1,350	26	58	6.1	3.7	4.1
2	7.8	3.3	51	152	5,760	33,500	1,220	31	56	5.6	3.7	38
3	7.2	4.1	36	189	5,310	34,300	1,020	39	52	5.6	3.7	27
4	6.6	6.1	30	186	5,100	32,700	845	45	34	5.1	3.7	18
5	6.6	6.1	18	148	5,220	30,400	750	50	4.6	5.1	3.7	17
6	6.1	5.1	13	92	6,430	25,800	688	51	3.0	5.1	3.7	15
7	5.6	4.6	13	68	13,800	25,200	626	54	2.4	5.1	3.7	15
8	5.1	4.6	14	80	17,100	24,100	572	51	2.4	4.6	3.7	15
9	6.1	3.0	10	170	22,100	22,700	540	51	2.4	4.6	3.7	9.6
10	6.6	3.3	9.0	1,170	34,300	17,500	494	46	2.1	4.6	3.7	8.4
11	8.4	5.1	8.4	3,770	46,800	11,800	436	50	2.4	4.6	3.7	11
12	8.4	5.6	8.4	9,820	51,200	7,540	430	51	2.4	4.1	3.7	12
13	7.8	1.8	7.8	26,600	46,500	5,380	406	51	2.4	4.1	3.3	13
14	7.2	16	7.8	46,200	41,500	4,480	382	50	2.1	4.1	3.7	18
15	6.6	327	7.2	44,500	40,300	3,910	374	50	5.1	4.1	3.7	36
16	7.2	1,710	7.8	42,500	36,500	3,150	356	51	40	3.7	3.7	26
17	6.6	2,990	8.4	67,400	32,500	2,910	304	52	45	3.7	3.7	31
18	5.6	3,210	134	85,500	28,800	2,460	186	54	42	3.7	3.7	16
19	2.7	2,830	945	111,000	23,100	2,170	128	52	21	3.7	3.7	38
20	7.2	2,120	2,170	103,000	18,300	2,280	107	52	2.1	3.7	4.1	68
21	6.1	1,450	2,400	90,000	12,600	2,800	150	51	2.7	3.7	4.6	80
22	5.6	1,020	1,960	68,000	7,620	3,500	169	51	3.3	3.7	4.6	82
23	5.1	652	1,550	49,500	6,200	4,440	82	51	6.6	3.7	4.1	82
24	6.1	426	1,230	38,100	5,590	4,410	79	51	12	3.7	3.7	56
25	3.7	296	966	32,400	6,580	3,970	88	51	18	3.7	3.7	26
26	5.1	216	755	29,500	8,080	3,220	83	52	29	3.7	3.3	7.2
27	6.1	176	622	24,400	9,540	2,950	77	54	24	3.7	3.3	39
28	5.1	128	530	18,700	11,900	2,590	72	60	19	3.7	3.7	50
29	6.1	105	342	12,800	------	2,140	34	58	16	3.7	3.7	40
30	4.1	79	205	9,100	------	2,050	24	60	9.0	3.7	3.7	25
31	2.4	------	138	7,570	------	1,680	------	60	------	3.7	3.7	------
TOTAL	188.7	17,806.4	14,259.8	922,755	555,210	351,230	12,072	1,556	521.0	131.7	116.1	923.3
MEAN	6.09	594	460	29,770	19,830	11,330	402	50.2	17.4	4.25	3.75	30.8
MAX	8.4	3,210	2,400	111,000	51,200	34,300	1,350	60	58	6.1	4.6	82
MIN	2.4	1.8	7.2	68	5,100	1,680	24	26	2.1	3.7	3.3	4.1
AC-FT	374	35,320	28,280	1,830M	1,101M	696,700	23,940	3,090	1,030	261	230	1,830

CAL YR 1972 TOTAL 43,045.99 MEAN 118 MAX 3,210 MIN .20 AC-FT 85,380
WTR YR 1973 TOTAL 1,876,770.00 MEAN 5,142 MAX 111,000 MIN 1.8 AC-FT 3,723,000

NOTE.--No gage-height record July 1 to Aug. 7.

11453500 PUTAH CREEK NEAR GUENOC, CALIF.

LOCATION.--Lat 38°46'44", long 122°30'59", in Guenoc Grant, Lake County, on right bank just upstream from Coyote Valley damsite, 2.8 miles upstream from Soda Creek, 3.2 miles downstream from highway bridge at Guenoc.

DRAINAGE AREA.--113 sq mi.

PERIOD OF RECORD.--February 1904 to September 1906, July 1930 to September 1973. Monthly discharge only for some periods, published in WSP 1315-A.

GAGE.--Water-stage recorder. Datum of gage is 914.18 ft above mean sea level. February 1904 to September 1906, nonrecording gage 0.2 mile upstream at different datum.

AVERAGE DISCHARGE.--45 years, 208 cfs (150,700 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 15,700 cfs Jan. 16 (gage height, 16.65 ft); minimum daily, 0.14 cfs Aug. 22.
Period of record: Maximum discharge, 32,000 cfs Dec. 11, 1937 (gage height, 22.7 ft), from rating curve extended above 13,000 cfs; no flow many days in August and September 1964, Oct. 2, 1970.

REMARKS.--Records good. Some regulation by Hartmann Dam on Coyote Creek since 1969 (capacity, 3,000 acre-ft); diversions and ground-water withdrawals for irrigation of about 1,600 acres above station. Records of water temperatures and suspended-sediment discharge for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1285: 1937(M), 1938, 1940, 1943(M), 1951(M).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	1.1	38	93	422	761	186	57	17	4.6	1.0	1.2
2	.28	1.1	36	86	357	631	173	55	17	4.8	1.6	.44
3	.36	1.2	38	82	443	705	160	54	17	5.5	2.0	1.3
4	.22	1.3	61	76	1,020	650	151	53	16	4.6	.71	.25
5	.33	2.2	50	71	862	543	146	52	15	4.3	2.4	.83
6	.20	3.5	128	68	1,590	732	141	49	13	3.0	2.2	.66
7	.18	6.7	107	64	2,950	579	134	46	12	2.7	2.2	2.0
8	.36	31	79	78	1,270	532	130	44	12	3.4	2.4	.97
9	.52	20	66	2,250	1,160	400	126	40	10	3.4	2.4	.66
10	.48	123	60	1,330	2,100	419	122	39	8.9	4.6	2.4	.71
11	.61	241	54	3,190	1,590	394	118	37	8.9	4.4	2.4	1.4
12	1.3	74	52	4,360	1,290	349	112	35	10	2.4	2.1	.90
13	1.3	487	49	1,410	1,270	323	112	34	11	2.4	.33	.61
14	1.3	1,300	47	803	1,140	294	110	33	10	2.6	.66	.77
15	1.6	641	46	836	882	275	104	31	8.9	2.5	.90	1.0
16	1.4	626	73	6,900	713	256	101	30	9.8	2.2	.97	1.1
17	1.3	273	1,410	2,170	601	247	98	28	9.8	3.0	.44	.97
18	1.3	151	709	4,120	511	229	93	27	9.5	2.1	.97	.83
19	1.2	128	662	1,530	444	314	90	26	9.5	2.6	.22	.71
20	1.1	101	357	941	394	443	88	25	9.2	3.0	.44	1.1
21	1.1	85	254	918	357	410	85	22	8.9	1.7	1.8	.61
22	1.1	75	526	631	323	357	81	20	8.5	2.5	.14	1.3
23	1.1	66	343	498	296	296	78	20	8.5	2.4	.90	1.7
24	1.1	60	267	438	1,430	267	74	22	8.5	2.6	.48	1.3
25	1.0	55	208	431	1,190	249	69	24	7.5	2.0	.71	.77
26	1.0	51	173	357	1,350	231	67	23	7.0	3.7	.83	.25
27	1.0	47	155	311	1,350	216	64	22	5.8	2.2	1.4	.30
28	1.1	45	142	279	1,000	204	63	21	5.0	1.8	2.5	.40
29	1.2	42	125	545	------	192	61	18	4.6	2.6	2.5	.40
30	1.1	40	110	820	------	198	60	17	4.4	3.0	2.6	.40
31	1.1	------	101	536	------	224	------	17	------	1.0	2.5	------
TOTAL	27.44	4,779.1	6,526	36,222	28,305	11,920	3,197	1,021	303.2	93.6	45.10	25.84
MEAN	.89	159	211	1,168	1,011	385	107	32.9	10.1	3.02	1.45	.86
MAX	1.6	1,300	1,410	6,900	2,950	761	186	57	17	5.5	2.6	2.0
MIN	.18	1.1	36	64	296	192	60	17	4.4	1.0	.14	.25
AC-FT	54	9,480	12,940	71,850	56,140	23,640	6,340	2,030	601	186	89	51

CAL YR 1972 TOTAL 29,264.41 MEAN 80.0 MAX 1,410 MIN .14 AC-FT 58,050
WTR YR 1973 TOTAL 92,465.28 MEAN 253 MAX 6,900 MIN .14 AC-FT 183,400

PEAK DISCHARGE (BASE, 5,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
1-9	1600	10.65	5,520	1-18	0930	12.88	8,610
1-12	0400	12.74	8,380	2-6	2400	10.86	5,770
1-16	0800	16.65	15,700				

11453550 HUNTING CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°46'18", long 122°24'26", in NE¼SE¼ sec.28, T.11 N., R.5 W., Lake County, on right bank 2,400 ft upstream from mouth, 5.3 miles southwest of Knoxville, and 11.2 miles east of Middletown.

DRAINAGE AREA.--37.8 sq mi.

PERIOD OF RECORD.--July 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 725 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 2,820 cfs Jan. 16 (gage height, 6.97 ft), from rating curve extended as explained below; no flow for several days.
Period of record: Maximum discharge, 4,500 cfs Jan. 23, 1970 (gage height, 8.30 ft), from rating curve extended above 740 cfs on basis of slope-area measurement of maximum flow; no flow many days in 1972.

REMARKS.--Records good. No regulation or diversion above station. Records of chemical analyses and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.57	3.9	7.6	62	135	43	14	8.3	2.6	1.0	.78
2	0	.57	3.7	7.0	55	112	40	14	8.3	2.6	.94	.86
3	0	.63	4.4	7.0	71	148	37	14	7.6	2.4	1.0	.86
4	0	.78	5.5	6.7	143	130	36	14	7.0	2.4	.94	.94
5	0	.86	4.7	6.1	92	104	35	14	6.4	1.9	.86	.94
6	0	.86	9.3	6.1	353	158	34	14	6.4	2.1	.94	1.0
7	0	1.5	7.6	5.8	435	114	33	14	5.8	2.1	.94	1.0
8	0	2.4	6.1	9.7	160	104	31	13	5.5	2.1	.94	1.0
9	0	1.6	4.2	636	235	89	31	13	4.2	1.8	.94	.94
10	0	9.7	4.2	208	460	83	29	12	4.2	1.8	.94	.94
11	.70	63	3.9	624	259	78	28	12	4.4	1.5	.94	.94
12	1.5	11	3.7	825	247	70	27	11	4.4	1.5	1.0	.94
13	.94	178	3.9	193	235	66	29	11	4.4	1.5	1.0	.94
14	1.0	504	3.9	86	202	60	29	11	4.4	1.5	1.0	.86
15	6.1	208	4.2	78	141	58	26	11	4.7	1.3	.94	.86
16	7.0	108	6.7	1,220	118	56	26	11	4.9	1.3	.94	.86
17	3.0	31	163	369	106	55	24	11	4.9	1.3	.86	.86
18	1.9	22	60	741	94	53	22	11	4.9	1.5	.86	.86
19	1.3	22	67	184	87	62	20	11	4.4	1.5	.86	.78
20	1.0	15	31	122	80	137	20	11	3.9	1.5	.86	.78
21	.86	12	21	143	72	139	20	11	3.7	1.5	.86	.86
22	.86	10	27	89	67	87	18	12	3.4	1.5	.94	.86
23	.86	8.5	21	71	63	65	18	12	3.4	1.5	.94	.86
24	.70	7.5	17	65	357	58	17	12	3.4	1.5	.94	.86
25	.63	6.4	13	62	160	56	16	12	3.4	1.5	.94	.78
26	.57	5.6	11	54	273	52	16	12	3.4	1.1	.94	.86
27	.57	5.0	11	49	337	50	16	11	3.0	1.1	.94	.86
28	.57	4.6	11	45	196	47	15	10	2.8	1.1	.94	.86
29	.57	4.3	9.7	207	------	45	16	9.0	2.6	1.2	.94	.86
30	.57	4.1	8.6	175	------	46	15	8.3	2.6	1.2	.94	.78
31	.57	------	8.3	78	------	48	------	7.9	------	1.2	.78	------
TOTAL	31.77	1,249.47	559.5	6,380.0	5,160	2,565	767	364.2	140.7	50.6	28.80	26.38
MEAN	1.02	41.6	18.0	206	184	82.7	25.6	11.7	4.69	1.63	.93	.88
MAX	7.0	504	163	1,220	460	158	43	14	8.3	2.6	1.0	1.0
MIN	0	.57	3.7	5.8	55	45	15	7.9	2.6	1.1	.78	.78
AC-FT	63	2,480	1,110	12,650	10,230	5,090	1,520	722	279	100	57	52

CAL YR 1972 TOTAL 2,480.07 MEAN 6.78 MAX 504 MIN 0 AC-FT 4,920
WTR YR 1973 TOTAL 17,323.42 MEAN 47.5 MAX 1,220 MIN 0 AC-FT 34,360

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-14	0030	6.35	2,150	1-18	0745	6.38	2,180
1-9	1415	5.80	1,650	1-29	1930	5.08	1,060
1-12	0230	5.82	1,670	2-6	2245	5.73	1,590
1-16	0445	6.97	2,820	2-24	1115	5.40	1,320

11453570 ADAMS CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'17", long 122°17'44", in NE¼NE¼ sec.21, T.10 N., R.4 W., Napa County, on left bank 20 ft downstream from road ford, 0.2 mile upstream from mouth, 8.8 miles southeast of Knoxville, and 18 miles southeast of Middletown.

DRAINAGE AREA.--7.42 sq mi.

PERIOD OF RECORD.--October 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 581 cfs Jan. 16 (gage height, 4.27 ft), from rating curve extended above 83 cfs as explained below; no flow many days.
Period of record: Maximum discharge, 745 cfs Jan. 23, 1970 (gage height, 4.85 ft), from rating curve extended above 53 cfs on basis of slope-area measurement of maximum flow; no flow many days in each year.

REMARKS.--Records good. No storage or diversion above station. Records of chemical analyses and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.57	.57	6.8	19	8.1	3.8	2.0	.50	.05	.02
2		0	.57	.52	6.8	17	8.1	3.4	2.0	.45	.05	.02
3		0	.62	.52	7.5	31	7.5	3.4	2.0	.43	.05	.02
4		0	.70	.47	10	20	6.8	3.4	2.0	.37	.05	.02
5		0	.62	.39	7.5	17	6.8	3.1	1.9	.37	.05	.02
6		0	1.4	.39	51	33	6.8	3.1	1.8	.33	.05	.02
7		0	.57	.39	40	18	6.8	3.1	1.8	.33	.05	.02
8		0	.43	1.4	15	17	6.2	3.1	1.7	.33	.05	.02
9		0	.35	65	17	16	6.2	2.7	1.5	.25	.04	.01
10		.01	.35	9.4	39	15	6.2	2.4	.89	.25	.04	.01
11		4.2	.31	56	22	14	6.2	2.4	1.0	.21	.04	.01
12		.04	.31	57	27	12	5.5	2.0	1.3	.21	.04	.01
13		13	.35	10	25	12	5.5	2.0	1.5	.21	.04	.01
14		35	.31	5.2	22	11	6.2	2.0	1.6	.21	.03	.01
15		11	.31	8.7	17	11	5.5	1.9	1.6	.17	.03	.01
16		6.6	.80	163	14	11	5.5	1.9	1.5	.17	.03	.01
17		2.6	18	28	14	11	5.5	1.9	1.4	.17	.03	.01
18		2.0	4.3	94	13	11	5.5	1.9	1.3	.17	.03	.01
19		1.8	3.2	19	12	13	5.5	1.8	1.2	.17	.03	.01
20		1.6	2.2	12	11	22	5.5	1.8	1.0	.17	.03	.01
21		1.4	2.0	14	11	22	5.5	1.8	.95	.13	.03	0
22		1.2	1.8	12	10	14	5.5	1.8	.90	.13	.03	0
23		.95	1.4	11	10	11	4.8	1.8	.80	.13	.03	0
24		.95	1.2	11	20	11	4.1	1.9	.80	.13	.02	0
25		.80	.95	11	19	10	4.1	1.9	.70	.09	.02	0
26		.70	.80	10	36	9.4	4.1	1.8	.70	.05	.02	0
27		.70	.80	8.8	57	9.4	3.8	1.8	.65	.05	.02	0
28		.62	.95	8.8	27	8.8	3.8	1.7	.60	.05	.02	0
29		.57	.80	21	------	8.8	3.8	1.6	.60	.05	.02	0
30		.52	.70	24	------	8.8	3.8	1.7	.50	.05	.02	0
31		------	.62	7.5	------	8.8	------	1.9	------	.05	.02	------
TOTAL	0	86.26	48.29	671.05	567.6	453.0	169.2	70.8	38.19	6.38	1.06	.28
MEAN	0	2.88	1.56	21.6	20.3	14.6	5.64	2.28	1.27	.21	.034	.009
MAX	0	35	18	163	57	33	8.1	3.8	2.0	.50	.05	.02
MIN	0	0	.31	.39	6.8	8.8	3.8	1.6	.50	.05	.02	0
AC-FT	0	171	96	1,330	1,130	899	336	140	76	13	2.1	.6

CAL YR 1972 TOTAL 223.02 MEAN .61 MAX 35 MIN 0 AC-FT 442
WTR YR 1973 TOTAL 2,112.11 MEAN 5.79 MAX 163 MIN 0 AC-FT 4,190

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-14	0200	2.82	150	2-6	2200	2.96	230
1-9	1000	2.83	152	2-27	1700	2.83	198
1-12	0300	3.08	206	3-3	1830	2.42	109
1-16	0600	4.27	581	3-6	0730	2.43	111
1-18	0700	3.63	398				

11453580 NEVADA CREEK NEAR KNOXVILLE, CALIF.

LOCATION.--Lat 38°42'42", long 122°17'31", in NW¼SW¼ sec.15, T.10 N., R.4 W., Napa County, on right bank 150 ft downstream from road ford, 0.6 mile upstream from Adams Creek, 8.4 miles southeast of Knoxville, and 18 miles southeast of Middletown.

DRAINAGE AREA.--7.06 sq mi.

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (from topographic map).

EXTREMES.--Current year: Maximum discharge, 614 cfs Jan. 16 (gage height, 6.77 ft), from rating curve extended as explained below; no flow many days.
Period of record: Maximum discharge, 841 cfs Jan. 23, 1970 (gage height, 7.75 ft), from rating curve extended above 110 cfs on basis of slope-area measurement of maximum flow; no flow many days in each year.

REMARKS.--Records good. No regulation or diversion above station. Records of chemical analyses and suspended-sediment discharge for the current year are published in Part 2 of this report.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.07	.37	8.0	24	8.5	1.4	.17	.08	.01	.01
2	0	0	.07	.37	7.0	22	8.5	1.4	.17	.08	.01	0
3	0	0	.07	.37	9.0	39	8.0	1.4	.19	.08	.01	0
4	0	0	.07	.31	15	26	7.5	1.3	.17	.08	.01	0
5	0	0	.07	.26	11	22	7.5	1.3	.17	.05	.01	0
6	0	0	.16	.28	90	49	7.0	1.1	.15	.02	.01	0
7	0	0	.16	.28	62	26	6.0	1.0	.13	.02	.01	0
8	0	0	.14	1.1	27	23	6.0	1.0	.13	.02	.01	0
9	0	0	.12	63	35	20	6.0	1.0	.13	.01	.01	0
10	0	.08	.12	19	53	19	5.5	.83	.13	.01	.01	0
11	0	1.6	.12	61	33	18	5.5	.75	.13	.01	.01	0
12	0	0	.12	89	37	17	5.0	.68	.11	.01	.01	0
13	0	14	.12	26	36	16	5.5	.61	.11	.02	.01	0
14	0	40	.12	18	34	15	5.0	.54	.11	.02	.01	0
15	.03	18	.12	23	24	14	4.5	.48	.11	.01	.01	0
16	0	10	.20	183	21	14	4.5	.48	.11	.01	.01	0
17	0	1.4	12	40	19	13	4.0	.42	.13	.01	.01	0
18	0	.62	5.4	126	18	13	3.5	.36	.13	.01	.01	0
19	0	.40	5.1	28	17	18	3.2	.32	.13	.01	.01	0
20	0	.15	2.1	19	15	23	3.2	.36	.13	.01	.01	0
21	0	.12	1.3	20	14	29	3.0	.36	.11	.01	.01	0
22	0	.12	1.9	13	13	18	2.6	.36	.11	.01	.01	0
23	0	.11	1.3	9.5	13	15	2.4	.32	.11	.01	.01	0
24	0	.10	.98	8.5	31	14	2.0	.42	.11	.01	.01	0
25	0	.09	.74	7.5	24	13	1.8	.48	.11	.01	.01	0
26	0	.08	.68	6.0	46	12	1.8	.32	.11	.01	.01	0
27	0	.07	.74	5.0	71	11	1.7	.29	.11	.01	.01	0
28	0	.06	.68	4.5	34	10	1.7	.26	.11	.01	.01	0
29	0	.06	.52	29	------	10	1.6	.21	.11	.01	.01	0
30	0	.07	.48	31	------	11	1.5	.17	.11	.01	.01	0
31	0	------	.44	11	------	9.5	------	.17	------	.01	.01	------
TOTAL	.03	87.13	36.21	843.34	817.0	583.5	134.5	20.09	3.84	.68	.31	.01
MEAN	.001	2.90	1.17	27.2	29.2	18.8	4.48	.65	.13	.022	.010	.0003
MAX	.03	40	12	183	90	49	8.5	1.4	.19	.08	.01	.01
MIN	0	0	.07	.26	7.0	9.5	1.5	.17	.11	.01	.01	0
AC-FT	.06	173	72	1,670	1,620	1,160	267	40	7.6	1.3	.6	.02

CAL YR 1972 TOTAL 159.68 MEAN .44 MAX 40 MIN 0 AC-FT 317
WTR YR 1973 TOTAL 2,526.64 MEAN 6.92 MAX 183 MIN 0 AC-FT 5,010

PEAK DISCHARGE (BASE, 100 CFS)

DATE	TIME	G.H.	DISCHARGE	DATE	TIME	G.H.	DISCHARGE
11-14	0100	4.61	232	2-6	2130	5.63	393
1-9	1100	3.88	137	2-9	2300	3.81	122
1-12	0200	4.42	204	2-27	1700	4.64	236
1-16	0800	6.77	614	3-3	1800	4.15	166
1-18	0730	6.14	488	3-6	0700	4.02	149
1-29	1900	4.01	147				

11453600 POPE CREEK NEAR POPE VALLEY, CALIF.

LOCATION.--Lat 38°37'48", long 122°19'52", in SW¼ sec.17, T.9 N., R.4 W., Napa County, on left bank 0.2 mile upstream from Lake Berryessa, 0.7 mile downstream from Maxwell Creek, and 5.2 miles east of Pope Valley.

DRAINAGE AREA.--78.3 sq mi.

PERIOD OF RECORD.--December 1960 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 450 ft (from topographic map).

AVERAGE DISCHARGE.--12 years (1961-73), 91.8 cfs (66,510 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 10,800 cfs Jan. 16 (gage height, 16.15 ft), from rating curve extended above 7,700 cfs; no flow many days.
Period of record: Maximum discharge, 18,000 cfs Jan. 31, 1963 (gage height, 19.79 ft), from rating curve extended above 7,700 cfs; no flow many days in 1960-68, 1971-73.

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records furnished by California Department of Water Resources and reviewed by Geological Survey.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	7.1	23	184	345	70	20	7.5	2.1		0
2	0	0	7.1	22	150	263	64	19	7.5	2.0		0
3	0	0	7.2	21	211	369	58	19	7.3	1.8		.10
4	0	21	9.3	20	447	327	55	18	6.8	1.7		.10
5	0	11	9.4	19	316	250	52	19	6.8	1.5		.10
6	0	5.8	68	19	637	449	56	18	6.3	1.3		.10
7	0	14	44	20	974	292	77	17	5.8	1.2		.10
8	0	21	28	71	419	256	47	17	5.8	1.1		.10
9	0	8.8	19	1,990	407	207	42	16	5.3	1.0		.10
10	0	90	16	584	1,060	185	41	15	5.0	.90		.10
11	0	175	15	1,910	648	173	38	15	5.3	.80		.10
12	0	32	13	3,300	477	146	36	14	5.7	.70		.10
13	0	169	12	659	576	129	35	14	5.6	.60		.10
14	0	694	11	320	590	115	38	13	5.3	.60		.10
15	18	288	11	391	396	106	35	13	5.0	.50		.20
16	15	257	38	3,830	285	98	32	12	4.9	.50		.30
17	7.5	79	776	1,010	231	97	31	12	4.7	.40		.20
18	5.9	45	307	2,660	193	88	29	11	4.6	.30		.20
19	2.9	37	264	649	166	120	28	11	4.3	.30		.20
20	1.6	28	123	348	144	213	27	11	3.8	.30		.30
21	.90	22	82	428	128	237	26	11	3.4	.30		.40
22	.50	18	158	249	115	189	26	11	3.2	.30		.40
23	.30	15	100	189	105	133	25	9.9	3.8	.30		.60
24	.20	13	74	160	484	112	25	10	4.3	.20		.60
25	.10	11	56	160	461	101	24	11	3.8	.20		.50
26	0	10	45	130	630	93	23	9.9	3.2	.20		.50
27	0	9.3	41	110	868	85	22	9.6	2.9	.10		.40
28	0	8.4	38	97	611	76	22	8.9	2.6	.10		.30
29	0	7.9	33	284	------	70	21	8.1	2.4	0		.20
30	0	7.4	29	611	------	74	20	7.8	2.2	0		.20
31	0	------	26	265	------	99	------	7.5	------	0		------
TOTAL	52.90	2,097.6	2,467.1	20,549	11,913	5,497	1,125	408.7	145.1	21.30	0	6.70
MEAN	1.71	69.9	79.6	663	425	177	37.5	13.2	4.84	.69	0	.22
MAX	18	694	776	3,830	1,060	449	77	20	7.5	2.1	0	.60
MIN	0	0	7.1	19	105	70	20	7.5	2.2	0	0	0
AC-FT	105	4,160	4,890	40,760	23,630	10,900	2,230	811	288	42	0	13

CAL YR 1972 TOTAL 9,666.70 MEAN 26.4 MAX 776 MIN 0 AC-FT 19,170
WTR YR 1973 TOTAL 44,283.40 MEAN 121 MAX 3,830 MIN 0 AC-FT 87,840

11453900 LAKE BERRYESSA NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'48", long 122°06'13", in SE¼NW¼ sec.29, T.8 N., R.2 W., Napa County, near center of Monticello Dam on Putah Creek, 7.4 miles west of Winters.

DRAINAGE AREA.--566 sq mi.

PERIOD OF RECORD.--January 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is at mean sea level (levels by Bureau of Reclamation).

EXTREMES.--Current year: Maximum contents, 1,626,000 acre-ft Mar. 21 (elevation, 441.20 ft); minimum, 1,139,000 acre-ft Nov. 8 (elevation, 414.30 ft).
Period of record: Maximum contents, 1,733,000 acre-ft Jan. 24, 1970 (elevation, 446.67 ft); minimum since irrigation pool first filled, 1,077,900 acre-ft Oct. 10, 11, 1962 (elevation, 410.60 ft).

REMARKS.--Reservoir is formed by concrete arch-gravity dam, completed November 1956. Usable capacity, 1,592,000 acre-ft between elevations 253.25 ft (invert of outlet valves) and 440 ft (crest of glory-hole spillway) above mean sea level. Dead storage, 10,340 acre-ft. Water is released down Putah Creek and is diverted into Putah South diversion canal for irrigation of about 46,000 acres in the lower Sacramento Valley. Total diverted during year was 196,915 acre-ft. Releases for irrigation began in May 1959. Records, including extremes, show total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation and reviewed by Geological Survey, rounded to Geological Survey standards.

REVISIONS (WATER YEARS).--WSP 1735: 1958-60. WSP 1931: Drainage area.

CAPACITY TABLE (ELEVATION, IN FEET, AND CONTENTS, IN ACRE-FEET)

400	911,200
410	1,068,000
420	1,236,000
430	1,414,000
450	1,800,000

CONTENTS, IN THOUSANDS OF ACRE-FEET, AT 2400, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,147	1,140	1,165	1,187	1,426	1,600	1,620	1,606	1,564	1,515	1,464	1,419
2	1,147	1,140	1,165	1,188	1,428	1,604	1,620	1,605	1,562	1,513	1,462	1,418
3	1,146	1,140	1,165	1,188	1,430	1,609	1,618	1,604	1,561	1,512	1,460	1,417
4	1,146	1,140	1,165	1,188	1,436	1,612	1,618	1,602	1,560	1,510	1,459	1,415
5	1,145	1,140	1,164	1,188	1,440	1,614	1,618	1,601	1,558	1,508	1,457	1,414
6	1,145	1,140	1,166	1,188	1,451	1,620	1,618	1,600	1,556	1,507	1,456	1,413
7	1,144	1,140	1,166	1,188	1,469	1,622	1,617	1,599	1,555	1,505	1,454	1,412
8	1,144	1,139	1,166	1,191	1,476	1,623	1,616	1,598	1,553	1,503	1,452	1,410
9	1,143	1,140	1,166	1,209	1,483	1,624	1,616	1,597	1,552	1,502	1,450	1,410
10	1,143	1,141	1,166	1,215	1,497	1,624	1,616	1,596	1,550	1,500	1,449	1,408
11	1,143	1,142	1,165	1,234	1,505	1,624	1,615	1,595	1,548	1,499	1,448	1,407
12	1,143	1,142	1,165	1,264	1,513	1,625	1,615	1,593	1,546	1,497	1,446	1,406
13	1,143	1,147	1,165	1,272	1,521	1,624	1,615	1,592	1,544	1,495	1,444	1,405
14	1,144	1,157	1,165	1,276	1,528	1,623	1,615	1,591	1,542	1,493	1,443	1,404
15	1,144	1,161	1,165	1,280	1,533	1,623	1,614	1,590	1,540	1,491	1,442	1,403
16	1,145	1,165	1,166	1,331	1,537	1,623	1,614	1,588	1,539	1,489	1,440	1,402
17	1,145	1,166	1,174	1,342	1,540	1,622	1,614	1,587	1,537	1,488	1,438	1,401
18	1,145	1,166	1,177	1,376	1,543	1,621	1,613	1,585	1,536	1,486	1,437	1,400
19	1,145	1,166	1,180	1,384	1,545	1,623	1,613	1,584	1,534	1,484	1,436	1,399
20	1,145	1,166	1,181	1,388	1,547	1,624	1,612	1,582	1,532	1,482	1,434	1,398
21	1,144	1,166	1,182	1,394	1,549	1,626	1,612	1,581	1,531	1,480	1,433	1,397
22	1,144	1,166	1,184	1,398	1,551	1,625	1,611	1,579	1,529	1,478	1,431	1,397
23	1,144	1,166	1,185	1,401	1,552	1,625	1,611	1,578	1,528	1,477	1,430	1,396
24	1,143	1,166	1,186	1,403	1,560	1,624	1,610	1,576	1,526	1,476	1,428	1,395
25	1,143	1,166	1,186	1,405	1,567	1,624	1,610	1,575	1,525	1,474	1,428	1,393
26	1,143	1,166	1,186	1,407	1,575	1,623	1,610	1,573	1,523	1,473	1,426	1,393
27	1,143	1,166	1,187	1,408	1,588	1,623	1,609	1,572	1,522	1,471	1,425	1,392
28	1,142	1,166	1,187	1,409	1,595	1,622	1,608	1,570	1,520	1,469	1,424	1,391
29	1,142	1,166	1,187	1,414	------	1,622	1,607	1,568	1,518	1,468	1,422	1,390
30	1,141	1,165	1,187	1,421	------	1,621	1,606	1,567	1,516	1,466	1,421	1,389
31	1,140	------	1,187	1,423	------	1,621	------	1,565	------	1,465	1,420	------
MAX	1,147	1,166	1,187	1,423	1,595	1,626	1,620	1,606	1,564	1,515	1,464	1,419
MIN	1,140	1,139	1,164	1,187	1,426	1,600	1,606	1,565	1,516	1,465	1,420	1,389
(a)	414.39	415.87	417.17	430.50	439.62	440.98	440.21	438.08	435.49	432.74	430.31	428.64
(b)	-8.0	+25.0	+22.0	+236.0	+172.0	+26.0	-15.0	-41.0	-49.0	-51.0	-45.0	-31.0
(c)	3,893	1,250	1,065	1,494	1,402	4,171	8,093	12,177	13,220	14,065	11,711	8,297

CAL YR 1972 b -180.0
WTR YR 1973 b +241.0

a Elevation, in feet, at end of month.
b Change in contents, in thousands of acre-feet.
c Evaporation, in acre-feet.

11454000 PUTAH CREEK NEAR WINTERS, CALIF.

LOCATION.--Lat 38°30'55", long 122°04'51", in NE¼NE¼ sec.28, T.8 N., R.2 W., Yolo County, on left bank 1 mile downstream from Cold Canyon, 1.3 miles downstream from Monticello Dam, and 6 miles west of Winters.

DRAINAGE AREA.--574 sq mi.

PERIOD OF RECORD.--July 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.75 ft above mean sea level (river-profile survey). June 28, 1930, to Feb. 29, 1940, at datum about 1 ft higher.

AVERAGE DISCHARGE (adjusted for change in contents and evaporation from Lake Berryessa).--43 years, 517 cfs (374,600 acre-ft per year).

EXTREMES.--Current year: Maximum discharge, 1,140 cfs Mar. 21 (gage height, 9.13 ft); minimum daily, 21 cfs Jan. 15.
Period of record: Maximum discharge, 81,000 cfs Feb. 27, 1940 (gage height, 30.5 ft, present datum), from rating curve extended above 30,000 cfs; no flow Sept. 6-15, 1950, July 26 to Sept. 1, Sept. 6-9, 1955. Maximum discharge since construction of Monticello Dam in 1957, 16,300 cfs Jan. 24, 1970 (gage height, 18.85 ft); minimum daily, 6.1 cfs Dec. 19, 1967.
Maximum stage known since at least 1905, that of Feb. 27, 1940, on basis of records for station at Winters.

REMARKS.--Records good. Flow regulated by Lake Berryessa beginning January 1957 (see sta 11453900). Records of water temperatures for the current year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 901: 1937-38(M). WSP 1285: 1932(M), 1935-36(M), 1940(M), 1942-43(M), 1951, 1952(M). WSP 1565: 1957. WSP 1931: Drainage area.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1972 TO SEPTEMBER 1973

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	87	70	64	43	60	780	568	668	673	593	437
2	202	93	73	69	56	71	742	585	652	677	614	405
3	175	95	80	68	56	156	693	586	640	657	611	395
4	141	97	80	68	24	322	646	586	638	654	593	395
5	128	97	79	68	22	444	619	566	680	683	556	395
6	145	97	80	62	161	627	599	560	729	687	582	395
7	163	98	79	57	218	836	577	594	757	673	597	392
8	163	87	78	60	101	935	541	660	762	657	597	392
9	170	79	77	133	84	994	522	648	735	676	587	382
10	173	81	77	37	164	1,050	505	631	731	711	568	382
11	119	80	76	52	126	1,060	489	628	745	711	601	396
12	67	80	76	134	114	1,060	477	645	727	712	594	412
13	62	77	75	50	138	1,050	457	669	771	705	573	412
14	57	81	75	28	104	1,010	446	721	755	702	573	386
15	57	38	67	21	80	970	432	701	714	708	592	376
16	56	40	55	334	65	960	424	717	691	719	602	345
17	48	41	43	76	55	930	419	739	674	727	580	324
18	45	74	29	259	46	893	397	710	651	707	553	350
19	45	78	27	90	40	885	377	694	659	663	521	370
20	56	81	51	53	36	1,030	358	659	697	656	488	335
21	67	81	70	45	33	1,060	371	671	726	657	467	310
22	90	74	71	34	31	1,110	398	720	743	636	468	299
23	110	68	71	28	28	1,100	396	707	715	592	481	298
24	110	66	70	24	34	1,060	410	716	676	575	528	278
25	90	64	69	41	28	1,030	419	725	648	576	525	259
26	75	68	63	52	33	988	429	703	635	615	476	256
27	78	77	59	47	99	960	442	691	700	650	461	268
28	104	72	59	46	85	914	489	691	748	649	460	285
29	123	69	59	50	------	854	503	714	702	603	492	310
30	98	69	58	65	------	826	519	744	701	621	489	318
31	81	------	58	31	------	827	------	711	------	610	492	------
TOTAL	3,264	2,289	2,054	2,246	2,114	26,072	14,876	20,660	21,070	20,542	16,914	10,557
MEAN	105	76.3	66.3	72.5	75.5	841	496	666	702	663	546	352
MAX	202	98	80	334	218	1,110	780	744	771	727	614	437
MIN	45	38	27	21	22	60	358	560	635	575	460	256
AC-FT	6,470	4,540	4,070	4,450	4,190	51,710	29,510	40,980	41,790	40,750	33,550	20,940

CAL YR 1972 TOTAL 121,259 MEAN 331 MAX 746 MIN 11 AC-FT 240,500 **MEAN a 192** **AC-FT a 139,000**
WTR YR 1973 TOTAL 142,658 MEAN 391 MAX 1,110 MIN 21 AC-FT 283,000 **MEAN a 835** **AC-FT a 604,800**

a Adjusted for change in contents and evaporation from Lake Berryessa.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same or practically the same site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		TULARE LAKE BASIN				
11208605	East Fork Kaweah River below Eagle Creek, near Hammond	NW¼SW¼ sec.15, T.17 S., R.31 E., Tulare County, 0.5 mile downstream from Eagle Creek, and 15.5 miles east of Hammond.	9.92	1968-73	9-14-73	a 6.22
11208607	East Fork Kaweah River above Monarch Creek, near Hammond	SE¼NW¼ sec.15, T.17 S., R.31 E., Tulare County, at bridge at Mineral King, 1,000 ft upstream from Monarch Creek, and 14.9 miles east of Hammond.	10.2	1968-73	9-14-73	a 6.04
11208615	East Fork Kaweah River below Monarch Creek, near Hammond	NW¼NW¼ sec.15, T.17 S., R.31 E., Tulare County, 250 ft downstream from Monarch Creek, and 14.6 miles east of Hammond.	12.1	1968-73	9-14-73	a 8.74
11208625	East Fork Kaweah River at Sequoia National Park boundary, near Hammond	SW¼SW¼ sec.7, T.17 S., R.31 E., Tulare County, Sequoia National Park, 0.6 mile southwest of Silver City, and 11.4 miles east of Hammond.	23.7	1968-71b 1972-73	9-14-73	c 10.0
11208630	Atwell Creek above Mineral King Highway, near Hammond	SE¼NE¼ sec.11, T.17 S., R.30 E., Tulare County, 750 ft west of Atwell Mills Ranger Station, and 10.4 miles east of Hammond.	.66	1968-73	9-14-73	a .41
11208650	Redwood Creek above Mineral King Highway, near Hammond	NE¼NW¼ sec.15, T.17 S., R.30 E., Tulare County, 50 ft upstream from Mineral King Highway, and 8.9 miles east of Hammond.	1.38	1968-73	9-14-73	a .26
11208680	Squirrel Creek below Mineral King Highway, near Hammond	SE¼SE¼ sec.13, T.17 S., R.29 E., Tulare County, at Sequoia National Park boundary, 300 ft above Mineral King Highway, and 5.4 miles east of Hammond.	5.80	1968-73	9-14-73	a .37
11208715	Crunigen Creek below Mineral King Highway, near Hammond	SW¼NE¼ sec.13, T.17 S., R.29 E., Tulare County, 100 ft downstream from Mineral King Highway, and 5.0 miles east of Hammond.	1.58	1968-73	9-14-73	0

See footnotes at end of table.

Low-flow partial-record stations--Continued

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		SAN JOAQUIN RIVER BASIN				
11264700	'Porcupine Creek at Porcupine Flat Campgrounds, near Yosemite Village	NE¼SW¼ sec.33, T.1 S., R.22 E., Mariposa County, in Yosemite National Park, at Porcupine Flat Campgrounds, 1,500 ft downstream from highway bridge, and 4.1 miles northeast of Yosemite Village.	3.60	1970-73	10-4-72 9-11-73	a 0.22 a .09
11265700	Yosemite Creek at Yosemite Creek Campgrounds, near Yosemite Village	SW¼NE¼ sec.30, T.1 S., R.22 E., Mariposa County, in Yosemite National Park, at Yosemite Creek Campgrounds, and 5.6 miles north of Yosemite Village.	18.5	1970-73	10-4-72 9-11-73	a .58 a .03
11266200	Sentinel Creek near Yosemite Village	Unsurveyed, T.2 S., R.22 E., Mariposa County, in Yosemite National Park, 200 ft downstream from Deer Meadows, 1.3 miles southeast of Glacier Point Hotel, and 2.3 miles south of Yosemite Village.	1.40	1971-73	10-3-72 9-12-73	a 0 a 0
11266600	Cascade Creek near El Portal	NW¼SW¼ sec.19, T.2 S., R.21 E., Mariposa County, in Yosemite National Park, 200 ft upstream from unnamed tributary, 6.2 miles northeast of El Portal, and 6.5 miles west of Yosemite Village.	10.3	1971-73	10-4-72 9-12-73	a .12 a .09
11266700	Tamarack Creek at Tamarack Flat Campground, near El Portal	NE¼NW¼ sec.23, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, at culvert on Big Oak Flat Road at Tamarack Flat Campground, 5.7 miles northeast of El Portal, and 8.2 miles west of Yosemite Village.	4.31	1970-73	10-4-72 9-12-73	a .20 a .32
11266800	Wildcat Creek near El Portal	SE¼SW¼ sec.25, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, upstream from highway bridge, and 4.9 miles northeast of El Portal.	1.24	1971-73	10-5-72 9-12-73	a .07 a .07
11266900	Crane Creek above diversion dam, near El Portal	SE¼SW¼ sec.34, T.2 S., R.20 E., Mariposa County, in Yosemite National Park, 40 ft upstream from head of diversion ditch, and 2.8 miles northeast of El Portal.	8.10	1964-73d	10-5-72 9-11-73	a .27 a .73
11267000	Little Crane Creek near El Portal	NW¼NE¼ sec.32, T.2 S., R.20 E., Mariposa County, in Stanislaus National Forest, upstream from Little Nellie Falls, and 3.2 miles north of El Portal.	1.31	1971-73	10-4-72 9-11-73	a .11 a .16
11267100	Moss Creek near El Portal	SE¼NW¼ sec.25, T.2 S., R.19 E., Mariposa County, in Stanislaus National Forest, 120 ft downstream from road crossing, 300 ft downstream from unnamed tributary, and 4.7 miles northwest of El Portal.	4.45	1971-73	9-11-73	a .52
11279400	Smoky Jack Creek at Smoky Jack Campground, near Yosemite Village	NW¼NW¼ sec.31, T.1 S., R.21 E., Tuolumne County, in Yosemite National Park, 12 ft downstream from culvert on Tioga Road, 8.5 miles northeast of Yosemite Village, and 10.6 miles northeast of El Portal.	4.15	1970-73	10-4-72 9-12-73	a .07 a .07

See footnotes at end of table.

Low-flow partial-record stations--Continued

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements	
					Date	Discharge (cfs)
		SACRAMENTO RIVER BASIN				
11433430	Buckeye Canyon Creek tributary near Greenwood	SE¼NW¼ sec.3, T.12 N., R.9 E., El Dorado County, 3.3 miles northwest of Greenwood, and 3.5 miles northeast of Cool.	0.08	1972-73	10-16-72	0
					12-8-72	.006
					1-9-73	.90
					1-16-73	4.09
					2-2-73	.50
					3-20-73	.14
					4-17-73	.04
					5-31-73	.003
					7-19-73	0
11433440	Wildcat Canyon Creek near Cool	NE¼SE¼ sec.4, T.12 N., R.9 E., El Dorado County, 3.3 miles northeast of Cool, and 3.5 miles northwest of Greenwood.	.30	1972-73	10-16-72	0
					12-8-72	.02
					1-9-73	1.33
					1-16-73	7.12
					2-2-73	.45
					3-20-73	.48
					4-17-73	.08
					5-31-73	.004
					7-19-73	0
11433450	Browns Bar Canyon Creek near Cool	SE¼SW¼ sec.4, T.12 N., R.9 E., El Dorado County, 2.7 miles northeast of Cool, and 3.8 miles northwest of Greenwood.	.75	1972-73	10-16-72	0
					12-8-72	.13
					1-9-73	9.14
					1-16-73	29.2
					2-2-73	1.73
					3-20-73	1.27
					4-17-73	.36
					5-31-73	.09
					7-19-73	0
11433900	Paymaster Creek near Cool	SE¼NW¼ sec.17, T.12 N., R.9 E., El Dorado County, 400 ft upstream from culvert on Paymaster trail, 0.9 mile northeast of Cool.	--	1972-73	10-16-72	.01
					12-8-72	.12
					1-9-73	5.74
					1-16-73	5.38
					3-20-73	.60
					3-27-73	.22
					4-17-73	.09
					5-31-73	.03
					7-19-73	.03
					8-29-73	.07

a Base flow.
b Operated as a continuous-record gaging station.
c Estimated.
d Published as miscellaneous measurements 1964-70.

Crest-stage partial-record stations

As explained on page 503 the California district publishes annual maxima on small streams at 304 sites in a separate publication Floods From Small Drainage Areas. In addition, discharge measurements are generally made in times of drought or flood to give better coverage to those events. Those measurements, and others collected for some special reason, are called measurements at miscellaneous sites.

The following table contains annual maximum discharges for crest-stage stations not included in the above-mentioned report. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been obtained.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		EAGLE LAKE BASIN					
10359250	Pine Creek near Westwood	NE¼SW¼ sec.5, T.31 N., R.8 E., Lassen County, 1.3 miles southwest of Bogard Guard Station, and 19 miles north of Westwood.	24.8	1950-61a 1966-73	5-27-73	3.60	87
		BUENA VISTA LAKE BASIN					
11185300	Golden Trout Creek near Cartago	NW¼SW¼ sec.10, T.18 S., R.34 E., Tulare County, Inyo National Forest, 0.5 mile upstream from Tunnel Ranger Station, and 15 miles west of Cartago.	23.6	1956-67a 1969a 1970 1972-73	5-13-73	3.45	198
11185400	Little Kern River near Quaking Aspen Camp	SE¼SE¼ sec.31, T.20 S., R.33 E., Tulare County, Sequoia National Forest, 600 ft upstream from mouth, and 5 miles east of Quaking Aspen Camp.	132	1957-68a 1969a 1970 1972-73	5-14-73	6.25	2,010
11188200	South Fork Kern River near Olancha	NW¼SW¼ sec.18, T.20 S., R.36 E., Tulare County, Sequoia National Forest, 2.0 miles downstream from Snake Creek, and 9.7 miles southwest of Olancha.	146	1956-67a 1969a 1970,1973	5-13-73	4.75	880
		TULARE LAKE BASIN					
11197370	Bitterwater Creek near Lost Hills	NW¼SE¼ sec.21, T.27 S., R.18 E., Kern County, 0.2 mile downstream from Cedar Canyon, 21 miles west of Lost Hills.	76.4	1961-73	1-18-73	1.16	288
11216800	Rock Creek at Dinkey Creek	NE¼SW¼ sec.5, T.10 S., R.26 E., Fresno County, 0.5 mile upstream from mouth, 0.4 mile northwest of town of Dinkey Creek.	7.6	1960-70a 1971-73	5-29-73	5.62	400
		SAN JOAQUIN RIVER BASIN					
11255500	Panoche Creek below Silver Creek, near Panoche	SW¼SW¼ sec.16, T.15 S., R.12 E., Fresno County, 1.1 miles downstream from Silver Creek, 9 miles east of Panoche, and 18 miles southwest of Mendota.	293	1949-53a 1958-70a 1972-73	2-11-73	5.04	1,900
11267300	South Fork Merced River at Wawona	SW¼ sec.34, T.4 S., R.21 E., Mariposa County, 1,000 ft downstream from highway bridge at Wawona, and 1,200 ft upstream from Big Creek.	100	1958-68a 1970-73	5-17-73	6.72	3,230

See footnotes at end of table.

Crest-stage partial-record stations--Continued

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1973--Continued

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum		
					Date	Gage height (feet)	Discharge (cfs)
		SAN JOAQUIN RIVER BASIN--Continued					
11304000	Corral Hollow Creek near Tracy	SE¼NE¼ sec.24, T.3 S., R.4 E., San Joaquin County, just upstream from highway bridge, 0.8 mile downstream from Elk Ravine, and 6.3 miles southwest of Tracy.	61.6	1959-65a 1967 1972-73	2-11-73	3.65	339
11305500	San Antonio Creek near San Andreas	NE¼ sec.10, T.3 N., R.12 E., Calaveras County, 800 ft downstream from highway bridge, 1.9 miles upstream from mouth, and 5 miles southeast of San Andreas.	48.0	1950-59a 1961-73	1-16-73	3.76	920
11309000	Cosgrove Creek near Valley Springs	SE¼ sec.35, T.4 N., R.10 E., Calaveras County, 0.4 mile upstream from mouth, and 2.7 miles south of Valley Springs.	21.1	1930-69a 1970-71 1973	1-21-70 3-26-71 1-16-73	5.73 3.30 6.43	982 91 1,400
11334200	Middle Fork Cosumnes River near Somerset	NW¼NW¼ sec.19, T.9 N., R.12 E., El Dorado County, 1,000 ft downstream from county road bridge, and 1.8 miles southwest of Somerset.	107	1957-71a 1973	1-12-73b	10.06	2,540
		SACRAMENTO RIVER BASIN					
11365500	Squaw Creek above Shasta Lake	SE¼ sec.29, T.35 N., R.2 W., Shasta County, 1.3 miles upstream from Salt Creek, 2 miles upstream from Shasta Lake, and 10 miles west of town of Montgomery Creek.	64.0	1944-66a 1969-73	1-16-73	16.96	7,880
11373200	Oak Run Creek near Oak Run	SE¼NW¼ sec.25, T.33 N., R.2 W., Shasta County, 800 ft downstream from road bridge, and 1.1 miles northwest of town of Oak Run.	11.0	1957-66a 1969-73	1-16-73	5.58	668
11377500	Paynes Creek near Red Bluff	SE¼ sec.22, T.28 N., R.3 W., Tehama County, 0.4 mile upstream from mouth, and 6.5 miles northeast of Red Bluff.	92.8	1950-66a 1967-70 1972-73	1-16-73	8.38	4,400
11380500	Elder Creek at Gerber	Lat 40°03'05", long 122°09'53", in Saucos Grant, Tehama County, 1.0 mile west of Gerber, and 3.5 miles upstream from mouth.	136	1949-69a 1970 1972-73	1-18-73	12.83	9,230
11449350	Burns Valley Creek near Clearlake Highlands	Lat 38°58'33", long 122°36'42", in SE¼ sec.15, T.13 N., R.7 W., Lake County, on right bank 500 ft downstream from small right-bank tributary, and 2.7 miles northeast of Clearlake Highlands.	4.37	1963-69a 1970-73	1-18-73	5.80	540

a Operated as a continuous-record gaging station.
b Revision (date): Previously published in 1972 report as 12-25-71.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table.

Discharge measurements made at miscellaneous sites during water year 1973

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water year)	Measurements	
					Date	Discharge (cfs)
		EAGLE LAKE BASIN				
Pine Creek	Eagle Lake	NE¼SW¼ sec.5, T.31 N., R.8 E., Lassen County, 1 mile southwest of Bogard Guard Station, and 19 miles north of Westwood.	24.8	1950-61a 1964 1967-72	8-24-73	b 1.02
		BUENA VISTA LAKE BASIN				
Golden Trout Creek	Kern River	NW¼SW¼ sec.10, T.18 S., R.34 E., Tulare County, 0.5 mile upstream from Tunnel Ranger Station, and 15 miles west of Cartago.	23.6	1956-67a 1969a 1970-72	9-6-73	b 14.1
Little Kern River	Kern River	SE¼SE¼ sec.31, T.20 S., R.33 E., Tulare County, 600 ft upstream from mouth, and 5 miles east of Quaking Aspen Camp.	132	1957-69a 1970-72	9-6-73	b 23.1
South Fork Kern River	Kern River	NW¼SW¼ sec.18, T.20 S., R.36 E., Tulare County, 2.0 miles downstream from Snake Creek, and 9.7 miles southwest of Olancha.	146	1956-67a 1969a 1970-72	9-6-73	b 14.2
Kelso Creek	South Fork Kern River	NW¼ sec.20, T.27 S., R.35 E., Kern County, 0.5 mile upstream from Woolstaff Creek, and 7 miles southeast of Weldon.	101	1958-66a 1968-72	8-22-73 9-24-73	b 2.14 b 2.54
		TULARE LAKE BASIN				
South Fork Kings River	Kings River	NW¼ sec.8, T.13 S., R.30 E., Fresno County, 0.3 mile downstream from Grizzly Creek, and 4.5 miles west of Cedar Grove.	408	1950-57a 1959-60 1963-66 1968 1970-72	9-13-73	b 136
Copper Creek[1/]	South Fork Kings River	S½ sec.11, T.13 S., R.31 E., Fresno County, 0.5 mile upstream from South Fork Kings River, and 5.9 miles northeast of Cedar Grove.	--	1965-68 1970-72	8-15-73 9-13-73	b 2.41 b 1.92
Sheep Creek	South Fork Kings River	SE¼ sec.14, T.13 S., R.30 E., Fresno County, 0.7 mile upstream from South Fork Kings River, and 0.7 mile southwest of Cedar Grove.	--	1965-68 1970-72	8-15-73 9-13-73	b 3.49 b 2.22
Lewis Creek	South Fork Kings River	SW¼ sec.11, T.13 S., R.30 E., Fresno County, 0.3 mile upstream from South Fork Kings River, and 1.5 miles northwest of Cedar Grove.	--	1965-68 1970-72	8-15-73 9-13-73	b 7.65 b 3.39
Rock Creek	Dinkey Creek	NE¼SW¼ sec.5, T.10 S., R.26 E., Fresno County, 0.4 mile northwest of town of Dinkey Creek, and 0.5 mile upstream from mouth.	7.60	1961-70a 1971-72	8-14-73 9-12-73	b .62 b .22

See footnotes at end of table.

Measurements at miscellaneous sites--Continued

Discharge measurements made at miscellaneous sites during water year 1973--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water year)	Measurements	
					Date	Discharge (cfs)
		TULARE LAKE BASIN--Continued				
Dinkey Creek	North Fork Kings River	Sec.3, T.12 S., R.26 E., Fresno County, 0.5 mile upstream from mouth, and 0.5 mile northwest of Balch Camp.	132	1920-37a 1959 1961-68 1970-72	8-28-73	b 23.8
		SAN JOAQUIN RIVER BASIN				
Yosemite Creek	Merced River	Lat 37°44'45", long 119°35'40", Mariposa County, in Yosemite National Park, 0.3 mile upstream from mouth, and 0.7 mile west of Yosemite National Park headquarters.	42.7	1904-9a 1912-26a 1960 1966-69 1971-72	9-20-73	b 0
Hunter Creek	North Fork Tuolumne River	SW¼NE¼ sec.19, T.1 N., R.20 E., Tuolumne County, at road ford, 5.5 miles southeast of Tuolumne.	--	1911,1964 1967-71	10-6-72	b .41
		SACRAMENTO RIVER BASIN				
Horse Creek	Pit River	NE¼ sec.15, T.35 N., R.7 E., Lassen County, 100 ft downstream from railroad bridge, 0.5 mile northeast of Little Valley, and 13 miles southeast of Pittville.	237	1929-31a 1960-67a 1968-72	8-20-73	b 6.96
Fall River	Pit River	NE¼ sec.30, T.38 N., R.4 E., Shasta County, 0.7 mile southeast of Dana, and 1 mile downstream from large springs below Bear Creek.	c 123	1959-67a 1968-72	8-20-73	b 450
Squaw Creek	Pit River	SE¼ sec.29, T.35 N., R.2 W., Shasta County, 1.3 miles upstream from Salt Creek, 2 miles upstream from Shasta Lake, and 10 miles west of town of Montgomery Creek.	64.0	1945-67a 1968-72	6-19-73 9-18-73	b 36.2 b 13.6
McCloud River	Pit River	SW¼NE¼ sec.12, T.39 N., R.2 W., Siskiyou County, 500 ft upstream from Lower Falls, and 6 miles southeast of McCloud.	--	1964,1968 1970,1972	9-17-73	b 37.5
Oak Run Creek	Cow Creek	SE¼NW¼ sec.25, T.33 N., R.2 W., Shasta County, 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 northeast of Millville.	11.0	1957-66a 1967-72	9-14-73	b 3.94
South Fork Rubicon River	American River	SE¼NE¼ sec.27, T.13 N., R.14 E., 12.9 miles northwest of Kyburz.	--	----	6-19-73	b 24.6

1. Published as Cooper Creek 1966-68.
a Operated as a continuous-record gaging station.
b Base flow.
c Hydrologic Drainage Boundary uncertain due to ground-water exchange.

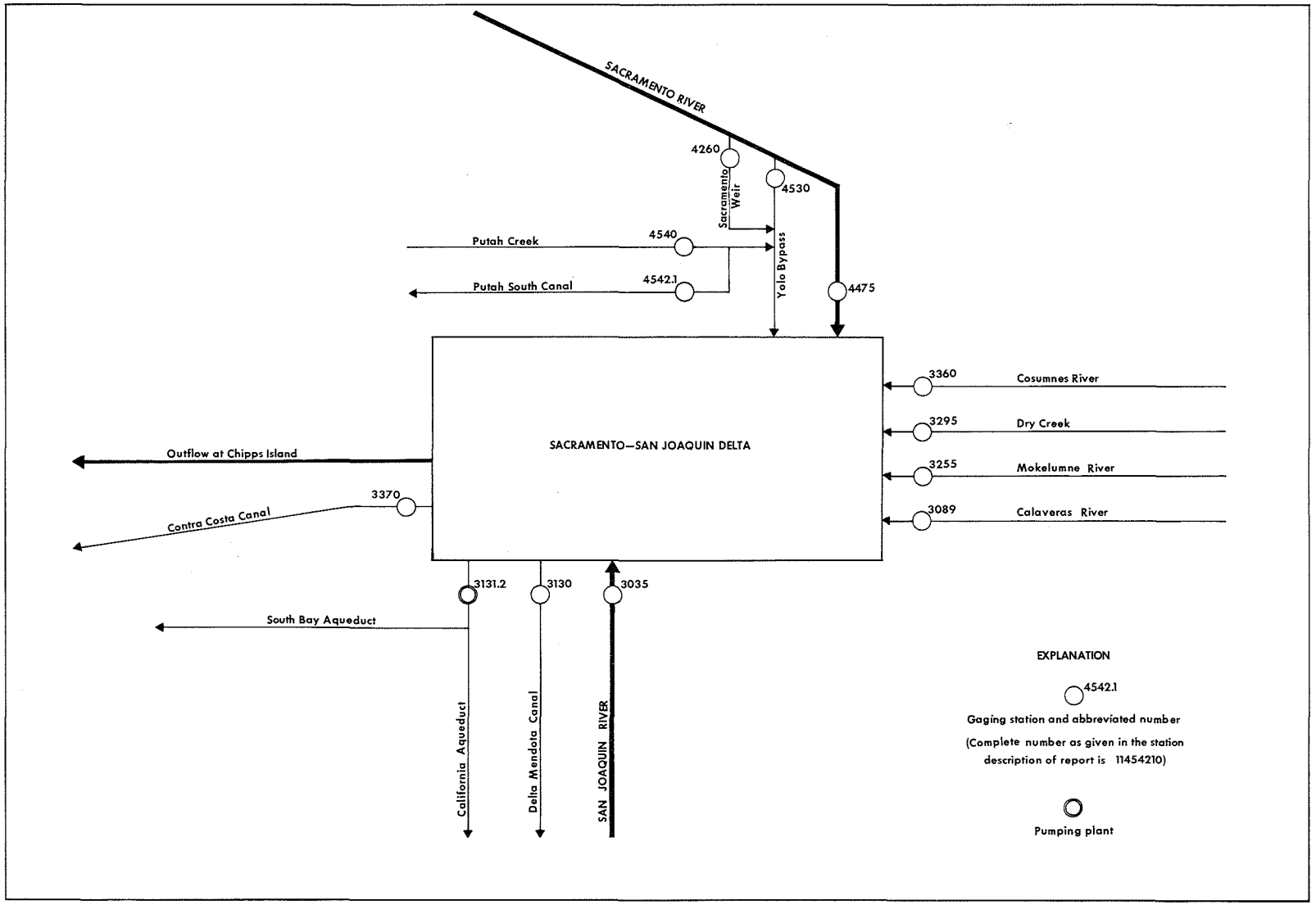

FIGURE 18.--Schematic diagram showing principal inflows and diversions, Sacramento-San Joaquin Delta.

LOCATION.--See schematic diagram of inflows and diversions, Sacramento-San Joaquin Delta.

DRAINAGE AREA.--Total drainage area of inflow streams tabulated below is 39,699 sq mi.

PERIOD OF RECORD.--October 1971 to current year. Data for periods prior to October 1971 can be obtained from published records for stations tabulated below.

COOPERATION.--Records for Delta-Mendota, Contra Costa, and Putah South Canals furnished by Bureau of Reclamation, California Aqueduct by California Department of Water Resources.

SUMMARY OF PRINCIPAL INFLOWS AND DIVERSIONS IN THE SACRAMENTO-SAN JOAQUIN DELTA

Inflows, in thousands of acre-feet

Station No.	Station name	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
11303500	San Joaquin River near Vernalis	122.5	131.9	153.8	249.6	443.6	468.0	250.1	180.6	153.3	66.54	65.61	87.51	2,373
11308900	Calaveras River below New Hogan Dam	2.33	1.10	.647	16.65	95.98	32.72	31.60	10.06	11.67	14.07	13.67	7.00	209.1
11325500	Mokelumne River at Woodbridge	5.68	4.52	9.43	72.28	68.50	52.03	20.66	21.42	33.39	19.33	15.63	14.12	337.0
11329500	Dry Creek near Galt	0	.555	2.43	50.26	61.92	37.91	8.77	1.71	.146	0	.030	.016	163.8
11336000	Cosumnes River at McConnell	.697	6.17	14.55	149.8	122.6	107.3	59.02	42.98	7.06	.007	.014	0	510.2
11426000	Sacramento weir spill	0	0	0	9.08	3.83	2.83	0	0	0	0	0	0	15.74
11447500	Sacramento River at Sacramento	988.6	1,381	1,686	3,397	3,624	3,175	1,230	1,009	888.8	932.6	991.4	1,041	20,650
11453000	Yolo Bypass near Woodland	.374	35.32	28.28	1,830	1,101	696.7	23.94	3.09	1.03	.261	.230	1.83	3,723
11454000	Putah Creek near Winters	6.47	4.54	4.07	4.45	4.19	51.71	29.51	40.98	41.79	40.75	33.55	20.94	283.0
	Total	1,127	1,565	1,899	5,779	5,526	4,624	1,654	1,310	1,137	1,074	1,120	1,172	28,260

Diversions, in thousands of acre-feet

Station No.	Station name	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
11313000	Delta-Mendota Canal	207.1	0	0.03	90.48	35.04	39.40	147.1	275.3	273.2	285.3	276.0	226.5	1,855
11313120	California Aqueduct (Delta pumping plant)	179.7	207.3	208.4	82.39	26.80	38.33	46.57	103.3	149.5	165.0	180.2	102.7	1,490
11337000	Contra Costa Canal	6.90	4.47	4.14	3.87	3.55	4.08	4.98	11.69	11.54	14.31	13.36	9.95	92.85
11454210	Putah South Canal	5.08	2.48	2.30	1.49	1.74	4.00	12.71	35.67	37.51	37.32	35.65	20.96	196.9
	Total	398.8	214.2	214.9	178.0	67.13	85.81	211.4	426.0	471.8	501.9	505.2	360.1	3,635

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