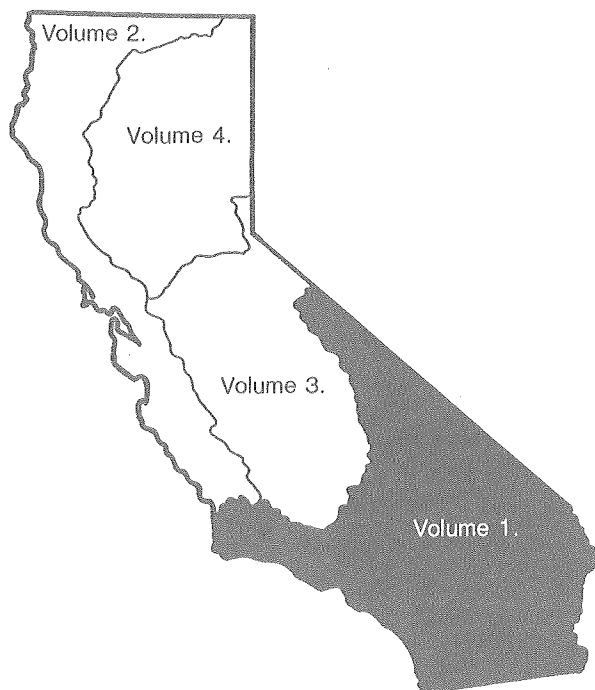


Water Resources Data California Water Year 1985

Volume 1. Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-85-1
Prepared in cooperation with the California Department of
Water Resources and with other agencies

CALENDAR FOR WATER YEAR 1985

1984

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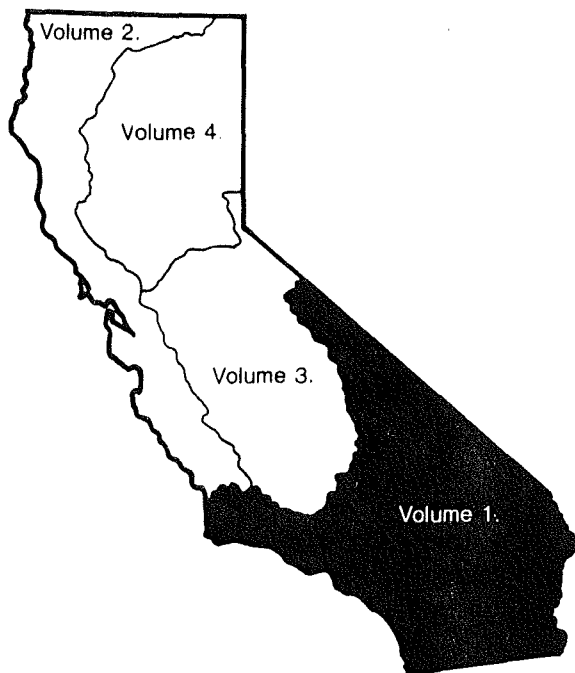
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Water Resources Data California Water Year 1985

Volume 1. Southern Great Basin from Mexican Border
to Mono Lake Basin, and Pacific Slope Basin
from Tijuana River to Santa Maria River

by J.C. Bowers, C.E. McConaughy, K.G. Polinoski, and G.B. Smith



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-85-1
Prepared in cooperation with the California Department of
Water Resources and with other agencies

DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

U.S. GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in California write to
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2800 Cottage Way
Sacramento, California 95825

PREFACE

This volume of the annual hydrologic data report of California is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for California are contained in 5 volumes:

- Volume 1. Southern Great Basin from Mexican Border to Mono Lake Basin, and Pacific Slope Basins from Tijuana River to Santa Maria River
- Volume 2. Pacific Slope Basins from Arroyo Grande to Oregon State Line except Central Valley
- Volume 3. Southern Central Valley Basins and The Great Basin from Walker River to Truckee River
- Volume 4. Northern Central Valley Basins and The Great Basin from Honey Lake Basin to Oregon State Line
- Volume 5. Ground-water data for California

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the individuals contributing significantly to the collection, processing, and tabulation of the data are given on page V.

This report was prepared in cooperation with the California Department of Water Resources and with other agencies under the general supervision of Gilbert L. Bertoldi and John M. Klein, successive District Chiefs, California.

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16. Abstract (Limit: 200 words) Water resources data for the 1985 water year for California consists of records of stage, discharge, and water quality of streams; stage and contents in lakes and reservoirs; and water levels and water quality in wells. Volume 1 contains discharge records for 150 gaging stations; stage and contents for 17 lakes and reservoirs; water quality for 23 streams. Also included are 10 crest-stage partial-record stations, three miscellaneous measurement sites, and one water-quality partial-record station. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.			
17. Document Analysis a. Descriptors *California, *Hydrologic data, *Surface water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water analyses b. Identifiers/Open-Ended Terms c. COSATI Field/Group			
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SURFACE-WATER AND WATER-QUALITY STATIONS
IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letters after station name designate type of data: (d), discharge; (l), lake contents;
(c), chemical; (t), water temperature; and (s), sediment]

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WATER RESOURCES DATA - CALIFORNIA, 1985

Volume 1

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of California each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - California."

This report includes records on surface water in the State. Specifically, it contains: (1) Discharge records for 150 streamflow-gaging stations, for 3 miscellaneous streamflow stations, and for 10 crest-stage, partial-record streamflow stations; (2) stage and content records for 17 lakes and reservoirs; and (3) water-quality records for 23 streamflow-gaging stations, and one water-quality partial-record station. Records included for stream stages are only a small fraction of those obtained during the water year.

This series of annual reports for California began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format changed to one volume, including data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1985 water year, a separate volume for ground-water levels and quality was published for California.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for California were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Parts 10 and 11." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Bldg. 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CA-85-1." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on back of title page or by telephone (916) 978-4668.

COOPERATION

The U.S. Geological Survey and agencies of the State of California have had cooperative agreements for the systematic collection of water-resource 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:

Antelope Valley-East Kern Water Agency, Wallace G. Spinarski, General Manager.
 California Department of Boating and Water Ways, Marty Mercado, Director.
 California Department of Water Resources, David N. Kennedy, Director
 Carpinteria County Water District, Robert R. Lieberknecht, General Manager/Secretary.
 Casitas Municipal Water District, Robert N. McKinney, General Manager and Chief Engineer.
 Coachella Valley Water District, Lowell O. Weeks, General Manager-Chief Engineer.
 Crestline-Lake Arrowhead Water Agency, Roxanne M. Holmes, Assistant General Manager.
 Desert Water Agency, Paul G. Payne, General Manager.
 East Valley Water District, Larry W. Rowe, General Manager.
 Goleta Water District, Lloyd C. Fowler, General Manager and Chief Engineer.
 Imperial County Department of Public Works, David E. Pierson, Director.
 Imperial Irrigation District, Donald A. Twogood, General Manager.
 Indian Wells Valley Water District, James H. Stramler, General Manager.
 Inyo County Department of Water, Gregory L. James, Director.
 Los Angeles Department of Water and Power, LeVal Lund, Engineer, Aqueduct Division.
 Mojave Water Agency, Jon D. Edson, General Manager.
 Montecito Water District, Charles C. Evans, General Manager and Chief Engineer.
 Newport Beach, City of, John Wolter, Senior Civil Engineer.
 Orange County Environmental Management Agency, Murray I. Storm, Director.
 Orange County Water District, Neil M. Cline, Secretary-Manager.
 Rancho California Water District, Stan Mills, General Manager.
 Riverside County Flood Control and Water Conservation District, Kenneth L. Edwards, Chief Engineer.
 San Bernardino Valley Municipal Water District, G. Louis Fletcher, General Manager.
 San Diego, City of, R.W. King, Water Utilities Director.
 San Diego County Department of Sanitation and Flood Control, R.J. Massman, Director.
 Santa Barbara, City of, Robert W. Puddicombe, Director.
 Santa Barbara County Flood Control and Water Conservation District, James M. Stubchaer, Flood Control Engineer.
 Santa Barbara County Water Agency, James M. Stubchaer, Engineer-Manager.
 Santa Maria Valley Water Conservation District, Maurice F. Twitchell, Secretary.
 United Water Conservation District, G. I. Wilde, General Manager and Chief Engineer.
 Ventura County Flood Control District, Arthur Goulet, Director.
 Western Municipal Water District, Howard A. Hicks, General Manager.

Assistance in the form of funds or services was given by the Vandenberg Air Force Base, U.S. Air Force; Corps of Engineers, U.S. Army; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, and National Park Service, U.S. Department of the Interior; Marine Corps, U.S. Navy; and Naval Weapons Center, U.S. Navy.

The following organizations aided in collecting records: California Department of Water Resources; Southern California Edison Company; United Water Conservation District.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Runoff was below normal during the 1985 water year for the area included in this volume and averaged 74 percent of the median runoff for water years 1951-80. Total runoff, in percent of median, at selected sites in California is shown in figure 1. Runoff was 104 percent of median in the Santa Ana River basin, 87 percent in the Los Angeles River basin, 54 percent in the Santa Clara River basin, and 50 percent in the Santa Ynez River basin. Figure 2 shows the variation in runoff during the 1985 water year and compares the 1985 monthly and annual mean flow with the median flow for representative streams in southern California.

The most significant runoff-producing storms occurred November 24, December 18, 19, 26, 27, and February 8, 9. There were no discharges exceeding peaks of record at any of the gaging stations on southern California streams, except perhaps at Chino Canyon Creek near Palm Springs. On July 19, 1985, a major debris flow occurred as a result of an intense thunderstorm over an area denuded 2 weeks previously by a brush fire. The debris flow completely filled the channel with boulders and mud; debris lines were nearly 15 ft higher than any previously recorded peak stage. The peak water discharge could not be determined.

SUMMARY OF HYDROLOGIC CONDITIONS

Water Quality

Water samples collected at the seven NASQAN stations reported in this volume were analyzed for water-quality constituents. Specific conductance varied in range from 220 to 320 $\mu\text{S}/\text{cm}$ at 25°C in the Owens River below Tinemaha Reservoir, near Big Pine, and 5,620 to 7,950 $\mu\text{S}/\text{cm}$ at 25°C in the New River at International Boundary, at Calexico. Specific conductance values were similar to those reported the previous year.

Six NASQAN stations indicated decreasing fecal-coliform bacteria concentrations, and four NASQAN stations indicated decreasing fecal-streptococci bacteria concentrations from the 1984 water year. The largest concentrations of fecal-coliform and fecal-streptococci bacteria was found in water sampled from New River at International Boundary, at Calexico, and ranged from 160,000 to 240,000 col/100 mL and 47,000 to 240,000 col/100 mL, respectively. Dissolved-oxygen concentrations at all NASQAN stations were above recommended Environmental Protection Agency (EPA) standards to maintain good fish populations (5.0 mg/L). Sulfate concentrations in excess of EPA domestic water supply criterion (250 mg/L) were detected at five of the seven NASQAN stations, with the Alamo River at Drop 3, near Calipatria having the highest values, ranging from 790 to 910 mg/L.

Manganese concentrations that exceeded EPA domestic water supply criterion (50 $\mu\text{g}/\text{L}$) were detected at four of the seven NASQAN stations. Santa Ana River below Prado Dam had the largest median concentration (160 $\mu\text{g}/\text{L}$). Median manganese concentrations during 1985 at all seven stations were greater than those of the previous year.

Sediment

Suspended-sediment discharge and concentration were monitored daily at seven stations and total sediment discharge and concentration were monitored daily at two stations in the area included in this volume. Periodic sediment data were collected at 15 other stations during the water year. The variation in storm patterns and basin characteristics in southern California resulted in significant differences in sediment discharge rates and concentrations at the sampled streams.

Sediment discharge was significantly less than normal during the 1985 water year, with the majority of sediment transported during storms in the months of December and February. Annual sediment discharge ranged from 1.6 percent of the 1973-84 mean for Santa Clara River at Montalvo to 14 percent for Santa Ana River at Santa Ana.

Annual sediment discharge at the nine daily stations ranged from 56 tons for Mission Creek at Santa Barbara to 89,200 tons for Santa Clara River at Montalvo. Annual sediment discharge per square mile of drainage area ranged from a minimum of 8.3 ton/mi² for Mission Creek at Santa Barbara to a maximum of 737 ton/mi² for San Jose Creek at Goleta.

Maximum daily sediment discharge ranged from 19 tons (35 percent of annual total) for Mission Creek at Santa Barbara to 58,400 tons (65 percent of annual total) for Santa Clara River at Montalvo. Maximum daily concentrations ranged from 263 mg/L for Mission Creek at Santa Barbara to 12,900 mg/L for San Jose Creek at Goleta.

Monthly and annual bedload discharge are published for five of the daily stations. The percentage of annual bedload discharge to total sediment discharge (suspended plus bedload) ranged from 5.8 percent for San Juan Creek at San Juan Capistrano to 16 percent for Santa Clara River at Montalvo.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

K Results based on colony count outside the acceptable range (non-ideal colony count).

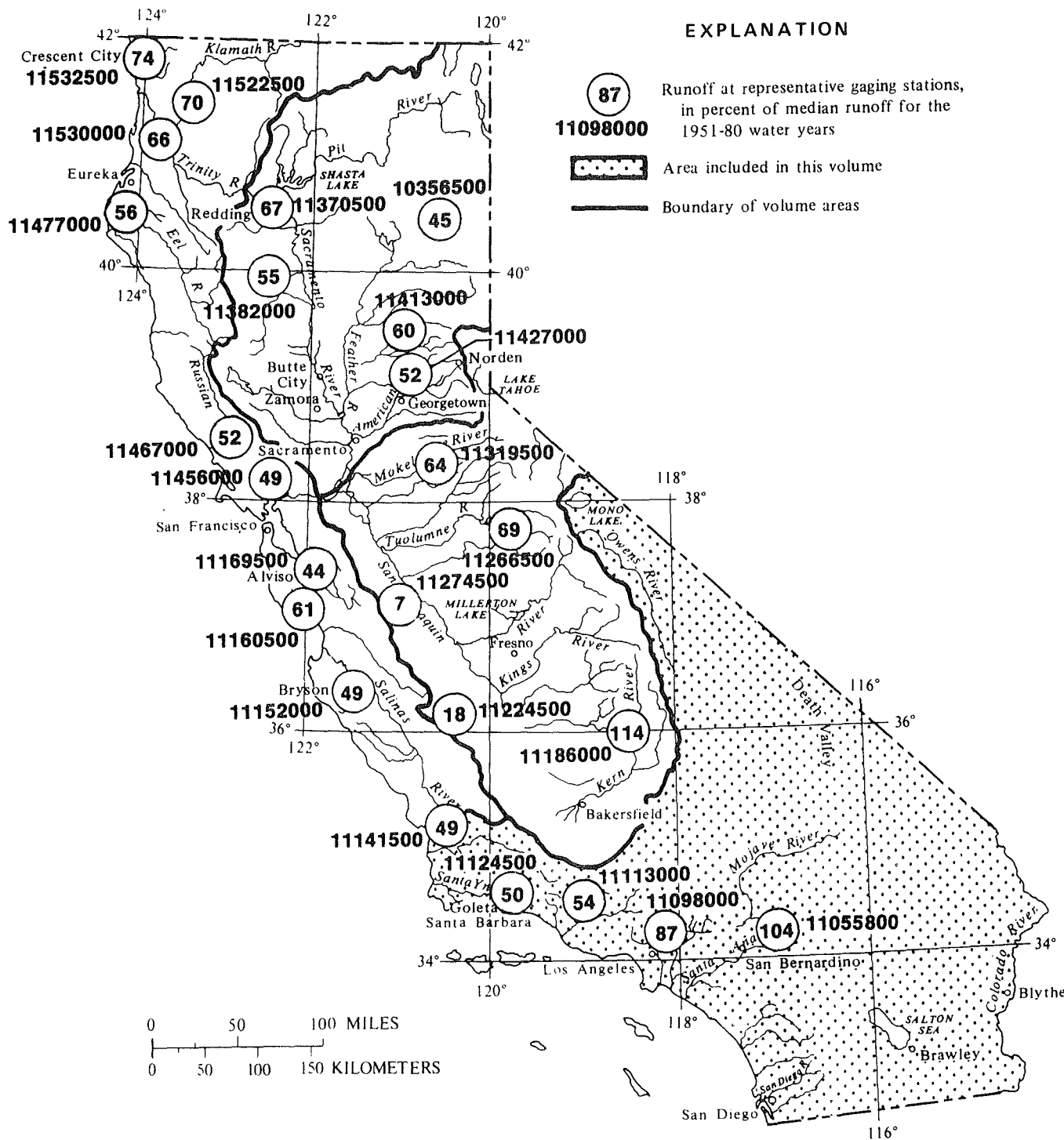


FIGURE 1. — Runoff for the 1985 water year.

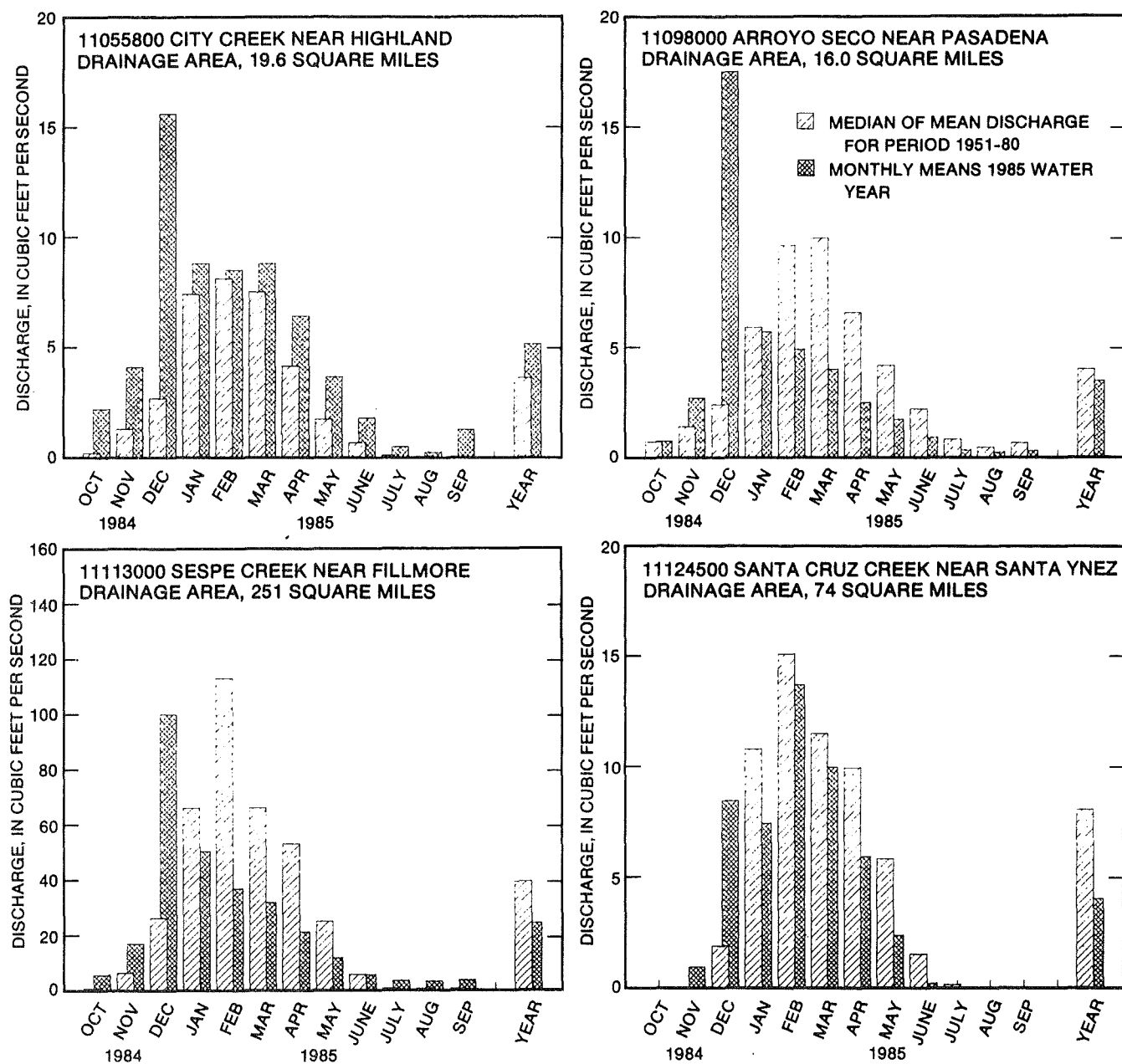


FIGURE 2. — Comparison of discharge during water year 1985 with long term median discharge at four representative gaging stations.

EXPLANATION OF THE RECORDS

The surface-water records published in this report are for the 1985 water that began October 1, 1984, and ended September 30, 1985. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface water. The locations of the stations where the data were collected are shown in figures 4 through 15. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for surface-water stations in California where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other 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 of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station such as 10123510, which appears just to the left of the station name, includes the two-digit part number "10" plus the six-digit downstream-order number "123510." The Part number designates the major river basin; for example, part "10" is in the Great Basin.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below).

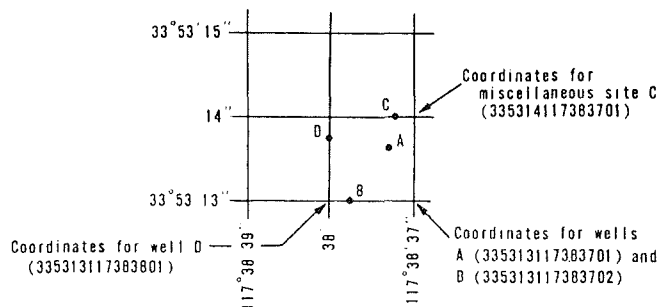


Figure 3.--System for numbering wells and miscellaneous sites (latitude and longitude).

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake and reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Location of all complete-record and crest-stage partial-record stations for which data are given in this report are shown, by county, in figures 4 through 15.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage or with digital recorders that punch stage values on paper tapes at selected time intervals. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in U.S. Geological Survey Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations (TWRI), Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow-over-dam or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. 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 of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may so obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes or observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the 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 computing 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.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships such as other stream discharges are computed.

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 from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes, record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that records from it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted 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 most recently revised figure was published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see Definition of Terms), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a remarks statement is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station, and possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development. The median of yearly mean discharges also is given under this heading for stations having 10 or more water years of record, if the median differs from the average given by more than 10 percent.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum discharges or content. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possible, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton storage-capacity table when daily contents are given.

The daily table for stream-gaging stations gives 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 is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-Ft"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. 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.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing the table footnote, "e Estimated," or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges 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, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. 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 losses are large in comparison with the observed discharge.

Other Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of sites as well as an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge measurement notes, gage-height records, temperature measurements, and rating tables are on file in the California District office. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figures 4 through 15.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-resources Investigations," Book 1, Chapter D2; Book 3, Chapter C2; Book 5, Chapter A1, A3, and A4. All of these references are listed on p. 22 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative value available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum, and values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the USGS District Office whose address is given on the back of the title page of this report.

Water temperature

Water temperatures are measured at the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Cross-Sectional Data

Cross-section surveys of water temperature, pH, specific conductance, dissolved oxygen, and suspended sediment are done at all NASQAN and Hydrologic Bench-mark stations during various seasons and surface-water discharges. Documentation of cross-section variation of water quality is essential in order to determine how many samples in a cross section are necessary to ensure a representative composite sample.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colo., or Doraville, Ga. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

<u>PRINTED OUTPUT</u>	<u>REMARK</u>
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptable range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

ACCESS TO WATSTORE DATA

The National Water Data STorage and Retrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, VA 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report are defined below. See also table for converting inch-pound units to International System (SI) Units on the inside of the back cover.

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 about 326,000 gallons or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measure of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter of the original water sample.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems and leaves.

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by a well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials, for example, decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. For the membrane filter method these bacteria are defined as the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 0.5°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. For the membrane filter method they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal-streptococcal bacteria are bacteria found in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. For the membrane filter method they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF Streptococcus agar (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Benthic organisms (invertebrates) are the group of animals living in or on the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m³), and periphyton and benthic organisms in grams per square meter (g/m²).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Cells/volume refers to the number of cells of any organism that are counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually in milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

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.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (ft³/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second-day (cfs.d) 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, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic meters.

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

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to is that material in a representative water sample which passes through a 0.45 μ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate. It is recognized that certain kinds of samples cannot be filtered; to provide for this, procedures that are considered equivalent to filtering through a 0.45 μ m membrane filter will be identified and announced at a later date.

Dissolved-solids concentration of water is determined either analytically or by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$d = \frac{s}{n} \sum_{i=1}^n \frac{1}{n_i} \log^2 \frac{n}{n_i}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the samples are the same, to some positive number, when some or all the organisms in the sample are different.

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 therein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage datum is the elevation of the zero point of the reference gage from which gage height is determined as compared to the National Geodetic Vertical Datum of 1929. This elevation is established by a system of levels from known bench marks or by approximation from topographic maps.

Gage height (G.H.) 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 hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap that is required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO_3).

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_0 e^{-\lambda L},$$

where I_0 is the source light intensity, I is the light intensity at length L (in meters) from the source, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0}.$$

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This development process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-pupa-adult or egg-nymph-adult.

Methylene blue active substance (MBAS) is a measure of apparent detergents. This determination depends on the formation of a blue color when methylene blue dye reacts with synthetic detergent compounds.

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) to describe the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) to detect changes in trends with time in the pattern occurrence of water-quality characteristics, and (4) to provide a nationally consistent data base useful for water-quality assessment and hydrologic research.

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area of the habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

<u>Classification</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
Clay.....	0.00024-0.004	Sedimentation
Silt.....	0.004-0.062	Sedimentation
Sand.....	0.062-2.0	Sedimentation or sieve
Gravel.....	2.0-64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native water analysis.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periphyton is the assemblage of micro-organisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, the periphyton also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton are suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton compose the plant part of the plankton. They are usually microscopic and their movement is subject to water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials into the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment and are commonly known as algae.

Blue-green algae are phytoplankton organisms having a blue pigment in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure or organochlorine insecticides.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms, chiefly green plants. The rate of primary production is estimated by measuring the amount of carbon assimilated by plants (carbon method) or the amount of oxygen released (oxygen method).

Milligrams of carbon per area or volume per unit time [$\text{mg C}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg C}/(\text{m}^3 \cdot \text{time})$] for phytoplankton are the units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [$\text{mg O}_2/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and [$\text{mg O}_2/(\text{m}^3 \cdot \text{time})$] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light- and dark-bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bedload is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bedload is considered to consist of particles in transit within 0.25 ft (0.076 m) of the streambed.

Bedload discharge (tons per day) is the quantity of sediment, as measured by dry weight, that moves past a section as bedload in a given time.

Suspended sediment is the sediment that any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft or above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour period.

Suspended-sediment discharge (tons per day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day by multiplying discharge times milligrams per liter times 0.0027.

Suspended-sediment load (tons per day) is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total-sediment discharge or total-sediment load (tons per day) is the sum of suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry mass, that passes a section in a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content in water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff." Streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic-organism collection and plexiglass strips for periphyton collection.

Surface area of a lake is the area, in square miles or acres, outlined on the latest Geological Survey topographic map as the boundary of the lake and measured by a planimeter. In localities not covered by topographic maps, the areas are computed from the best maps available. Areas shown are for the lake stage at the time the map was made.

Surficial bed material is the part (upper 0.1 to 0.2 ft or 0.03 to 0.06 m) of the bed material that is sampled by using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. The water-sediment mixture is associated with (or sorbed on) the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	Hexagenia
Species.....	<u>Hexagenia limbata</u>

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the presence of a thermograph or a digital mechanism that records water temperature in a digital format on punched paper tape.

Time-weighted average is computed by multiplying and number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total load (tons) is the total amount of any individual constituent, as measured by dry mass or volume, that is dissolved in a specific amount of water (discharge) during a given time. It is computed by multiplying the total discharge, times the milligrams per liter of the constituent, times the factor 0.0027, times the number of days.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the total amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in the dissolved and suspended phases of the sample. A knowledge of the expected form is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Nephelometric turbidity units (NTU), obtained from the Nephelometric method for turbidity determination which measures the intensity of light scattered by suspended particles at 90 degrees from the path of incident light source.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1985, is called the "1985 water year."

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

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, CO 80225. Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 1-D1. Water temperature--influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. Measurement of peak discharge by slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. Measurement of time of travel and dispersion in streams by dye tracing, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A10. Discharge ratings at gaging stations, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.
- 3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.
- 3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. Introduction to ground-water hydraulics, a programmed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

- 3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. Field methods for measurement of fluvial sediment, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. Computation of fluvial-sediment discharge, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. Low-flow investigations, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.
- 5-A5. Methods for determination of radioactive substances in water and fluvial sediments, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. Laboratory theory and methods for sediment analysis, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. Computer model of two-dimensional solute transport and dispersion in ground water, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. A model for simulation of flow in singular and interconnected channels by R. W. Shaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. Installation and service manual for U.S. Geological Survey manometers, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

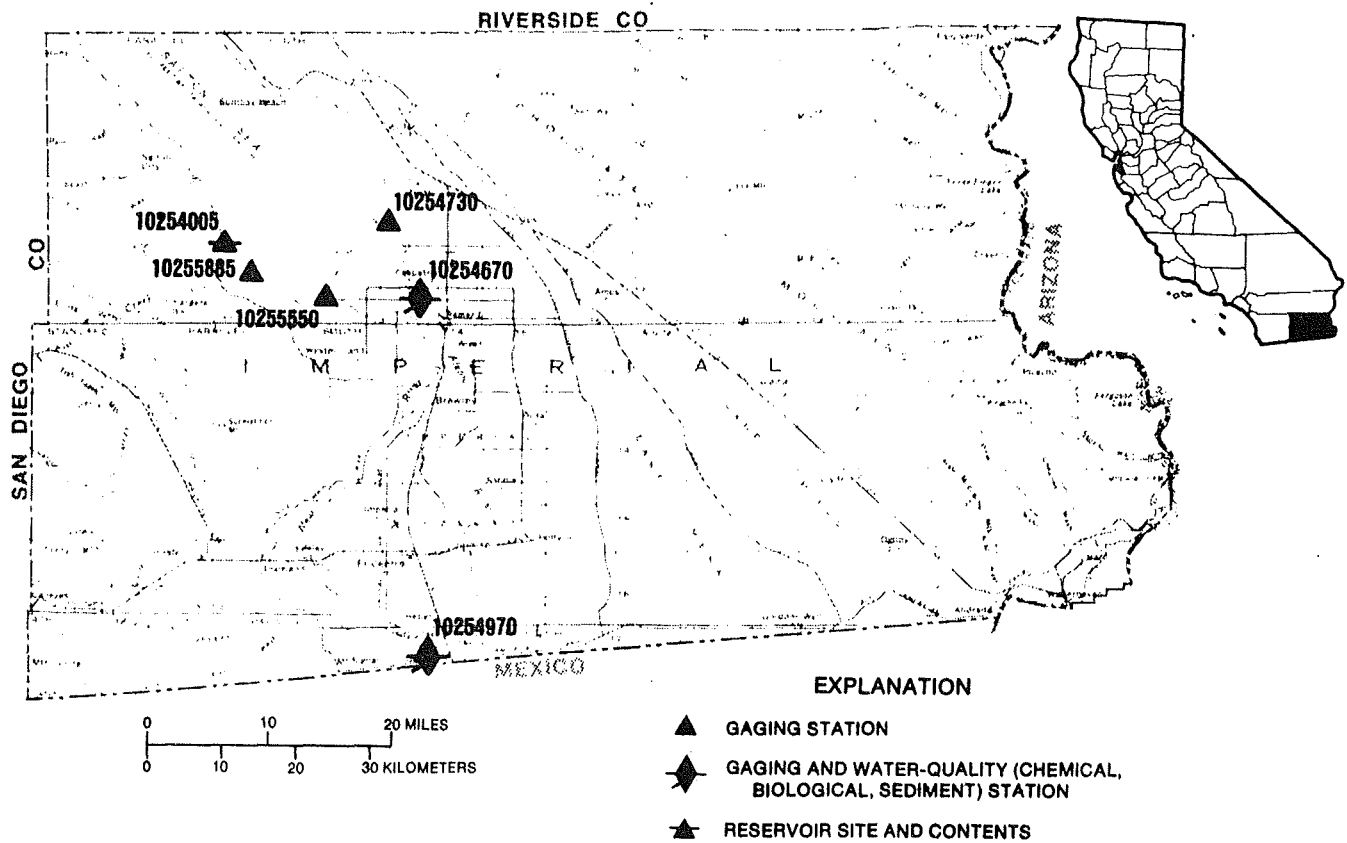


FIGURE 4. — Location of discharge and water-quality stations in Imperial County.

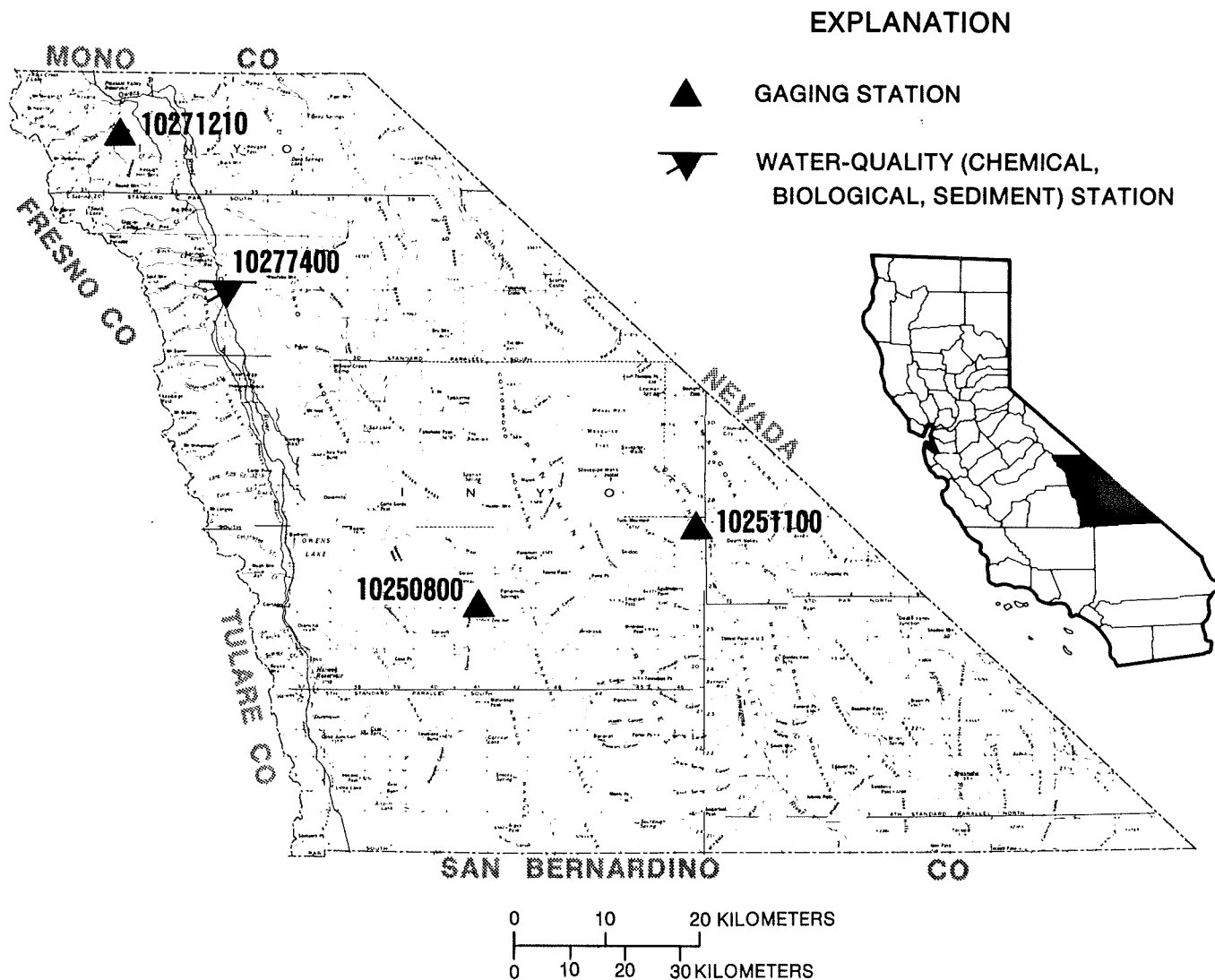


FIGURE 5. — Location of discharge and water-quality stations in Inyo County.

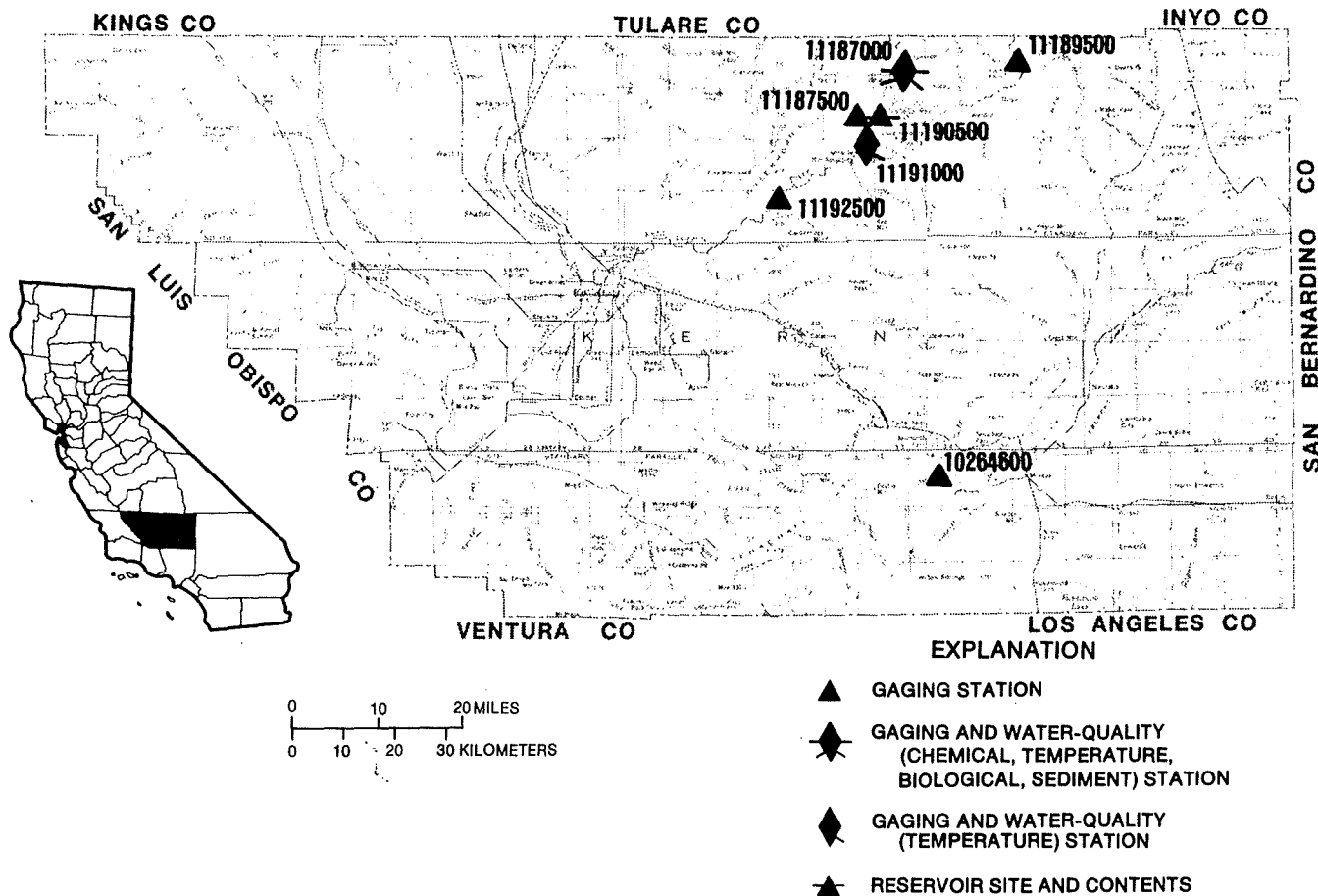


FIGURE 6. — Location of discharge and water-quality stations in Kern County.

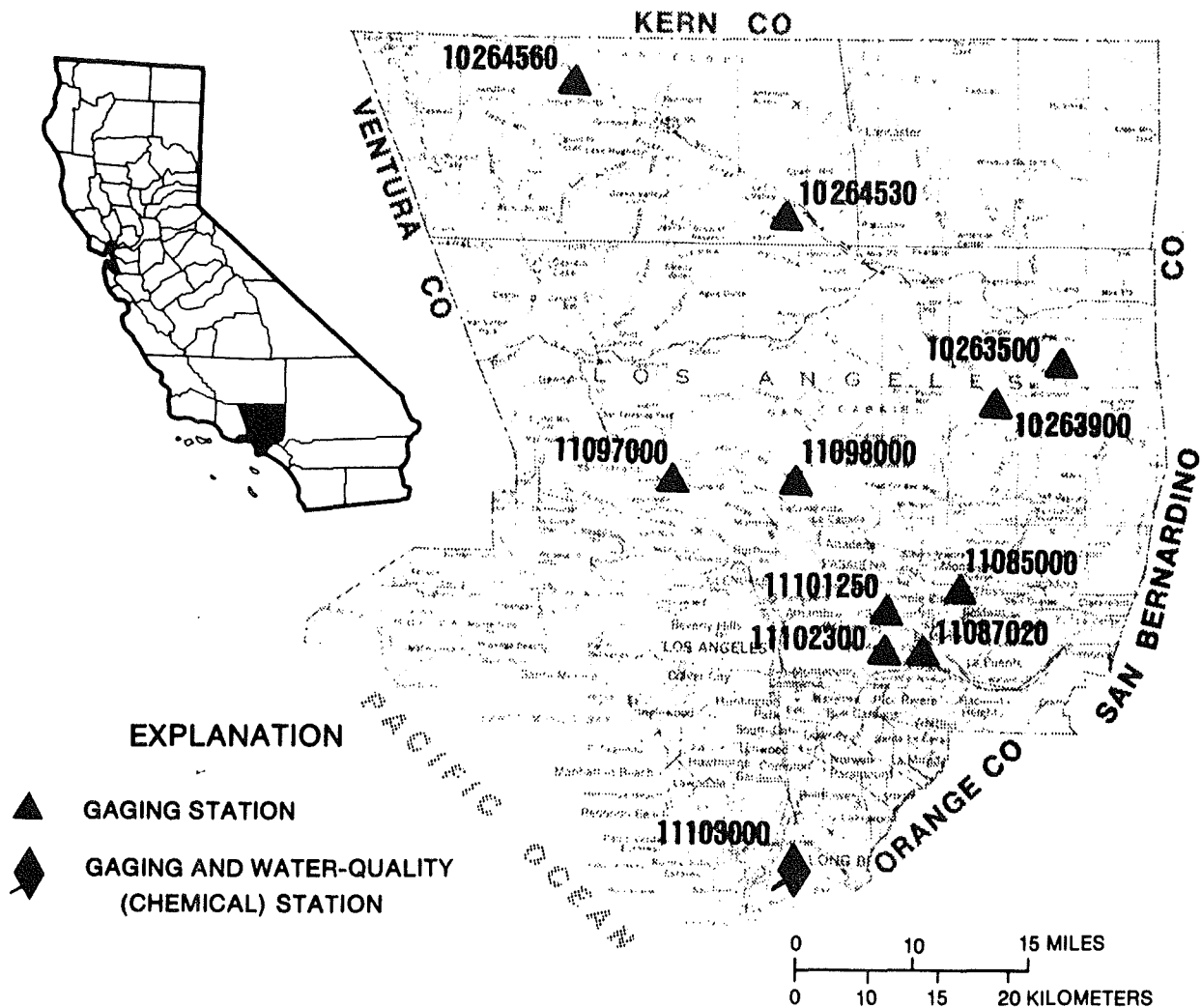


FIGURE 7. — Location of discharge and water-quality stations in Los Angeles County.

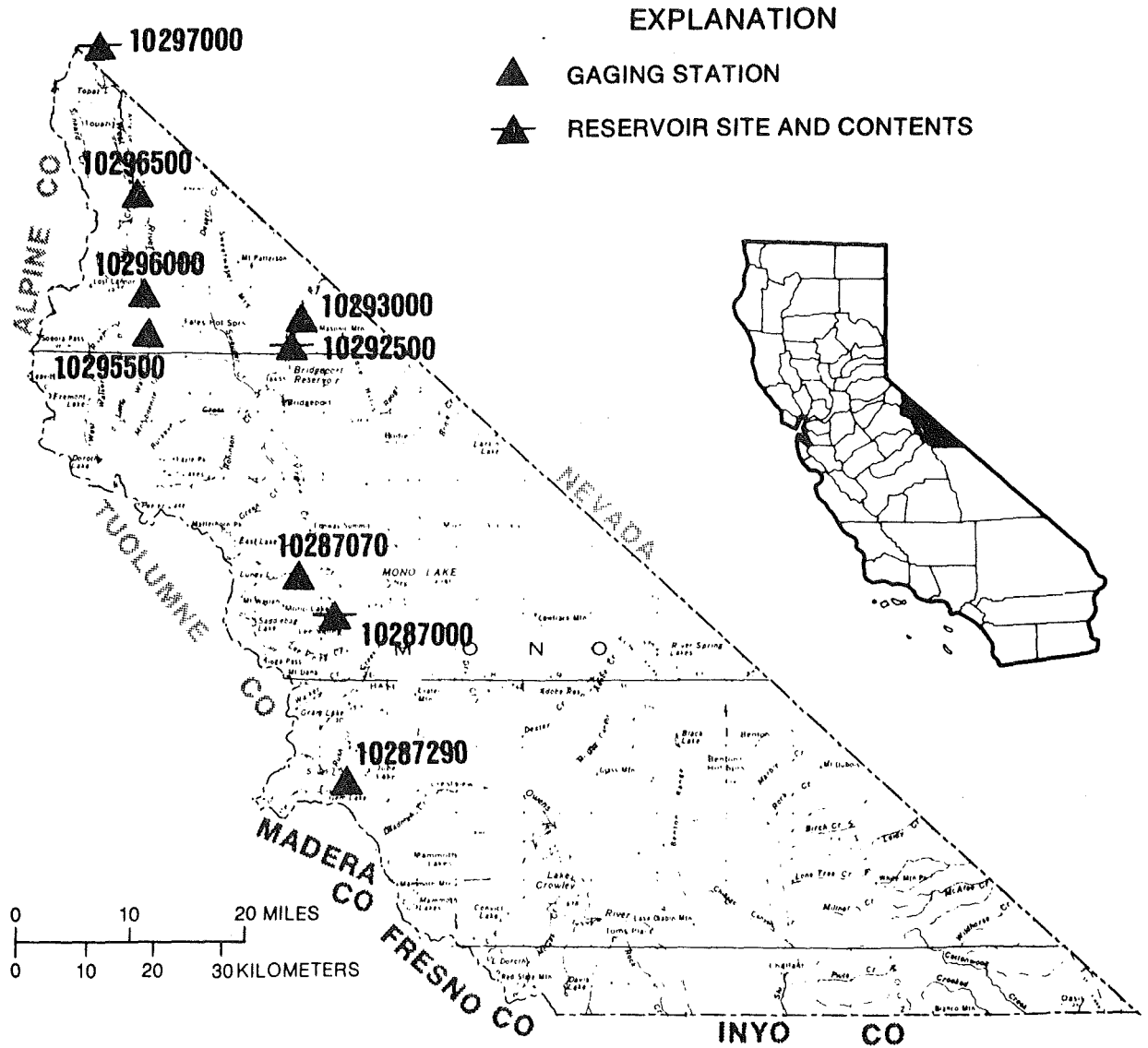


FIGURE 8. — Location of discharge stations in Mono County.

EXPLANATION

-  GAGING STATION
-  GAGING AND WATER-QUALITY (SEDIMENT) STATION

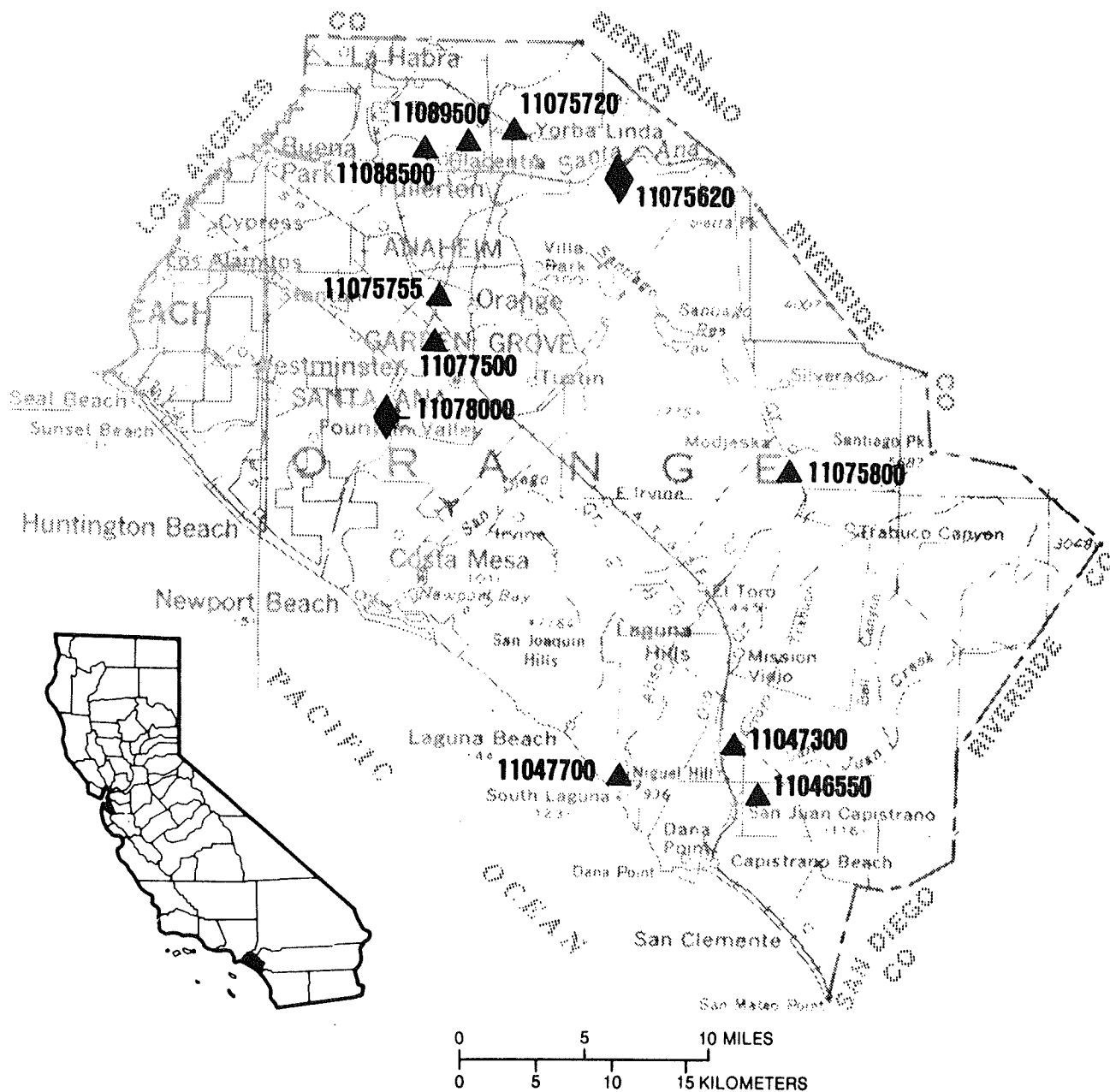


FIGURE 9. — Location of discharge and water-quality stations in Orange County.

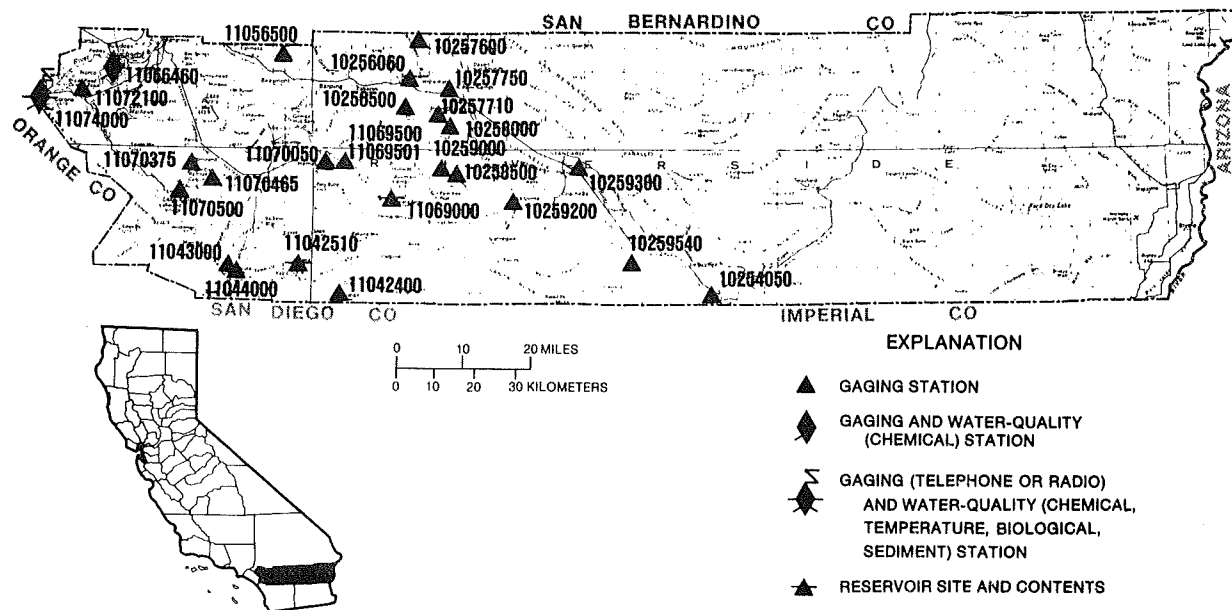


FIGURE 10. — Location of discharge and water-quality stations in Riverside County.

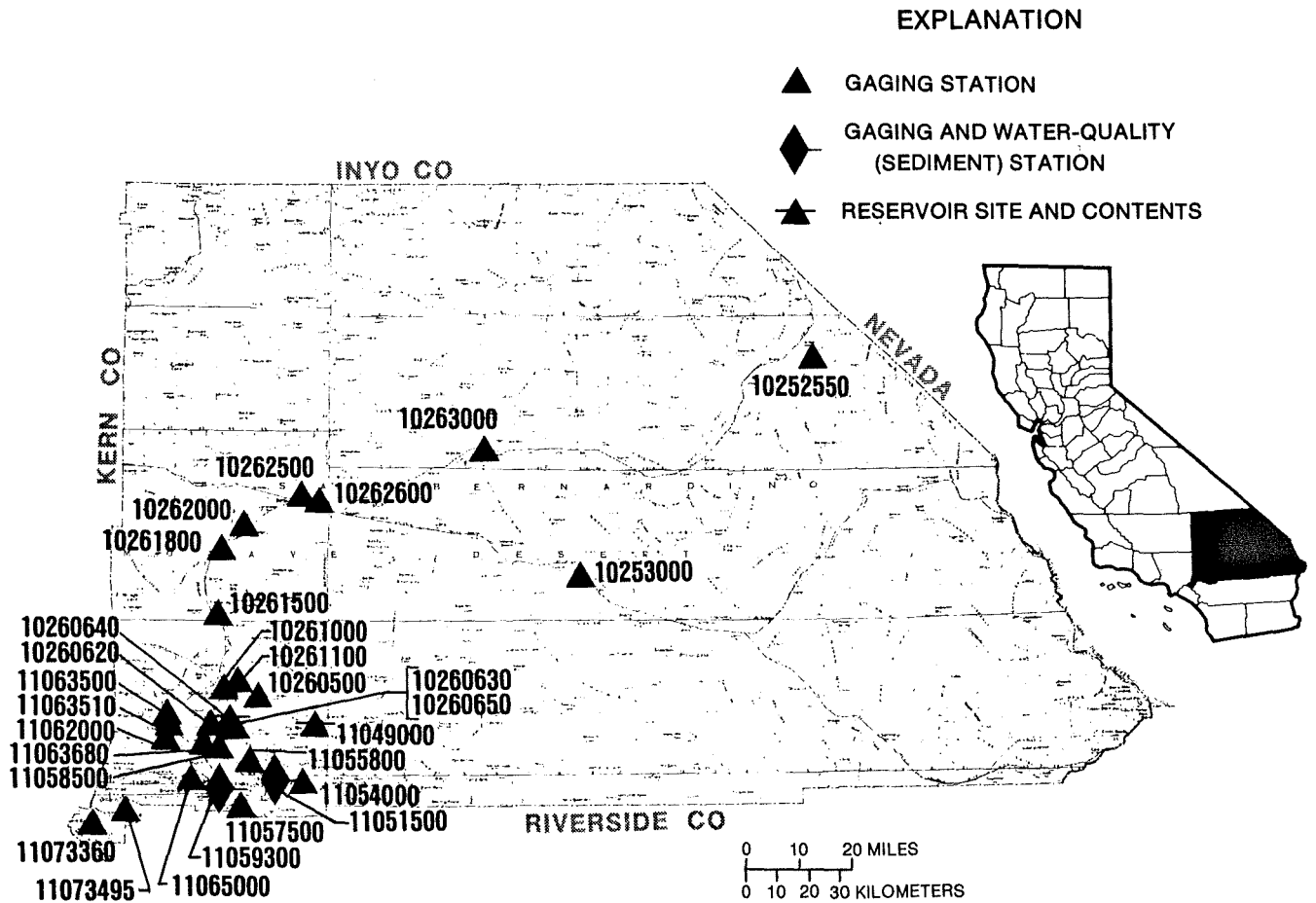


FIGURE 11. — Location of discharge and water-quality stations in San Bernardino County.

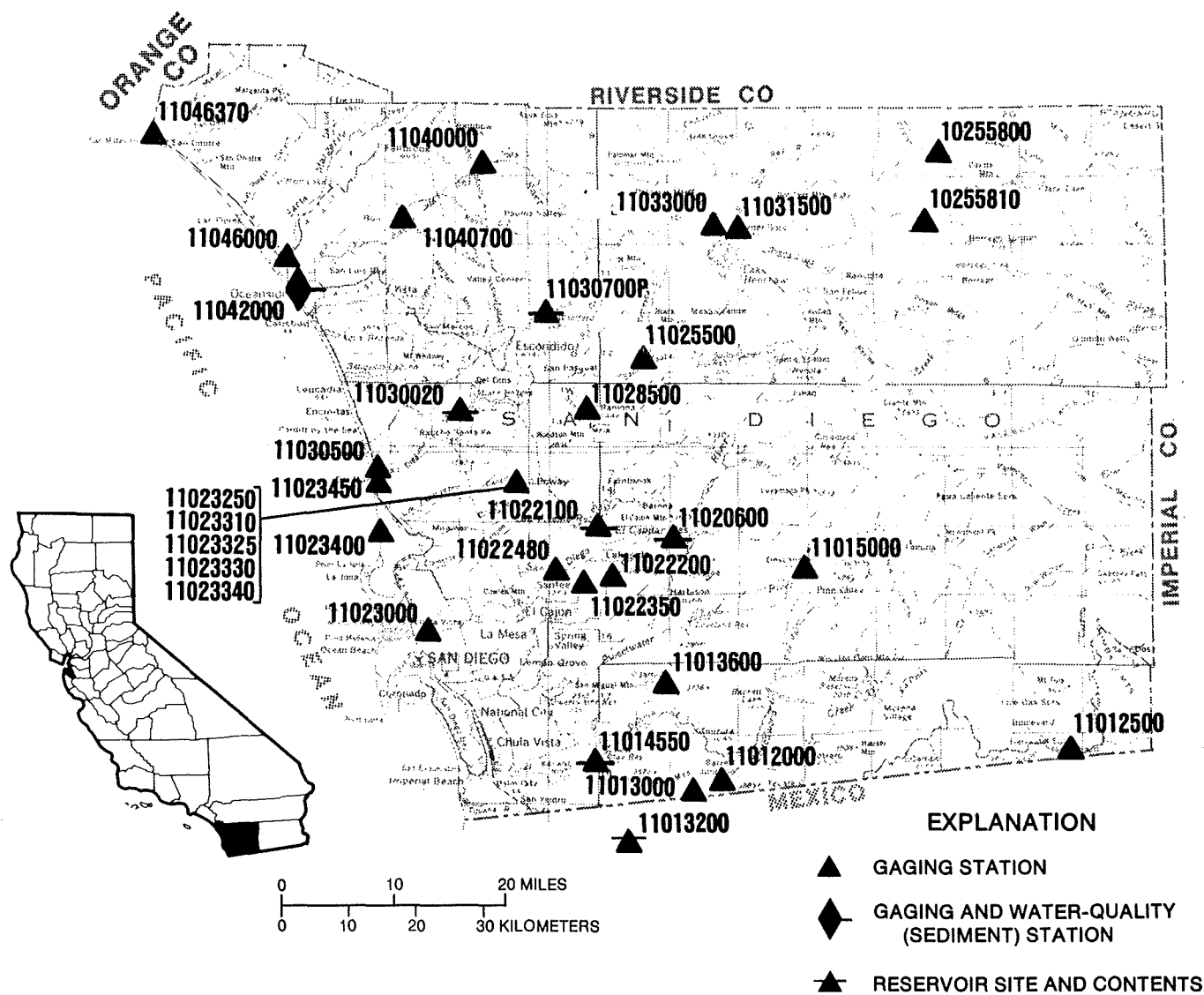


FIGURE 12. — Location of discharge and water-quality stations in San Diego County.

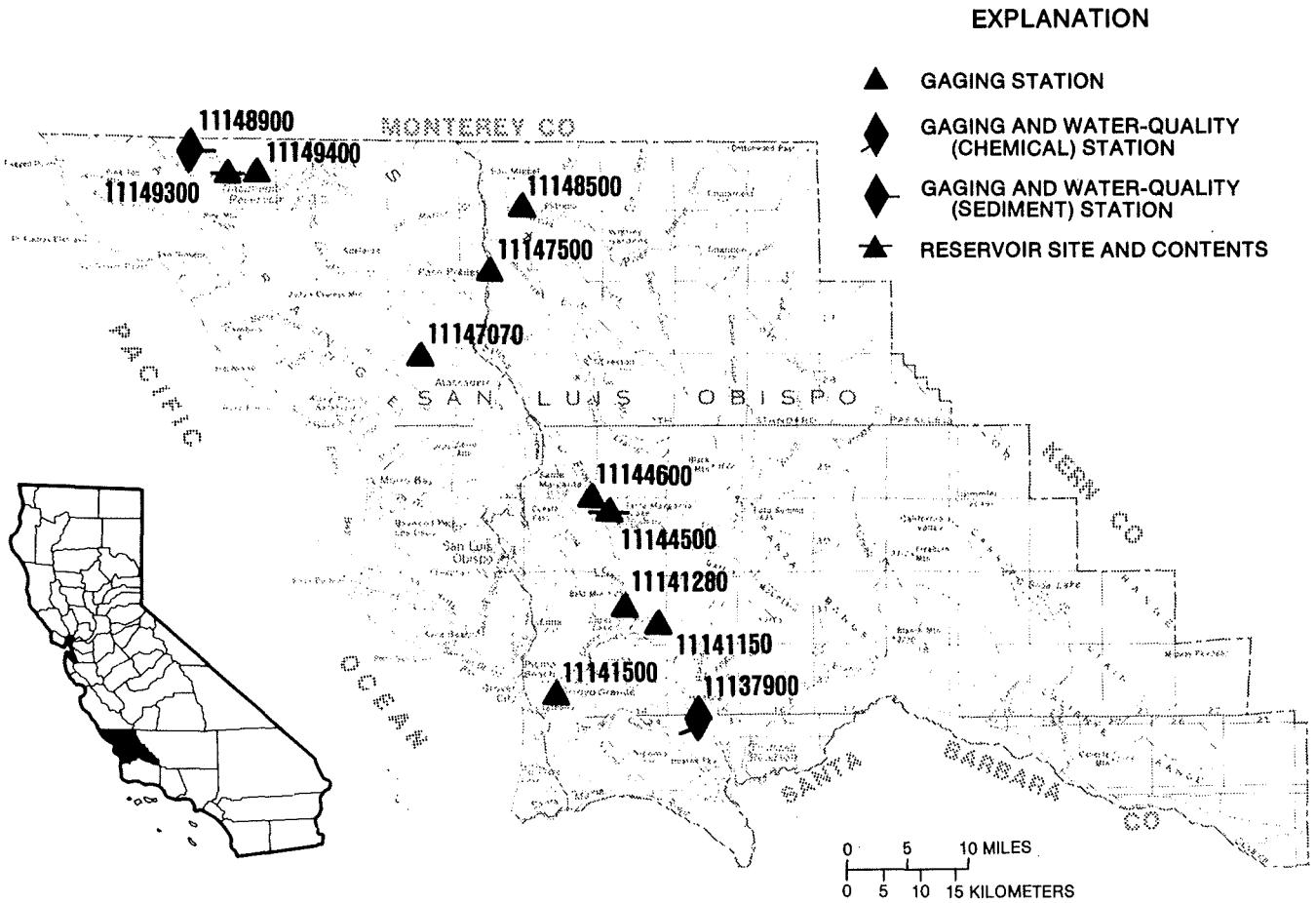


FIGURE 13. — Location of discharge and water-quality stations in San Luis Obispo County.

- GAGING STATION
- GAGING AND WATER-QUALITY
(CHEMICAL) STATION
- GAGING AND WATER-QUALITY
(TEMPERATURE) STATION
- GAGING AND WATER-QUALITY
(SEDIMENT) STATION
- RESERVOIR SITE AND CONTENTS

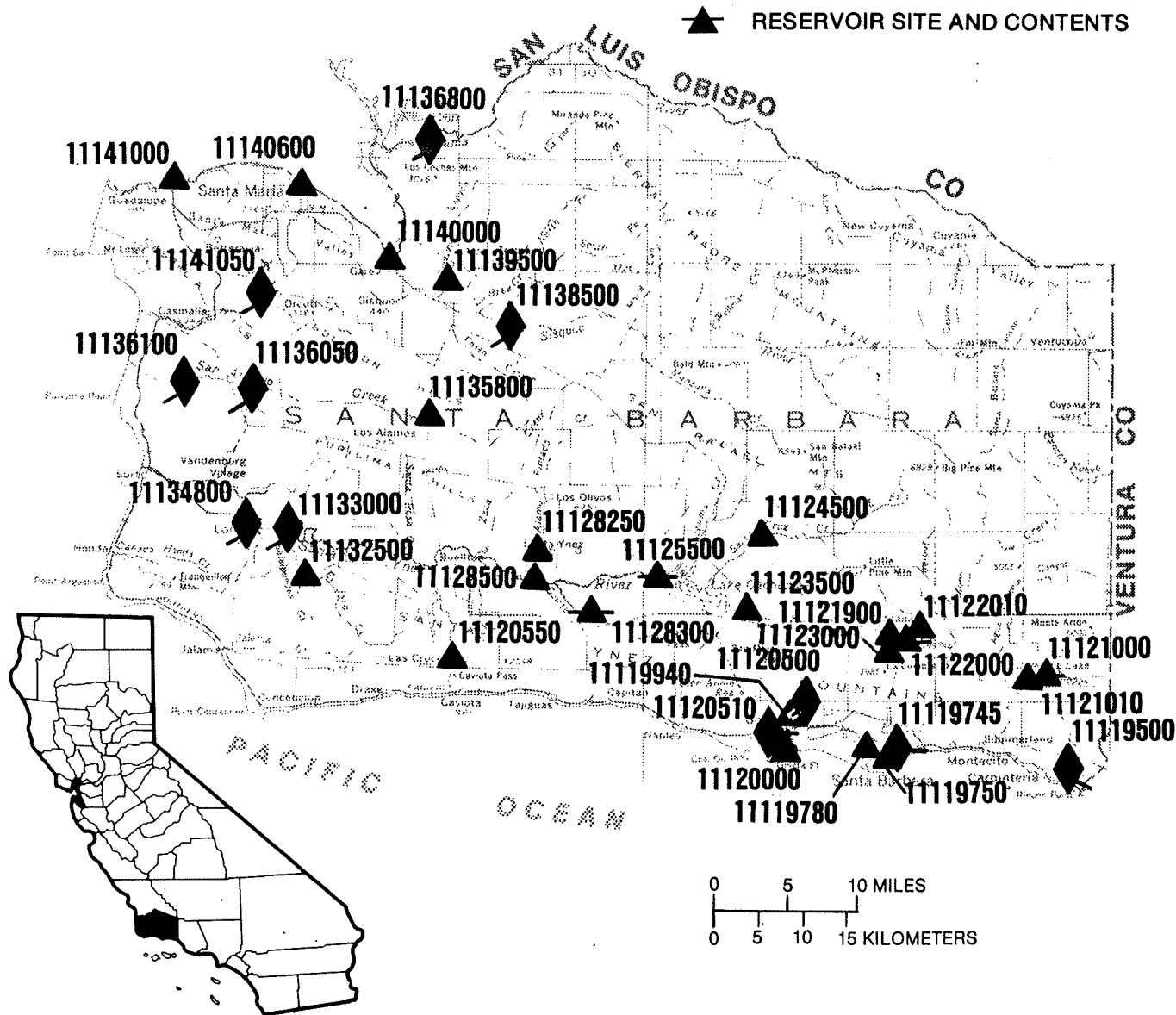


FIGURE 14. — Location of discharge and water-quality stations in Santa Barbara County.

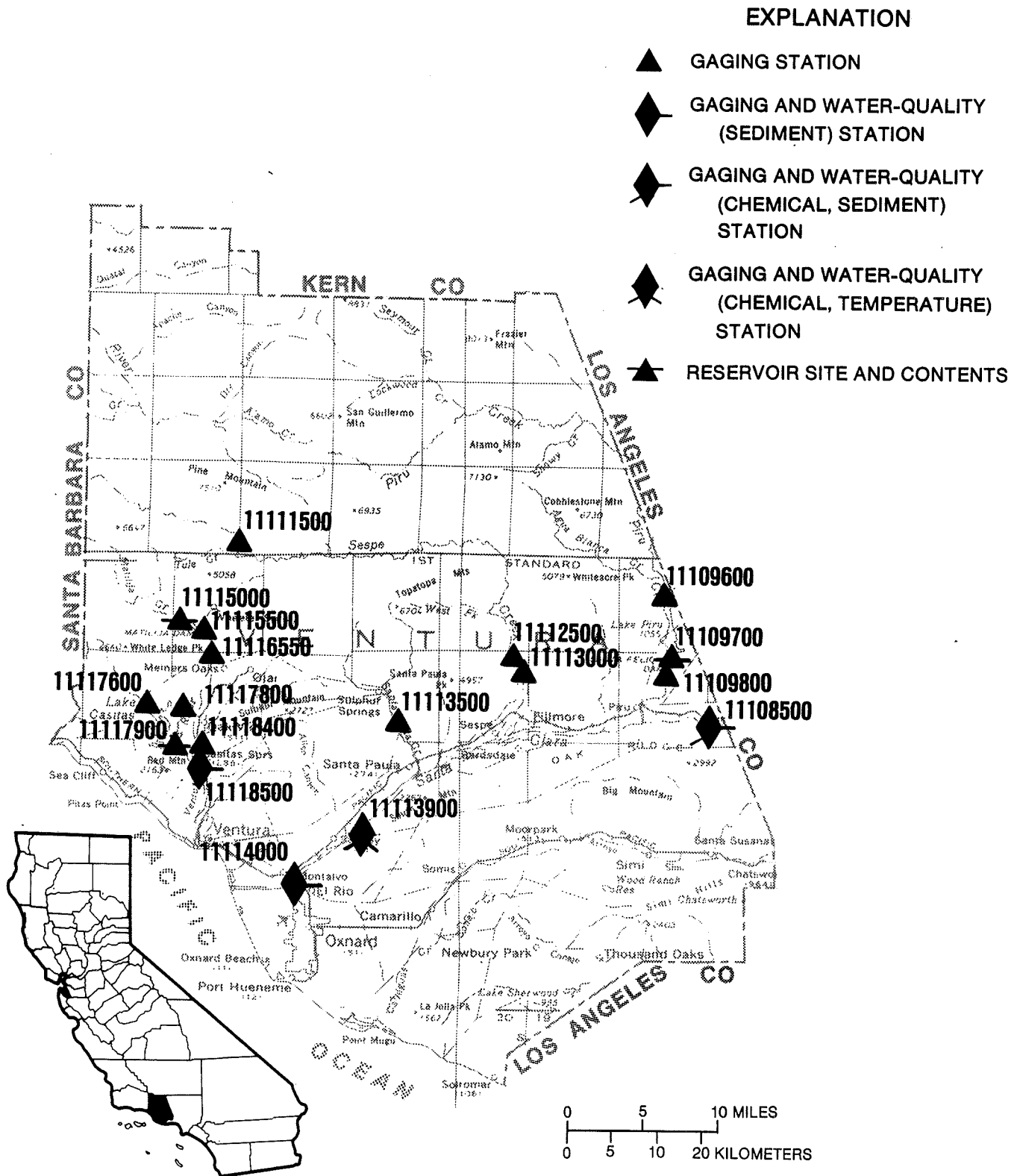


FIGURE 15. — Location of discharge and water-quality stations in Ventura County.

DISCONTINUED GAGING STATIONS

The following continuous-record streamflow stations in California have been discontinued as of the 1985 water year. Daily streamflow or stage records were collected and published for the period of record shown for each station.

Station number	Station name	Drainage area (mi ²)	Period of record
10257710	Chino Canyon Creek near Palm Springs, CA	3.88	1975-85
11013600	Jamul Creek at Lee Valley, near Jamul, CA	2.26	1984-85
11040700	San Luis Rey River below Moosa Canyon, near Bonsall, CA	499	1984-85
11048500	San Diego Creek at Culver Drive, near Irvine, CA	41.8	1950-85
11048540	Peters Canyon Wash at Barranca Road, near Irvine, CA	45.2	1983-85
11056500	Little San Geronio River near Beaumont, CA	1.74	1949-85
11058600	Waterman Canyon Creek near Arrowhead Springs, CA	4.65	1912-14
			1920-85
11113000	Sespe Creek near Fillmore, CA	251	1911-13
11128250	Alamo Pintado Creek near Solvang, CA	29.4	1928-85
			1971-85

a Temporarily discontinued.

DISCONTINUED WATER-QUALITY STATIONS

The following water-quality stations in California have been discontinued as of the 1985 water year. Continuous daily records of water temperature and/or sediment were collected and published for the period of record shown for each station.

Station number	Station name	Drainage area (mi ²)	Type of Record	Period of Record
11048500	San Diego Creek at Culver Drive, near Irvine, CA	41.8	T,S	1983-85
11048540	Peters Canyon Wash at Barranca Road, near Irvine, CA	45.2	T,S	1983-85
11114000	Santa Clara River at Montalvo, CA	1,612	T,S	1968, 1969
				1971-81
				1983-85
11120510	San Jose Creek at Goleta, CA	9.42	T,S	1982-85

Type of record: T (water temperature); S (sediment).

THE GREAT BASIN

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PANAMINT VALLEY

10250800 DARWIN CREEK NEAR DARWIN, CA

LOCATION.--Lat 36°19'14", long 117°31'23", in SE 1/4 SW 1/4 sec.34, T.18 S., R.41 E., Inyo County, Hydrologic Unit 18090204, on left bank 510 ft downstream from Darwin Falls, 1.6 mi upstream from unnamed tributary, and 5.2 mi northeast of Darwin.

DRAINAGE AREA.--173 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 2,640 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 6, 1970, at site 190 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 20, Apr. 10 to June 9, and July 31 to Aug. 21. Records poor. No regulation above station. Town of Darwin pumps water above station for municipal supply.

AVERAGE DISCHARGE.--23 years, 0.40 ft³/s, 290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft³/s, Jan. 25, 1969, gage height, 8.40 ft, at site then in use, from floodmarks, on basis of slope-conveyance study of peak flow; minimum daily, 0.05 ft³/s, Aug. 30 to Sept. 4, 1969, Sept. 10-12, 15, 17, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 20.42 ft, present site, from floodmarks, date and discharge unknown.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s, from rating curve extended above 0.60 ft³/s on basis of slope-area measurement at gage height 6.45 ft, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 18	1615	*15	*4.83				

Minimum daily, 0.10 ft³/s, July 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.29	.40	.45	.40	.30	.35	.28	.29	.26	.18	.18
2	.27	.29	.40	.45	.51	.35	.35	.28	.29	.23	.18	.18
3	.25	.29	.40	.45	.58	.35	.30	.28	.29	.21	.18	.21
4	.24	.29	.40	.45	.40	.35	.40	.28	.28	.18	.18	.28
5	.24	.29	.40	.45	.40	.35	.40	.28	.28	.16	.18	.26
6	.24	.30	.40	.45	.40	.35	.30	.28	.28	.16	.18	.23
7	.24	.30	.40	.58	.40	.35	.30	.28	.28	.21	.18	.23
8	.24	.40	.45	.51	.45	.35	.26	.28	.28	.16	.18	.21
9	.25	.38	.45	.51	.40	.35	.30	.28	.28	.21	.18	.21
10	.25	.36	.45	.58	.40	.35	.30	.28	.28	.18	.17	.23
11	.26	.36	.51	.66	.45	.35	.30	.28	.26	.16	.17	.23
12	.25	.36	.51	.66	.45	.30	.30	.28	.26	.14	.17	.23
13	.25	.37	.45	.66	.40	.30	.30	.28	.26	.14	.17	.21
14	.25	.36	.45	.66	.40	.30	.30	.28	.28	.14	.17	.21
15	.25	.36	.45	.66	.40	.35	.30	.28	.28	.14	.17	.21
16	.26	.35	.45	.66	.40	.35	.29	.28	.23	.14	.17	.23
17	.26	.35	.45	.66	.40	.35	.29	.28	.23	.14	.17	.23
18	.26	.35	.51	.58	.40	.35	.29	.28	.21	.63	.16	.26
19	.27	.35	.61	.58	.40	.35	.29	.28	.26	.21	.16	.26
20	.27	.35	.58	.51	.40	.30	.29	.28	.26	.21	.16	.23
21	.27	.40	.51	.45	.40	.30	.29	.28	.26	.18	.16	.23
22	.27	.51	.45	.51	.40	.35	.29	.28	.26	.14	.16	.23
23	.27	.45	.45	.51	.40	.35	.29	.28	.26	.10	.14	.23
24	.27	.45	.45	.51	.45	.35	.29	.28	.31	.10	.16	.23
25	.27	.45	.45	.51	.45	.35	.29	.28	.31	.10	.16	.23
26	.28	.45	.45	.51	.40	.35	.29	.28	.31	.10	.16	.23
27	.28	.40	.51	.58	.37	.35	.29	.28	.28	.14	.16	.26
28	.28	.40	.45	.66	.35	.35	.29	.28	.26	.14	.16	.23
29	.28	.40	.45	.66	---	.35	.29	.28	.34	.16	.16	.23
30	.28	.40	.45	.58	---	.35	.29	.29	.26	.18	.16	.23
31	.28	---	.45	.40	---	.30	---	.30	---	.18	.16	---
TOTAL	8.08	11.06	14.19	17.05	11.66	10.50	9.11	8.71	8.21	5.53	5.20	6.85
MEAN	.26	.37	.46	.55	.42	.34	.30	.28	.27	.18	.17	.23
MAX	.28	.51	.61	.66	.58	.35	.40	.30	.34	.63	.18	.28
MIN	.24	.29	.40	.40	.35	.30	.26	.28	.21	.10	.14	.18
AC-FT	16	22	28	34	23	21	18	17	16	11	10	14
CAL YR 1984	TOTAL	146.80	MEAN	.40	MAX	.21	MIN	.06	AC-FT	290		
WTR YR 1985	TOTAL	116.15	MEAN	.32	MAX	.66	MIN	.10	AC-FT	230		

DEATH VALLEY

10251100 SALT CREEK NEAR STOVEPIPE WELLS, CA

LOCATION.--Lat 36°35'58", long 117°00'46", in NE 1/4 sec.6, T.16 S., R.46 E., Inyo County, Hydrologic Unit 18090203, Death Valley National Monument, on left bank 3.0 mi southeast of intersection of State Highway 190 and Stovepipe Wells Road, and 7.4 mi southeast of Stovepipe Wells Hotel.

DRAINAGE AREA.--Indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1974 to current year.

GAGE.--Water-stage recorder, Parshall flume, and flashboard weir. Flashboard weir installed Feb. 2, 1984. Elevation of gage is -180 ft below National Geodetic Vertical Datum of 1929, from topographic map.

AVERAGE DISCHARGE.--11 years (water years 1975-85), 0.347 ft³/s, 251 acre-ft/yr.

REMARKS.--Estimated daily discharges: June 4 to Aug. 21, Sept. 17-24. Records good except for estimated daily discharges, which are poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 363 ft³/s, Feb. 9, 1976, gage height, 4.81 ft based on slope-conveyance study of peak flow; maximum gage height, 4.87 ft, July 22, 1984 (flashboard weir installed); minimum daily, 0.05 ft³/s, July 14, 19, Aug. 4-6, 8, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5.0 ft³/s and maximum (*), from rating curve extended above 6.2 ft³/s on basis of theoretical weir formula:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 20	0130	*12	*3.19				

Minimum daily, 0.06 ft³/s, Aug. 26, Sept. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.21	.47	.78	.66	.64	.53	.32	.12	.09	.08	.06
2	.15	.23	.48	.76	.68	.64	.53	.30	.13	.08	.08	.06
3	.14	.24	.51	.75	.69	.60	.52	.27	.14	.08	.08	.07
4	.14	.24	.50	.75	.69	.58	.51	.26	.14	.08	.08	.09
5	.14	.26	.51	.76	.66	.62	.49	.27	.13	.08	.08	.09
6	.14	.26	.49	.78	.68	.62	.47	.24	.13	.08	.08	.09
7	.14	.26	.50	.85	.69	.61	.46	.23	.12	.08	.07	.09
8	.14	.25	.53	.82	.71	.62	.45	.22	.12	.08	.07	.08
9	.14	.25	.53	.77	.71	.63	.44	.22	.11	.08	.07	.08
10	.14	.27	.57	.74	.68	.64	.43	.30	.11	.08	.07	.09
11	.14	.28	.73	.70	.68	.62	.42	.28	.11	.08	.07	.09
12	.14	.29	.66	.65	.70	.62	.42	.26	.10	.08	.07	.09
13	.15	.28	.53	.67	.70	.62	.41	.25	.10	.08	.07	.10
14	.14	.30	.49	.67	.69	.60	.40	.25	.10	.08	.07	.09
15	.14	.31	.52	.69	.70	.61	.39	.23	.10	.08	.07	.09
16	.15	.32	.54	.69	.71	.61	.35	.22	.10	.08	.07	.09
17	.14	.32	.53	.69	.71	.61	.35	.21	.10	.08	.07	.09
18	.15	.32	.85	.70	.71	.61	.37	.22	.10	.10	.07	.10
19	.16	.32	2.5	.70	.71	.61	.37	.21	.10	.11	.07	.11
20	.16	.33	3.7	.70	.68	.60	.37	.19	.10	.09	.07	.10
21	.16	.38	1.3	.71	.59	.58	.37	.17	.09	.15	.07	.10
22	.16	.99	.87	.70	.64	.56	.38	.18	.09	.11	.07	.10
23	.16	.68	.82	.67	.63	.56	.38	.18	.09	.11	.07	.10
24	.16	.58	.79	.67	.64	.57	.36	.16	.09	.10	.07	.10
25	.16	.51	.78	.68	.66	.55	.35	.15	.09	.10	.07	.10
26	.18	.44	.77	.71	.66	.52	.32	.15	.09	.09	.06	.10
27	.19	.44	1.2	.71	.65	.50	.32	.14	.09	.09	.07	.11
28	.20	.46	1.0	.70	.64	.50	.33	.14	.09	.09	.07	.11
29	.21	.45	.93	.70	---	.49	.33	.14	.09	.09	.07	.10
30	.22	.47	.88	.68	---	.49	.33	.14	.09	.08	.07	.10
31	.22	---	.83	.64	---	.52	---	.13	---	.08	.07	---
TOTAL	4.89	10.94	26.31	22.19	18.95	18.15	12.15	6.63	3.16	2.76	2.22	2.77
MEAN	.16	.36	.85	.72	.68	.59	.40	.21	.11	.089	.072	.092
MAX	.22	.99	3.7	.85	.71	.64	.53	.32	.14	.15	.08	.11
MIN	.13	.21	.47	.64	.59	.49	.32	.13	.09	.08	.06	.06
AC-FT	9.7	22	52	44	38	36	24	13	6.3	5.5	4.4	5.5
CAL YR 1984	TOTAL	179.35	MEAN	.49	MAX 26	MIN .07	AC-FT 356					
WTR YR 1985	TOTAL	131.12	MEAN	.36	MAX 3.7	MIN .06	AC-FT 260					

10251100 SALT CREEK NEAR STOVEPIPE WELLS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1975-76, 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
SEP 24...	1230	18800	8.0	22.0	1700	1100	160	310	30	4100	81

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
SEP 24...	44	290	607	2400	1.6	59	13000	<0.10	0.03	25000	50

< Actual value is known to be less than the value shown.

BRISTOL LAKE BASIN

10252550 CARUTHERS CREEK NEAR IVANPAH, CA

LOCATION.--Lat 35°14'33", long 115°17'58", in NW 1/4 NE 1/4 sec.6, T.13 N., R.16 E., San Bernardino County, Hydrologic Unit 15030102, on left bank 6.6 mi south of Ivanpah.

DRAINAGE AREA.--1.13 mi².

PERIOD OF RECORD.--October 1963 to September 1981, May 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 11 to Feb. 26. Records fair above 40 ft³/s and poor below. No regulation or diversion above station.

AVERAGE DISCHARGE.--21 years (water years 1964-81, 1983-85), 0.124 ft³/s, 90 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 814 ft³/s, Aug. 12, 1979, gage height, 5.75 ft, from rating curve extended above 2.5 ft³/s, on basis of slope-conveyance studies; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*), from rating curve extended above 2.5 ft³/s on basis of slope-conveyance studies:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 27	0830	16	1.75	July 19	1215	*120	*3.06

No flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.01	.55	.12	.04	0			0		
2		0	.01	.47	.12	.04	0			0		
3		0	.01	.27	.22	.04	0			0		
4		0	.01	.22	.20	.04	0			0		
5		0	.01	.22	.16	.04	0			0		
6		0	.01	.22	.14	.04	0			0		
7		0	0	1.8	.12	.04	0			0		
8		0	.12	2.5	.12	.04	0			0		
9		0	.07	1.7	.12	.04	0			0		
10		0	.04	1.6	.10	.04	0			0		
11		0	.24	1.0	.10	.06	0			0		
12		0	.22	.78	.10	.06	0			0		
13		0	.09	.52	.10	.06	0			0		
14		0	.07	.42	.09	.06	0			0		
15		0	.03	.33	.09	.06	0			0		
16		0	.16	.26	.09	.08	0			0		
17		0	.02	.24	.09	.08	0			0		
18		0	.02	.23	.09	.06	.02			.45		
19		0	4.1	.22	.09	.04	.01			8.4		
20		0	.90	.21	.09	.03	0			4.5		
21		0	.51	.20	.10	.02	0			4.2		
22		.06	.45	.18	.10	.01	0			4.0		
23		.07	.20	.21	.09	0	0			3.6		
24		.07	.24	.18	.09	0	0			3.1		
25		.09	.24	.16	.08	0	0			2.3		
26		.04	.29	.16	.08	0	0			.64		
27		.02	8.4	.18	.06	0	0			.03		
28		.02	4.4	.21	.06	.02	0			0		
29		.02	1.9	.18	---	.02	0			0		
30		.02	1.1	.16	---	0	0			0		
31		---	.74	.14	---	0	---			0		
TOTAL	0	0.41	24.61	15.72	3.01	1.06	0.03	0	0	31.22	0	0
MEAN	0	.014	.79	.51	.11	.034	.001	0	0	1.01	0	0
MAX	0	.09	8.4	2.5	.22	.08	.02	0	0	8.4	0	0
MIN	0	0	0	.14	.06	0	0	0	0	0	0	0
AC-FT	0	.8	49	31	6.0	2.1	.06	0	0	62	0	0
CAL YR 1984	TOTAL	122.10	MEAN	.33	MAX	38	MIN	0	AC-FT	242		
WTR YR 1985	TOTAL	76.06	MEAN	.21	MAX	8.4	MIN	0	AC-FT	151		

SALTON SEA BASIN

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10254005 SALTON SEA NEAR WESTMORLAND, CA

LOCATION.--Lat 33°11'37", long 115°49'54", in SE 1/4 SW 1/4 sec. 21, T.11 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on western shore at Sandy Beach, and 15.5 mi northwest of Westmorland.

DRAINAGE AREA.--8,360 mi², approximately.

PERIOD OF RECORD.--November 1904 to current year. Records prior to 1932 are published in WSP 735.

GAGE.--Water-stage recorder. Datum of gage is 233.46 ft below National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations below NGVD. See WSP 1734 for history of changes prior to Mar. 2, 1956.

REMARKS.--Bottom of sea is 277.7 ft below NGVD. See WSP 300, 735, and 918 for condensed history of Salton Sea.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 195.9 ft below NGVD, in February and March 1907; minimum since 1906, 251.6 ft below NGVD in November 1924.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 226.9 ft below NGVD, Apr. 10 to May 28; minimum, 228.0 ft below NGVD Sept. 13 to 22.

MEAN DAILY MONTHEND ELEVATIONS, IN FEET, BELOW NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Date	Elevation (feet)
Sept. 30.....	227.5	Apr. 30.....	226.9
Oct. 31.....	227.8	May 31.....	227.0
Nov. 30.....	227.8	June 30.....	227.2
Dec. 31.....	227.6	July 31.....	227.4
Jan. 31.....	227.5	Aug. 31.....	227.7
Feb. 28.....	227.2	Sept. 30.....	227.9
Mar. 31.....	227.0		

INFLOW TO SALTON SEA

Salton Sea, located near the northeast corner of Imperial County, is a closed basin consisting of approximately 8,360 mi².

The following table shows monthly and annual inflow to the Salton Sea from the Imperial and Coachella Valleys, in acre-feet, for the water year October 1984 to September 1985 and the annual inflow for the calendar year January to December 1984. Inflow from Imperial Valley is the sum of flows in Alamo River (station 10254730), New River (station 10255500), San Felipe Creek (station 10255885), and 36 drains. Drain inflow furnished by Imperial Irrigation District. Inflow from Coachella Valley is the sum of flows in Whitewater River (station 10259540), Salt Creek (station 10254050), and 24 drains. Drain inflow furnished by Coachella Valley County Water District. Ungaged drains and natural runoff are not included as inflow to the Salton Sea.

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
Inflow from												
Imperial Valley	106450	88740	73000	69350	83020	104260	114830	108180	84500	89330	93740	95650
Coachella Valley	15840	12570	14950	14220	14610	18940	17710	17520	15870	15700	16580	16680
Total cal yr 1984		1,411,000 ac-ft										
Total wtr yr 1985		1,302,000 ac-ft										

The following table lists the monthly and annual flows, in acre-feet, of the Alamo and New Rivers at the United States-Mexico International Boundary. Data was furnished by Imperial Irrigation District.

FLOW FROM MEXICO AT INTERNATIONAL BOUNDARY

Alamo River	120	145	140	141	143	157	189	182	166	162	163	145
New River	20550	19840	21960	18150	19880	20270	22860	23010	17830	20260	20810	22020
Cal yr 1984:	Alamo River		1,830 ac-ft									
Cal yr 1984:	New River		264,530 ac-ft									
						Wtr yr 1985:		1,850 ac-ft				
						Wtr yr 1985:		247,440 ac-ft				

SALTON SEA BASIN

10254050 SALT CREEK NEAR MECCA, CA

LOCATION.--Lat 33°26'49", long 115°50'33", in SE 1/4 SW 1/4 sec.28, T.8 S., R.11 E., Riverside County, Hydrologic Unit 18100200, on pier of Southern Pacific Railroad bridge, 0.3 mi upstream from mouth, and 16 mi southeast of Mecca.

DRAINAGE AREA.--269 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 230 ft below National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 21, 1984, at same site, but at datum 2.50 ft lower.

REMARKS.--No estimated daily discharges. Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--24 years, 7.66 ft³/s, 5,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,900 ft³/s, Sept. 24, 1976, gage height, 14.3 ft, from floodmarks, rating curve extended above 20 ft³/s on basis of contracted-opening measurement of peak flow; maximum gage height, 16.9 ft, Mar. 2, 1982 (backwater from Salton Sea and channel vegetation); minimum daily, 0.06 ft³/s, Nov. 1, 4, 5, 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 100 ft³/s, Sept. 18, gage height, 6.86 ft, from rating curve extended above 10 ft³/s on basis of slope-area measurement at gage height 14.3 ft; minimum daily, 0.67 ft³/s, Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.6	5.6	5.7	4.7	5.4	3.2	2.1	1.3	.97	.85	1.2
2	3.3	4.6	5.6	5.0	5.0	5.2	3.4	2.0	1.3	.97	.70	1.2
3	3.4	4.6	5.7	4.7	6.5	4.7	3.1	1.8	1.3	.93	.70	1.4
4	3.3	4.9	5.7	5.4	6.5	4.4	3.2	1.8	1.4	.97	.81	1.4
5	3.3	4.9	5.6	5.6	6.3	4.7	3.3	1.7	1.4	1.1	.81	1.3
6	3.4	5.0	5.6	5.4	5.9	5.0	3.3	1.8	1.4	1.1	.81	1.4
7	3.3	5.0	5.7	5.7	5.9	4.9	3.2	1.8	1.4	1.1	.89	1.7
8	3.3	5.2	6.1	7.1	5.9	5.0	3.1	1.7	1.4	1.1	.89	2.1
9	3.3	5.2	7.1	8.0	6.1	5.2	3.0	1.7	1.3	1.1	.81	2.0
10	3.6	5.0	6.3	6.3	6.3	5.4	2.9	1.6	1.2	1.1	.85	1.8
11	3.6	4.9	9.2	5.9	5.6	5.0	3.3	1.4	1.2	1.1	.70	1.8
12	3.6	4.9	8.2	5.6	5.2	4.9	3.4	1.5	1.2	1.1	.67	1.7
13	3.6	5.0	6.3	4.7	5.4	4.7	2.6	1.6	1.2	1.0	.77	1.8
14	3.7	5.0	5.6	4.6	5.2	4.6	2.4	1.5	1.2	1.0	.89	1.8
15	3.7	4.9	5.2	5.0	5.0	4.7	2.3	1.4	1.2	1.1	1.0	1.8
16	3.7	4.9	5.7	5.6	5.4	5.2	2.1	1.3	1.2	1.2	1.1	1.9
17	3.6	4.9	5.7	5.2	5.0	5.0	2.0	1.3	1.1	1.3	1.1	1.9
18	3.8	4.9	5.9	5.7	5.0	5.0	2.0	1.3	1.1	1.3	1.0	1.1
19	3.8	4.9	6.5	6.5	5.2	4.9	2.1	1.4	1.1	1.3	1.0	8.3
20	4.3	4.7	7.3	6.7	5.4	4.4	2.3	1.4	1.1	1.3	1.2	4.6
21	4.4	4.7	6.1	6.3	5.2	4.6	2.5	1.4	1.1	1.3	1.2	3.6
22	4.4	5.0	5.9	5.9	5.0	4.7	2.5	1.5	1.1	1.3	1.1	3.3
23	4.4	9.4	5.9	6.1	5.6	4.4	2.3	1.4	1.1	1.2	1.1	3.1
24	4.4	8.4	5.9	5.9	5.2	4.1	2.2	1.4	1.1	1.2	1.0	3.1
25	4.0	6.1	5.9	5.7	4.9	4.0	2.1	1.4	1.1	1.3	.97	3.1
26	4.0	5.6	6.1	5.9	5.2	3.8	1.9	1.3	1.1	1.2	.97	3.1
27	4.4	5.0	30	5.7	5.6	3.8	1.6	1.2	1.1	1.2	1.1	3.0
28	3.6	5.0	17	5.6	5.4	3.8	1.8	1.2	1.0	1.2	1.2	3.1
29	4.1	5.4	7.7	5.7	---	3.7	2.1	1.3	.97	1.1	1.2	2.9
30	4.4	5.6	6.7	5.6	---	3.6	2.1	1.4	1.0	1.0	1.2	2.6
31	4.7	---	6.3	5.2	---	3.2	---	1.4	---	1.0	1.2	---
TOTAL	117.8	158.2	228.1	178.0	153.6	142.0	77.3	47.0	35.67	35.14	29.79	83.0
MEAN	3.80	5.27	7.36	5.74	5.49	4.58	2.58	1.52	1.19	1.13	.96	2.77
MAX	4.7	9.4	30	8.0	6.5	5.4	3.4	2.1	1.4	1.3	1.2	11
MIN	3.3	4.6	5.2	4.6	4.7	3.2	1.6	1.2	.97	.93	.67	1.2
AC-FT	234	314	452	353	305	282	153	93	71	70	59	165
CAL YR 1984	TOTAL	1950.3	MEAN	5.33	MAX	30	MIN	1.5	AC-FT	3870		
WTR YR 1985	TOTAL	1285.60	MEAN	3.52	MAX	30	MIN	.67	AC-FT	2550		

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°06'13", long 115°32'38", on line between secs.19 and 20, T.12 S., R.14 E., Imperial County,
Hydrologic Unit 18100200, on right bank 2.2 mi southeast of Calipatria.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to current year. Records prior to October 1979, in files of the Imperial
Irrigation District.

GAGE.--Water-stage recorder and broad-crested weir. Elevation of gage is 185 ft below National Geodetic
Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow is mainly return from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,940 ft³/s, Mar. 3, 1983, gage height, 5.95 ft, from rating
curve extended above 1,000 ft³/s; maximum gage height, 6.93 ft, July 22, 1984, (backwater from debris);
minimum daily, 259 ft³/s, Jan. 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,110 ft³/s, Sept. 28, gage height, 2.45 ft; minimum daily,
259 ft³/s, Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	666	673	525	279	664	684	759	922	574	588	579	676
2	673	662	500	259	681	733	768	924	608	611	573	619
3	684	685	482	292	698	766	797	895	581	563	642	621
4	731	687	494	283	726	759	893	892	561	576	643	619
5	735	665	485	267	590	713	894	848	588	580	653	634
6	742	652	476	275	576	721	913	828	622	598	638	667
7	726	659	472	287	593	724	914	821	650	627	638	643
8	706	666	542	301	530	725	818	777	678	635	657	693
9	706	630	466	275	520	710	849	779	657	592	641	581
10	731	637	416	271	501	721	847	791	629	612	659	534
11	732	611	400	283	492	723	880	777	636	610	677	554
12	741	583	351	283	465	660	925	802	643	589	693	561
13	741	596	351	279	524	681	910	756	643	552	653	568
14	740	632	323	301	536	684	884	756	636	536	615	622
15	700	654	305	346	582	695	920	745	643	549	649	664
16	677	635	327	365	632	718	887	785	561	590	676	615
17	664	657	341	355	690	735	835	806	588	592	660	629
18	654	605	351	410	662	682	847	862	581	594	697	745
19	673	548	374	448	654	671	882	825	588	651	666	851
20	705	588	395	437	686	679	911	730	574	645	638	615
21	669	628	365	489	741	683	866	707	588	619	663	629
22	644	670	410	489	707	731	836	737	581	545	716	615
23	639	583	421	515	701	749	818	737	588	536	707	622
24	672	557	437	520	689	783	854	707	574	557	738	615
25	700	519	384	522	635	749	894	664	608	544	725	664
26	704	481	332	547	605	735	839	657	664	550	693	723
27	694	477	515	611	586	782	850	615	608	547	654	805
28	681	476	438	578	657	815	848	608	574	559	643	995
29	661	482	360	535	---	823	791	657	574	580	675	723
30	621	479	305	518	---	773	863	650	595	594	667	664
31	668	---	287	579	---	842	---	629	---	590	647	---
TOTAL	21480	18077	12630	12199	17323	22649	25792	23689	18195	18111	20517	19766
MEAN	693	603	407	394	619	731	860	764	606	584	662	659
MAX	742	687	542	611	741	842	925	924	678	651	738	995
MIN	621	476	287	259	465	660	759	608	561	536	573	534
AC-FT	42610	35860	25050	24200	34360	44920	51160	46990	36090	35920	40700	39210
CAL YR 1984	TOTAL	239487	MEAN	656	MAX	1600	MIN	287	AC-FT	475000		
WTR YR 1985	TOTAL	230428	MEAN	631	MAX	995	MIN	259	AC-FT	457100		

SALTON SEA BASIN

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-70, 1975 to current year.

CHEMICAL ANALYSES: Water years 1969-70, 1975-77, 1979 to current year.

BIOLOGICAL DATA: Water years 1979-81.

SPECIFIC CONDUCTANCE: Water years 1969-70, 1975-77, 1979-84.

WATER TEMPERATURES: Water years 1969-70, 1975-77, 1979-84.

SEDIMENT RECORDS: Water years 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1981 to September 1984.

WATER TEMPERATURES: March 1981 to September 1984.

INSTRUMENTATION.--Water-quality monitor from March 1981 to September 1984.

REMARKS.--Data for the 1975 and 1976 water years are published with 1977 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,590 microsiemens, Feb. 11, 1983; minimum, 2,890 microsiemens, June 26, 27, 1982, May 8, 1984.

WATER TEMPERATURES: Maximum, 32.5°C on several days during July 1984; minimum, 7.5°C Jan. 1, 2, 1983.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)	
DEC 13...	1000	355	5950	8.1	14.5	755	100	9.8	99	4400	9700	1400	
MAR 19...	1500	715	3770	7.8	17.5	765	180	9.0	95	K18000	K17000	890	
JUN 18...	1000	547	3490	8.0	20.5	760	110	6.7	88	--	850	880	
SEP 18...	0900	657	3820	8.1	23.5	760	150	7.7	92	29000	3500	8606	
DATE		HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	LINITY, CARBON- ATE IT-FLD (MG/L - CAC03)	ALKA- LINITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 13...	1200	280	180	870		57	10	12	327	268	269	--	1200
MAR 19...	680	190	100	560		57	8	13	261	214	214	860	630
JUN 18...	660	190	98	470		53	7	12	267	219	219	790	590
SEP 18...	630	160	110	500		56	8	11	271	222	223	910	620
DATE		FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC 13...	.60	13	4360	--	5.9	4180	11	.480	1.8	.440	.190	.160	
MAR 19...	.50	10	2650	2500	3.6	5120	7.7	2.00	4.7	.800	.500	.480	
JUN 18...	.50	13	2410	2300	3.3	3560	4.2	.410	1.5	.780	.390	.350	
SEP 18...	.50	11	2680	2500	3.6	4750	5.6	.250	2.0	.760	.220	.170	
DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)		
DEC 13...	1000	10	3	<100	<10	<1	10	1	3	40	8		
MAR 19...	1500	<10	4	300	<10	1	<1	<1	4	40	<1		
JUN 18...	1000	10	6	<100	<10	1	<1	<1	4	40	4		
SEP 18...	0900	<10	4	100	<10	1	<1	<1	3	50	1		

See footnotes at end of table.

10254670 ALAMO RIVER AT DROP NO. 3, NEAR CALIPATRIA, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 13...	270	70	<.1	17	6	18	1	6100	24	20
MAR 19...	170	40	<.1	10	2	11	2	3300	14	30
JUN 18...	180	10	<.1	17	4	11	<1	3000	15	30
SEP 18...	190	10	<.1	16	2	11	<1	2900	14	60

K Results based on colony count outside the acceptable range (non-ideal colony count).
 < Actual value is known to be less than the value shown.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
MAR						
09...	1630	12	3760	7.7	17.0	9.0
09...	1645	23	3770	7.7	17.0	9.0
09...	1700	36	3770	7.7	17.0	9.0
09...	1715	46	3780	7.7	17.0	9.0
09...	1730	57	3770	7.7	17.0	8.9
SEP						
18...	0945	12	3820	8.1	24.0	7.6
18...	0950	23	3820	8.1	24.0	7.6
18...	1010	46	3820	8.1	24.0	7.7
18...	1000	36	3820	8.1	24.0	7.7
18...	1015	57	3820	8.1	24.0	7.7

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 13...	1000	355	14.5	691	662	83
MAR 19...	1500	715	17.5	724	1400	89
JUN 18...	1000	547	28.5	412	608	96
SEP 18...	0900	657	23.5	556	986	89

SALTON SEA BASIN

10254730 ALAMO RIVER NEAR NILAND, CA

LOCATION.--Lat 33°12'03", long 115°36'07", in SW 1/4 NE 1/4 sec.22, T.11 S., R.13 E., Imperial County Hydrologic Unit 18100200, on left bank 0.6 mi upstream from mouth, and 5.8 mi southwest of Niland.

PERIOD OF RECORD.--January 1943 to September 1960 (monthly discharge only, published in WSP 1743), October 1960 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 235 ft below National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 28-30, Mar. 26-29, Apr. 17, 18, 20, 21, May 9-11, 31, June 2, 24, July 9, 10. Records fair. Discharge mainly represents seepage and return flow from irrigated areas.

COOPERATION.--Records were provided by Imperial Irrigation District; 5 discharge measurements were made, and records were reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,500 ft³/s, Aug. 17, 1977, estimated by Imperial Irrigation District, minimum daily, 288 ft³/s, Jan 2, 1966, Dec. 15, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,150 ft³/s, Sept. 28; minimum daily, 288 ft³/s, Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	874	634	348	794	899	825	967	675	641	627	641
2	833	817	634	312	833	900	841	975	700	634	627	579
3	841	833	606	336	858	907	882	958	690	613	697	620
4	891	866	545	342	704	817	949	958	606	613	711	620
5	899	817	538	336	654	858	949	899	613	620	675	627
6	899	825	512	354	654	949	975	874	647	641	661	704
7	915	915	487	373	613	891	975	858	682	661	647	704
8	874	992	606	424	599	850	915	833	733	675	675	719
9	907	874	592	392	620	858	915	825	763	675	690	733
10	907	825	525	379	525	874	933	850	711	700	682	647
11	924	771	552	379	506	833	949	825	704	690	711	647
12	958	697	449	480	552	748	1000	874	697	641	726	647
13	907	779	386	379	586	771	1000	825	711	599	719	682
14	924	763	318	373	654	802	983	810	668	579	661	711
15	941	787	288	379	690	794	1000	779	690	620	675	756
16	850	787	342	430	771	817	1010	763	620	668	719	741
17	958	771	398	443	771	825	950	817	613	654	704	802
18	841	741	455	506	771	817	975	833	613	641	748	915
19	841	661	493	512	833	771	975	858	654	690	756	1020
20	924	690	500	579	967	787	1000	802	627	704	697	741
21	850	794	461	592	949	850	950	787	641	682	697	668
22	763	825	500	606	841	907	933	794	641	606	748	704
23	779	771	545	627	802	882	924	810	647	565	726	675
24	850	697	532	641	726	891	941	787	675	572	748	675
25	941	733	474	668	675	915	975	756	647	572	748	756
26	1060	572	430	756	627	850	941	763	690	613	711	817
27	1040	506	733	748	711	900	866	690	647	613	697	899
28	967	519	532	627	779	900	858	682	668	606	704	1150
29	891	586	405	668	---	875	841	748	634	641	711	907
30	841	565	392	704	---	850	882	748	627	641	719	726
31	933	---	373	787	---	858	---	725	---	647	647	---
TOTAL	27999	22653	15237	15480	20065	26446	28112	25473	19934	19717	21664	22233
MEAN	903	755	492	499	717	853	937	822	664	636	699	741
MAX	1060	992	733	787	967	949	1010	975	763	704	756	1150
MIN	763	506	288	312	506	748	825	682	606	565	627	579
AC-FT	55540	44930	30220	30700	39800	52460	55760	50530	39540	39110	42970	44100
CAL YR 1984	TOTAL	314231	MEAN	861	MAX	1930	MIN	288	AC-FT	623300		
WTR YR 1985	TOTAL	265013	MEAN	726	MAX	1150	MIN	288	AC-FT	525700		

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA
(National stream-quality accounting network station)

LOCATION.--Lat 32°39'57", long 115°30'08", in SW 1/4 SE 1/4 sec.14, T.17 S., R.14 E., Imperial County, Hydrologic Unit 18100200, on left bank 200 ft downstream from bridge on Second Street, 0.2 mi downstream from international boundary in Calexico.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to current year. October 1945 to September 1978, in files of Imperial Irrigation District.

GAGE.--Water-stage recorder. Elevation of gage is 35 ft below National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. Discharge represents seepage and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 735 ft³/s, Dec. 9, 1982, Feb. 5, 1983; minimum daily, 130 ft³/s, Nov. 29, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 534 ft³/s, Dec. 29; minimum daily, 249 ft³/s, Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	346	290	333	338	291	327	523	278	343	347	336
2	356	328	302	308	344	302	346	454	282	337	336	373
3	382	317	339	290	339	333	351	391	283	335	315	380
4	385	332	408	281	381	339	346	368	308	328	314	387
5	377	348	422	277	449	358	338	392	322	320	327	366
6	369	350	355	288	479	359	333	430	319	309	341	354
7	337	343	325	308	451	336	362	450	324	285	361	364
8	316	331	331	328	423	322	393	444	307	280	368	361
9	321	298	336	318	372	319	434	427	305	296	344	363
10	357	274	448	304	340	333	415	396	290	306	343	358
11	347	281	453	299	384	365	375	386	291	334	326	356
12	330	301	424	275	393	388	348	401	309	320	327	378
13	311	298	384	254	388	388	328	419	294	297	342	383
14	301	291	370	261	380	375	342	441	272	301	347	378
15	317	298	317	267	346	340	347	421	281	307	337	400
16	345	313	287	297	331	304	361	382	309	345	316	397
17	333	327	297	303	311	303	356	345	304	368	291	367
18	325	301	303	273	297	307	341	321	295	389	298	368
19	303	282	298	259	325	312	342	306	283	379	338	374
20	291	299	249	260	357	320	357	319	290	360	350	384
21	301	318	266	271	345	324	384	345	294	358	357	373
22	320	344	289	295	327	331	404	363	295	340	373	359
23	331	389	297	290	322	331	433	366	294	349	366	332
24	341	439	318	275	322	330	442	340	306	345	335	324
25	320	458	321	260	321	333	440	317	310	330	318	335
26	309	448	361	262	322	323	430	319	316	331	335	317
27	315	437	450	289	327	329	433	330	301	325	349	434
28	340	360	532	336	311	325	435	318	305	317	375	410
29	344	282	534	386	---	301	469	295	304	318	367	401
30	342	272	437	365	---	295	514	293	318	325	337	389
31	355	---	330	341	---	303	---	299	---	336	314	---
TOTAL	10361	10005	11073	9153	10025	10219	11526	11601	8989	10213	10494	11101
MEAN	334	334	357	295	358	330	384	374	300	329	339	370
MAX	385	458	534	386	479	388	514	523	324	389	375	434
MIN	291	272	249	254	297	291	327	293	272	280	291	317
AC-FT	20550	19840	21960	18150	19880	20270	22860	23010	17830	20260	20610	22020
CAL YR 1984	TOTAL	133368	MEAN	364	MAX	564	MIN	249	AC-FT	264500		
WTR YR 1985	TOTAL	124760	MEAN	342	MAX	534	MIN	249	AC-FT	247500		

SALTON SEA BASIN

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969-71, 1973 to current year.
 CHEMICAL ANALYSES: Water years 1969-71, 1973 to current year.
 BIOLOGICAL DATA: Water years 1973-81.
 SPECIFIC CONDUCTANCE: Water years 1974-81.
 WATER TEMPERATURES: Water years 1974-81.
 SEDIMENT RECORDS: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: October 1973 to September 1981.
 WATER TEMPERATURES: October 1973 to September 1981.

INSTRUMENTATION.--Water-quality monitor from October 1973 to September 1981.

REMARKS.--Sudden changes in chemical quality can occur due to slug flows of wastewater.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 12,000 microsiemens, July 12, 1978; minimum, 2,240 microsiemens, Oct. 31, 1976.
 WATER TEMPERATURES: Maximum, 38.0°C, June 20, 1980, minimum, 10.0°C, Dec. 8-11, 1979.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
NOV 28...	1400	346	6080	8.0	14.0	760	20	8.4	83	K190000	240000	75
JAN 22...	1400	291	5620	7.8	14.5	760	17	7.8	78	K160000	47000	88
FEB 21...	1230	354	7950	7.8	16.0	755	18	6.4	67	240000	57000	89

DATE	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L AS CACO3)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 28...	540	180	72	1000	70	16	160	254	208	207	510	1700
JAN 22...	650	200	92	900	67	14	75	283	232	232	640	1400
FEB 21...	650	210	87	1200	69	18	210	284	233	229	600	2100

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 28...	.60	27	3730	3800	5.1	3480	.72	3.40	5.5	1.10	.690	.59
JAN 22...	.60	20	3570	3500	4.9	2800	.74	1.40	3.0	.450	.290	.21
FEB 21...	.60	28	4760	4600	6.5	4550	.73	4.50	7.5	1.40	.560	.46

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 28...	1400	20	31	<100	<10	1	5	<1	1	30	4
FEB 21...	1230	20	35	100	<10	<1	2	<1	3	30	<1

See footnotes at end of table.

10254970 NEW RIVER AT INTERNATIONAL BOUNDARY, AT CALEXICO, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 28...	1400	80	<.1	7	1	3	1	2700	18	20
FEB 21...	1900	130	<.1	2	7	2	<1	3300	43	20

K Results based on colony count outside the acceptable range (non-ideal colony count).
 < Actual value is known to be less than the value shown.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 28...	1400	346	14.0	84	78	49
JAN 22...	1400	291	14.5	276	217	79
FEB 21...	1230	354	16.0	279	267	92

10255550 NEW RIVER NEAR WESTMORLAND, CA

LOCATION.--Lat 33°06'17", long 115°39'49", in SW 1/4 SW 1/4 sec.19, T.12 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on right bank 3.5 mi upstream from mouth, and 5.2 mi northwest of Westmorland.

PERIOD OF RECORD.--January 1943 to September 1960 (monthly discharge only, published in WSP 1734), October 1960 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 220 ft below National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Nov. 19. Discharge mainly represents seepage and return flow from irrigated areas.

COOPERATION.--Records were provided by Imperial Irrigation District; 2 discharge measurements were made, and records reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,000 ft³/s, Aug. 17-18, 1977, estimated by Imperial Irrigation District; minimum daily, 293 ft³/s, Jan. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 938 ft³/s, May 3, minimum daily, 443 ft³/s, Jan. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	696	690	595	597	727	677	744	862	656	621	652	719
2	702	700	597	523	713	669	767	917	623	650	635	717
3	696	694	571	513	694	629	797	938	603	671	650	719
4	746	650	595	489	650	609	780	896	597	685	654	696
5	778	627	627	483	635	613	784	841	603	698	683	683
6	791	652	677	472	660	652	813	811	652	706	694	698
7	765	669	677	466	673	700	835	826	702	694	679	715
8	706	662	639	498	698	711	778	837	692	677	709	711
9	694	685	603	511	687	690	811	855	677	639	725	709
10	700	658	567	519	660	650	839	869	667	621	690	715
11	711	615	589	502	607	623	878	841	664	605	685	706
12	715	591	652	519	593	629	883	782	658	652	652	704
13	702	593	650	513	660	687	844	736	656	673	658	698
14	669	605	629	474	667	732	811	757	631	671	664	713
15	639	599	613	490	679	729	757	791	619	654	681	729
16	652	619	579	509	650	723	755	793	609	692	700	717
17	721	605	530	494	633	696	793	806	625	683	711	719
18	757	619	519	530	621	656	784	789	631	704	685	740
19	751	590	542	528	645	656	804	753	625	732	690	789
20	732	571	540	481	637	641	811	732	613	748	732	755
21	694	583	536	447	685	671	780	715	625	698	740	709
22	625	631	563	443	704	721	800	725	625	671	727	694
23	639	603	555	525	681	765	835	748	631	664	692	685
24	673	619	549	621	648	740	826	729	641	690	717	662
25	675	625	545	635	603	740	848	713	619	669	704	643
26	673	645	563	607	597	802	880	664	637	652	677	706
27	656	645	685	597	607	778	857	633	631	667	702	727
28	656	654	715	544	643	765	837	648	613	679	717	864
29	664	660	692	583	---	774	833	667	595	658	748	926
30	706	609	690	667	---	771	846	658	603	671	753	791
31	687	---	685	713	---	732	---	648	---	669	725	---
TOTAL	21671	18968	18769	16493	18357	21631	24410	23980	19023	20864	21531	21759
MEAN	699	632	605	532	656	698	814	774	634	673	695	725
MAX	791	700	715	713	727	802	883	938	702	748	753	926
MIN	625	571	519	443	593	609	744	633	595	605	635	643
AC-FT	42980	37620	37230	32710	36410	42910	48420	47560	37730	41380	42710	43160
CAL YR 1984	TOTAL	258261	MEAN	706	MAX	952	MIN	502	AC-FT	512300		
WTR YR 1985	TOTAL	247456	MEAN	678	MAX	938	MIN	443	AC-FT	490800		

SALTON SEA BASIN

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10255800 COYOTE CREEK NEAR BORREGO SPRINGS, CA

LOCATION.--Lat 33°22'25", long 116°25'36", in NE 1/4 NE 1/4 sec.23, T.9 S., R.5 E., San Diego County, Hydrologic Unit 18100200, in Anza-Borrego Desert State Park, on right bank 500 ft upstream from Box Canyon, 2.3 mi northwest of Rancho De Anza, and 8.7 mi northwest of Borrego Springs.

DRAINAGE AREA.--144 mi².

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for October and November 1950, published in WSP 1734.

REVISED RECORDS.--WDR CA-72-1: 1969, 1971.

GAGE.--Water-stage recorder. Elevation of gage is 1,120 ft above National Geodetic Vertical Datum of 1929, from topographic map. Since Sept. 30, 1983, at present site and datum. Apr. 19, 1978, to Sept. 30, 1983, at site 0.9 mi upstream at different datum. Mar. 24, 1967, to Apr. 18, 1978 at site 0.5 mi upstream at different datum. Prior to Mar. 24, 1967 at site 1.0 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 8-11, Feb. 17-27. Records poor. No regulation or diversion.

AVERAGE DISCHARGE.--35 years, 2.62 ft³/s, 1,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft³/s, Feb. 21, 1980, gage height, 7.50 ft, from floodmark in well, on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 18	1945	*26	*1.97				

Minimum daily, 1.5 ft³/s, several days during August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	5.2	5.0	5.4	4.8	6.0	5.1	2.5	3.7	2.7	1.5	1.8
2	5.3	4.7	5.0	5.1	6.1	5.8	4.8	2.4	4.0	2.6	1.5	2.6
3	5.2	4.6	5.1	5.0	6.5	5.7	4.6	2.7	4.2	2.8	1.6	5.0
4	4.8	4.5	5.1	4.9	6.3	5.3	4.9	2.7	3.9	3.2	1.5	3.9
5	4.8	4.5	5.0	4.8	6.2	4.8	4.7	3.2	3.7	3.1	1.6	4.0
6	4.8	4.6	4.8	5.0	6.0	4.6	4.8	3.3	3.4	3.3	1.7	4.1
7	4.9	4.9	4.8	5.0	6.7	5.0	5.0	3.5	3.4	3.7	1.8	3.8
8	5.5	5.2	7.1	4.6	6.6	5.6	5.1	5.5	3.1	3.5	2.0	3.1
9	6.5	5.3	5.7	4.9	6.3	5.7	4.9	5.4	3.1	3.6	2.0	3.0
10	6.0	5.1	5.3	4.9	5.6	4.8	5.0	5.5	3.1	3.4	1.8	3.1
11	5.6	4.7	5.6	4.9	5.4	3.9	5.4	6.0	3.1	3.5	1.7	3.6
12	6.5	4.6	5.3	5.3	5.6	3.9	5.2	5.8	3.0	3.4	1.6	4.4
13	6.4	4.8	5.8	5.3	5.9	4.0	5.0	5.8	2.8	3.4	1.5	5.6
14	5.9	5.3	5.5	5.1	6.5	3.9	5.6	5.6	2.7	3.6	1.5	5.9
15	6.7	5.3	5.3	5.0	6.2	4.2	6.2	4.7	2.6	4.3	1.5	5.9
16	7.0	5.3	5.4	5.0	5.9	4.2	6.1	3.8	2.6	4.1	1.6	5.9
17	6.2	5.4	5.3	5.0	5.6	4.5	6.5	3.8	2.5	4.8	1.8	5.9
18	6.2	5.7	5.7	5.0	5.6	4.8	6.7	3.9	2.3	6.4	1.7	5.5
19	6.5	5.7	7.2	5.1	5.6	4.4	6.2	4.2	2.5	4.5	1.8	5.0
20	6.7	5.5	6.6	5.3	4.6	4.2	6.4	4.2	3.1	3.9	1.9	4.6
21	6.5	5.6	6.0	5.3	5.4	5.3	5.7	3.1	3.3	3.8	1.8	4.4
22	6.5	6.4	5.7	5.3	5.1	5.4	5.4	2.6	3.2	3.7	1.6	4.0
23	5.5	11	6.0	5.3	5.4	5.6	4.9	2.4	3.2	3.5	1.6	4.3
24	5.0	9.9	6.2	5.3	5.6	5.4	4.5	2.3	3.5	3.4	1.6	4.1
25	5.1	7.7	6.0	5.3	5.6	5.1	4.7	2.4	3.6	2.3	2.0	3.7
26	4.8	7.3	6.0	5.6	5.4	5.0	4.9	3.1	3.2	2.9	2.0	4.1
27	4.8	7.6	10	5.6	5.9	4.8	5.0	3.1	3.0	2.5	1.7	3.3
28	5.0	7.9	7.4	5.4	6.3	4.9	4.3	3.0	2.8	2.6	1.7	3.5
29	5.1	7.2	6.4	5.1	---	4.9	3.0	3.5	2.7	2.3	1.7	3.7
30	5.0	5.7	5.5	5.0	---	4.8	2.7	3.1	2.8	2.2	1.6	3.9
31	5.2	---	5.6	4.7	---	5.0	---	3.5	---	1.7	1.6	---
TOTAL	174.7	177.2	181.4	158.5	162.7	151.5	153.3	116.6	94.1	104.7	52.5	125.7
MEAN	5.64	5.91	5.85	5.11	5.81	4.89	5.11	3.76	3.14	3.38	1.69	4.19
MAX	7.0	11	10	5.6	6.7	6.0	6.7	6.0	4.2	6.4	2.0	5.9
MIN	4.7	4.5	4.8	4.6	4.6	3.9	2.7	2.3	2.3	1.7	1.5	1.8
AC-FT	347	351	360	314	323	301	304	231	187	208	104	249
CAL YR 1984	TOTAL	1648.1	MEAN	4.50	MAX	20	MIN	2.7	AC-FT	3270		
WTR YR 1985	TOTAL	1652.9	MEAN	4.53	MAX	11	MIN	1.5	AC-FT	3280		

SALTON SEA BASIN

10255810 BORREGO PALM CREEK NEAR BORREGO SPRINGS, CA

LOCATION.--Lat 33°16'44", long 116°25'45", in Anza-Borrego Desert State Park, San Diego County, Hydrologic Unit 18100200, on left bank 3.3 mi northwest of Borrego Springs.

DRAINAGE AREA.--21.8 mi².

PERIOD OF RECORD.--October 1950 to current year. Prior to October 1960, published as Palm Canyon Creek near Borrego Springs. Monthly discharge only for October to November 1950, published in WSP 1734.

GAGE.--Water-stage recorder. Elevation of gage is 1,200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 29 to May 29. Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--35 years, 0.98 ft³/s, 710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, Aug. 16, 1979, gage height, 9.8 ft, from floodmarks, on basis of slope-area measurement of peak flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 19	1045	*16	*3.34	Dec. 27	0930	15	3.30

No flow many days July to Sept.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	1.1	1.6	2.6	2.3	2.0	3.1	1.1	.85	.01	.01	0
2	.85	1.1	1.5	2.4	3.1	2.8	2.6	1.0	.83	0	.01	0
3	.86	1.1	1.8	2.4	3.2	3.2	2.3	1.0	1.0	0	.01	0
4	.85	1.1	1.9	2.1	3.3	2.9	2.1	1.1	.94	0	.01	0
5	.83	1.1	1.6	2.2	2.8	2.6	2.0	1.2	.63	0	.01	0
6	.82	1.1	1.5	2.2	3.0	2.3	1.8	1.3	.47	0	.01	0
7	.76	1.2	1.5	3.9	3.1	2.1	1.7	1.5	.36	0	0	0
8	.69	1.3	4.5	5.3	3.6	2.0	1.6	1.8	.27	0	0	0
9	.65	1.3	1.9	3.0	5.7	2.0	1.5	1.8	.21	0	0	0
10	.72	1.3	1.9	2.7	6.3	1.9	1.4	1.9	.18	0	0	0
11	.85	1.3	3.6	2.6	4.3	1.9	1.4	1.9	.17	0	0	0
12	.92	1.3	2.3	2.5	3.7	1.9	1.3	1.9	.17	0	0	0
13	.84	1.5	2.1	2.4	3.4	1.8	1.3	1.9	.15	0	0	0
14	.78	1.6	2.0	2.3	3.2	1.8	1.1	1.8	.14	0	0	0
15	.90	1.4	1.9	2.2	3.1	1.9	1.0	1.6	.13	0	0	0
16	.98	1.5	3.0	2.1	3.0	1.9	1.1	1.4	.13	0	0	0
17	1.4	1.4	2.3	2.0	2.8	1.8	1.4	1.4	.11	0	0	0
18	1.3	1.2	4.3	2.0	2.7	2.0	1.7	1.4	.10	0	0	0
19	1.2	1.2	9.8	2.0	2.6	2.2	1.6	1.5	.10	0	0	0
20	1.3	1.3	7.8	2.0	2.8	1.8	1.7	1.5	.09	.37	0	0
21	1.3	1.4	4.3	2.0	3.1	1.6	2.3	1.2	.09	.07	0	0
22	1.2	1.5	3.2	2.0	2.5	1.6	2.0	1.1	.08	.03	0	0
23	1.1	3.3	2.8	2.1	2.3	1.6	1.6	1.0	.06	.02	0	0
24	1.1	2.4	2.6	2.1	2.2	1.6	1.2	1.0	.07	.02	0	0
25	1.1	3.9	2.4	2.1	2.1	1.5	1.3	1.1	.06	.02	0	0
26	1.1	1.8	2.5	2.1	2.0	1.6	1.5	1.2	.05	.02	0	0
27	1.1	1.7	11	2.2	2.0	3.3	1.6	1.1	.04	.02	0	0
28	1.2	1.7	6.3	2.6	2.0	9.1	1.6	.90	.03	.02	0	.04
29	1.2	1.7	3.7	4.8	---	6.8	1.4	.80	.02	.02	0	.10
30	1.1	1.6	3.0	2.9	---	4.5	1.2	.60	.01	.01	0	.12
31	1.2	---	2.9	2.6	---	3.7	---	.70	---	.01	0	---
TOTAL	30.93	46.4	103.5	78.4	86.2	79.7	49.4	40.70	7.54	0.64	0.06	0.26
MEAN	1.00	1.55	3.34	2.53	3.08	2.57	1.65	1.31	.25	.021	.002	.009
MAX	1.4	3.9	11	5.3	6.3	9.1	3.1	1.9	1.0	.37	.01	.12
MIN	.65	1.1	1.5	2.0	2.0	1.5	1.0	.60	.01	0	0	0
AC-FT	61	92	205	156	171	158	98	81	15	1.3	.1	.5
CAL YR 1984	TOTAL	708.81	MEAN	1.94	MAX	11	MIN	.50	AC-FT	1410		
WTR YR 1985	TOTAL	523.73	MEAN	1.43	MAX	11	MIN	0	AC-FT	1040		

10255885 SAN FELIPE CREEK NEAR WESTMORLAND, CA

LOCATION.--Lat 33°07'24", long 115°51'10", in NW 1/4 SW 1/4 sec.17, T.12 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on right bank 35 ft downstream from State Highway 86, and 14.6 mi northwest of Westmorland.

DRAINAGE AREA.--1,693 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 190 ft below National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 10, 1976, at site on left bank 320 ft downstream from bridge on State Highway 86 at different datum.

REMARKS.--No estimated daily discharges. Records poor. No regulation above station. Diversion and pumping for domestic use and irrigation in Borrego Valley 25 mi upstream.

AVERAGE DISCHARGE.--24 years (water years 1962-85), 7.66 ft³/s, 5,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s, Sept. 10, 1976, gage height, 19.0 ft, site and datum then in use, from rating curve extended above 500 ft³/s on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for months most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 23	0400	306	8.67	Sept. 27	2400	918	8.20
July 18	1830	*2,190	*9.35				

Minimum daily, 0.70 ft³/s, May 9, Aug. 6-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.8	3.0	2.1	2.5	1.9	1.7	.90	1.3	1.0	.80	1.1
2	1.7	1.8	2.5	2.1	3.5	2.5	1.7	.85	1.3	1.0	.80	1.1
3	1.7	1.8	2.1	2.1	3.0	1.9	1.6	.85	1.4	1.0	.75	1.1
4	1.7	1.8	2.1	2.1	2.8	1.9	1.6	.80	1.4	1.0	.75	1.1
5	1.7	1.8	2.1	2.1	2.6	1.8	1.6	.80	1.4	1.0	.75	1.1
6	1.7	1.8	2.1	2.1	2.5	1.8	1.6	.80	1.4	1.0	.70	1.1
7	1.7	1.8	2.1	2.1	2.5	1.8	1.5	.75	1.4	1.0	.70	1.1
8	1.7	1.8	2.5	2.5	2.5	1.8	1.5	.75	1.3	1.0	.70	1.1
9	1.7	1.9	2.3	2.4	2.5	1.7	1.5	.70	1.3	1.0	.70	1.1
10	1.7	1.9	2.2	2.2	2.8	1.7	1.4	.75	1.3	1.0	.70	1.1
11	1.7	1.9	2.1	2.1	2.4	1.7	1.4	.80	1.3	1.0	.70	1.1
12	1.7	1.9	2.0	2.1	2.4	1.7	1.4	.80	1.3	1.0	.70	1.1
13	1.7	1.9	2.0	2.1	2.4	1.7	1.4	.85	1.3	1.0	.75	1.1
14	1.7	1.9	2.0	2.1	2.3	1.7	1.3	.85	1.2	1.0	.75	1.1
15	1.7	1.9	2.0	2.1	2.3	1.6	1.3	.85	1.2	1.0	.80	1.1
16	1.7	1.9	2.0	2.1	2.3	1.6	1.3	.90	1.2	1.0	.80	1.1
17	1.7	1.9	2.0	2.1	2.2	1.6	1.3	.90	1.2	108	.80	5.0
18	1.7	1.9	2.3	2.1	2.2	1.6	1.3	.90	1.2	244	.80	2.5
19	1.7	1.9	3.0	2.1	2.2	1.6	1.4	.95	1.2	174	.80	1.1
20	1.7	1.9	2.4	2.1	2.2	1.7	1.4	1.0	1.1	1.0	.85	1.1
21	1.7	1.9	2.0	2.1	2.4	1.7	1.5	1.0	1.1	1.0	.85	1.1
22	1.7	1.9	2.0	2.1	2.2	1.7	1.3	1.0	1.1	1.0	.90	1.1
23	1.7	56	2.0	2.1	2.1	1.8	1.1	1.0	1.1	.95	.90	1.0
24	1.8	36	2.0	2.1	2.1	1.8	1.1	1.1	1.1	.95	.90	1.0
25	1.8	44	2.0	2.1	2.0	1.8	1.0	1.1	1.1	.90	.95	1.0
26	1.8	30	2.5	2.1	2.0	1.9	1.0	1.1	1.0	.90	.95	1.0
27	1.8	15	15	2.2	2.0	1.9	1.0	1.2	1.0	.90	.95	50
28	1.8	10	4.0	2.3	2.0	2.0	.95	1.2	1.0	.85	1.0	143
29	1.8	5.0	2.5	2.4	---	2.0	.95	1.2	1.0	.80	1.0	2.0
30	1.8	4.0	2.1	2.5	---	1.9	.90	1.2	1.0	.80	1.0	1.5
31	1.8	---	2.1	2.5	---	1.8	---	1.3	---	.80	1.1	---
TOTAL	53.5	241.0	83.0	67.3	66.9	55.6	40.00	29.15	36.2	552.85	25.60	230.0
MEAN	1.73	8.03	2.68	2.17	2.39	1.79	1.33	.94	1.21	17.8	.83	7.67
MAX	1.8	56	15	2.5	3.5	2.5	1.7	1.3	1.4	244	1.1	143
MIN	1.7	1.8	2.0	2.1	2.0	1.6	.90	.70	1.0	.80	.70	1.0
AC-FT	106	478	165	133	133	110	79	58	72	1100	51	456
CAL YR 1984	TOTAL	2310.12	MEAN	6.31	MAX	518	MIN	0	AC-FT	4580		
WTR YR 1985	TOTAL	1481.10	MEAN	4.06	MAX	244	MIN	.70	AC-FT	2940		

SALTON SEA BASIN

10256060 WHITEWATER RIVER AT WHITE WATER CUTOFF, AT WHITE WATER, CA

LOCATION.--Lat 33°55'31", long 116°38'07", in NE 1/4 SE 1/4 sec.11, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on center pier of White Water Cutoff (old Highway 99) bridge, 0.1 mi east of White Water, 0.75 mi downstream from Metropolitan Water District's Colorado River Aqueduct turnout, and 2.0 mi upstream of San Geronio River.

DRAINAGE AREA.--59.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985 (discharge measurements only).

GAGE.-- Water-stage recorder and concrete rectangular weir. Elevation of gage is 1,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records of discharge measurements made during the 1985 water year available in files of the Geological Survey. Imported water is released to the Whitewater River from the Colorado River Aqueduct at a point 0.75 mi upstream. Water is diverted out of the basin 16.5 mi upstream to powerplants in the San Geronio River basin and then to an area north of Banning for irrigation. For records of releases and diversions see Whitewater River at Windy Point near White Water (station 10257550).

10256060 WHITEWATER RIVER AT WHITE WATER CUTOFF, AT WHITE WATER, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1972-76, 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS	SPE- CIFIC CON- DUCT- ANCE	PH (STAND- ARD	TEMPER- ATURE	HARD- NESS (MG/L	HARD- NESS, NONCAR- BONATE	CALCIUM DIS- SOLVED	MAGNE- SIUM, DIS- SOLVED	MANGA- NESE, DIS- SOLVED	SODIUM, DIS- SOLVED	PERCENT SODIUM
		(CFS)	(US/CM)	UNITS)	(DEG C)	(CACO3)	(MG/L CACO3)	(MG/L AS CA)	(MG/L AS MG)	(UG/L AS MN)	(MG/L AS NA)	
OCT 25...	1530	101	870	8.5	17.0	280	140	69	25	3	73	36
MAY 17...	1045	E571	885	8.5	21.0	290	150	73	25	1	75	36
DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED	ALKA- LINITY FIELD (MG/L	SULFATE DIS- SOLVED	CHLO- RIDE, DIS- SOLVED	FLUO- RIDE, DIS- SOLVED	SILICA, DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	NITRO- GEN, NO2+NO3 DIS- SOLVED	PHOS- PHORUS, ORTHO, DIS- SOLVED	BORON, DIS- SOLVED	IRON, DIS- SOLVED
		(MG/L AS K)	(MG/L AS CACO3)	(MG/L AS SO4)	(MG/L AS CL)	(MG/L AS F)	(MG/L AS SIO2)	(MG/L)	(MG/L AS N)	(MG/L AS P)	(UG/L AS B)	(UG/L AS FE)
OCT 25...	2	3.7	134	210	58	0.4	8.9	530	0.21	<0.01	100	16
MAY 17...	2	4.2	132	230	59	0.3	8.4	550	0.22	<0.01	110	4

E Estimated.

< Actual value is known to be less than the value shown.

SALTON SEA BASIN

10256500 SNOW CREEK NEAR WHITE WATER, CA

LOCATION.--Lat 33°52'14", long 116°40'49", in NW 1/4 NW 1/4 sec.33, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on left bank 10 ft upstream from Desert Water Agency diversion dam, 0.1 mi downstream from East Fork, and 4.4 mi southwest of White Water.

DRAINAGE AREA.--10.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to December 1921, May 1922 to February 1927, December 1927 to September 1931, October 1959 to current year. Yearly discharge only for 1930, published in WSP 1314.

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on diversion. Elevation of both gages is 2,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1931, at various sites within 500 ft of present site at different datums. October 1959 to Oct. 6, 1970, at site 40 ft upstream at present datum. Oct. 6, 1970 to Oct. 25, 1978, at site 290 ft upstream above diversion at present datum. Gage moved to present site 10 ft downstream of diversion and 10 ft upstream of concrete diversion dam Oct. 25, 1978.

REMARKS.--Estimated daily discharges: Oct. 1, 2. Records good. No regulation above station. Desert Water Agency diverts 10 ft upstream, generally taking most of the base flow. Total flow is computed by combining discharge records for the diversion and the creek. Discharge records for Snow Creek diversion beginning October 1978 available in the files of the Geological Survey.

AVERAGE DISCHARGE.--Combined creek and diversion: 33 years (water years 1923-26, 1929-31, 1960-85), 9.89 ft³/s, 7,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s, Jan. 25, 1969, gage height, 13.8 ft, from floodmarks, site and datum then in use, from rating curve extended above 55 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 2.1 ft³/s, June 23-27, Sept. 5-11, 1961.

EXTREMES FOR CURRENT YEAR.--Combined creek and diversion: Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 7	1330	*55	*2.44				

Minimum daily, 3.5 ft³/s, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	4.6	5.4	8.0	5.7	7.3	11	12	6.9	4.5	4.3	4.0
2	4.4	4.6	5.2	7.3	6.0	7.2	12	13	6.8	4.5	4.3	4.0
3	4.4	4.5	6.0	7.2	5.4	6.7	13	13	6.8	4.7	4.7	4.0
4	4.5	4.6	5.4	7.2	5.5	6.3	14	13	6.5	4.7	4.6	4.1
5	4.6	4.6	8.0	7.0	5.4	6.3	15	13	6.5	4.8	4.6	3.9
6	4.5	4.6	8.0	7.1	6.0	5.9	17	12	6.6	4.7	4.5	3.5
7	4.5	4.6	8.0	24	6.4	6.8	19	12	6.5	5.0	4.6	3.8
8	4.4	4.6	9.2	31	6.6	6.4	19	11	6.6	4.9	4.6	3.9
9	4.4	4.6	8.5	15	14	6.3	18	11	6.2	5.0	4.4	4.0
10	4.5	4.6	9.2	12	10	7.4	16	11	6.0	5.1	4.4	4.0
11	4.5	4.7	14	10	8.0	7.7	15	11	5.9	5.9	4.5	4.3
12	4.5	4.7	8.5	9.1	8.0	7.5	15	10	6.0	5.3	4.5	4.3
13	4.4	5.1	9.5	8.4	8.1	8.2	16	9.4	5.9	5.2	4.3	4.0
14	4.4	5.2	8.8	8.1	8.0	8.2	17	9.6	5.7	5.4	4.2	4.1
15	4.3	4.8	8.6	7.9	8.0	8.1	17	10	5.6	6.0	4.2	4.1
16	4.4	4.4	10	7.7	8.2	7.9	17	9.9	5.5	6.0	4.2	4.1
17	4.8	4.3	9.0	7.0	8.4	7.8	15	9.9	5.4	6.2	4.2	4.1
18	4.6	4.4	10	7.2	8.9	8.1	14	9.4	5.3	6.1	4.1	5.6
19	4.6	4.4	24	7.7	9.2	7.9	13	9.5	5.3	11	4.1	4.7
20	4.6	4.0	13	7.7	9.1	8.3	13	9.0	5.2	8.0	4.2	4.7
21	4.6	4.1	11	7.7	7.9	8.9	12	8.8	5.1	5.3	4.1	4.6
22	4.6	4.4	9.4	7.4	7.7	8.3	12	8.8	5.0	6.2	4.2	4.4
23	4.5	4.6	9.2	6.2	8.2	8.5	12	8.9	4.9	6.7	4.0	4.3
24	4.5	5.5	9.6	6.1	7.9	8.8	12	8.8	5.0	6.8	4.0	4.2
25	4.6	7.2	9.5	6.4	7.7	9.2	12	8.5	5.0	5.8	4.1	4.2
26	4.6	5.2	10	6.4	7.7	9.1	12	8.4	4.7	5.0	4.2	4.0
27	4.5	4.9	19	6.4	7.6	13	12	8.1	4.5	4.9	4.2	3.6
28	4.6	5.6	16	6.8	7.6	16	11	7.4	4.4	6.4	4.0	3.6
29	4.6	5.7	12	7.2	---	12	11	7.3	4.4	5.2	4.0	3.9
30	4.6	5.6	11	6.1	---	11	11	7.2	4.5	4.4	4.2	4.1
31	4.7	---	9.3	6.0	---	11	---	6.9	---	4.4	4.0	---
TOTAL	140.1	144.7	314.3	279.3	217.2	262.1	423	307.8	168.7	174.1	132.5	124.1
MEAN	4.52	4.82	10.1	9.01	7.76	8.45	14.1	9.93	5.62	5.62	4.27	4.14
MAX	4.8	7.2	24	31	14	16	19	13	6.9	11	4.7	5.6
MIN	4.3	4.0	5.2	6.0	5.4	5.9	11	6.9	4.4	4.4	4.0	3.5
AC-FT	278	287	623	554	431	520	839	611	335	345	263	246
CAL YR 1984	TOTAL	2406.1	MEAN	6.59	MAX	24	MIN	4.0	AC-FT	4770		
WTR YR 1985	TOTAL	2687.9	MEAN	7.36	MAX	31	MIN	3.5	AC-FT	5330		

10256500 SNOW CREEK NEAR WHITE WATER, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-76, 1978 to current year.

CHEMICAL ANALYSES: Water years 1972-76, 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
OCT 25...	1215	4.0	112	7.9	11.5	37	13	1.1	<1	9.1	33	0.7
MAY 14...	1445	9.8	79	7.9	15.0	28	9.7	0.9	<1	6.7	33	0.6

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 25...	2.0	56	2.4	1.8	<0.1	20	83	<0.10	<0.01	<10	16
MAY 14..	1.4	39	2.3	1.2	<0.1	18	64	<0.10	0.02	10	9

< Actual value is known to be less than the value shown.

SALTON SEA BASIN

10257550 WHITEWATER RIVER AT WINDY POINT, NEAR WHITE WATER, CA

LOCATION.--Lat 33°53'56", long 116°37'13", in SW 1/4 NE 1/4 sec.24, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank 200 ft north of Highway 111, 2.0 mi southeast of White Water, and 3.8 mi east of the junction of Highway 111 and Interstate 10.

DRAINAGE AREA.--263 mi².

PERIOD OF RECORD.--July 1982 to current year. Discharge measurements only July 1982 to September 1984.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 1,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Jan. 11, Feb. 16 to Apr. 12, July 23 to Aug. 19, Sept. 12-27. Records poor. Imported water is released to the Whitewater River from the Colorado River Aqueduct at a point 2.75 mi upstream for groundwater recharge in the upper Coachella Valley. Water is diverted out of the basin 18.5 mi upstream to powerplants in the San Geronio River basin and then to an area north of Banning for irrigation.

COOPERATION.--Records of diversion out of basin were provided by Southern California Edison Company. Records of Colorado River Aqueduct releases were provided by Coachella Valley Water District (from Metropolitan Water District's monthly reports).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 417 ft³/s, May 6, gage height, 4.35 ft; no flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	100	129	148	136	280	300	310	304	314	70	108
2	88	120	125	142	137	280	320	310	303	271	70	110
3	88	120	124	140	135	280	327	309	308	299	70	114
4	87	118	123	142	136	0	322	312	310	289	70	118
5	86	110	122	139	140	0	317	333	308	284	70	124
6	84	119	121	134	143	0	285	382	313	298	70	173
7	82	122	122	152	147	0	239	339	305	318	70	213
8	82	124	129	150	139	0	272	303	294	322	70	204
9	80	104	124	150	133	280	306	301	298	317	70	211
10	78	127	123	150	137	280	308	275	303	311	70	205
11	76	130	138	150	139	280	305	249	319	312	70	208
12	76	114	131	153	144	280	307	218	315	132	70	212
13	75	116	124	153	148	280	307	246	306	16	70	100
14	74	126	127	154	149	320	288	251	304	14	70	0
15	73	125	131	160	149	320	285	242	297	14	70	0
16	73	121	134	155	148	320	288	255	304	13	70	300
17	74	120	133	150	148	320	279	222	306	14	70	300
18	74	116	141	146	151	320	283	196	297	14	70	300
19	75	119	180	143	150	320	302	186	291	28	70	300
20	76	120	150	135	200	320	294	206	297	36	0	300
21	78	121	100	140	200	330	281	185	299	33	70	300
22	78	121	85	148	200	330	284	201	300	42	0	300
23	79	115	85	149	200	330	299	242	291	46	0	300
24	80	116	85	152	200	300	298	216	272	70	0	300
25	80	140	85	155	250	300	302	261	285	70	0	300
26	80	131	88	149	280	300	310	307	298	70	0	300
27	80	129	127	149	280	300	320	306	306	70	123	300
28	80	127	128	147	280	300	317	300	301	70	130	301
29	80	129	148	132	---	300	311	297	294	70	132	303
30	80	129	137	138	---	300	312	308	308	70	133	303
31	80	---	141	146	---	300	---	303	---	70	124	---
TOTAL	2464	3629	3840	4551	4799	7870	8968	8371	9036	4297	2042	6607
MEAN	79.5	121	124	147	171	254	299	270	301	139	65.9	220
MAX	88	140	180	160	280	330	327	382	319	322	133	303
MIN	73	100	85	132	133	0	239	185	272	13	0	0
AC-FT	4890	7200	7620	9030	9520	15610	17790	16600	17920	8520	4050	13100
a	6140	8880	7680	10260	12910	25300	29620	30860	29580	15610	6140	20930
b	132	147	151	162	145	124	194	174	130	101	121	108

WTR YR 1985 TOTAL 66474 MEAN 182 MAX 382 MIN 0 AC-FT 131900

aDischarge, in acre-feet, of imported water released to river 2.75 mi upstream.

bDischarge, in acre-feet, diverted out of basin 18.5 mi upstream.

10257600 MISSION CREEK NEAR DESERT HOT SPRINGS, CA

LOCATION.--Lat 34°00'40", long 116°37'38", in NE 1/4 SW 1/4 sec.12, T.2 S., R.3 E., Riverside County, Hydrologic Unit 18100200, in Mission Creek Indian Reservation, 0.6 mi downstream from West Fork, and 6.8 mi northwest of Desert Hot Springs.

DRAINAGE AREA.--35.7 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 26 to Dec. 9. Records good. Slight regulation of low flow by two small dams with a combined capacity of about 3 acre-ft, 2 mi above station.

AVERAGE DISCHARGE.--18 years, 4.06 ft³/s, 2,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,750 ft³/s, Aug. 17, 1983, gage height, 3.33 ft on basis of slope-conveyance study of peak flow; maximum gage height, 6.40 ft, Jan. 25, 1969; no flow for long periods in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0715	*17	*1.19				

Minimum daily, 0.42 ft³/s, Aug. 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.6	1.8	4.6	3.3	2.8	2.5	2.0	1.9	1.2	.78	.78
2	1.6	1.5	1.8	4.4	2.9	2.9	2.5	2.0	1.9	1.2	.68	.68
3	1.6	1.4	1.8	4.2	2.9	3.1	2.3	2.0	2.0	1.1	.68	.68
4	1.6	1.4	1.6	4.2	2.9	2.9	2.3	2.0	1.9	1.1	.58	.89
5	1.5	1.4	1.5	4.0	2.9	2.9	2.3	2.0	1.6	1.0	.58	1.0
6	1.5	1.4	1.6	3.8	2.8	2.9	2.3	2.0	1.6	1.1	.48	1.1
7	1.4	1.5	1.6	4.6	2.8	2.8	2.2	2.0	1.6	1.1	.58	1.0
8	1.3	1.8	2.0	4.8	2.8	2.8	2.0	2.0	1.5	1.1	.58	1.0
9	1.3	1.5	1.6	4.0	2.8	2.8	2.3	1.9	1.5	1.1	.48	.89
10	1.4	1.5	1.9	4.0	2.9	2.6	2.3	2.0	1.5	1.1	.48	.89
11	1.5	1.3	2.6	3.8	2.9	2.6	2.2	2.0	1.5	.89	.48	.89
12	1.4	1.4	2.0	3.8	2.6	2.6	2.2	2.0	1.5	.78	.48	.89
13	1.3	1.4	1.9	3.6	2.6	2.6	2.0	1.9	1.4	.78	.48	.89
14	1.2	1.5	1.6	3.6	2.6	2.6	1.9	1.9	1.2	.78	.48	.78
15	1.2	1.4	1.9	3.4	2.6	2.6	1.9	1.8	1.2	.89	.48	.68
16	1.4	1.4	3.0	3.4	2.8	2.6	1.9	1.8	1.2	1.0	.48	.68
17	1.5	1.4	2.2	3.3	2.8	2.5	2.0	1.9	1.1	.89	.48	.68
18	1.5	1.4	3.7	3.3	2.8	2.6	2.2	2.0	1.1	1.1	.48	1.0
19	1.6	1.4	10	3.3	2.9	2.5	2.2	1.9	1.2	1.0	.48	1.0
20	1.6	1.4	5.2	3.3	3.1	2.6	2.3	2.0	1.2	1.1	.48	.89
21	1.6	1.5	4.0	3.3	3.1	2.6	2.3	1.9	1.2	1.0	.47	.78
22	1.6	1.5	3.3	3.4	3.1	2.6	2.2	1.9	1.2	1.0	.46	.58
23	1.6	1.5	3.1	3.3	2.9	2.6	2.0	1.9	1.2	.89	.44	.48
24	1.6	1.8	3.3	3.1	2.9	2.6	1.9	1.8	1.2	.89	.43	.47
25	1.5	1.8	3.5	3.3	2.9	2.6	2.2	1.8	1.4	.89	.42	.47
26	1.5	1.8	5.4	3.3	2.8	2.6	2.3	1.9	1.4	.89	.42	.47
27	1.5	1.8	7.0	3.3	2.6	2.8	2.5	1.9	1.4	.78	.78	.48
28	1.6	1.8	7.7	3.6	2.6	2.9	2.3	1.9	1.4	.68	.89	.58
29	1.6	1.8	5.6	3.6	---	2.8	2.2	1.9	1.4	.78	.79	.58
30	1.6	1.8	5.0	3.4	---	2.6	2.0	1.9	1.2	.78	.68	.56
31	1.6	---	4.8	3.3	---	2.6	---	1.9	---	.78	.68	---
TOTAL	46.2	46.1	104.0	114.3	79.6	83.6	65.7	59.8	42.6	29.67	17.16	22.76
MEAN	1.49	1.54	3.35	3.69	2.84	2.70	2.19	1.93	1.42	.96	.55	.76
MAX	1.6	1.8	10	4.8	3.3	3.1	2.5	2.0	2.0	1.2	.89	1.1
MIN	1.2	1.3	1.5	3.1	2.6	2.5	1.9	1.8	1.1	.68	.42	.47
AC-FT	92	91	206	227	158	166	130	119	84	59	34	45
CAL YR 1984	TOTAL	942.88	MEAN	2.58	MAX	10	MIN	0	AC-FT	1869		
WTR YR 1985	TOTAL	711.49	MEAN	1.95	MAX	10	MIN	.42	AC-FT	1410		

SALTON SEA BASIN

10257710 CHINO CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°50'21", long 116°36'45", in SW 1/4 NW 1/4 sec.7, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank 800 ft downstream from tram building, 3.7 mi west of Highway 111 on road leading to Palm Springs aerial tramway, and 5.5 mi west of Palm Springs.

DRAINAGE AREA.--3.88 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to July 18, 1985 (temporarily discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 2,500 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 2-13. Records good. Two diversions for the city of Palm Springs, 0.5 mi upstream. Gage destroyed by debris flow on July 19, 1985. Discharge measurements made during the period July 19 to Sept. 30, 1985 in files of U.S. Geological Survey.

AVERAGE DISCHARGE.--10 years (water years 1975-84), 0.93 ft³/s, 674 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 247 ft³/s, Aug. 15, 1977, gage height, 5.93 ft, from floodmark, from rating curve extended above 61 ft³/s on basis of slope-area measurement of peak flow; no flow for several days in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 19, 1985 was a debris flow as a result of intense thunderstorm activity less than two weeks after a brushfire denuded over 75 percent of the drainage basin. The maximum stage for this flood exceeded gage height 20.7 ft, completely filling the existing channel with boulders and mud, and altering the entire canyon floor at the gage. The peak discharge for this flood is unknown.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.15	.82	.39	.27	.08	.03		0		
2	0	.01	.15	.76	.39	.27	.08	.02		0		
3	0	.02	.40	.73	.39	.28	.11	.02		0		
4	0	.02	.42	.80	.39	.27	.11	.01		0		
5	.01	.02	.36	.67	.39	.27	.10	.01		0		
6	.04	.02	.33	.51	.39	.27	.10	.02		0		
7	.04	.02	.33	.67	.39	.27	.09	.02		0		
8	.03	.02	.87	.78	.39	.25	.07	.02		0		
9	.03	.02	.68	.62	.39	.23	.08	.01		0		
10	.04	.02	.68	.62	.39	.23	.08	.03		0		
11	.04	.02	.83	.62	.39	.25	.08	.03		0		
12	.02	.02	.62	.62	.39	.25	.08	.02		0		
13	.02	.80	.62	.63	.37	.23	.07	.02		0		
14	.02	.75	.62	.62	.34	.23	.05	.01		0		
15	.01	.72	.62	.61	.33	.19	.06	0		0		
16	.02	.73	.74	.51	.33	.19	.07	0		0		
17	.02	.82	.72	.46	.33	.18	.10	0		0		
18	.02	.82	1.0	.46	.33	.21	.10	0		1.3		
19	.02	.86	2.3	.46	.33	.23	.10	0		---		
20	.01	.89	2.3	.46	.30	.17	.11	0		---		
21	.01	.82	1.4	.46	.28	.15	.12	0		---		
22	.02	.83	.92	.46	.27	.14	.10	0		---		
23	.02	.88	.86	.44	.27	.12	.08	0		---		
24	.01	.83	.75	.39	.27	.11	.07	0		---		
25	.01	.87	.62	.39	.25	.11	.06	0		---		
26	.01	.64	.62	.39	.27	.12	.07	0		---		
27	.01	.18	1.1	.39	.27	.13	.09	0		---		
28	.01	.14	1.3	.39	.27	.16	.06	0		---		
29	0	.12	1.1	.39	---	.15	.05	0		---		
30	.01	.12	1.0	.39	---	.11	.05	0		---		
31	0	---	.99	.39	---	.08	---	0		---		
TOTAL	0.50	12.03	25.40	16.91	9.49	6.12	2.47	0.27	0	---		
MEAN	.016	.40	.82	.55	.34	.20	.082	.009	0	---		
MAX	.04	.89	2.3	.82	.39	.28	.12	.03	0	---		
MIN	0	0	.15	.39	.25	.08	.05	0	0	---		
AC-FT	1.0	24	50	34	19	12	4.9	.5	0	---		

CAL YR 1984 TOTAL 196.55 MEAN .54 MAX 3.0 MIN 0 AC-FT 390

10257710 CHINO CANYON CREEK NEAR PALM SPRINGS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972-76, 1978 to current year.

CHEMICAL ANALYSES: Water years 1972-76, 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS AS (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
OCT 24...	1100	0.03	236	8.3	9.5	99	34	3.3	<1	10	17	0.5
MAY 14...	1000	0.01	225	8.5	14.5	92	32	3.0	<1	10	18	0.5

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 24...	5.3	109	9.1	2.6	<0.1	19	150	<0.10	<0.01	<10	21
MAY 14...	5.0	107	8.2	2.3	<0.1	19	140	<0.10	0.01	10	8

< Actual value is known to be less than the value shown.

SALTON SEA BASIN

10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°48'18", long 116°33'30", in SW 1/4 SW 1/4 sec.22, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, 2.2 mi southwest of Palm Springs, and 7 mi upstream from mouth.

DRAINAGE AREA.--16.8 mi².

PERIOD OF RECORD.--October 1947 to September 1982, October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 762.5 ft above National Geodetic Vertical Datum of 1929 (levels by Riverside County Flood Control District). Prior to Aug. 25, 1970, at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1-3, Jan. 13 to Feb. 6, Apr. 4 to May 3. Records good except for periods of estimated daily discharges, which are poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--37 years (water years 1948-82, 1984-85), 5.33 ft³/s, 3,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,900 ft³/s, Nov. 22, 1965, Jan. 25, 1969, gage height, 12.34 ft, from rating curve extended above 70 ft³/s on basis of slope-area measurements at gage heights 10.45 ft and 12.34 ft; maximum gage height, 15.78 ft, Sept. 7, 1981, from debris wave produced by thunderstorm following a brushfire; no flow for parts of most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 85 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 18	Unknown	*16	*4.65				
Minimum daily, 0.18 ft ³ /s, Aug. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.1	1.6	3.2	2.6	3.8	4.8	12	3.8	1.2	.52	.30
2	1.2	1.0	1.6	3.1	3.3	4.1	5.3	12	3.7	1.1	.52	.37
3	1.3	1.0	1.8	3.0	2.9	3.8	7.0	11	3.7	.99	.48	.32
4	1.2	1.0	1.8	2.9	2.6	3.8	8.6	11	3.6	.93	.43	.38
5	1.2	1.0	1.7	2.8	2.5	3.6	9.0	11	3.3	.84	.37	.48
6	1.2	1.0	1.7	2.7	2.4	3.4	9.4	10	3.0	.75	.31	.55
7	1.1	1.0	1.6	5.4	2.4	3.3	9.8	9.7	2.7	.69	.33	.55
8	1.1	1.0	2.6	9.2	2.4	3.3	10	9.1	2.5	.65	.37	.50
9	1.1	1.0	2.1	5.2	3.4	3.3	10	8.8	2.4	.61	.36	.50
10	1.1	1.1	2.0	4.2	4.1	3.9	11	9.2	2.3	.66	.33	.48
11	1.1	1.0	2.8	3.7	3.1	4.5	11	8.7	2.3	.58	.36	.49
12	1.1	1.0	2.4	3.4	2.9	4.1	11	8.3	2.2	.50	.37	.50
13	1.1	1.0	2.1	3.0	3.0	4.0	11	7.8	2.1	.43	.36	.44
14	1.1	1.1	1.9	2.9	3.0	4.0	11	7.4	2.0	.44	.35	.37
15	1.1	1.2	1.8	2.8	3.1	3.9	11	7.2	2.0	.49	.32	.33
16	1.1	1.2	2.1	2.7	3.2	3.8	11	6.9	1.9	.61	.31	.31
17	1.2	1.2	1.9	2.6	3.5	3.8	11	6.7	1.8	.57	.33	.32
18	1.1	1.2	2.6	2.5	3.7	4.0	14	6.4	1.7	1.0	.31	.66
19	1.1	1.2	7.1	2.4	3.7	4.0	11	6.2	1.6	2.4	.30	.79
20	1.2	1.2	4.9	2.4	3.9	3.8	9.2	5.9	1.5	4.1	.32	.62
21	1.2	1.2	3.6	2.3	3.8	3.8	9.2	5.7	1.5	2.0	.39	.53
22	1.1	1.3	3.1	2.3	3.5	4.1	9.6	5.4	1.4	1.3	.32	.49
23	1.1	1.6	2.9	2.3	3.5	4.2	9.8	5.2	1.4	1.1	.28	.47
24	1.1	1.5	2.8	2.3	3.5	4.5	11	5.0	1.3	.91	.21	.44
25	1.1	2.4	2.7	2.3	3.6	4.7	10	4.8	1.3	.83	.19	.41
26	1.1	1.7	2.8	2.3	3.7	4.5	10	4.6	1.3	.80	.25	.40
27	1.1	1.5	6.1	2.4	3.9	5.0	10	4.4	1.2	.81	.33	.45
28	1.1	1.5	5.6	2.5	3.8	6.0	11	4.2	1.2	.71	.28	.54
29	1.1	2.0	4.1	2.8	---	4.8	11	4.1	1.2	.63	.21	.57
30	1.1	1.8	3.7	2.6	---	4.4	11	4.0	1.2	.58	.18	.59
31	1.1	---	3.4	2.5	---	4.5	---	4.0	---	.55	.21	---
TOTAL	35.1	38.0	88.9	96.7	91.0	126.7	298.7	226.7	63.1	29.76	10.20	14.15
MEAN	1.13	1.27	2.87	3.12	3.25	4.09	9.96	7.31	2.10	.96	.33	.47
MAX	1.3	2.4	7.1	9.2	4.1	6.0	14	12	3.8	4.1	.52	.79
MIN	1.1	1.0	1.6	2.3	2.4	3.3	4.8	4.0	1.2	.43	.18	.30
AC-FT	70	75	176	192	180	251	592	450	125	59	20	28
CAL YR 1984	TOTAL	1857.35	MEAN	5.09	MAX	38	MIN	.56	AC-FT	3680		
WTR YR 1985	TOTAL	1119.01	MEAN	3.07	MAX	14	MIN	.18	AC-FT	2220		

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°44'42", long 116°32'05", in SW 1/4 SE 1/4 sec.11, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on right bank 0.8 mi upstream from Murray Canyon Creek, and 6 mi south of Palm Springs.

DRAINAGE AREA.--93.3 mi².

PERIOD OF RECORD.--January 1930 to January 1942, October 1947 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 700 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 14, 1942, at datum 0.2 ft higher.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--49 years (water years 1931-41, 1948-85), 5.34 ft³/s, 3,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,000 ft³/s, Feb. 21, 1980, gage height, 7.29 ft, from rating curve extended above 650 ft³/s on basis of slope-area measurement at gage height 6.38 ft; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2300	*140	*3.22	Jan. 8	0615	120	3.15

No flow many days, June through September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	1.2	2.1	6.7	5.1	4.9	6.0	1.4	.23	0		
2	.84	1.1	1.9	5.7	6.4	5.7	5.4	1.3	.26	0		
3	.84	1.1	2.3	5.4	6.7	6.7	5.1	1.2	.33	0		
4	.84	1.1	2.6	5.1	6.7	5.7	5.1	1.2	.33	0		
5	.94	1.2	2.3	4.9	6.4	5.4	4.9	1.3	.11	0		
6	.84	1.2	2.3	4.6	6.0	5.4	4.9	1.3	.05	0		
7	.84	1.2	2.3	7.9	6.4	5.1	4.6	1.3	.02	0		
8	.84	1.1	4.2	45	6.4	5.1	4.4	1.1	.01	0		
9	.76	1.2	3.0	16	12	5.1	3.9	.92	0	0		
10	.84	1.2	2.8	12	11	4.9	3.7	1.0	0	0		
11	1.0	1.2	5.4	10	8.8	4.9	3.4	1.3	0	0		
12	1.0	1.2	3.5	9.2	8.4	4.9	3.4	1.2	0	0		
13	.94	1.5	2.8	8.0	7.3	4.9	3.0	.92	0	0		
14	.84	1.5	2.4	7.7	6.7	4.9	2.7	.76	0	0		
15	.94	1.5	2.3	7.0	6.7	4.9	2.5	.70	0	0		
16	1.0	1.6	4.0	6.7	6.4	4.9	2.5	.63	0	0		
17	1.2	1.6	3.5	6.4	6.4	4.9	2.7	.63	0	0		
18	1.2	1.6	7.4	6.0	6.0	5.1	3.4	.51	0	0		
19	1.2	1.6	51	5.7	6.0	5.7	3.4	.51	0	.82		
20	1.2	1.6	32	5.7	6.0	4.9	3.4	.57	0	1.9		
21	1.2	1.8	11	5.4	6.7	4.4	3.7	.51	0	3.7		
22	1.1	1.8	7.3	5.4	6.0	3.9	3.4	.46	0	.09		
23	1.2	3.5	5.7	5.7	6.0	3.9	2.9	.41	0	0		
24	1.1	3.3	4.9	5.1	5.7	3.7	2.5	.33	0	0		
25	1.1	5.4	4.4	5.1	5.4	3.7	2.0	.23	0	0		
26	1.1	3.5	4.4	5.1	5.1	3.7	2.2	.23	0	0		
27	1.1	2.6	13	4.9	5.1	4.9	2.4	.23	0	0		
28	1.2	2.6	20	5.4	4.9	8.4	2.4	.20	0	0		
29	1.2	2.6	11	7.7	---	9.2	2.2	.17	0	0		
30	1.2	2.3	8.4	6.4	---	7.7	1.8	.17	0	0		
31	1.2	---	7.3	5.7	---	6.7	---	.17	---	0		
TOTAL	31.48	55.9	237.5	247.6	186.7	164.2	103.9	22.86	1.34	6.51	0	0
MEAN	1.02	1.86	7.66	7.99	6.67	5.30	3.46	.74	.045	.21	0	0
MAX	1.2	5.4	51	45	12	9.2	6.0	1.4	.33	3.7	0	0
MIN	.68	1.1	1.9	4.6	4.9	3.7	1.8	.17	0	0	0	0
AC-FT	62	111	471	491	370	326	206	45	2.7	13	0	0
CAL YR 1984	TOTAL	1444.56	MEAN	4.0	MAX	54	MIN	0	AC-FT	2860		
WTR YR 1985	TOTAL	1057.99	MEAN	2.90	MAX	51	MIN	0	AC-FT	2100		

SALTON SEA BASIN

10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°45'36", long 116°32'57", in SE 1/4 SE 1/4 sec.3, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank at Bureau of Indian Affairs diversion dam, 1.1 mi above mouth, and 5.1 mi south of Palm Springs.

DRAINAGE AREA.--8.61 mi².

PERIOD OF RECORD.--October 1948 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 800 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 25, 1949, reference point at same site at different datum.

REMARKS.--Estimated daily discharges: Dec. 19, 20. Records good except for estimated daily discharges, which are poor. No regulation above station. One small diversion for domestic use about 1 mi above station.

AVERAGE DISCHARGE.--37 years, 3.02 ft³/s, 2,190 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s, Aug. 31, 1954, gage height, 7.11 ft, from rating curve extended above 80 ft³/s on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0615	*21	*2.89				

Minimum daily, 1.0 ft³/s, Aug. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.5	2.8	4.1	3.7	3.7	3.6	2.8	2.2	1.5	1.4	1.4
2	2.4	2.5	2.7	4.0	4.3	4.4	3.8	2.8	2.2	1.4	1.4	1.3
3	2.4	2.5	2.8	3.8	4.2	4.2	3.8	2.8	2.3	1.4	1.3	1.3
4	2.6	2.5	2.7	3.7	4.0	4.0	3.9	2.8	2.1	1.5	1.2	1.5
5	2.4	2.5	2.6	3.7	4.0	3.9	4.0	2.8	2.0	1.5	1.2	1.7
6	2.4	2.5	2.6	3.7	3.9	3.8	4.1	2.8	2.0	1.6	1.2	1.7
7	2.3	2.6	2.6	7.3	3.9	3.7	4.1	2.7	1.9	1.6	1.3	1.6
8	2.3	2.6	3.7	8.5	3.9	3.7	3.9	2.6	1.8	1.6	1.3	1.5
9	2.3	2.6	2.9	5.5	5.9	3.6	3.8	2.6	1.8	1.6	1.3	1.5
10	2.3	2.6	3.1	5.0	5.4	3.7	3.7	2.7	1.8	1.6	1.3	1.5
11	2.4	2.6	4.4	4.6	4.6	3.9	3.5	2.7	1.9	1.4	1.3	1.5
12	2.4	2.6	3.4	4.3	4.3	3.8	3.5	2.7	1.8	1.3	1.3	1.5
13	2.3	2.7	3.1	4.2	4.3	3.7	3.5	2.5	1.7	1.3	1.3	1.4
14	2.3	2.6	3.0	4.1	4.3	3.6	3.4	2.4	1.7	1.4	1.2	1.4
15	2.4	2.6	3.0	4.0	4.3	3.6	3.3	2.4	1.7	1.7	1.2	1.4
16	2.4	2.6	3.7	3.8	4.2	3.5	3.3	2.4	1.7	1.7	1.2	1.4
17	2.6	2.6	3.2	3.7	4.4	3.5	3.4	2.4	1.7	1.8	1.2	1.4
18	2.5	2.6	5.2	3.7	4.4	3.7	3.5	2.3	1.6	2.7	1.2	2.1
19	2.5	2.6	10	3.8	4.4	3.6	3.4	2.4	1.7	2.1	1.2	1.9
20	2.6	2.6	6.7	3.8	4.4	3.5	3.5	2.4	1.7	2.0	1.3	1.7
21	2.5	2.7	4.9	3.7	4.2	3.5	3.4	2.3	1.8	1.7	1.2	1.7
22	2.5	2.7	4.2	3.8	4.1	3.5	3.3	2.3	1.7	1.6	1.2	1.6
23	2.5	3.4	3.9	3.7	3.9	3.5	3.2	2.3	1.7	1.6	1.1	1.6
24	2.5	3.4	3.8	3.7	3.8	3.5	3.1	2.2	1.7	1.6	1.0	1.6
25	2.5	4.7	3.8	3.7	3.8	3.5	3.1	2.2	1.8	1.6	1.1	1.5
26	2.5	3.0	4.2	3.7	3.8	3.5	3.1	2.2	1.7	1.5	1.3	1.6
27	2.5	2.8	6.8	3.6	3.8	4.0	3.1	2.2	1.6	1.3	1.2	1.7
28	2.5	2.9	5.8	4.1	3.7	4.7	3.0	2.2	1.6	1.4	1.2	1.8
29	2.5	3.0	5.0	4.4	---	4.1	3.0	2.2	1.5	1.4	1.2	1.8
30	2.5	2.8	4.5	3.8	---	3.8	2.9	2.2	1.5	1.4	1.2	1.8
31	2.6	---	4.3	3.7	---	3.7	---	2.2	---	1.4	1.3	---
TOTAL	75.7	82.9	125.4	131.2	117.9	116.4	104.2	76.5	53.9	49.2	38.3	47.4
MEAN	2.44	2.76	4.05	4.23	4.21	3.75	3.47	2.47	1.80	1.59	1.24	1.58
MAX	2.6	4.7	10	8.5	5.9	4.7	4.1	2.8	2.3	2.7	1.4	2.1
MIN	2.3	2.5	2.6	3.6	3.7	3.5	2.9	2.2	1.5	1.3	1.0	1.3
AC-FT	150	164	249	260	234	231	207	152	107	98	76	94
CAL YR 1984	TOTAL	1362.4	MEAN	3.72	MAX	10	MIN	2.2	AC-FT	2700		
WTR YR 1985	TOTAL	1019.0	MEAN	2.79	MAX	10	MIN	1.0	AC-FT	2020		

10259200 DEEP CREEK NEAR PALM DESERT, CA

LOCATION.--Lat 33°37'52", long 116°23'29", in NE 1/4 SE 1/4 sec.19, T.6 S., R.6 E., Riverside County, Hydrologic Unit 18100200, on left bank 500 ft downstream from unnamed tributary, and 6.3 mi south of Palm Desert.

DRAINAGE AREA.--30.6 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 1,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 15 to Feb. 26, Sept. 27-30. Records good except for periods of estimated daily discharges, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--23 years, 2.38 ft³/s, 1,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s, Sept. 10, 1976, gage height, 7.84 ft, from rating curve extended above 40 ft³/s on basis of slope-area measurements at gage heights 2.68 ft, 5.15 ft, and 7.84 ft; maximum gage height, 10.27 ft, Aug. 14, 1984, (backwater from debris); no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*), from rating curve extended above 10 ft³/s on basis of slope-area measurements at gage heights 2.68 ft, 5.15 ft, and 7.84 ft:

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 19	0815	146	3.25	Jan. 7	2115	24	2.43
Dec. 27	0800	273	3.64	July 17	1515	224	3.51
Jan. 2	0545	31	2.53	Sept. 26	1615	*609	*4.37

Minimum daily, 0.02 ft³/s, Aug. 11 to Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.4	1.3	8.4	2.4	2.7	2.6	.63	.27	.14	.03	.02
2	1.1	1.4	1.3	28	2.6	3.0	2.6	.60	.28	.13	.03	.02
3	1.1	1.3	1.5	27	2.6	2.7	2.7	.56	.27	.13	.03	.02
4	1.1	1.3	1.4	22	2.5	2.5	2.9	.52	.63	.13	.03	.02
5	1.1	1.3	1.4	11	2.4	2.5	2.9	.55	.54	.13	.03	.02
6	1.1	1.3	1.4	10	2.4	2.3	3.1	.52	.53	.14	.03	.02
7	1.0	1.3	1.3	13	2.5	2.2	3.6	.46	.40	.13	.03	.02
8	1.0	1.3	3.8	17	2.7	2.2	3.7	.40	.33	.13	.03	.02
9	1.0	1.2	2.5	10	4.7	2.1	3.4	.38	.27	.12	.03	.02
10	1.1	1.2	2.0	8.2	4.8	2.6	3.0	.41	.21	.12	.03	.02
11	1.1	1.3	3.6	6.7	3.8	5.0	2.5	.47	.21	.11	.02	.03
12	1.1	1.3	3.1	6.6	3.5	4.3	2.2	.50	.16	.11	.02	.03
13	1.1	1.3	5.1	5.9	3.3	3.6	1.9	.48	.13	.12	.02	.03
14	1.1	1.3	5.3	5.0	3.1	3.3	1.6	.44	.13	.12	.02	.04
15	1.1	1.3	5.3	4.8	2.9	3.1	1.4	.40	.14	.14	.02	.04
16	1.1	1.2	5.4	4.4	2.8	3.0	1.5	.41	.14	.13	.02	.04
17	1.1	1.2	5.6	3.8	2.7	2.8	1.6	.43	.14	13	.02	.05
18	1.2	1.2	7.5	3.4	2.7	2.7	1.6	.42	.15	2.6	.02	.05
19	1.2	1.2	55	3.1	2.8	2.7	1.5	.40	.14	3.0	.02	.05
20	1.2	1.3	18	2.9	3.0	2.6	1.3	.52	.14	.44	.02	.05
21	1.2	1.3	10	2.8	3.1	2.6	1.4	.44	.14	.26	.02	.05
22	1.3	1.3	8.5	2.7	3.2	2.6	1.2	.35	.14	.17	.02	.05
23	1.3	4.2	6.5	2.7	3.0	2.6	1.1	.30	.14	.11	.02	.05
24	1.3	1.7	4.9	2.6	2.8	2.6	1.0	.27	.14	.07	.02	.05
25	1.2	1.9	3.8	2.5	2.7	2.6	.94	.25	.14	.06	.02	.06
26	1.3	1.5	3.4	2.4	2.7	2.7	.97	.22	.14	.05	.02	30
27	1.2	1.4	137	2.3	2.8	3.1	1.0	.21	.15	.05	.02	.10
28	1.3	1.4	34	2.5	2.7	4.3	1.0	.20	.14	.05	.02	.09
29	1.3	1.5	11	3.5	---	3.9	.87	.20	.14	.05	.02	.09
30	1.3	1.4	11	3.0	---	3.1	.73	.21	.13	.04	.02	.09
31	1.4	---	7.5	2.7	---	2.8	---	.24	---	.04	.02	---
TOTAL	36.0	43.2	369.4	230.9	83.2	90.8	57.81	12.39	6.61	22.02	0.72	31.24
MEAN	1.16	1.44	11.9	7.45	2.97	2.93	1.93	.40	.22	.71	.023	1.04
MAX	1.4	4.2	137	28	4.8	5.0	3.7	.63	.63	.13	.03	30
MIN	1.0	1.2	1.3	2.3	2.4	2.1	.73	.20	.13	.04	.02	.02
AC-FT	71	86	733	458	165	180	115	25	13	44	1.4	62
CAL YR 1984	TOTAL	1392.28	MEAN	3.80	MAX	400	MIN	.08	AC-FT	2760		
WTR YR 1985	TOTAL	984.29	MEAN	2.70	MAX	137	MIN	.02	AC-FT	1950		

SALTON SEA BASIN

10259300 WHITEWATER RIVER AT INDIO, CA

LOCATION.--Lat 33°44'14", long 116°14'07", in SE 1/4 NE 1/4 sec.15, T.5 S., R.7 E., Riverside County, Hydrologic Unit 18100200, on right bank of concrete drop structure, 1,000 ft upstream from Monroe Street bridge, and 1.7 mi northwest of Indio.

DRAINAGE AREA.--1,073 mi².

PERIOD OF RECORD.--March 1966 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Oct. 1, 1979. Elevation of gage is 0 ft National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1979, water-stage recorder at site 0.5 mi upstream at different datum. Oct. 1, 1979, to Feb. 17, 1983, at datum 1.03 ft lower.

REMARKS.--No flow since Aug. 20, 1984. No regulation above station. Water diverted from tributary streams for municipal supply in vicinity of Palm Springs.

AVERAGE DISCHARGE.--19 years, 3.57 ft³/s, 2,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s, Jan. 25, 1969, gage height, 14.41 ft, site and datum then in use, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement at gage height 15.3 ft, for flood of Nov. 22, 1965; no flow all or most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 2 or 3, 1938, reached a discharge of 29,000 ft³/s, on basis of slope-area measurement, at site 5.0 mi upstream. Flood of November 22, 1965, reached a stage of 15.3 ft, from floodmark, at site and datum used prior to Oct. 1, 1979, discharge 14,100 ft³/s on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--No flow during year.

SALTON SEA BASIN

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10259540 WHITEWATER RIVER NEAR MECCA, CA

LOCATION.--Lat 33°31'29", long 116°04'36", in NW 1/4 NW 1/4 sec.32, T.7 S., R.9 E., Riverside County, Hydrologic Unit 18100200, on left bank 1.6 mi upstream from mouth at Salton Sea, and 3.3 mi south of Mecca.

DRAINAGE AREA.--1,495 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 221.00 ft below National Geodetic Vertical Datum of 1929 (levels by Coachella County Water District). Oct. 1, 1960, to Mar. 22, 1967, at site 1.3 mi downstream and Mar. 23, 1967, to July 22, 1970, at site 0.7 mi downstream at different datums.

REMARKS.--No estimated daily discharges. Records fair. Most of the flow represents seepage and return flow from irrigated areas.

COOPERATION.--Twenty-one discharge measurements were provided by Coachella Valley County Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,500 ft³/s, Jan. 25, 1969, estimated; minimum daily, 37 ft³/s, Nov. 25-29, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 121 ft³/s, Mar. 2; minimum daily, 56 ft³/s, July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	92	77	80	85	109	102	88	94	79	72	79
2	79	90	74	82	95	121	103	90	105	93	81	73
3	81	104	79	83	89	115	99	96	79	81	78	75
4	82	98	77	82	91	115	106	97	79	81	86	86
5	83	82	104	85	79	104	98	93	76	83	84	100
6	87	62	111	89	84	107	104	83	74	88	75	110
7	87	61	98	98	81	107	101	84	75	88	73	106
8	81	59	83	87	79	103	96	87	77	86	79	107
9	82	58	83	95	77	104	83	96	83	83	86	105
10	83	60	81	93	71	102	79	95	81	87	84	88
11	95	65	89	92	69	102	82	89	78	83	88	80
12	88	66	86	87	71	100	86	105	73	94	81	82
13	84	65	79	87	76	102	92	93	83	108	83	88
14	90	66	78	84	76	107	102	86	88	108	83	92
15	82	70	79	82	89	108	107	85	89	103	83	92
16	76	73	79	82	93	106	106	89	95	97	83	83
17	83	74	79	84	97	113	101	91	82	102	86	82
18	80	72	83	87	89	116	97	93	76	101	97	91
19	87	70	89	90	90	112	106	95	74	87	95	89
20	76	68	88	88	97	107	109	103	76	71	88	98
21	72	75	82	83	96	105	108	89	72	68	104	100
22	70	75	83	84	98	108	96	79	84	56	101	93
23	66	76	80	82	101	109	98	86	89	60	95	92
24	70	79	77	91	109	108	101	83	83	68	101	93
25	73	70	77	89	110	110	95	93	70	75	93	87
26	71	68	76	88	105	107	91	95	72	76	88	85
27	80	68	90	89	105	107	97	89	70	79	72	89
28	79	75	95	85	107	113	94	84	68	76	70	96
29	80	75	83	84	---	115	89	71	79	73	79	92
30	85	72	82	84	---	108	86	90	86	69	88	89
31	86	---	80	80	---	102	---	82	---	66	84	---
TOTAL	2500	2188	2601	2676	2509	3352	2914	2779	2410	2569	2642	2722
MEAN	80.6	72.9	83.9	86.3	89.6	108	97.1	89.6	80.3	82.9	85.2	90.7
MAX	95	104	111	98	110	121	109	105	105	108	104	110
MIN	66	58	74	80	69	100	79	71	68	56	70	73
AC-FT	4960	4340	5160	5310	4980	6650	5780	5510	4780	5100	5240	5400
CAL YR 1984	TOTAL	37798	MEAN	103	MAX	291	MIN	58	AC-FT	74970		
WTR YR 1985	TOTAL	31862	MEAN	87.3	MAX	121	MIN	56	AC-FT	63200		

MOJAVE RIVER BASIN

10260500 DEEP CREEK NEAR HESPERIA, CA

LOCATION.--Lat 34°20'28", long 117°13'39", in NE 1/4 SE 1/4 sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 0.5 mi upstream from confluence with West Fork Mojave River at Mojave River Forks Dam, 7 mi southeast of Hesperia, and 11 mi downstream from Lake Arrowhead.

DRAINAGE AREA.--134 mi².

PERIOD OF RECORD.--October 1904 to September 1922, October 1929 to current year. Prior to January 1930, monthly discharge only, published in WSP 1314.

GAGE.--Water-stage recorder. Broad-crested weir since December 1938. Elevation of gage is 3,050 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1314 for history of changes prior to Dec. 10, 1938.

REMARKS.--Estimated daily discharges: June 22 to July 11, July 13-20, July 30 to Aug. 3, Sept. 17, 26-28. Records fair. Slight regulation by Lake Arrowhead, capacity, 48,000 acre-ft, used principally for recreation.

AVERAGE DISCHARGE.--74 years, 71.7 ft³/s, 51,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft³/s, Mar. 2, 1938, gage height, unknown, based on slope-area measurement of peak flow; maximum gage height, 23.81 ft, Feb. 10, 1978 (backwater from Mojave Forks Reservoir); no flow July 17, 18, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0615	*817	*3.38	Dec. 27	1000	708	3.28

Minimum daily, 0.24 ft³/s Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	7.2	9.5	42	19	57	80	19	7.2	1.4	.46	.48
2	4.0	7.2	9.3	36	23	64	87	18	7.4	1.3	.44	.48
3	4.3	7.4	9.5	32	22	60	82	17	7.4	1.2	.42	.48
4	4.7	7.4	9.6	31	21	50	84	16	10	1.2	.41	.55
5	5.5	7.5	9.6	28	18	45	82	16	9.4	1.2	.35	.63
6	5.5	7.4	9.5	30	19	40	76	15	7.8	1.1	.35	.63
7	5.5	7.4	9.4	31	19	37	74	14	6.6	1.1	.29	.71
8	4.9	7.4	10	85	19	36	74	13	5.8	1.1	.24	.71
9	4.3	8.5	12	67	25	36	71	13	5.1	1.0	.29	.80
10	4.3	8.6	11	49	66	42	64	15	4.9	.98	.29	1.2
11	4.0	8.1	11	42	38	65	57	15	4.3	1.0	.29	1.3
12	3.8	7.9	15	34	33	59	52	15	4.2	1.1	.29	1.3
13	4.1	7.9	13	30	34	52	49	14	3.8	.94	.29	1.3
14	4.5	10	11	27	43	50	47	12	3.5	.90	.29	1.4
15	4.5	10	11	27	50	49	43	11	3.2	.87	.29	1.4
16	4.5	8.9	14	26	57	43	40	11	3.2	.84	.29	1.5
17	4.7	8.6	12	26	65	42	38	11	2.9	.81	.35	1.5
18	5.1	8.4	55	27	67	47	38	11	2.6	.79	.35	1.5
19	5.5	8.3	463	34	69	50	37	10	2.6	.77	.29	1.4
20	5.5	8.3	119	40	73	50	33	10	2.4	.74	.35	1.3
21	5.7	8.6	55	43	60	49	33	9.6	2.2	1.0	.35	1.9
22	5.7	9.2	37	43	50	52	31	9.0	2.1	1.9	.38	2.2
23	5.7	9.5	28	38	47	52	29	8.6	2.0	1.8	.41	1.9
24	5.7	9.3	23	33	49	52	26	8.2	2.0	1.6	.41	1.8
25	5.7	12	20	31	49	59	25	7.8	1.8	1.3	.41	1.7
26	5.7	12	23	29	52	54	24	7.7	1.7	1.1	.41	1.8
27	5.7	10	368	27	57	58	23	7.2	1.6	.95	.41	2.5
28	6.0	9.6	172	26	57	123	22	7.0	1.5	.80	.41	2.3
29	6.7	9.5	87	27	---	87	21	7.0	1.5	.63	.41	2.3
30	6.9	9.6	64	26	---	67	20	6.8	1.4	.55	.41	2.3
31	6.9	---	49	23	---	67	---	7.0	---	.48	.41	---
TOTAL	159.6	261.7	1749.4	1090	1201	1694	1462	361.9	122.1	32.45	11.04	41.27
MEAN	5.15	8.72	56.4	35.2	42.9	54.6	48.7	11.7	4.07	1.05	.36	1.38
MAX	6.9	12	463	85	73	123	87	19	10	1.9	.46	2.5
MIN	3.8	7.2	9.3	23	18	36	20	6.8	1.4	.48	.24	.48
AC-FT	317	519	3470	2160	2380	3360	2900	718	242	64	22	82
CAL YR 1984	TOTAL	5781.2	MEAN	15.8	MAX	463	MIN	1.2	AC-FT	11470		
WTR YR 1985	TOTAL	8186.46	MEAN	22.4	MAX	463	MIN	.24	AC-FT	16240		

10260620 HOUSTON CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'33", long 117°16'48", in NE 1/4 SE 1/4 sec.22, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 0.1 mi east of Wildrose Road, 0.1 mi southeast of intersection of Lake Gregory Road and Wildrose Road, and 0.3 mi east of Crestline.

DRAINAGE AREA.--0.35 mi².

PERIOD OF RECORD.--March 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,540 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 18 to Nov. 6, Nov. 7-14, Apr. 7-10, Apr. 22 to May 6, May 11 to June 5. Records fair. No regulation above station.

AVERAGE DISCHARGE.--6 years, 0.87 ft³/s, 630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 295 ft³/s, Feb. 19, 1980, gage height, 7.40 ft, from rating curve extended above 68 ft³/s on basis of slope-conveyance study at gage height 7.40 ft; no flow many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1815	*40	*5.86				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.05	.50	.12	.10	.56	.12	.10	.02	.01	0
2	.01	.01	.05	.38	.13	.63	.48	.10	.25	.02	.01	0
3	.01	.01	.33	.30	.12	.27	.40	.10	.80	.02	.01	0
4	.01	0	.04	.25	.13	.09	.35	.10	.10	.02	.01	0
5	.02	0	.03	.24	.12	.07	.31	.10	.05	.02	.01	0
6	.02	0	.02	.18	.13	.09	.29	.10	.06	.02	.01	0
7	0	0	.03	1.7	.13	.10	.25	.24	.04	.03	.01	0
8	.01	.40	.83	2.2	.35	.10	.22	.11	.04	.03	.01	0
9	.01	.20	.09	.52	5.4	.10	.21	.11	.04	.03	.01	0
10	.01	.12	.39	.35	.53	.10	.19	.33	.03	.02	.01	0
11	.01	.10	.52	.30	.29	.10	.19	.28	.02	.02	.01	.28
12	.01	.08	.26	.28	.23	.09	.16	.20	.02	.02	.01	0
13	0	.30	.26	.25	.19	.09	.16	.14	.02	.02	.01	0
14	0	.03	.25	.22	.16	.09	.16	.13	.02	.02	0	0
15	0	.01	.27	.18	.14	.07	.16	.12	.02	.02	0	0
16	0	.01	.89	.16	.13	.07	.16	.11	.02	.02	0	0
17	.37	.01	.50	.16	.11	.07	.16	.10	.02	.02	0	0
18	.04	.01	13	.15	.10	.26	.17	.09	.02	.02	0	.10
19	.03	.01	9.6	.13	.09	.31	.16	.08	.02	.02	0	0
20	.02	.02	2.6	.13	.20	.10	.40	.08	.02	.02	0	0
21	.02	.54	.94	.13	.13	.10	.29	.08	.02	.02	0	0
22	.02	.08	.49	.14	.11	.08	.20	.06	.02	.02	0	0
23	.02	.01	.35	.15	.10	.07	.18	.06	.02	.02	0	0
24	.01	2.6	.29	.13	.10	.07	.16	.06	.02	.02	0	0
25	.01	.21	.27	.13	.10	.07	.14	.06	.02	.01	0	0
26	.01	.11	3.7	.17	.10	.07	.12	.06	.02	.01	0	0
27	.01	.09	11	.13	.10	3.7	.10	.08	.02	.01	0	0
28	.01	.12	3.0	.37	.10	6.2	.10	.08	.02	.01	0	0
29	.01	.06	1.4	.36	---	1.8	.10	.08	.02	.01	0	0
30	.01	.05	.90	.15	---	1.1	.14	.10	.02	.01	0	0
31	.01	---	.68	.13	---	.78	---	.10	---	.01	0	---
TOTAL	0.73	5.20	53.03	10.57	9.64	16.94	6.67	3.56	1.91	0.58	0.13	0.38
MEAN	.024	.17	1.71	.34	.34	.55	.22	.11	.064	.019	.004	.013
MAX	.37	2.6	13	2.2	5.4	6.2	.56	.33	.80	.03	.01	.28
MIN	0	0	.02	.13	.09	.07	.10	.06	.02	.01	0	0
AC-FT	1.4	10	105	21	19	34	13	7.1	3.8	1.2	.3	.8
CAL YR 1984	TOTAL	82.23	MEAN	.23	MAX	13	MIN	0	AC-FT	163		
WTR YR 1985	TOTAL	109.34	MEAN	.30	MAX	13	MIN	0	AC-FT	217		

MOJAVE RIVER BASIN

10260630 ABONDIGAS CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'16", long 117°15'51", in SW 1/4 SE 1/4 sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 400 ft south of east gate for San Moritz Park (revised), and 1.4 mi east of Crestline.

DRAINAGE AREA.--1.15 mi².

PERIOD OF RECORD.--March 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,555 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1983 at site 200 ft upstream at datum 5.78 ft higher.

REMARKS.--Estimated daily discharges: Nov. 27 to Dec. 5, Dec. 29 to Jan. 15. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--6 years, 1.63 ft³/s, 1,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft³/s, Feb. 27, 1983, gage height, 6.32 ft, site and datum then in use, from rating curve extended above 94 ft³/s on basis of field estimate of peak flow; maximum gage height, 7.28 ft, Jan. 29, 1980; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1845	*34	*6.97				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.05	.56	1.7	1.5	.55	.41	.69			
2		0	.04	.50	1.8	1.8	.50	.10	.77			
3		0	.08	.48	1.7	.52	.45	.12	.37			
4		0	.07	.46	1.7	.20	.39	.12	.11			
5		0	.06	.45	1.6	.23	.37	.14	.11			
6		0	.08	.45	1.5	.31	.35	.14	.11			
7		0	.09	1.5	1.7	.39	.33	.12	.10			
8		.98	.32	5.3	1.9	.38	.33	.09	.07			
9		0	.08	2.0	5.6	.36	.33	.09	.05			
10		0	.12	.72	1.4	.31	.36	.12	.05			
11		0	.59	.61	.78	.37	.37	.10	.05			
12		0	.09	.58	.60	.38	.32	.10	.04			
13		1.0	.11	.58	.57	.38	.26	.10	.04			
14		.13	.11	.58	.54	.38	.24	.11	.04			
15		.08	.15	.60	.46	.38	.25	.17	.04			
16		.13	.46	.69	.46	.39	.33	.30	.03			
17		.15	.20	.69	.52	.46	.62	.38	.03			
18		.15	7.9	.69	.69	.61	.72	.33	.02			
19		.13	5.7	.62	.86	.65	.73	.11	.02			
20		.10	.88	.73	.92	.51	.77	.11	.02			
21		.50	.14	1.3	.78	.46	.72	.11	.02			
22		.13	.04	1.6	.69	.46	.73	.08	.02			
23		.16	.03	1.6	.62	.41	.69	.05	.01			
24		2.1	.03	1.5	.47	.38	.63	.05	.03			
25		.20	.04	1.6	.58	.42	.58	.11	.03			
26		.07	1.3	1.6	.72	.48	.57	.20	.01			
27		.06	8.3	1.4	1.0	3.1	.47	.16	.01			
28		.06	2.3	1.7	1.3	4.0	.41	.26	.01			
29		.05	1.0	1.6	---	.96	.46	.35	0			
30		.05	.70	1.6	---	.53	.45	.52	0			
31		---	.60	1.7	---	.58	---	.63	---			
TOTAL	0	6.23	31.66	35.99	33.16	22.29	14.28	5.78	2.90	0	0	0
MEAN	0	.21	1.02	1.16	1.18	.72	.48	.19	.097	0	0	0
MAX	0	2.1	8.3	5.3	5.6	4.0	.77	.63	.77	0	0	0
MIN	0	0	.03	.45	.46	.20	.24	.05	0	0	0	0
AC-FT	0	12	63	71	66	44	28	11	5.8	0	0	0
CAL YR 1984	TOTAL	101.97	MEAN	.28	MAX	8.3	MIN	0	AC-FT	202		
WTR YR 1985	TOTAL	152.29	MEAN	.42	MAX	8.3	MIN	0	AC-FT	302		

10260640 LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'35", long 117°16'22", in NW 1/4 SW 1/4 sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, in boathouse on north side of Lake Gregory, 0.8 mi east of Lake Gregory Drive, and 0.9 mi east of Crestline.

DRAINAGE AREA.--2.66 mi².

PERIOD OF RECORD.--August 1978 to current year. Records for September 1966 through November 1971 in files of California Department of Water Resources.

GAGE.--Water-stage recorder. Datum of gage is 4,510.00 ft, based on map from land survey of 1892 (see Remarks paragraph); approximately 4,517.0 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated monthend elevations: Nov. 30, Apr. 30. Lake is formed by earth-type dam. Dam was completed to a height of 90 ft in 1938. Capacity table developed from land survey dated 1892 (provided by California Department of Water Resources). Capacity is 2,070 acre-ft below spillway elevation, 4,517.0 ft. Water is released from lake to Houston Creek for eventual water supply and recreational use in Silverwood Lake, 4.5 mi downstream. Spillway elevation is raised by addition of flashboards to accommodate summer recreational use.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents recorded, 2,360 acre-ft, Jan. 29, 1980, elevation, 4,520.33 ft; minimum, 1,920 acre-ft, Nov. 7, 1984, elevation, 4,515.22 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents recorded, 2,160 acre-ft, Apr. 2, elevation, 4,518.02 ft; minimum, 1,920 acre-ft, Nov. 7, elevation, 4,515.22 ft.

MONTHEND ELEVATION, 1892 DATUM, AND CONTENTS, AT 0800 HRS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	4,515.67	1,960	--
Oct. 31.....	4,515.29	1,930	-30
Nov. 30.....	4,516.23	2,010	+80
Dec. 31.....	4,517.35	2,100	+90
CAL YR 1984.....	--	--	0
Jan. 31.....	4,517.27	2,100	0
Feb. 28.....	4,515.81	1,970	-130
Mar. 31.....	4,517.55	2,120	+150
Apr. 30.....	4,517.94	2,150	+30
May 31.....	4,517.82	2,140	-10
June 30.....	4,517.49	2,110	-30
July 31.....	4,516.96	2,070	-40
Aug. 31.....	4,516.23	2,010	-60
Sept. 30.....	4,515.91	1,980	-30
WTR YR 1985.....	--	--	+20

MOJAVE RIVER BASIN

10260650 HOUSTON CREEK BELOW LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'54", long 117°16'05", in NE 1/4 NW 1/4 sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank of channel on Camp Switzerland campgrounds, 0.2 mi downstream from Lake Gregory spillway, 0.5 mi east of the intersection of Lake Gregory Road and Lake Gregory Drive, and 1.2 mi northeast of Crestline.

DRAINAGE AREA.--2.68 mi².

PERIOD OF RECORD.--March 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Feb. 9-11, Aug. 17-21, Sept. 10-30. Records fair. Flow regulated by Lake Gregory (10260640) 0.2 mi upstream, usable capacity, 2,070 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 570 ft³/s, Jan. 29, 1980, gage height, 7.31 ft, from rating curve extended above 180 ft³/s on basis of velocity-area study of peak flow; no flow for several days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 155 ft³/s, Dec. 19, gage height, 6.19 ft; minimum daily, 0.01 ft³/s many days during November and December.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.10	.01	3.7	1.6	.07	.21	.35	.08	.09	.08	.02
2	.09	.10	.01	2.8	1.9	.08	.13	.32	.08	.09	.07	.03
3	.08	.13	.04	2.2	1.7	.07	.12	.33	.08	.09	.07	.03
4	.06	.09	.01	1.9	1.2	.06	.10	.20	.08	.08	.07	.04
5	.06	.09	.01	1.7	1.1	.07	.10	.30	.07	.08	.06	.04
6	.06	.10	.01	1.6	1.0	.07	.10	.30	.07	.08	.06	.04
7	.05	.11	.01	2.7	.97	.07	.10	.23	.07	.08	.06	.03
8	.04	1.0	.12	11	1.3	.07	.09	.19	.07	.07	.06	.04
9	.04	.03	.01	6.8	16	.06	.09	.24	.06	.07	.06	.04
10	.04	.01	.01	4.3	9.0	.06	.09	.34	.07	.07	.06	.04
11	.05	.01	.05	3.2	5.0	.07	.09	.21	.06	.06	.06	.04
12	.05	.01	.01	2.5	8.3	.07	.09	.14	.06	.06	.06	.04
13	.05	.51	.01	2.0	7.0	.06	.09	.12	.06	.06	.06	.04
14	.05	.07	.01	1.6	5.9	.06	.14	.23	.06	.06	.05	.04
15	.05	.05	.01	1.5	5.7	.06	.31	.34	.06	.07	.06	.04
16	.06	.05	.05	1.3	5.7	.06	.22	.19	.06	.06	.06	.04
17	.17	.04	.01	1.2	5.9	.06	.15	.10	.06	.06	.06	.04
18	.10	.04	26	1.2	5.9	.07	.18	.10	.06	.06	.04	.04
19	.10	.03	85	1.1	5.8	.06	.21	.09	.06	.06	.04	.04
20	.09	.03	26	1.2	5.8	.07	.51	.09	.06	.06	.03	.04
21	.09	.38	10	1.1	5.9	.07	.63	.07	.06	.06	.02	.04
22	.09	.19	5.7	1.0	5.7	.07	.55	.08	.06	.06	.02	.04
23	.09	.15	3.7	1.0	5.9	.07	.55	.08	.07	.06	.02	.04
24	.09	.58	2.7	1.0	6.1	.07	.50	.10	.07	.05	.02	.04
25	.09	.26	2.2	.93	5.8	.07	.48	.10	.07	.05	.02	.04
26	.09	.12	5.1	1.0	5.7	.07	.41	.10	.10	.06	.02	.04
27	.09	.01	50	1.1	5.7	.21	.26	.09	.18	.07	.02	.04
28	.09	.01	24	1.7	2.1	3.7	.26	.08	.14	.09	.02	.04
29	.09	.01	11	2.7	---	3.4	.30	.07	.10	.10	.02	.04
30	.09	.01	7.3	2.1	---	.22	.25	.07	.09	.08	.02	.04
31	.10	---	5.2	1.5	---	.22	---	.08	---	.08	.02	---
TOTAL	2.36	4.32	264.29	70.63	139.67	9.49	7.31	5.33	2.27	2.17	1.39	1.15
MEAN	.076	.14	8.53	2.28	4.99	.31	.24	.17	.076	.070	.045	.038
MAX	.17	1.0	85	11	16	3.7	.63	.35	.18	.10	.08	.04
MIN	.04	.01	.01	.93	.97	.06	.09	.07	.06	.05	.02	.02
AC-FT	4.7	8.6	524	140	277	19	14	11	4.5	4.3	2.8	2.3
CAL YR 1984	TOTAL	386.69	MEAN	1.06	MAX 85	MIN 0	AC-FT 767					
WTR YR 1985	TOTAL	510.38	MEAN	1.40	MAX 85	MIN 0.01	AC-FT 1010					

10261000 WEST FORK MOJAVE RIVER NEAR HESPERIA, CA

LOCATION.--Lat 34°20'20", long 117°15'25", in NW 1/4 NW 1/4 sec.24, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank on upstream wingwall of concrete double box culvert on Arrowhead Lake Road, 0.1 mi northeast of junction with Highway 174, 4.5 mi downstream from Cedar Springs Dam, and 6.5 mi southeast of Hesperia.

DRAINAGE AREA.--70.3 mi².

PERIOD OF RECORD.--October 1904 to September 1922, October 1929 to September 1971, October 1974 to current year.

REVISED RECORDS.--WDR CA-84-1: 1983.

GAGE.--Water-stage recorder. Elevation of gage is 3,040 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 30, 1922, nonrecording gage or water-stage recorder 1.6 mi downstream at different datum. June 30, 1922 to September 1971, water-stage recorder 1.5 mi downstream at different datum. June 30, 1942, to Apr. 14, 1966, at datum 2.00 ft higher than datum then in use.

REMARKS.--Estimated daily discharges: Jan. 20 to Feb. 13. Records fair except for estimated daily discharges, which are poor. Since 1972 regulated by Cedar Springs Dam (holding basin for imported water), total capacity, 78,000 acre-ft, 4.5 mi upstream.

AVERAGE DISCHARGE.--60 years (water years 1905-22, 1930-71), 39.4 ft³/s, 28,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,100 ft³/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 954 ft³/s, Dec. 19, gage height, 3.35 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	18	2.9	16	15	15	12			
2			0	15	2.8	18	16	12	12			
3			0	12	2.7	18	16	14	14			
4			0	11	2.6	39	16	13	12			
5			0	10	5.5	109	15	13	9.4			
6			0	9.4	2.5	113	14	12	10			
7			0	8.0	2.5	111	13	13	7.4			
8			0	12	2.4	116	12	14	.40			
9			0	8.7	2.4	118	11	17	0			
10			0	7.7	2.4	118	14	17	0			
11			0	6.2	2.3	120	16	17	0			
12			0	5.1	2.3	118	18	17	0			
13			0	4.7	2.3	120	17	16	0			
14			0	4.2	1.7	120	16	15	0			
15			0	4.2	1.7	105	13	15	0			
16			.66	4.2	3.8	23	18	14	0			
17			0	4.2	5.7	18	25	14	0			
18			73	4.2	7.2	20	24	14	0			
19			329	4.2	6.8	18	16	15	0			
20			183	4.0	9.4	17	8.7	15	0			
21			105	3.8	11	16	9.4	15	0			
22			14	3.7	14	16	9.4	15	0			
23			7.4	3.6	13	16	9.4	14	0			
24			6.2	3.6	14	16	10	14	0			
25			4.2	3.5	16	16	10	14	0			
26			11	3.5	14	17	10	15	0			
27			293	3.4	15	20	10	15	0			
28			99	3.4	16	27	9.4	13	0			
29			47	3.3	---	19	12	12	0			
30			33	3.2	---	17	15	12	0			
31			23	3.0	---	15	---	12	---			
TOTAL	0	0	1228.46	195.0	184.9	1650	418.3	443	77.20	0	0	0
MEAN	0	0	39.6	6.29	6.60	53.2	13.9	14.3	2.57	0	0	0
MAX	0	0	329	18	16	120	25	17	14	0	0	0
MIN	0	0	0	3.0	1.7	15	8.7	12	0	0	0	0
AC-FT	0	0	2440	387	367	3270	830	879	153	0	0	0
CAL YR 1984	TOTAL	1944.16	MEAN	5.31	MAX	329	MIN	0	AC-FT	3860		
WTR YR 1985	TOTAL	4196.86	MEAN	11.5	MAX	329	MIN	0	AC-FT	8320		

MOJAVE RIVER BASIN

10261100 MOJAVE RIVER BELOW FORKS RESERVOIR, NEAR HESPERIA, CA

LOCATION (REVISED).--Lat 34°21'17", long 117°14'40", in NE 1/4 NE 1/4 sec.13, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank, 0.8 mi downstream of Mojave Forks Reservoir, 6.2 mi downstream from Silverwood Lake on West Fork Mojave River, 6.5 mi southeast of Hesperia, and 12.2 mi downstream of Lake Arrowhead on Deep Creek (East Fork Mojave River).

DRAINAGE AREA.--211 mi².

PERIOD OF RECORD.--October 1971 to September 1974, October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. October 1971 to September 1974 water-stage recorder at site 0.8 mi upstream on reservoir outlet channel at different datum.

REMARKS.--Estimated daily discharges: Oct. 31 to Nov. 5, and Nov. 18-27. Records poor. Flow partially regulated by Lake Arrowhead, capacity, 48,000 acre-ft used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft used for flood control with ungated opening, release capacity, 23,500 ft³/s. Silverwood Reservoir releases all natural inflow to the west fork of the Mojave River as soon as possible after a storm. Sewage effluent from Lake Arrowhead area is released above gage at times.

AVERAGE DISCHARGE.--8 years (water years 1972-74, 1981-85), 86.8 ft³/s, 62,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,700 ft³/s, Mar. 2, 1983, on basis of flood routing; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s, Dec. 19, gage height, 3.34 ft; no flow Oct. 1-30, June 13 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.25	.79	48	24	72	101	27	9.5			
2	0	.28	.62	42	24	78	107	27	9.5			
3	0	.30	.88	39	24	76	107	26	10			
4	0	.34	.88	38	24	77	107	26	11			
5	0	.32	.88	32	24	170	110	25	12			
6	0	.27	.88	30	23	186	104	23	10			
7	0	.39	.88	35	23	164	93	22	8.7			
8	0	.34	.79	81	23	156	87	22	6.8			
9	0	.34	1.1	70	24	147	82	22	4.0			
10	0	.44	1.3	53	53	147	72	22	2.4			
11	0	.44	1.3	42	36	188	68	22	1.3			
12	0	.39	3.6	38	35	176	63	23	.02			
13	0	.34	2.1	29	36	169	61	22	0			
14	0	.34	1.3	28	52	165	57	21	0			
15	0	.55	.79	28	55	143	57	20	0			
16	0	.55	2.9	28	66	87	55	20	0			
17	0	.55	1.5	28	77	80	57	19	0			
18	0	.52	69	29	86	80	57	18	0			
19	0	.45	894	34	93	80	53	19	0			
20	0	.43	330	38	99	75	45	18	0			
21	0	.45	127	42	86	75	41	17	0			
22	0	.50	36	44	79	72	40	16	0			
23	0	.52	29	42	68	70	35	16	0			
24	0	.49	26	41	60	70	33	15	0			
25	0	1.0	24	36	62	70	32	14	0			
26	0	1.5	32	34	64	68	32	13	0			
27	0	1.1	684	31	70	61	30	12	0			
28	0	.70	213	29	74	123	30	11	0			
29	0	.49	101	29	---	101	29	11	0			
30	0	.79	74	28	---	90	29	10	0			
31	.13	---	58	26	---	87	---	9.5	---			
TOTAL	0.13	15.37	2719.49	1172	1464	3403	1874	588.5	85.22	0	0	0
MEAN	.004	.51	87.7	37.8	52.3	110	62.5	19.0	2.84	0	0	0
MAX	.13	1.5	894	81	99	188	110	27	12	0	0	0
MIN	0	.25	.62	26	23	61	29	9.5	0	0	0	0
AC-FT	.3	30	5390	2320	2900	6750	3720	1170	169	0	0	0
CAL YR 1984	TOTAL	6302.85	MEAN	17.2	MAX	894	MIN	0	AC-FT	12500		
WTR YR 1985	TOTAL	11321.71	MEAN	31.0	MAX	894	MIN	0	AC-FT	22460		

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA

LOCATION.--Lat 34°34'23", long 117°19'11", in SW 1/4 SE 1/4 sec.29, T.6 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 650 ft upstream from bridge on county road, formerly U.S. Highway 66, 0.6 mi downstream from Atchison, Topeka, and Santa Fe Railway bridge, 3 mi northwest of Victorville, 17.8 mi downstream from Mojave Forks Reservoir, 24 mi downstream from Silverwood Lake on the West Fork Mojave River, and 30 mi downstream of Lake Arrowhead on Deep Creek (East Fork Mojave River).

DRAINAGE AREA.--513 mi².

PERIOD OF RECORD.--February 1899 to September 1906, October 1930 to current year. Monthly discharge only for January to September 1906, October, November 1930, published in WSP 1314. Prior to October 1936, published as "at Victorville" and as "near Victorville" in 1937.

GAGE.--Water-stage recorder. Datum of gage is 2,643.01 ft above National Geodetic Vertical Datum of 1929. See WSP 1314 for history of gage changes prior to Mar. 28, 1938. Mar. 28, 1938, to Apr. 14, 1966, at site 350 ft upstream at datum 5.00 ft higher; Apr. 15, 1966, to July 17, 1969, at site 350 ft upstream at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 16-27, Feb. 5-12, Aug. 4-22. Records fair. Regulation by Lake Arrowhead, capacity, 48,000 acre-ft used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft with ungated opening, capacity, 23,500 ft³/s. Diversions and pumping for irrigation of about 5,000 acres and Mojave State Fish Hatchery above station. During the year no imported water was released from Silverwood Lake into the West Fork Mojave River, only natural inflow.

AVERAGE DISCHARGE.--62 years (water years 1900-06, 1931-85), 79.8 ft³/s, 57,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,600 ft³/s, Mar. 2, 1938, gage height, 23.7 ft, present datum, from rating curve extended above 10,000 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 3.4 ft³/s, July 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 445 ft³/s, Dec. 19, gage height, 4.25 ft; minimum daily, 8.6 ft³/s, several days in July.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	29	33	43	46	43	43	22	17	18	11	9.6
2	18	31	31	43	48	43	37	20	17	18	11	11
3	17	29	33	41	46	43	37	23	20	16	11	9.6
4	17	29	35	41	41	43	35	23	18	14	12	14
5	17	27	37	43	43	43	35	22	18	13	12	14
6	17	27	37	43	43	41	35	23	20	13	12	14
7	17	29	35	46	44	41	35	23	17	13	12	14
8	17	27	39	46	44	43	35	23	16	13	12	14
9	17	27	39	46	45	41	33	22	17	13	12	14
10	17	31	41	46	45	41	31	22	18	13	12	17
11	18	33	41	46	45	43	29	22	18	13	12	17
12	20	31	39	48	45	43	31	22	18	13	12	17
13	18	33	39	48	48	43	31	22	18	9.6	13	17
14	17	33	37	46	48	41	29	22	18	8.6	13	16
15	18	31	35	46	51	41	27	22	20	12	13	17
16	18	32	59	43	48	41	27	22	18	11	13	18
17	18	32	41	46	51	43	27	20	17	8.6	13	16
18	18	32	94	48	51	46	27	22	18	8.6	13	18
19	18	32	175	48	46	43	25	23	17	12	13	27
20	22	32	94	48	43	43	25	23	14	12	13	25
21	23	33	62	48	43	41	27	23	14	9.6	13	23
22	25	34	59	48	46	43	27	22	14	8.6	13	23
23	25	33	59	48	43	43	29	20	17	8.6	14	23
24	25	33	54	48	46	43	33	18	18	9.6	14	20
25	23	34	51	48	46	43	33	17	20	8.6	13	23
26	25	33	54	46	46	43	33	14	22	9.6	11	23
27	27	34	94	48	43	43	27	16	22	12	12	22
28	27	31	54	48	43	43	25	16	22	14	12	23
29	27	27	51	43	---	46	22	17	20	11	12	18
30	29	27	51	43	---	46	20	18	20	11	13	17
31	27	---	51	46	---	43	---	18	---	11	11	---
TOTAL	639	926	1654	1419	1277	1326	910	642	543	366.0	383	534.2
MEAN	20.6	30.9	53.4	45.8	45.6	42.8	30.3	20.7	18.1	11.8	12.4	17.8
MAX	29	34	175	48	51	46	43	23	22	18	14	27
MIN	17	27	31	41	41	41	20	14	14	8.6	11	9.6
AC-FT	1270	1840	3280	2810	2530	2630	1800	1270	1080	726	760	1060
CAL YR 1984	TOTAL	12250.0	MEAN	33.5	MAX	175	MIN	15	AC-FT	24300		
WTR YR 1985	TOTAL	10619.2	MEAN	29.1	MAX	175	MIN	8.6	AC-FT	21060		

MOJAVE RIVER BASIN

10262000 MOJAVE RIVER NEAR HODGE, CA

LOCATION.--Lat 34°50'09", long 117°11'27", in SE 1/4 SE 1/4 sec.28, T.9 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, at county bridge 1.5 mi north of Hodge, 10.9 mi southwest of Barstow, and 42 mi downstream from Mojave Forks Reservoir, 48 mi downstream from Silverwood Lake on West Fork Mojave River, and 54 mi downstream of Lake Arrowhead on Deep Creek (East Fork Mojave River).

DRAINAGE AREA.--1,091 mi².

PERIOD OF RECORD.--October 1930 to September 1932, October 1970 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,260 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1970, at different datum.

REMARKS.--Estimated daily discharges: Oct. 29 to Nov. 27. No flow since Mar. 29, 1984. Regulation by Lake Arrowhead, capacity 48,000 acre-ft used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity 89,700 acre-ft, with ungated opening, capacity, 23,500 ft³/s. Diversion and pumping for irrigation of about 12,000 acres above station.

AVERAGE DISCHARGE.--17 years (water years 1931-32, 1971-85), 47.0 ft³/s, 34,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s, Feb. 10, 1978, gage height, 8.80 ft, on basis of slope-area measurement of peak flow; no flow all or most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

10262500 MOJAVE RIVER AT BARSTOW, CA

LOCATION.--Lat 34°54'25", long 117°01'19", in SW 1/4 SW 1/4 sec.31, T.10 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 75 ft upstream from bridge on U.S. Highway 91 at Barstow, 54 mi downstream of Mojave Forks Reservoir, 60 mi downstream of Silverwood Lake on West Fork Mojave River, and 66 mi downstream of Lake Arrowhead on Deep Creek (East Fork Mojave River).

DRAINAGE AREA.--1,291 mi².

PERIOD OF RECORD.--October 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,089.34 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. No flow since Sept. 12, 1984. Regulation by Lake Arrowhead, capacity, 48,000 acre-ft used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft with ungated opening, capacity, 23,500 ft³/s. Diversions and pumping for irrigation of about 15,000 acres above station.

AVERAGE DISCHARGE.--55 years, 25.7 ft³/s, 18,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,300 ft³/s, Mar. 3, 1938, gage height, 8.60 ft, on basis of slope-area measurement of peak flow; no flow for all or most of each year.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

MOJAVE RIVER BASIN

10263000 MOJAVE RIVER AT AFTON, CA

LOCATION.--Lat 35°02'14", long 116°23'00", in NW 1/4 SE 1/4 sec.18, T.11 N., R.6 E., San Bernardino County, Hydrologic Unit 18090208, on downstream end of right pier of Union Pacific Railroad bridge, 0.3 mi west of Afton, and 63 mi east of Barstow.

DRAINAGE AREA.--2,121 mi².

PERIOD OF RECORD.--October 1929 to September 1932, October 1952 to current year. Records for the water year 1930 incomplete, yearly estimate published in WSP 1314. Records for the water years 1979 and 1980 incomplete, discharge measurements only were published at that time.

GAGE.--Water-stage recorder. Datum of gage is 1,398.15 ft above National Geodetic Vertical Datum of 1929. Dec. 21, 1929, to Sept. 30, 1932, at site 1.7 mi downstream at different datum; October 1952 to May 1978 at datum 2 ft higher.

REMARKS.--No estimated daily discharges. Records poor. Natural flow affected by ground-water withdrawals, diversions, municipal use, and storage in upstream reservoirs 100 mi upstream. For description of upstream reservoirs see Mojave River at Barstow (station 10262500).

AVERAGE DISCHARGE.--34 years (water years 1930-32, 1953-78, 1981-85), 6.88 ft³/s, 4,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s, Jan. 26, 1969, gage height, 10.40 ft, from rating curve extended above 3,200 ft³/s on basis of slope-area measurement of peak flow; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 30	1730	*42	*1.12				

Minimum daily, 0.18 ft³/s, June 16-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.89	.98	1.4	1.4	1.4	1.1	.80	.28	.20	.24	.40
2	.64	.98	.98	1.4	1.4	1.4	.98	.80	.24	.20	.24	.34
3	.64	.98	1.1	1.4	1.4	1.2	1.1	.80	.28	.24	.28	.47
4	.72	1.1	.98	1.4	1.4	1.2	1.1	.80	.34	.20	.34	.64
5	.64	1.1	.89	1.4	1.4	1.2	.98	.89	.28	.19	.34	.80
6	.64	1.2	.89	1.4	1.4	1.2	1.1	.89	.24	.20	.34	.80
7	.64	1.2	.89	1.4	1.4	1.2	1.2	.80	.24	.20	.34	.80
8	.64	1.2	1.9	1.7	1.4	1.4	1.1	.80	.20	.20	.34	.80
9	.64	1.2	1.7	1.4	1.4	1.4	1.1	.80	.24	.20	.34	.80
10	.72	1.2	1.7	1.4	1.4	1.2	1.2	.72	.24	.24	.28	.85
11	.72	1.2	1.4	1.4	1.4	1.2	1.2	.72	.24	.24	.20	.80
12	.72	1.2	1.2	1.4	1.6	1.2	1.2	.72	.28	.20	.20	.80
13	.72	1.3	1.2	1.4	1.7	1.2	1.1	.72	.28	.20	.24	.72
14	.64	1.2	1.1	1.2	1.7	1.2	.98	.72	.34	.24	.24	.72
15	.64	1.2	1.2	1.2	1.7	1.2	.89	.64	.20	.28	.24	.72
16	.64	1.2	1.4	1.2	1.7	1.4	.98	.64	.18	.34	.24	.72
17	.72	1.2	1.1	1.2	1.4	1.4	.98	.64	.18	.34	.24	.80
18	.72	1.2	1.2	1.4	1.4	1.4	.98	.64	.18	.40	.24	5.2
19	.72	1.2	3.3	1.4	1.4	1.4	.89	.64	.18	.88	.28	2.0
20	.72	1.1	3.0	1.4	1.7	1.2	.80	.55	.18	.40	.28	1.1
21	.64	1.3	2.7	1.4	1.4	1.2	.80	.55	.18	.28	.34	.98
22	.64	2.5	3.0	1.4	1.4	1.2	.89	.55	.18	.26	.40	.89
23	.64	1.7	3.0	1.7	1.4	1.1	.89	.47	.18	.24	.34	.89
24	.72	1.7	2.5	1.7	1.4	.98	.89	.55	.18	.24	.34	.80
25	.80	1.7	1.7	1.7	1.4	.98	.89	.47	.18	.24	.34	.80
26	.80	1.4	1.4	1.7	1.4	1.1	.89	.47	.28	.24	.34	.89
27	.80	1.4	2.6	1.4	1.4	1.2	.89	.40	.24	.24	.40	.89
28	.89	1.4	2.7	1.4	1.7	1.2	.80	.34	.20	.20	.40	.89
29	.89	1.1	3.0	1.7	---	1.1	.80	.34	.19	.20	.40	.89
30	.89	.98	2.5	1.7	---	1.1	.80	.37	.19	.20	.47	3.1
31	.89	---	1.7	1.4	---	.98	---	.34	---	.24	.40	---
TOTAL	22.20	38.23	54.91	44.7	41.2	37.74	29.50	19.58	6.82	8.17	9.65	31.30
MEAN	.72	1.27	1.77	1.44	1.47	1.22	.98	.63	.23	.26	.31	1.04
MAX	.89	2.5	3.3	1.7	1.7	1.4	1.2	.89	.34	.88	.47	5.2
MIN	.64	.89	.89	1.2	1.4	.98	.80	.34	.18	.19	.20	.34
AC-FT	44	76	109	89	82	75	59	39	14	16	19	62

CAL YR 1984 TOTAL 914.56 MEAN 2.50 MAX 42 MIN .13 AC-FT 1810
WTR YR 1985 TOTAL 344.00 MEAN .94 MAX 5.2 MIN .18 AC-FT 682

10263500 BIG ROCK CREEK NEAR VALYERMO, CA

LOCATION.--Lat 34°25'15", long 117°50'19", in SE 1/4 NE 1/4 sec.20, T.4 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank 0.1 mi upstream from Punchbowl Canyon, and 1.9 mi southeast of Valyermo.

DRAINAGE AREA.--22.9 mi².

PERIOD OF RECORD.--January 1923 to current year. Monthly discharge only for October 1937 to January 1939, published in WSP 1314. Prior to October 1954, published as Rock Creek near Valyermo.

GAGE.--Water-stage recorder. Elevation of gage is 4,050 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 4, 1938, at same site at different datums. May 4, 1938, to Jan. 26, 1939, at site 0.2 mi downstream (below Punchbowl Canyon) at different datum.

REMARKS.--Estimated daily discharges: Aug. 14 to Sept. 30. Records fair except for period May 25 to Sept. 30, which is poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--62 years (water years 1924-85), 17.8 ft³/s, 12,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,300 ft³/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow; minimum daily, 0.70 ft³/s, Nov. 5, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 7	0915	*28	*2.19				

Minimum daily, 2.6 ft³/s, Nov. 18-20, 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	2.9	2.8	8.2	8.6	13	11	10	7.2	6.0	5.7	3.9
2	3.3	2.9	3.0	8.1	8.5	13	13	11	7.0	6.1	5.6	3.8
3	3.2	2.8	3.3	7.9	8.3	12	15	12	7.2	6.0	5.8	3.7
4	3.2	2.8	3.4	7.8	8.2	12	17	11	7.1	6.0	5.4	3.9
5	3.2	2.7	3.5	7.8	8.0	11	19	11	6.5	6.1	4.9	4.1
6	3.0	2.7	3.5	7.8	7.8	11	22	10	6.1	6.0	4.8	3.8
7	2.9	2.7	3.5	8.9	7.8	10	23	10	5.7	6.0	4.7	3.6
8	2.9	2.8	4.3	11	7.5	10	25	9.9	5.7	6.2	4.7	3.5
9	2.9	2.8	4.0	11	8.7	9.7	24	12	5.6	6.4	4.8	3.5
10	2.9	2.9	4.5	11	8.8	9.9	21	12	5.4	6.4	4.8	3.3
11	2.9	2.7	4.9	10	8.6	10	18	11	5.2	6.2	4.8	5.0
12	2.9	2.7	4.3	9.9	8.3	10	18	9.9	5.1	6.2	4.8	3.8
13	2.9	2.9	4.6	9.5	8.4	10	18	9.4	5.2	6.3	4.8	3.4
14	3.0	2.7	4.6	9.1	8.5	10	19	9.0	5.1	6.4	4.8	3.2
15	3.0	2.7	4.8	8.9	8.8	9.8	19	8.9	4.9	6.6	4.7	3.2
16	3.1	2.7	6.8	8.7	9.5	9.9	17	8.8	5.4	6.4	4.6	3.1
17	3.3	2.7	4.7	8.6	11	9.8	16	8.5	6.2	6.5	4.6	3.1
18	3.3	2.6	4.8	8.8	13	10	15	8.2	6.1	6.7	4.5	3.3
19	3.3	2.6	5.0	9.2	14	10	14	8.0	5.9	7.2	4.5	3.6
20	3.3	2.6	4.8	10	15	9.9	14	7.6	5.9	7.1	4.5	3.3
21	3.2	3.0	4.9	11	15	10	13	7.3	5.9	6.9	4.4	3.2
22	3.1	2.8	4.9	11	14	10	12	7.1	5.7	5.8	4.4	3.2
23	3.1	2.8	4.8	11	13	10	12	7.0	5.7	5.7	4.4	3.2
24	3.0	3.1	4.9	11	12	10	12	7.0	5.8	5.6	4.4	3.2
25	2.9	3.1	4.9	10	12	11	12	7.0	5.8	5.6	4.4	3.2
26	2.9	2.7	6.1	10	12	11	12	7.5	5.7	5.5	4.3	3.1
27	2.9	2.6	11	10	12	12	11	6.8	5.7	5.4	4.3	3.1
28	2.9	2.6	11	10	13	13	10	7.1	5.6	5.5	4.3	3.1
29	2.9	2.8	9.4	9.6	---	13	9.8	7.0	5.8	5.5	4.2	3.1
30	2.9	2.8	8.7	9.3	---	12	10	7.5	5.7	5.5	4.1	3.1
31	3.0	---	8.5	9.0	---	11	---	7.2	---	5.6	4.0	---
TOTAL	94.5	83.2	164.2	294.1	290.3	334.0	471.8	276.7	175.9	189.4	145.0	103.6
MEAN	3.05	2.77	5.30	9.49	10.4	10.8	15.7	8.93	5.86	6.11	4.68	3.45
MAX	3.3	3.1	11	11	15	13	25	12	7.2	7.2	5.8	5.0
MIN	2.9	2.6	2.8	7.8	7.5	9.7	9.8	6.8	4.9	5.4	4.0	3.1
AC-FT	187	165	326	583	576	662	936	549	349	376	288	205
CAL YR 1984	TOTAL	2405.8	MEAN	6.59	MAX	19	MIN	2.6	AC-FT	4770		
WTR YR 1985	TOTAL	2622.7	MEAN	7.19	MAX	25	MIN	2.6	AC-FT	5200		

10264600 OAK CREEK NEAR MOJAVE, CA

LOCATION.--Lat 35°03'00", long 118°21'25", in NW 1/4 sec.15, T.11 N., R.14 W., Kern County, Hydrologic Unit 18090206, on upstream right wingwall of culvert, 100 ft downstream from unnamed tributary, 0.1 mi west of junction of Oak Creek and Willow Springs Roads, and 10.5 mi west of Mojave.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 14, Mar. 18-27, May 6, 7, 9-16, May 25 to June 2, and June 22 to July 1. Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--28 years, 1.30 ft³/s, 942 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s, May 14, 1973, by slope-area measurement, peak caused by failure of small earthen dam 4 mi upstream during intense local thunderstorm; maximum gage height, 10.53 ft, May 14, 1973, ponding at culvert 0.1 mi downstream; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	1515	11	2.49	July 25	2030	*24	*3.00

Minimum daily, 0.03 ft³/s for many days in August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.61	.68	1.2	1.1	1.3	1.3	1.2	.75	.60	.35	.06	.03
2	.67	.68	.89	1.3	1.2	1.6	1.2	.86	.74	.40	.05	.03
3	.60	.72	1.1	1.2	1.1	1.5	1.2	.87	2.2	.27	.05	.03
4	.55	.68	.99	1.3	1.1	1.6	1.2	.80	1.5	.39	.05	.03
5	.50	.68	.81	1.3	1.1	1.4	1.2	.73	.98	.38	.05	.03
6	.74	.68	.79	.98	1.3	1.4	1.4	.73	.84	.26	.05	.03
7	.75	.66	.84	1.6	1.4	1.4	1.2	.74	.79	.26	.05	.03
8	.62	1.0	1.0	1.6	1.5	1.4	.91	.74	.68	.34	.04	.03
9	.66	.80	.81	1.3	2.0	1.5	.87	.74	.66	.22	.04	.03
10	.75	.70	.71	1.5	1.1	1.4	1.0	.80	.57	.24	.04	.03
11	.99	.68	.73	1.3	1.2	1.4	.81	.76	.50	.13	.04	.03
12	1.1	.68	.74	1.1	1.6	1.4	.98	.76	.41	.12	.04	.03
13	.88	.66	.71	1.0	1.5	1.5	.83	.74	.24	.13	.04	.03
14	.83	.66	.76	1.1	1.3	1.5	.83	.73	.21	.14	.04	.03
15	.77	.68	.80	1.3	1.3	1.4	1.0	.72	.24	.16	.04	.03
16	.60	.71	.79	1.2	1.3	1.3	.96	.73	.26	.18	.04	.03
17	.57	.62	.80	1.2	1.6	1.3	.99	.73	.29	.11	.04	.03
18	.74	.57	.80	1.5	1.4	1.4	.99	.58	.25	.17	.05	.04
19	.84	.63	.81	1.4	1.4	1.3	.79	.53	.23	.35	.05	.03
20	.57	.63	.93	1.5	1.4	1.3	.75	.50	.28	.42	.05	.03
21	.77	.77	1.2	1.4	1.6	1.3	.82	.37	.25	.26	.05	.03
22	.83	.82	.89	1.3	1.5	1.3	.89	.34	.30	.21	.05	.03
23	.87	.73	.91	1.3	1.3	1.2	.82	.37	.32	.19	.05	.03
24	.82	2.0	.98	1.3	1.3	1.3	.83	.30	.32	.19	.05	.04
25	.67	1.6	1.0	1.2	1.3	1.2	.91	.30	.33	1.6	.04	.04
26	.80	1.8	1.0	1.2	1.3	1.2	.90	.30	.34	4.2	.04	.04
27	.74	1.7	1.1	1.3	1.3	1.6	.92	.30	.33	.07	.04	.04
28	.73	1.2	1.7	1.4	1.3	1.4	.85	.31	.33	.06	.03	.04
29	.72	.74	1.1	1.1	---	1.2	.75	.32	.33	.06	.03	.04
30	.71	1.2	1.1	1.3	---	1.2	.75	.36	.34	.06	.03	.04
31	.70	---	1.1	1.3	---	1.2	---	.48	---	.07	.03	---
TOTAL	22.70	26.36	29.09	39.88	38.0	42.4	28.75	18.29	15.66	11.99	1.35	0.98
MEAN	.73	.88	.94	1.29	1.36	1.37	.96	.59	.52	.39	.044	.033
MAX	1.1	2.0	1.7	1.6	2.0	1.6	1.4	.87	2.2	4.2	.06	.04
MIN	.50	.57	.71	.98	1.1	1.2	.75	.30	.21	.06	.03	.03
AC-FT	45	52	58	79	75	84	57	36	31	24	2.7	1.9

CAL YR 1984	TOTAL	682.05	MEAN	1.87	MAX	8.3	MIN	.50	AC-FT	1350
WTP YR 1985	TOTAL	275.45	MEAN	.75	MAX	4.2	MIN	.03	AC-FT	546

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA

LOCATION.--Lat 37°03'15", long 118°13'33", in SW 1/4 NE 1/4 sec.26, T.10 S., R.34 E., Inyo County, Hydrologic Unit 18090102, about 100 ft west of center of dam, and 8.4 mi southeast of Big Pine.

DRAINAGE AREA.--1,964 mi².

PERIOD OF RECORD.--Water years 1975 to current year.

CHEMICAL ANALYSES: Water years 1975 to current year.

BIOLOGICAL DATA: Water years 1975 to current year.

SPECIFIC CONDUCTANCE: Water years 1975-81.

WATER TEMPERATURES: Water years 1975-81.

SEDIMENT RECORDS: Water years 1975 to current year (partial-record station).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1975 to September 1981.

WATER TEMPERATURES: February 1975 to September 1981.

INSTRUMENTATION.--Specific-conductance recorder from May 1975 to September 1981. Temperature recorder from February 1975 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 442 microsiemens, Feb. 13, 1978; minimum recorded, 129 microsiemens, July 5, 1980.

WATER TEMPERATURES: Maximum recorded, 26.5°C, July 20, 1978; minimum recorded, 0.0°C, Dec. 7, 8, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
DEC 13...	1330	746	265	8.7	4.5	660	8.5	11.4	102	K3
MAR 14...	1515	667	320	8.5	8.5	655	17	10.4	104	K1
JUN 27...	1500	485	220	8.6	20.5	660	20	7.9	102	K5
SEP 18...	1130	684	280	8.3	15.0	650	9.2	7.9	92	K7
	DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 13...		38	72	0	22	4.0	31	47	2	3.7
MAR 14...		K3	72	0	22	4.2	44	55	2	4.2
JUN 27...		K8	58	0	18	3.2	25	47	1	3.2
SEP 18...		42	68	0	20	4.3	34	51	2	3.7
	DATE	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L AS CACO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
DEC 13...	133	112	2.0	112	21	11	.60	19	157	
MAR 14...	128	106	6.0	115	21	17	.80	25	203	
JUN 27...	88	84	7.6	85	14	8.9	.60	18	134	
SEP 18...	131	109	.800	109	17	12	.70	26	183	

See footnotes at end of table.

OWENS LAKE BASIN

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE		SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS-SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC 13...		180	.21	316	<.10	<.010	.70	.110	.030	.020
MAR 14...		210	.28	366	<.10	.030	.70	.080	.030	.030
JUN 27...		150	.18	175	<.10	.030	.70	.100	.040	.050
SEP 18...		180	.25	338	.12	.050	.50	.080	.040	.040

DATE	TIME	ALUM- INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL- LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO- MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PR)
DEC 13...	1330	10	21	12	<.5	<1	1	<3	3	23	7
MAR 14...	1515	20	29	20	<.5	<1	1	<3	9	17	<1
JUN 27...	1500	10	19	7	<.5	<1	<1	<3	3	52	<1
SEP 18...	1130	20	39	24	<.5	<1	<1	<3	3	25	1

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA- NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE- NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON- TIUM, DIS-SOLVED (UG/L AS SR)	VANA- DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 13...	92	<1	<.1	20	3	<1	1	110	<6	11
MAR 14...	130	6	<.1	30	3	<1	<1	110	<6	17
JUN 27...	63	1	<.1	30	<1	<1	<1	90	<6	8
SEP 18...	110	11	.1	17	<1	<1	<1	100	<6	33

K Results based on colony count outside the acceptable range (non-ideal colony count).
 < Actual value is known to be less than the value shown.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR 14...	1515	667	8.5	44	79	97
JUN 27...	1500	485	20.5	36	47	100
SEP 18...	1130	684	15.0	29	M54	97

10287000 MONO LAKE NEAR MONO LAKE, CA

LOCATION.--Lat 37°58'46", long 119°08'11", in NW 1/4 sec. 5, T.2 N., R.26 E., Mono County, Hydrologic Unit 18090101, on west bank 1 mi south of town of Mono Lake.

DRAINAGE AREA.--785 mi².

PERIOD OF RECORD.--June 1912 to current year. Records prior to September 1934, published in WSP 765.

GAGE.--Nonrecording gage or reference point read once a week. Gage readings have been reduced to elevations to National Geodetic Vertical Datum of 1929. Gage heights prior to October 1944 are converted to elevations to NGVD in WSP 1314.

REMARKS.--Since 1941 water diverted to Owens Lake basin via Mono tunnel, capacity, 200 ft³/s. No elevation readings were provided for January and February, lake frozen at gages. Corrected elevations for water years 1977 to 1982 were published in the 1983 report.

COOPERATION.--Records were provided by City of Los Angeles, Department of Water and Power.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 6,428.1 ft, July 18, 1919, present datum; minimum observed, 6,372.00 ft, Dec. 17, 30, 1981.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 3	6,380.08	Mar. 11	6,380.14	June 6	6,379.86	Sept. 5	6,378.84
10	6,380.04	13	6,380.14	13	6,379.81	12	6,378.84
17	6,379.92	28	6,380.17	20	6,379.78	19	6,378.78
24	6,379.86	Apr. 3	6,380.17	27	6,379.67	26	6,378.76
31	6,379.83	10	6,380.17	July 3	6,379.57		
Nov. 7	6,379.80	18	6,380.19	11	6,379.52		
14	6,379.79	24	6,380.19	18	6,379.45		
21	6,379.79	May 2	6,380.17	25	6,379.42		
28	6,379.78	8	6,380.16	Aug. 1	6,379.24		
Dec. 5	6,379.79	16	6,380.10	8	6,379.17		
12	6,379.78	23	6,379.98	15	6,379.07		
19	6,379.78	30	6,379.88	22	6,378.99		
				29	6,378.87		

10287070 MILL CREEK BELOW LUNDY LAKE, NEAR MONO LAKE, CA

LOCATION.--Lat 38°01'58", long 119°12'53", in SE 1/4 NE 1/4 sec. 16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, at road crossing 1,500 ft downstream from Lundy Lake Dam, and 4.9 mi northwest of Mono Lake Post Office.

DRAINAGE AREA.--18.1 mi², natural flow.

PERIOD OF RECORD.--October 1942 to current year. Monthly and yearly mean discharges prior to October 1969, published in WSP-2127.

GAGE.--Water-stage recorder and Parshall flume on creek. Elevation of gage is 7,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Flow regulated for power development by Lundy Lake, capacity, 3,820 acre-ft. Records for "actual flow" include Mill Creek, Lundy powerplant tailrace, and Upper Conway ditch. Records for "natural flow" are computed as the "actual flow" plus change in contents and evaporation of Lundy Lake. Records for water year 1984 were not available in time for the 1984 publication, and are published herein.

COOPERATION.--Records were provided by Southern California Edison Co. and reviewed by the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (Actual flow).--44 years, 28.3 ft³/s, 20,500 acre-ft/yr.
(Natural flow).--44 years, 24.3 ft³/s, 17,610 acre-ft/yr.

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 229 ft³/s, June 22, 1983; no flow for many days in 1971 and 1974.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 17 ft³/s, Sept. 16; no flow for many days.

EXTREMES FOR WATER YEAR 1984 (NOT PREVIOUSLY PUBLISHED).--Maximum daily discharge, 34 ft³/s for several days; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES
(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	.50	.70	.50				0	7.9	28	26	.70
2	5.6	.50	.70	.50				0	9.8	28	25	.60
3	5.4	.40	.70	.60				0	11	28	23	.40
4	5.4	.40	.70	.60				0	12	29	22	.40
5	5.4	.30	.70	.60				0	13	31	21	.30
6	5.2	.20	.70	.60				0	13	32	20	.20
7	4.8	.20	.70	.60				0	13	32	19	.10
8	4.3	.10	.70	.50				0	13	34	18	0
9	3.7	.10	.70	.50				0	13	34	17	0
10	3.2	.10	.60	.50				0	12	34	16	0
11	2.9	.10	.60	.40				0	12	34	14	0
12	2.5	.10	.60	.40				0	11	34	13	0
13	1.9	.10	.70	.40				0	11	34	12	0
14	1.6	.10	.70	.30				0	11	34	11	0
15	1.5	.10	.70	.30				0	11	33	11	0
16	1.2	.10	.70	.30				0	11	32	9.8	0
17	.90	.10	.70	.20				0	11	32	9.5	0
18	.80	.20	.70	.20				0	12	32	8.2	0
19	.60	.20	.70	.10				0	13	33	7.3	0
20	.50	.30	.70	.10				0	14	34	6.5	0
21	.40	.40	.70	0				0	15	34	5.4	0
22	.40	.40	.70	0				0	16	32	5.1	0
23	.90	.40	.70	0				0	16	32	4.6	0
24	.90	.40	.70	0				0	17	31	3.9	0
25	.80	.70	.70	0				0	18	30	3.4	0
26	.90	.70	.70	0				0	19	29	2.9	0
27	.80	.70	.70	0				.90	21	28	2.4	0
28	.70	.70	.70	0				1.6	22	28	2.0	0
29	.70	.70	.70	0				2.6	24	27	1.9	0
30	.60	.70	.70	0				3.7	26	27	1.5	0
31	.60	---	.70	0				5.9	---	26	1.1	---
TOTAL	70.50	10.00	21.40	8.20	0	0	0	14.70	428.7	966	343.5	2.70
MEAN	2.27	.33	.69	.26	0	0	0	.47	14.3	31.2	11.1	.090
MAX	5.6	.70	.70	.60	0	0	0	5.9	26	34	26	.70
MIN	.40	.10	.60	0	0	0	0	0	7.9	26	1.1	0
AC-FT	140	20	42	16	0	0	0	29	850	1920	681	5.4
a	1876	1383	1212	948	785	1018	1288	4736	5957	5867	2573	1513
CAL YR 1983	TOTAL	17931.7	MEAN	49.0	MAX	229	MIN	.10	AC-FT	35570		
WTR YR 1984	TOTAL	1865.70	MEAN	5.10	MAX	34	MIN	0	AC-FT	3700		

aComputed natural flow, in acre-ft.

10287070 MILL CREEK BELOW LUNDY LAKE, NEAR MONO LAKE, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						0	.10		0	2.8	2.8	1.7
2						0	.10		0	2.8	2.8	1.7
3						0	.10		0	2.8	2.8	1.7
4						0	.10		0	2.8	2.6	1.7
5						0	.10		0	2.8	2.6	1.7
6						0	.10		0	2.8	2.6	1.7
7						0	0		0	2.8	2.6	1.6
8						0	0		0	2.8	2.4	1.6
9						0	0		0	2.8	2.4	1.6
10						0	.10		0	2.8	2.4	1.6
11						0	.10		0	3.0	2.4	1.6
12						0	.10		0	3.0	2.4	1.6
13						0	.10		.10	3.0	2.4	1.6
14						0	.10		.20	3.0	2.4	4.6
15						0	0		.40	3.2	2.2	16
16						0	0		.60	3.2	2.2	17
17						0	0		.80	3.2	2.2	1.4
18						0	0		.90	3.2	2.2	1.2
19						0	0		1.1	3.2	2.2	1.1
20						0	0		1.2	3.5	2.2	1.1
21						0	0		1.4	3.5	2.0	9.0
22						0	0		1.5	3.5	2.0	9.0
23						0	0		1.7	3.5	2.0	9.0
24						0	0		1.9	3.2	2.0	9.0
25						0	0		2.2	3.2	1.9	9.0
26						.10	0		2.4	3.0	1.9	8.0
27						.10	0		2.6	3.0	1.9	8.0
28						.10	0		2.6	3.0	1.9	8.0
29						.10	0		2.8	3.0	1.7	8.0
30						.10	0		2.8	2.8	1.7	8.0
31						.10	---		---	2.8	1.7	---
TOTAL	0	0	0	0	0	0.60	1.10	0	27.20	94.0	69.5	148.8
MEAN	0	0	0	0	0	.019	.037	0	.91	3.03	2.24	4.96
MAX	0	0	0	0	0	.10	.10	0	2.8	3.5	2.8	17
MIN	0	0	0	0	0	0	0	0	0	2.8	1.7	1.1
AC-FT	0	0	0	0	0	1.2	2.2	0	54	186	138	295
a	873	853	780	608	584	707	1424	3043	4371	2058	1131	1191
CAL YR 1984	TOTAL	1763.8	MEAN	4.82	MAX	34	MIN	0	AC-FT	3500		
WTR YR 1985	TOTAL	341.20	MEAN	.93	MAX	17	MIN	0	AC-FT	677		

aComputed natural flow, in acre-ft.

10287290 RUSH CREEK BELOW AGNEW LAKE, NEAR JUNE LAKE, CA

LOCATION.--Lat 37°45'32", long 119°07'47", in NE 1/4 SW 1/4 sec.20, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, 500 ft downstream from Agnew Lake Dam, and 3.4 mi southwest of town of June Lake.

DRAINAGE AREA.--23.3 mi², natural flow.

PERIOD OF RECORD.--October 1951 to current year. Monthly and yearly mean discharges prior to October 1969, published in WSP-2127.

GAGE.--Water-stage recorder and Parshall flume on creek. Elevation of gage is 8,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Flow regulated for power development by Waugh, Gem, and Agnew Lakes, combined capacity, 23,420 acre-ft and Rush Creek powerplant. "Actual flow" is total flow of Rush Creek below Agnew Lake and Rush Creek powerplant tailrace. "Natural flow" is the sum of "actual flow", change in contents and evaporation for Waugh, Gem, and Agnew Lakes. Records for water year 1984 were not available in time for the 1984 publication, and are published herein.

COOPERATION.--Records were provided by Southern California Edison Co., and reviewed by the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (ACTUAL FLOW).--34 years, 57.6 ft³/s, 41,730 acre-ft/yr.
(NATURAL FLOW).--34 years, 61.9 ft³/s, 44,850 acre-ft/yr.

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 421 ft³/s, July 15, 1978; minimum daily, 0.90 ft³/s, Aug. 31 to Sept. 2, 1976.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 88 ft³/s, Nov. 1, May 1; minimum daily, 14 ft³/s for several days.

EXTREMES (ACTUAL FLOW) FOR WATER YEAR 1984 (NOT PREVIOUSLY PUBLISHED).--Maximum daily discharge, 98 ft³/s, June 6; minimum daily, 31 ft³/s, Sept. 25-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES
(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	78	68	62	63	61	82	40	85	89	88	85
2	86	73	60	62	63	61	68	43	85	89	88	85
3	86	83	59	62	63	61	40	42	85	88	85	86
4	86	81	63	62	63	61	38	48	89	89	88	86
5	94	81	65	62	63	61	36	52	93	88	88	88
6	94	83	62	62	63	61	37	52	98	89	85	89
7	76	83	64	62	63	60	35	54	89	89	85	85
8	50	83	65	62	63	61	32	65	91	88	85	85
9	50	83	65	62	63	61	40	76	94	88	87	87
10	50	84	65	62	63	61	44	70	90	86	86	88
11	50	84	65	62	64	61	44	66	92	87	87	88
12	50	84	65	62	64	62	44	80	91	87	87	86
13	50	65	65	62	57	62	44	81	92	88	86	85
14	50	83	64	62	59	57	44	81	92	87	87	87
15	50	50	62	62	63	48	44	81	91	87	86	87
16	50	50	57	62	65	51	50	81	91	88	88	87
17	50	73	60	62	64	53	55	81	92	88	87	85
18	34	47	62	62	64	52	54	81	93	88	88	86
19	38	59	62	62	63	51	55	81	93	87	86	73
20	38	86	62	62	63	50	48	81	92	88	86	60
21	55	84	63	62	63	50	44	81	90	88	84	58
22	80	83	63	61	63	55	43	81	90	87	87	63
23	81	84	62	61	64	61	42	81	90	87	88	58
24	82	85	62	61	64	61	36	81	91	87	87	37
25	82	84	64	61	64	61	44	83	90	88	88	31
26	82	84	63	61	64	62	50	84	90	88	86	31
27	82	84	62	61	64	62	40	84	90	88	87	31
28	84	83	62	62	64	72	36	84	91	87	77	31
29	96	83	62	63	64	83	40	84	90	86	85	33
30	95	83	63	62	---	82	34	84	89	87	88	35
31	82	---	63	63	---	83	---	84	---	88	86	---
TOTAL	2119	2330	1949	1918	1830	1888	1343	2247	2719	2719	2676	2096
MEAN	68.4	77.7	62.9	61.9	63.1	60.9	44.8	72.5	90.6	87.7	86.3	69.9
MAX	96	86	68	63	65	83	82	84	98	89	88	89
MIN	34	47	57	61	57	48	32	40	85	86	77	31
AC-FT	4200	4620	3870	3800	3630	3740	2660	4460	5390	5390	5310	4160
a	1303	1098	1059	482	366	772	1859	17277	11926	7984	2831	1259

CAL YR 1983 TOTAL 37634.9 MEAN 103.1 MAX 339 MIN 9.6 AC-FT 74650
WTR YR 1984 TOTAL 25834 MEAN 70.6 MAX 98 MIN 31 AC-FT 51240

aComputed natural flow, in acre-ft.

10287290 RUSH CREEK BELOW AGNEW LAKE, NEAR JUNE LAKE, CA--continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	88	68	69	24	15	26	88	85	84	26	28
2	41	70	68	69	24	15	31	87	85	84	26	35
3	32	66	68	46	24	15	31	85	84	84	26	66
4	29	68	68	35	24	15	32	85	85	84	26	84
5	31	68	68	34	24	15	32	84	85	85	26	85
6	29	68	68	34	24	15	32	84	85	85	26	85
7	31	68	68	34	25	15	28	85	85	85	25	85
8	33	68	68	34	25	14	32	85	85	85	28	85
9	32	65	68	34	25	15	32	85	85	85	24	85
10	34	66	68	34	25	15	32	85	85	85	22	85
11	38	68	68	34	25	16	32	84	85	85	20	85
12	43	67	68	34	19	16	46	84	85	84	18	85
13	66	68	69	34	14	17	71	84	85	84	18	85
14	65	68	68	34	14	17	71	84	85	84	18	85
15	66	68	68	34	14	16	72	85	85	68	18	85
16	68	68	70	34	14	16	72	85	85	35	18	84
17	69	68	69	35	14	16	71	84	85	35	18	62
18	68	68	69	35	14	16	70	85	85	35	18	40
19	82	68	68	35	15	16	70	85	85	35	16	27
20	82	68	68	35	16	16	71	85	76	35	15	24
21	82	68	69	34	16	16	71	85	67	35	15	33
22	82	68	69	35	14	16	72	85	67	30	15	49
23	80	68	69	35	14	16	72	85	62	26	15	38
24	75	68	69	35	15	16	78	85	58	26	15	23
25	73	70	69	34	14	16	85	84	56	26	14	19
26	73	68	69	34	15	17	86	84	56	26	15	16
27	68	68	69	33	14	24	86	84	59	26	15	16
28	66	68	69	33	15	18	86	85	72	26	15	16
29	66	68	69	33	---	16	86	84	84	26	15	16
30	66	68	69	32	---	16	86	85	84	26	15	16
31	68	---	69	29	---	16	---	85	---	26	15	---
TOTAL	1782	2056	2124	1134	520	498	1762	2629	2355	1725	596	1627
MEAN	57.5	68.5	68.5	36.6	18.6	16.1	58.7	84.8	78.5	55.6	19.2	54.2
MAX	82	88	70	69	25	24	86	88	85	85	28	85
MIN	29	65	68	29	14	14	26	84	56	26	14	16
AC-FT	3530	4080	4210	2250	1030	988	3490	5210	4670	3420	1180	3230
a	2306	2474	2463	1326	870	1091	6376	12495	9625	4130	1815	2950
CAL YR 1984	TOTAL	25398	MEAN	69.4	MAX	98	MIN	29	AC-FT	50360		
YR 1985	TOTAL	18808	MEAN	51.5	MAX	88	MIN	14	AC-FT	37310		

³Computed natural flow, in acre-ft.

PACIFIC SLOPE BASINS IN CALIFORNIA

TIJUANA RIVER BASIN

11012000 COTTONWOOD CREEK ABOVE TECATE CREEK, NEAR DULZURA, CA

LOCATION.--Lat 32°34'30", long 116°45'11", in NW 1/4 SW 1/4 sec.26, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on right bank 0.8 mi upstream from confluence with Tecate Creek, 5.1 mi south of Dulzura, and 11.3 mi downstream from Barrett Reservoir.

DRAINAGE AREA.--310 mi².

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 569.40 ft above National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission).

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Morena Reservoir, capacity, 50,120 acre-ft and Barrett Reservoir, capacity, 44,760 acre-ft. Water diverted from Barrett Reservoir through San Diego and Dulzura conduits to Lower Otay Reservoir.

AVERAGE DISCHARGE.--49 years, 15.2 ft³/s, 11,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s, Feb. 21, 1980, gage height, 11.15 ft; no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10.0 ft³/s, Dec. 28, gage height, 3.51 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.10	3.2	2.0	1.9	1.4	.08	0			
2		0	.09	2.9	2.9	2.3	1.1	.07	0			
3		0	.17	2.6	3.7	2.9	.98	.07	0			
4		0	.17	2.4	6.7	2.1	.95	.07	.07			
5		0	.13	2.2	6.1	1.8	.98	.08	.03			
6		0	.09	2.3	4.0	1.7	.96	.07	0			
7		0	.17	2.6	3.5	1.7	.92	.05	0			
8		0	.70	3.0	3.2	1.7	.75	.06	0			
9		.08	.29	2.6	4.6	1.7	.64	.09	0			
10		.04	.42	2.4	5.6	1.6	.60	.16	0			
11		0	.68	2.2	5.1	1.5	.53	.16	0			
12		0	.48	2.0	4.8	1.5	.44	.17	0			
13		.05	.40	1.9	4.3	1.4	.32	.13	0			
14		.13	.25	1.8	3.2	1.4	.23	.08	0			
15		.12	.24	1.7	2.9	1.4	.23	.05	0			
16		.26	.49	1.7	2.8	1.4	.20	.05	0			
17		.58	.32	1.7	2.7	1.3	.24	.09	0			
18		.24	.54	1.7	2.5	1.3	.37	.11	0			
19		.20	1.2	1.7	2.5	1.3	.38	.14	0			
20		.13	1.1	1.7	2.8	1.2	.39	.16	0			
21		.32	.67	1.7	3.8	1.2	.48	.16	0			
22		.31	.45	1.7	2.8	1.2	.52	.14	0			
23		.47	.38	1.7	2.4	1.0	.50	.10	0			
24		.47	.33	1.7	2.2	.97	.35	.03	0			
25		.53	.30	1.7	2.1	.96	.27	0	0			
26		.19	.38	1.7	2.0	.92	.21	0	0			
27		.11	4.0	1.8	1.9	1.5	.14	0	0			
28		.18	7.6	2.0	1.9	2.7	.14	0	0			
29		.15	4.2	2.4	---	2.0	.12	0	0			
30		.11	3.6	2.2	---	1.7	.10	0	0			
31		---	3.4	2.1	---	1.5	---	0	---			---
TOTAL	0	4.67	33.34	65.0	95.0	48.75	15.44	2.37	0.10	0	0	0
MEAN	0	.16	1.08	2.10	3.39	1.57	.51	.076	.003	0	0	0
MAX	0	.58	7.6	3.2	6.7	2.9	1.4	.17	.07	0	0	0
MIN	0	0	.09	1.7	1.9	.92	.10	0	0	0	0	0
AC-FT	0	9.3	66	129	188	97	31	4.7	.2	0	0	0
CAL YR 1984	TOTAL	1062.74	MEAN	2.90	MAX	57	MIN	0	AC-FT	2110		
WTR YR 1985	TOTAL	264.67	MEAN	.73	MAX	7.6	MIN	0	AC-FT	525		

11012500 CAMPO CREEK NEAR CAMPO, CA

LOCATION.--Lat 32°35'28", long 116°31'29", in NE 1/4 SE 1/4 sec.24, T.18 S., R.4 E., San Diego County, Hydrologic Unit 18070305, on left bank just upstream from bridge on State Highway 94, and 3.5 mi southwest of Campo.

DRAINAGE AREA.--85.0 mi², of which 3 mi² are in Mexico.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder and broad-crested weir. Broad-crested weir buried by sand Mar. 25, 1982 to Sept. 30, 1985 and was ineffective as a control. Datum of gage is 2,178.92 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1954, at datum 1 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by small conservation reservoir 1 mi upstream since August 1956. No diversion above station.

AVERAGE DISCHARGE.--49 years, 3.32 ft³/s, 2,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft³/s, Mar. 24, 1983, gage height, 5.39 ft from rating curve extended above 340 ft³/s; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29.0 ft³/s, Feb. 4, gage height, 4.45 ft; maximum gage height, 4.98 ft, Oct. 17, 18, 21, 22, 29, (sand fill); minimum daily, 0.04 ft³/s, Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	6.7	10	7.0	13	18	7.0	4.6	1.1	.63	.14	.07
2	2.9	6.7	9.6	6.9	19	17	6.4	4.2	1.3	.59	.13	.07
3	3.1	6.7	9.7	7.2	21	17	6.7	3.8	1.3	.41	.14	.12
4	3.3	6.9	9.3	7.3	23	13	6.8	3.6	1.3	.20	.13	.21
5	3.3	7.4	9.0	7.3	24	11	6.7	3.7	.91	.24	.14	.31
6	3.3	7.5	9.0	7.4	23	11	6.5	3.7	.66	.26	.14	.30
7	3.4	7.5	8.7	7.8	22	11	6.4	3.5	.48	.25	.17	.23
8	3.5	8.0	9.5	7.2	22	10	6.3	3.3	.37	.21	.18	.21
9	3.7	8.4	8.8	6.1	23	8.7	6.3	3.2	.36	.20	.19	.22
10	3.8	8.2	8.7	6.7	23	9.0	6.3	3.2	.30	.20	.18	.23
11	4.0	7.8	9.1	7.5	21	9.0	6.3	3.1	.39	.20	.19	.19
12	4.2	7.4	8.4	8.3	22	9.4	6.2	3.3	.34	.20	.22	.12
13	4.1	7.4	8.3	9.0	22	9.1	6.1	3.2	.32	.19	.20	.09
14	4.4	8.0	7.7	9.6	21	9.0	6.1	2.7	.34	.21	.20	.07
15	4.6	8.4	7.3	9.9	22	9.2	6.1	2.3	.30	.30	.19	.07
16	4.5	8.8	7.4	8.8	22	8.9	6.1	2.1	.28	.30	.18	.10
17	4.8	9.8	7.0	8.1	22	8.7	6.1	2.1	.26	.25	.21	.14
18	5.2	10	6.6	8.2	22	8.7	6.3	2.1	.27	.41	.20	.34
19	5.1	8.7	8.9	8.6	23	9.6	6.7	2.1	.24	.50	.14	.35
20	5.1	8.0	8.1	8.8	23	7.8	6.6	2.0	.24	.92	.13	.23
21	5.4	8.9	7.2	9.3	25	7.4	6.9	1.9	.31	.59	.12	.18
22	5.5	10	7.1	9.9	24	7.5	7.5	1.9	.26	.31	.11	.20
23	5.5	11	7.1	10	23	7.4	7.3	1.6	.24	.26	.09	.17
24	5.6	11	7.1	10	22	7.3	6.3	1.5	.36	.23	.08	.16
25	5.5	11	6.9	11	22	7.2	6.0	1.3	.36	.18	.07	.18
26	5.4	11	7.1	11	21	7.1	5.9	1.3	.33	.14	.07	.26
27	5.8	11	9.7	12	21	7.6	5.7	1.3	.49	.13	.08	.30
28	6.2	11	8.2	13	20	9.9	5.5	1.3	.56	.13	.07	.29
29	6.5	11	7.4	19	---	9.3	5.4	1.2	.53	.13	.06	.26
30	6.3	10	7.1	15	---	7.5	5.1	1.1	.58	.14	.05	.23
31	6.6	---	7.1	15	---	7.3	---	1.1	---	.17	.04	---
TOTAL	143.5	264.2	253.1	292.9	611	300.6	189.6	77.3	15.08	9.08	4.24	5.90
MEAN	4.63	8.81	8.16	9.45	21.8	9.70	6.32	2.49	.50	.29	.14	.20
MAX	6.6	11	10	19	25	18	7.5	4.6	1.3	.92	.22	.35
MIN	2.9	6.7	6.6	6.1	13	7.1	5.1	1.1	.24	.13	.04	.07
AC-FT	285	524	502	581	1210	596	376	153	30	18	8.4	12
CAL YR 1984	TOTAL	2995.5	MEAN	8.18	MAX	21	MIN	1.1	AC-FT	5940		
WTR YR 1985	TOTAL	2166.50	MEAN	5.94	MAX	25	MIN	.04	AC-FT	4300		

TIJUANA RIVER BASIN

11013000 TIJUANA RIVER NEAR DULZURA, CA

LOCATION.--Lat 32°33'56", long 116°46'27", in E 1/2 sec.33, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on left bank 0.5 mi downstream from confluence of Cottonwood and Tecate Creeks, 5.5 mi south of Dulzura, and 12.8 mi downstream from Barrett Reservoir.

DRAINAGE AREA.--481 mi², of which 70 mi² are in Mexico.

PERIOD OF RECORD.--October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 542.42 ft above National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission). Prior to Sept. 19, 1939, at datum 2.00 ft higher.

REMARKS.--Estimated daily discharge: July 7. Records fair. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft and Barrett Reservoir, capacity, 44,760 acre-ft. Water diverted from Barrett Reservoir through San Diego and Dulzura conduits to Lower Otay Reservoir.

AVERAGE DISCHARGE.--49 years, 25.8 ft³/s, 18,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s, Mar. 3, 1983, gage height, 7.03 ft, from rating curve extended above 3,500 ft³/s; maximum gage height, 11.19 ft, Feb. 18, 1980; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 258 ft³/s, Dec. 27, gage height, 3.27 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	4.5	12	25	33	22	14	3.7	.06	.01	.01	
2	.08	3.8	9.0	21	61	25	11	2.8	.06	.01	0	
3	.07	3.3	11	18	64	45	12	2.7	.04	.01	0	
4	.08	1.6	13	17	96	26	11	2.1	.03	.02	0	
5	.08	3.2	13	17	53	21	12	2.0	.05	.02	0	
6	.08	5.1	13	18	36	22	12	1.5	.03	.02	0	
7	.08	7.4	11	25	32	20	7.6	.98	.04	.02	0	
8	.08	11	16	46	27	18	4.4	1.3	.04	.05	0	
9	.09	14	20	37	37	23	4.1	1.6	.04	.18	0	
10	.12	14	22	31	38	17	4.7	3.1	.02	.16	0	
11	.36	10	28	29	30	19	5.4	3.5	.03	.19	0	
12	1.9	8.1	24	28	23	14	4.5	2.3	.03	.15	0	
13	1.6	11	22	30	21	13	6.3	1.0	.03	.16	0	
14	.69	13	21	28	19	15	7.9	.13	.02	.12	0	
15	.55	12	19	29	20	14	7.4	.18	.02	.41	0	
16	.39	17	25	26	20	11	5.7	.21	.02	.30	0	
17	1.1	28	23	27	19	11	5.8	.31	.02	.26	0	
18	.56	30	20	19	21	13	6.0	.17	.02	.37	0	
19	1.7	30	50	23	23	15	5.6	.44	.02	.26	0	
20	2.6	30	63	22	23	14	6.7	.75	.02	.12	0	
21	4.9	39	31	24	38	16	5.6	.52	.02	.06	0	
22	7.0	54	22	21	23	14	5.6	.55	.03	.04	0	
23	5.5	65	18	20	24	12	5.4	.37	.04	.04	0	
24	4.1	61	15	22	22	9.3	5.4	.44	.04	.04	0	
25	4.3	42	13	17	21	11	4.6	.52	.03	.04	0	
26	4.8	18	14	17	22	9.2	4.3	.45	.03	.02	0	
27	6.1	15	119	16	20	9.5	5.3	.26	.02	.01	0	
28	7.0	15	86	25	19	18	5.4	.17	.01	.01	0	
29	5.3	13	45	41	---	37	4.6	.15	.01	.01	0	
30	8.1	16	36	36	---	26	4.4	.16	0	.01	0	
31	8.4	---	30	39	---	20	---	.09	---	.01	0	---
TOTAL	77.84	595.0	864.0	794	885	560.0	204.7	34.45	0.87	3.13	0.01	0
MEAN	2.51	19.8	27.9	25.6	31.6	18.1	6.82	1.11	.029	.10	.000	0
MAX	8.4	65	119	46	96	45	14	3.7	.06	.41	.01	0
MIN	.07	1.6	9.0	16	19	9.2	4.1	.09	0	.01	0	0
AC-FT	154	1180	1710	1570	1760	1110	406	68	1.7	6.2	.02	0
CAL YR 1984	TOTAL	5586.30	MEAN	15.3	MAX	119	MIN	.03	AC-FT	11080		
WTR YR 1985	TOTAL	4019.00	MEAN	11.0	MAX	119	MIN	0	AC-FT	7970		

11013200 RODRIGUEZ RESERVOIR AT RODRIGUEZ DAM, BAJA CALIFORNIA, MEXICO

LOCATION.--Lat 32°26'40", long 116°54'25", Baja California, Mexico, Hydrologic Unit 18070305, at Rodriguez Dam on Rio de las Palmas, 0.2 mi upstream from Arroyo Matanuco, and 10 mi southeast of Tijuana.

DRAINAGE AREA.--977 mi², of which 10 mi² are in the United States.

PERIOD OF RECORD.--April 1937 to current year. Published with record for Tijuana River near Nestor, CA, October 1953 to September 1957. Monthend contents for April 1937 to September 1950 published in WSP 1315-B and October 1950 to September 1960 in WSP 1735.

GAGE.--Nonrecording gage read once a day. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by National Irrigation Commission, Mexico).

REMARKS.--Reservoir is formed by thin-shell concrete-arch dam completed in 1936; storage began in 1937. Capacity table is based on surveys made in 1927. Maximum storage at crest of spillway gates, elevation, 410.10 ft, 111,070 acre-ft; at spillway lip, elevation, 380.08 ft, 74,580 acre-ft; dead storage below outlet, elevation, 267.39 ft, 1,650 acre-ft included in contents. Reservoir stores water for irrigation of 3,000 acres on both banks 0.5 to 5.5 mi downstream and municipal supply for city of Tijuana. Since August 1972, Colorado River water diverted through Otay aqueduct into the reservoir for Tijuana emergency use; this year none was imported.

COOPERATION.--Records were provided by Ministry of Hydraulic Resources, Government of Mexico, through International Boundary and Water Commission, United States section.

EXTREMES FOR PERIOD OF RECORD.--Reservoir spilled during March 1938, September 1940, February to May 1941, March 1942, February and March 1944, January to July 1980, April 1983; reservoir dry Apr. 2, 1964 to Apr. 9, 1965, Aug. 21 to Nov. 22, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 64,870 acre-ft, Oct. 1; minimum observed, 49,800 acre-ft, Sept. 30.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	64,940	--
Oct. 31.....	63,040	-1,900
Nov. 30.....	61,450	-1,590
Dec. 31.....	62,230	+780
CAL YR 1984.....	--	-17,040
Jan. 31.....	62,290	+60
Feb. 28.....	62,810	+520
Mar. 31.....	62,230	-580
Apr. 30.....	60,500	-1,730
May 31.....	58,350	-2,150
June 30.....	56,330	-2,020
July 31.....	54,220	-2,110
Aug. 31.....	51,910	-2,310
Sept. 30.....	49,800	-2,110
WTR YR 1985.....	--	-15,140

OTAY RIVER BASIN

11013600 JAMUL CREEK AT LEE VALLEY, NEAR JAMUL, CA

LOCATION.--Lat 32°42'39", long 116°48'52", in SE 1/4 NW 1/4 sec.7, T.17 S., R.2 E., San Diego County, Hydrologic Unit 18070304, on right bank 3.5 mi southeast of Jamul.

DRAINAGE AREA.--2.26 mi².

PERIOD OF RECORD.--October 1983 to April 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 182 ft³/s, July 14, 1984, gage height, 2.72 ft, on basis of rating extended above 1.0 ft³/s based on slope area measurement at gage height, 4.12 ft; no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 27	0115	*4.3	*1.12				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO APRIL 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.03	.05	.04	.05	.05					
2		0	.03	.05	.17	.05	.03					
3		0	.19	.05	.08	.05	.03					
4		0	.30	.05	.06	.05	.04					
5		0	.46	.05	.05	.05	.04					
6		0	.39	.05	.05	.05	.04					
7		0	.74	.05	.05	.05	.04					
8		0	.37	.05	.04	.05	.04					
9		0	.05	.05	.07	.05	.04					
10		0	.10	.05	.08	.05	.03					
11		0	.08	.05	.07	.05	.03					
12		0	.01	.05	.07	.05	.03					
13		0	.01	.05	.07	.05	.02					
14		0	.01	.05	.07	.05	.02					
15		0	.01	.05	.07	.05	.02					
16		0	.02	.05	.07	.05	.02					
17		0	.02	.05	.07	.05	.02					
18		0	.10	.05	.06	.05	.03					
19		0	.38	.05	.06	.05	.03					
20		0	.24	.05	.08	.05	.03					
21		0	.22	.05	.08	.05	.04					
22		0	.20	.05	.06	.05	.03					
23		0	.20	.05	.06	.04	.02					
24		.02	.21	.05	.05	.03	.02					
25		.02	.18	.05	.05	.04	.02					
26		.02	.19	.05	.05	.04	.02					
27		.02	.53	.05	.05	.11	.01					
28		.03	.16	.05	.05	.22	.01					
29		.03	.06	.05	---	.11	.01					
30		.03	.06	.04	---	.06	.01					
31		---	.05	.04	---	.06	---					
TOTAL	0	0.17	5.60	1.53	1.83	1.81	0.82					
MEAN	0	.006	.18	.049	.065	.058	.027					
MAX	0	.03	.74	.05	.17	.22	.05					
MIN	0	0	.01	.04	.04	.03	.01					
AC-FT	0	.3	.11	3.0	3.6	3.6	1.6					

CAL YR 1984 TOTAL 23.50 MEAN .064 MAX 7.6 MIN 0 AC-FT 47

11014550 LOWER OTAY LAKE NEAR CHULA VISTA, CA

LOCATION.--Lat 32°36'33", long 116°55'45", in NE 1/4 NE 1/4 sec.13, T.18 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on outlet tower near right bank, 1,000 ft west of right end of Savage Dam on Otay River, and 9.0 mi east of Chula Vista.

DRAINAGE AREA.--99.0 mi².

PERIOD OF RECORD.--October 1945 to September 1959 (published with Otay River at Savage Dam, station 11014500), October 1972 to current year. Monthend gage heights October 1936 to September 1945, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 347.20 ft above National Geodetic Vertical Datum of 1929 (levels by County of San Diego); gage readings have been reduced to NGVD. October 1972 to current year, supplementary water-stage recorder for flood warning only, on right bank 30 ft upstream from dam at datum 50.0 ft higher.

REMARKS.--Reservoir is formed by gravity section cyclopean concrete and masonry dam, built in 1919. Capacity from Geological Survey table dated Apr. 3, 1956. Maximum capacity at top of spillway gates, 56,520 acre-ft, elevation, 490.70 ft. Capacity at permanent spillway level, 49,510 acre-ft, elevation, 484.70 ft. Dead storage below lowest outlet, 1,150 acre-ft, elevation, 395.05 ft. Dulzura conduit carries water from Barrett Reservoir on Cottonwood Creek to Dulzura Creek, where water is carried to the reservoir by Jamul Creek (station 11014000). Reservoir storage includes supplemental Colorado River water. Small diversions for local use near reservoir. Water used for municipal supply by city of San Diego.

COOPERATION.--Gage-heights were provided by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 51,860 acre-ft, spilling, Mar. 3, 1983, elevation, 486.78 ft; minimum observed, 3,160 acre-ft, Dec. 31, 1951, elevation, 407.56 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 45,220 acre-ft, spilling, Oct. 4, elevation, 480.70 ft; minimum observed, 39,900 acre-ft, Sept. 26, elevation, 475.34 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	480.68	45,200	--
Oct. 31.....	479.94	44,440	-760
Nov. 30.....	479.79	44,290	-150
Dec. 31.....	479.18	43,670	-620
CAL YR 1984.....	--	--	-2,550
Jan. 31.....	477.84	42,340	-1,330
Feb. 28.....	477.65	42,150	-190
Mar. 31.....	477.65	42,150	0
Apr. 30.....	477.70	42,200	+50
May 31.....	477.28	41,790	-410
June 30.....	476.92	41,440	-350
July 31.....	476.28	40,830	-610
Aug. 31.....	475.62	40,200	-630
Sept. 30.....	475.36	39,960	-240
WTR YR 1985.....	--	--	-5,240

SWEETWATER RIVER BASIN

11015000 SWEETWATER RIVER NEAR DESCANSO, CA

LOCATION.--Lat 32°50'05", long 116°37'20", in NW 1/4 SE 1/4 sec.25, T.15 S., R.3 E., San Diego County, Hydrologic Unit 18070304, near right bank at Los Terrenitos Road bridge, 0.7 mi downstream from unnamed tributary, and 1.3 mi south of Descanso.

DRAINAGE AREA.--45.4 mi².

PERIOD OF RECORD.--October 1905 to September 1927 (monthly discharge only, published in WSP 1315-B), October 1956 to current year. Prior to September 1927, records unadjusted for diversion. Records adjusted for diversion, October 1956 to November 1976. No diversion since November 1976.

GAGE.--Water-stage recorder. Datum of gage is 3,269.24 ft above National Geodetic Vertical Datum of 1929. Prior to June 25, 1927, nonrecording gages at several sites and datums, upstream about 0.1 mile. Diversion gage at site 0.3 mile upstream, October 1956 to September 1984, at different datum.

REMARKS.--Estimated daily discharges: July 28 to Aug. 5. Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--51 years (water years 1906-27, 1957-85), 12.1 ft³/s, 8,770 acre-ft/yr, unadjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 11,200 ft³/s Feb. 16, 1927, gage height, 13.2 ft, from floodmarks, site and datum then in use, on basis of slope-area measurement of peak flow; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base of discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Mar. 28	1800	*43	*5.20				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.26	.51	2.1	4.8	4.2	4.5	10	3.9	2.4	.06	.01	0
2	.40	.50	2.0	4.3	7.0	5.9	9.2	3.8	2.3	.04	.01	0
3	.50	.50	2.2	4.1	7.2	7.6	8.9	3.6	2.8	.04	.01	0
4	.63	.56	2.3	3.9	8.6	6.7	8.6	3.5	2.9	.04	.01	0
5	.59	.50	2.1	3.6	6.7	6.3	8.2	3.4	2.6	.04	.01	0
6	.37	.50	2.1	3.7	5.8	6.0	7.6	3.3	2.2	.04	.01	0
7	.30	.74	1.8	5.1	5.5	5.9	7.2	3.1	2.0	.03	.01	0
8	.23	1.6	4.1	7.3	5.4	5.6	6.9	3.0	1.7	.03	0	0
9	.21	1.2	2.6	5.9	10	5.3	6.6	3.0	1.6	.02	0	.01
10	.25	.85	3.3	5.2	15	5.2	6.3	3.3	1.5	.02	0	.02
11	.42	.39	7.1	4.7	11	5.0	6.2	3.4	1.5	.01	0	.02
12	.60	.25	6.1	4.5	9.0	5.1	6.1	3.2	1.4	.01	0	.02
13	.37	1.1	5.6	4.3	8.2	4.9	5.8	3.0	1.3	0	.01	0
14	.35	1.2	4.2	4.1	7.3	4.8	5.9	2.8	1.2	0	0	0
15	.45	1.0	3.5	4.0	6.9	4.6	5.8	2.6	1.1	.03	0	0
16	.36	.59	5.2	3.8	6.6	4.5	5.6	2.6	.98	.08	0	0
17	.60	1.0	4.5	3.6	6.2	4.4	5.8	2.7	.88	.09	0	0
18	.12	1.1	5.4	3.4	6.0	4.8	6.4	2.8	.71	2.3	0	.15
19	.12	1.2	19	3.4	5.8	6.1	6.3	2.7	.59	1.6	0	.04
20	.12	1.0	23	3.3	6.4	5.2	6.0	2.8	.40	.77	0	.03
21	.22	.87	14	3.3	7.2	4.7	7.2	2.6	.40	.25	0	.02
22	.20	1.3	7.9	3.2	6.0	4.5	9.3	2.5	.32	.11	0	.01
23	.18	2.2	6.6	3.2	5.5	4.2	7.1	2.3	.29	.07	0	.01
24	.12	3.5	5.9	3.1	5.1	4.0	6.2	2.3	.39	.05	0	.01
25	.12	7.1	5.4	3.1	5.0	4.0	5.7	2.2	.44	.04	0	.01
26	.12	3.1	5.5	3.2	4.8	3.9	5.5	2.1	.30	.04	0	.02
27	.21	2.3	15	3.2	4.6	6.6	5.2	2.2	.19	.03	0	.06
28	.44	2.4	12	4.3	4.5	34	4.9	2.3	.13	.02	0	.24
29	.50	2.3	7.4	7.0	---	25	4.5	2.3	.10	.01	0	.20
30	.50	2.2	5.9	4.8	---	15	4.2	2.3	.09	.01	0	.09
31	.50	---	5.2	4.6	---	11	---	2.3	---	.01	0	---
TOTAL	10.36	43.56	199.0	130.0	191.5	225.3	199.2	87.9	34.71	5.89	0.08	0.96
MEAN	.33	1.45	6.42	4.19	6.84	7.27	6.64	2.84	1.16	.19	.003	.032
MAX	.63	7.1	23	7.3	15	34	10	3.9	2.9	2.3	.01	.24
MIN	.12	.25	1.8	3.1	4.2	3.9	4.2	2.1	.09	0	0	0
AC-FT	21	86	395	258	380	447	395	174	69	12	.2	1.9
CAL YR 1984	TOTAL	1097.78	MEAN	3.00	MAX	30	MIN	.07	AC-FT	2180		
WTR YR 1985	TOTAL	1128.46	MEAN	3.09	MAX	34	MIN	0	AC-FT	2240		

11020600 EL CAPITAN LAKE NEAR LAKESIDE, CA

LOCATION.--Lat 32°53'00", long 116°48'25", in SE 1/4 NE 1/4 sec.7, T.15 S., R.2 E., San Diego County, Hydrologic Unit 18070304, on outlet tower 100 ft upstream of El Capitan Dam on San Diego River, and 7.0 mi east of Lakeside.

DRAINAGE AREA.--188 mi².

PERIOD OF RECORD.--October 1936 to September 1966 (published with San Diego River at El Capitan Dam, station 11020500), October 1972 to current year. October 1936 to September 1945, published in WSP 1315-B, not equivalent owing to exclusion of greater part of flow released from Cuyamaca Reservoir.

GAGE.--Nonrecording gage. Datum of gage is 553.0 ft above National Geodetic Vertical Datum of 1929 (levels by city of San Diego); gage readings have been reduced to NGVD. October 1972 to current year, supplementary water-stage recorder used for flood warning only, on left side of outlet tower at datum 110.0 ft higher.

REMARKS.--Reservoir is formed by hydraulic fill-rock embankment, completed in 1935. Capacity table dated Mar. 29, 1956. Capacity of reservoir at spillway level, 112,810 acre-ft, elevation, 750.00 ft. Dead storage below lowest outlet, 59.2 acre-ft, elevation, 574.00 ft. Reservoir storage includes supplemental Colorado River water. No significant diversion above reservoir. Flow partly regulated by Cuyamaca Reservoir. Water is released as required for municipal use and irrigation.

COOPERATION.--Gage heights were provided by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 114,500 acre-ft, spilling, Mar. 7, 1980, elevation, 751.09 ft; minimum observed, 2,252 acre-ft, May 1, 1957, elevation, 606.28 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 45,370 acre-ft, Oct. 1, elevation, 694.12 ft; minimum observed, 18,830 acre-ft, Sept. 30, elevation, 656.62 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	694.26	45,490	--
Oct. 31.....	688.92	40,900	-4,590
Nov. 30.....	684.76	37,500	-3,400
Dec. 31.....	682.80	35,950	-1,550
CAL YR 1984.....	--	--	-53,060
Jan. 31.....	679.56	33,450	-2,500
Feb. 28.....	678.54	32,690	-760
Mar. 31.....	681.16	34,670	+1,980
Apr. 30.....	682.51	35,720	+1,050
May 31.....	678.28	32,490	-3,230
June 30.....	673.26	28,890	-3,600
July 31.....	667.98	25,390	-3,500
Aug. 31.....	662.05	21,810	-3,580
Sept. 30.....	656.62	18,830	-2,980
WTR YR 1985.....	--	--	-26,660

SAN DIEGO RIVER BASIN

11022100 SAN VICENTE RESERVOIR NEAR LAKESIDE, CA

LOCATION.--Lat 32°54'45", long 116°55'25", in SW 1/4 NW 1/4 sec.31, T.14 S., R.1 E., San Diego County, Hydrologic Unit 18070304, at outlet tower near center of upstream face of San Vicente Dam on San Vicente Creek, and 3.6 mi north of Lakeside.

DRAINAGE AREA.--74.2 mi².

PERIOD OF RECORD.--October 1946 to September 1961 (published as San Vicente Creek at San Vicente Dam, at Foster, station 11022000), October 1972 to current year.

GAGE.--Nonrecording gage. Datum of gage is 460.0 ft above National Geodetic Vertical Datum of 1929 (levels by county of San Diego); gage readings have been reduced to NGVD. October 1972 to current year, supplementary water-stage recorder used for flood warning only, at same site at datum 100 ft higher.

REMARKS.--Reservoir is formed by concrete-gravity dam, constructed in 1941-43 by city of San Diego; storage began during construction period. Capacity table is dated Feb. 18, 1944. Capacity of reservoir at spillway level, 90,230 acre-ft, elevation, 650 ft. Dead storage below lowest outlet, 350 acre-ft, elevation, 493.0 ft. Reservoir storage includes supplemental water from the San Diego River, Santa Ysabel Creek, and Colorado River basins. No diversion above reservoir. Water is released as required for municipal use.

COOPERATION.--Gage heights were provided by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 94,200 acre-ft, spilling Feb. 21, 1980, elevation, 653.54 ft; minimum observed, 12,390 acre-ft, Nov. 1, 1947, elevation, 549.22 ft

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 72,830 acre-ft, July 23, elevation, 633.01 ft; minimum observed, 52,860 acre-ft, Oct. 23, elevation, 611.17 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	613.36	54,740	--
Oct. 31.....	612.06	53,620	-1,120
Nov. 30.....	616.91	57,850	+4,230
Dec. 31.....	617.22	58,120	+270
CAL YR 1984.....	--	--	-7,710
Jan. 31.....	617.39	58,270	+150
Feb. 28.....	619.09	59,790	+1,520
Mar. 31.....	622.53	62,910	+3,120
Apr. 30.....	625.13	65,320	+2,410
May 31.....	629.97	69,890	+4,570
June 30.....	632.82	72,640	+2,750
July 31.....	632.31	72,150	-490
Aug. 31.....	629.41	69,350	-2,800
Sept. 30.....	629.70	69,630	+280
WTR YR 1985.....	--	--	+14,890

11022200 LOS COCHES CREEK NEAR LAKESIDE, CA

LOCATION.--Lat 32°49'57", long 116°54'15", in Ex Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on upstream right bank side of bridge on Old Highway 8, 2.7 mi upstream from mouth, and 1.9 mi southeast of Lakeside.

DRAINAGE AREA.--1.08 mi²

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 18-20, Dec. 27 to Feb. 25. Record good except for period of estimated daily discharges, which is fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470 ft³/s, Dec. 18, 1984, gage height, 7.20 ft from floodmarks; minimum daily, 0.07 ft³/s, July 11, 12, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 470 ft³/s, Dec. 18, gage height, 7.20 ft, from floodmarks; minimum daily, 0.15 ft³/s, Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.39	.86	2.0	1.8	1.5	1.1	.86	.62	.23	.22	.16
2	.22	.35	.84	2.0	7.5	2.1	1.0	.88	.63	.20	.22	.16
3	.22	.37	1.0	1.9	3.3	3.0	1.0	.89	.67	.20	.23	.21
4	.21	.38	.90	1.8	3.5	1.5	1.1	.83	.63	.21	.22	.36
5	.21	.40	.89	1.8	1.9	1.5	1.2	.85	.53	.23	.20	.35
6	.21	.40	.85	2.0	1.9	1.5	1.1	.85	.43	.25	.18	.30
7	.21	.44	1.1	3.5	1.9	1.5	1.1	.88	.38	.24	.20	.27
8	.21	1.0	4.3	2.6	1.9	1.5	1.0	.84	.35	.25	.22	.29
9	.22	.79	1.1	2.0	2.8	1.5	1.0	.89	.36	.27	.22	.33
10	.22	.74	3.3	1.9	2.2	1.5	.98	.95	.38	.26	.23	.31
11	.23	.69	6.5	1.8	2.0	1.5	.99	.90	.40	.21	.23	.26
12	.25	.72	1.9	1.8	1.9	1.5	.98	.90	.38	.19	.23	.24
13	.24	.79	1.5	1.8	1.8	1.4	.97	.85	.40	.21	.23	.22
14	.26	.75	1.5	1.8	1.8	1.3	1.3	.81	.36	.22	.24	.21
15	.26	.75	1.5	1.7	1.8	1.3	.96	.82	.34	.30	.24	.21
16	.25	.81	18	1.7	1.8	1.3	.96	.79	.35	.28	.24	.22
17	.57	.95	4.3	1.7	1.8	1.4	1.2	.76	.34	.26	.27	.25
18	.34	.83	36	1.8	1.8	1.4	1.3	.79	.32	.29	.27	.53
19	.33	.85	11	1.8	1.9	1.3	.98	.73	.32	.28	.25	.29
20	.36	.82	8.5	1.8	2.0	1.4	1.0	.57	.32	.24	.25	.28
21	.36	1.1	1.9	1.8	1.7	1.5	1.2	.57	.33	.21	.24	.26
22	.34	1.1	1.6	1.9	1.6	1.4	1.4	.60	.33	.21	.21	.24
23	.32	2.9	1.4	1.9	1.5	1.4	1.1	.58	.32	.23	.20	.22
24	.30	4.4	1.3	1.9	1.5	1.3	.99	.56	.34	.27	.19	.20
25	.30	2.4	1.2	1.9	1.7	1.4	.96	.58	.34	.28	.17	.18
26	.29	.97	1.4	1.9	1.3	1.4	.90	.57	.33	.22	.17	.26
27	.36	.90	47	2.3	1.4	3.6	.89	.56	.33	.20	.16	.28
28	.38	.90	15	5.4	1.5	4.2	.89	.57	.30	.20	.18	.29
29	.38	.90	7.0	3.0	---	1.3	.90	.58	.29	.23	.17	.27
30	.39	.88	2.8	1.9	---	1.2	.88	.60	.26	.26	.17	.25
31	.38	---	2.2	1.8	---	1.2	---	.62	---	.23	.15	---
TOTAL	9.02	29.67	188.64	64.9	59.5	50.8	31.33	23.05	11.68	7.36	6.62	7.92
MEAN	.29	.99	6.09	2.09	2.12	1.64	1.04	.74	.39	.24	.21	.26
MAX	.57	4.4	47	5.4	7.5	4.2	1.4	.95	.67	.30	.27	.53
MIN	.20	.35	.84	1.7	1.3	1.2	.88	.56	.26	.19	.15	.16
AC-FT	18	59	374	129	118	101	62	46	23	15	13	16
CAL YR 1984	TOTAL	380.50	MEAN	1.04	MAX	47	MIN	.07	AC-FT	755		
WTR YR 1985	TOTAL	490.49	MEAN	1.34	MAX	47	MIN	.15	AC-FT	973		

SAN DIEGO RIVER BASIN

11022350 FORESTER CREEK AT EL CAJON, CA

LOCATION.--Lat 32°49'16", long 116°58'32", in Ex-Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on right bank at downstream side of bridge on Billy Mitchell Drive, 0.8 mi upstream from unnamed tributary, and 3.6 mi upstream from mouth.

DRAINAGE AREA.--21.3 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 368 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 8-10, Feb. 17-20, and Apr. 18 to June 5. Records good. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,870 ft³/s, Dec. 18, 1984, gage height, 7.85 ft; minimum daily, 0.69 ft³/s, July 29, 1984.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*), from rating curve extended above 600 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	0530	778	6.59	Dec. 27	1800	1,150	7.11
Dec. 18	1630	*1,870	*7.85	Feb. 2	1030	822	6.65

Minimum daily, 0.75 ft³/s, Nov. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.92	1.1	1.8	1.4	1.8	1.3	1.6	1.1	2.9	.96	1.4
2	1.0	.98	.76	1.9	49	18	1.3	1.6	1.1	2.9	1.1	1.3
3	1.2	.99	3.7	1.8	4.5	5.2	1.3	1.7	1.1	3.1	1.0	1.4
4	1.1	1.1	.90	1.7	7.8	1.5	1.3	1.7	1.2	2.1	1.0	2.0
5	1.1	1.1	.82	1.7	1.6	1.4	1.3	1.7	1.1	1.6	1.3	1.3
6	1.1	1.1	.81	1.7	1.6	1.3	1.2	1.8	1.1	1.5	1.2	1.3
7	1.1	1.1	.77	23	1.6	1.3	1.2	1.7	1.1	1.3	1.2	1.2
8	1.2	13	23	5.5	1.7	1.4	1.3	1.6	1.0	1.6	1.3	1.3
9	1.1	1.0	1.0	2.0	19	1.4	1.5	1.6	1.1	.95	1.2	1.5
10	1.2	.90	2.0	2.0	1.9	1.5	1.4	1.6	1.2	.94	1.1	1.6
11	1.2	.88	59	1.7	1.9	2.1	1.4	1.6	1.2	1.0	1.2	1.4
12	1.3	.86	1.7	1.7	1.8	2.1	1.5	1.7	1.2	1.2	1.0	1.4
13	1.3	4.6	1.1	1.7	1.8	1.6	1.4	1.7	1.2	1.0	1.1	1.2
14	1.2	.99	1.1	1.6	1.7	1.6	1.4	1.6	1.3	.82	1.2	1.0
15	1.3	.90	.89	1.6	1.7	1.6	1.4	1.5	1.3	1.0	1.2	1.1
16	1.1	11	54	1.6	1.7	1.6	1.5	1.4	1.3	1.0	1.6	1.2
17	14	25	1.2	1.6	1.7	1.6	1.5	1.4	1.6	1.1	1.3	1.2
18	1.1	1.9	204	1.6	1.7	6.6	12	1.4	2.0	1.3	1.3	9.5
19	1.0	1.1	91	1.7	2.0	2.1	2.0	1.4	2.1	1.3	1.4	1.1
20	1.8	.75	55	1.7	13	1.7	1.5	1.4	2.1	1.0	1.5	1.1
21	.96	20	2.2	1.7	2.0	1.8	2.0	1.4	2.1	.85	1.4	.90
22	.96	1.7	1.6	1.8	1.9	1.9	12	1.3	2.4	.90	1.4	.99
23	.97	46	1.4	1.7	1.6	1.8	1.8	1.3	2.1	1.0	1.4	1.2
24	1.0	76	1.3	1.8	1.5	1.8	1.7	1.3	2.2	1.0	1.2	1.3
25	1.0	5.7	1.1	1.7	2.1	1.9	1.7	6.0	1.3	1.0	1.2	1.3
26	1.0	1.0	10	1.7	1.7	1.9	1.7	1.3	1.5	1.0	1.3	1.6
27	1.7	1.0	313	2.1	1.7	29	1.6	1.2	2.0	.96	1.3	1.0
28	.90	.95	63	36	1.7	16	1.7	1.1	2.3	.93	1.3	1.0
29	.90	.90	3.5	3.0	---	1.4	1.6	1.1	2.3	.94	1.6	1.0
30	.95	.84	2.5	1.7	---	1.1	1.6	1.2	2.5	.90	1.8	1.3
31	.99	---	2.0	1.5	---	1.1	---	1.1	---	1.1	1.6	---
TOTAL	47.73	224.26	905.45	114.3	133.3	117.1	66.1	50.0	47.1	40.19	39.66	46.09
MEAN	1.54	7.48	29.2	3.69	4.76	3.78	2.20	1.61	1.57	1.30	1.28	1.54
MAX	14	76	313	36	49	29	12	6.0	2.5	3.1	1.8	9.5
MIN	.90	.75	.76	1.5	1.4	1.1	1.2	1.1	1.0	.82	.96	.90
AC-FT	95	445	1800	227	264	232	131	99	93	80	79	91
CAL YR 1984	TOTAL	1585.79	MEAN	4.33	MAX	313	MIN	.69	AC-FT	3150		
WTR YR 1985	TOTAL	1831.28	MEAN	5.02	MAX	313	MIN	.75	AC-FT	3630		

11022480 SAN DIEGO RIVER AT MAST ROAD, NEAR SANTEE, CA

LOCATION.--Lat 32°49'29", long 117°03'17", in Ex Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, near left bank at Mast Road bridge, 1.1 mi upstream from Old Mission Damsite, 2.8 mi west of Santee, and 14.2 mi downstream from El Capitan Lake.

DRAINAGE AREA.--368 mi².

PERIOD OF RECORD.--May 1912 to December 1915 (monthly discharge only for some periods and yearly estimates only for 1924-25, published in WSP 1315-B), March 1916 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 300 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 10, 1920, nonrecording gage at site 1.5 mi upstream at different datum. Nov. 10, 1920, to Jan. 19, 1982 at site 2.6 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Cuyamaca Reservoir, capacity, 11,540 acre-ft, El Capitan Lake (station 11020600), and San Vicente Reservoir (station 11022100). Diversions by city of San Diego for municipal supply and by Helix Irrigation District. AVERAGE DISCHARGE represents flow to ocean during period of record, regardless of upstream development.

AVERAGE DISCHARGE.--72 years (water years 1913-15, 1917-85), 25.5 ft³/s, 18,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,200 ft³/s, Jan. 27, 1916, based on slope-conveyance computation of peak flow, gage height, 25.1 ft, from floodmarks, site and datum then in use; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,250 ft³/s, Dec. 18, gage height, 8.48 ft, from rating curve extended above 3,300 ft³/s; minimum daily, 0.97 ft³/s, Sept. 2.

EXTREMES FOR 1984 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--Maximum discharge, 1,110 ft³/s, Nov. 25, gage height, 5.67 ft, from rating curve extended above 3,300 ft³/s; minimum daily, 1.40 ft³/s, Aug. 1-3, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES
(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.1	19	124	144	14	7.4	4.9	2.6	2.4	1.4	2.1
2	11	6.2	14	132	143	14	7.0	5.1	2.7	3.6	1.4	1.8
3	7.7	6.2	63	133	142	13	6.8	5.5	3.0	4.2	1.4	1.7
4	7.2	6.4	33	132	92	14	7.0	5.7	3.3	2.5	1.5	1.6
5	6.8	6.5	20	152	56	14	6.9	5.8	3.6	2.3	1.4	1.7
6	6.8	6.7	16	87	46	13	35	5.8	5.0	2.5	1.5	1.7
7	24	6.7	15	69	39	13	7.3	6.0	6.9	2.5	1.6	1.8
8	9.1	7.0	15	119	36	12	7.0	5.9	5.1	2.5	1.5	1.7
9	8.0	6.8	29	120	32	13	7.0	5.7	4.6	2.3	1.5	1.6
10	7.7	6.5	19	141	31	13	6.7	6.0	4.3	2.3	1.7	1.8
11	7.0	6.8	16	140	26	13	7.2	4.6	3.9	2.4	1.6	1.9
12	6.7	25	17	136	24	13	7.1	3.3	3.2	2.4	1.6	1.8
13	6.7	18	13	142	22	12	7.0	2.8	2.6	2.4	1.5	1.8
14	6.9	8.8	45	142	21	12	7.6	2.5	2.6	4.3	1.5	1.6
15	6.5	7.9	88	138	20	11	7.6	2.6	2.5	2.8	1.5	1.8
16	6.2	7.5	91	158	18	11	7.3	2.4	2.4	2.3	1.6	1.7
17	6.6	7.3	89	162	17	11	7.2	2.4	2.4	2.2	1.7	2.0
18	6.7	9.2	95	142	17	11	7.2	2.3	2.6	2.3	1.8	1.7
19	7.4	7.4	104	146	16	11	17	2.3	2.4	2.4	1.9	1.7
20	7.2	119	118	146	16	12	6.0	2.4	2.6	2.2	2.1	1.7
21	7.2	44	122	144	16	10	5.7	2.4	2.9	2.3	1.9	1.9
22	6.9	18	111	145	16	10	5.8	2.4	3.1	2.2	1.9	1.9
23	7.2	13	107	144	15	9.8	6.0	2.5	3.0	2.2	1.9	1.7
24	7.2	11	146	144	15	9.4	6.1	2.7	3.0	2.8	1.9	1.6
25	6.3	137	194	145	15	8.9	5.4	3.0	2.6	2.3	1.9	1.8
26	5.7	24	97	145	14	8.9	5.7	2.9	2.4	2.0	1.8	1.7
27	5.7	18	82	145	14	8.6	9.2	2.8	2.4	8.0	1.7	1.6
28	5.8	19	50	144	14	8.1	8.2	2.8	2.6	7.4	1.7	1.6
29	5.7	18	40	146	14	7.9	5.1	2.9	2.8	1.7	1.6	1.6
30	5.7	13	52	146	---	7.9	5.2	2.7	2.4	1.5	1.7	1.5
31	5.9	---	101	145	---	8.1	---	2.6	---	1.5	5.0	---
TOTAL	235.5	597.0	2023	4254	1091	347.6	241.7	113.7	95.5	86.7	54.7	52.3
MEAN	7.60	19.9	65.3	137	37.6	11.2	8.06	3.67	3.18	2.80	1.76	1.74
MAX	24	137	194	162	144	14	35	6.0	6.9	8.0	5.0	2.1
MIN	5.7	6.1	13	69	14	7.9	5.1	2.3	2.4	1.5	1.4	1.5
AC-FT	467	1180	4010	8440	2160	689	479	226	189	172	108	104
CAL YR 1983	TOTAL	30793.5	MEAN	84.4	MAX	2270	MIN	5.2	AC-FT	61080		
WTR YR 1984	TOTAL	9192.7	MEAN	25.1	MAX	194	MIN	1.4	AC-FT	18230		

SAN DIEGO RIVER BASIN

11022480 SAN DIEGO RIVER AT MAST ROAD, NEAR SANTEE, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.2	8.2	33	14	11	11	7.5	3.9	1.5	1.4	1.1
2	1.8	2.1	7.6	28	58	23	10	7.2	3.9	1.6	1.3	.97
3	1.9	2.2	10	20	25	25	9.1	7.8	4.1	1.6	1.4	1.0
4	2.1	2.2	9.2	15	28	15	9.1	7.7	4.3	2.0	1.4	1.2
5	2.4	2.3	7.4	14	20	19	9.5	8.0	4.0	1.9	1.3	1.9
6	2.9	2.4	6.6	14	18	17	9.5	8.3	4.0	1.8	1.4	1.5
7	2.0	2.4	7.1	36	16	19	9.2	7.3	3.9	1.7	1.4	1.2
8	1.9	17	63	29	15	17	8.3	7.2	3.8	1.7	1.5	1.1
9	2.2	6.6	12	19	31	16	8.0	7.2	3.7	1.9	1.6	1.1
10	2.3	3.4	46	18	18	16	7.9	7.3	3.7	1.6	1.5	1.2
11	2.3	2.9	170	17	16	16	7.6	7.3	3.5	1.5	1.4	1.1
12	2.4	3.1	42	14	15	17	7.2	7.4	3.0	1.6	1.5	1.0
13	2.3	6.7	25	15	16	15	7.4	7.7	2.8	1.7	1.5	1.0
14	2.2	5.2	16	14	15	18	7.6	6.9	2.7	1.5	1.5	1.0
15	2.2	3.5	13	16	15	17	7.7	6.6	2.6	1.7	1.5	.98
16	2.1	4.4	73	16	15	17	6.8	6.2	2.5	1.7	1.4	1.0
17	19	34	19	15	15	17	6.9	6.0	2.3	1.5	1.7	1.2
18	4.0	4.7	248	14	15	19	22	6.2	2.4	1.6	1.5	15
19	2.4	5.4	168	14	16	19	10	6.2	2.0	1.7	1.3	5.8
20	2.7	4.4	112	15	23	14	9.2	6.5	1.9	1.5	1.3	2.1
21	2.4	25	44	15	20	14	11	6.1	1.9	1.4	1.3	1.7
22	2.0	8.6	29	15	13	13	21	6.0	2.0	1.4	1.2	1.3
23	2.0	53	23	14	12	13	8.3	5.6	1.9	1.5	1.2	1.2
24	2.0	61	20	14	11	13	7.4	5.8	1.8	1.6	1.2	1.2
25	1.9	46	18	14	10	14	7.5	7.6	2.0	1.6	1.1	1.3
26	1.9	14	18	14	10	15	7.9	4.6	2.0	1.4	1.1	1.5
27	2.3	11	359	15	10	36	7.3	3.9	1.9	1.3	1.2	2.5
28	2.4	10	296	36	10	45	7.6	4.0	1.8	1.2	1.2	2.0
29	2.1	9.6	78	24	---	20	7.2	4.3	1.7	1.3	1.1	1.9
30	2.1	8.6	51	16	---	15	6.9	4.3	1.6	1.3	1.2	2.0
31	2.2	---	38	15	---	13	---	4.1	---	1.2	1.1	---
TOTAL	86.1	363.9	2037.1	568	500	558	276.1	198.8	83.6	48.5	41.7	59.05
MEAN	2.78	12.1	65.7	18.3	17.9	18.0	9.20	6.41	2.79	1.56	1.35	1.97
MAX	19	61	359	36	58	45	22	8.3	4.3	2.0	1.7	15
MIN	1.7	2.1	6.6	14	10	11	6.8	3.9	1.6	1.2	1.1	.97
AC-FT	171	722	4040	1130	992	1110	548	394	166	96	83	117
CAL YR 1984	TOTAL	8824.3	MEAN	24.1	MAX	359	MIN	1.4	AC-FT	17500		
WTR YR 1985	TOTAL	4820.85	MEAN	13.2	MAX	359	MIN	.97	AC-FT	9560		

11023000 SAN DIEGO RIVER AT FASHION VALLEY, AT SAN DIEGO, CA

LOCATION.--Lat 32°45'54", long 117°10'04", in Ex Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on left bank 2.6 mi upstream from mouth, 500 ft upstream from Fashion Valley road crossing, 0.4 mi downstream from unnamed tributary, and 26.4 mi downstream from El Capitan Reservoir.

DRAINAGE AREA.--429 mi².

PERIOD OF RECORD.--January 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records excellent. Flow regulated by Cuyamaca Reservoir, capacity 11,540 acre-ft, El Capitan Reservoir (station 11020600), and San Vicente Reservoir (station 11022100). Diversions by city of San Diego for municipal supply and by Helix Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,280 ft³/s, Mar. 2, 1983, gage height, 13.11 ft, from rating curve extended above 5,800 ft³/s; no flow many days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,150 ft³/s, Dec. 27, gage height, 8.89 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	1.2	11	62	19	12	18	7.1	2.7	.85	0	0
2	0	1.1	9.9	52	74	15	15	7.0	2.6	.60	0	0
3	0	1.2	11	46	94	27	14	7.2	2.6	.42	0	.28
4	0	1.2	11	38	46	30	13	8.4	2.2	.05	0	.39
5	0	1.5	9.2	33	36	20	14	8.5	2.0	.29	.60	.35
6	0	1.3	9.3	29	29	16	14	7.7	2.0	.70	.85	.14
7	0	1.3	13	39	24	16	14	6.5	2.1	.89	.64	.22
8	0	9.4	96	64	21	15	13	5.7	2.4	.92	.38	.01
9	0	6.9	57	49	46	17	12	5.2	2.5	.63	.02	.34
10	0	5.2	30	33	53	16	11	5.1	2.2	.42	0	.22
11	0	5.0	368	29	31	14	10	5.5	1.6	.05	.55	.19
12	.49	5.4	218	27	22	14	8.9	5.7	1.4	0	.89	.18
13	.54	6.2	62	25	19	13	9.1	5.5	1.1	0	.83	.14
14	.57	6.1	40	21	16	12	9.4	5.0	.97	0	.94	.05
15	.68	5.2	27	20	15	12	8.6	5.2	.90	0	.73	.18
16	.47	8.7	144	19	14	13	7.5	4.9	.94	0	.75	.17
17	5.0	44	94	20	16	14	9.6	5.0	.93	0	2.1	.29
18	3.9	22	183	19	16	13	13	4.9	.84	0	1.7	1.7
19	3.4	19	566	19	15	12	12	5.1	.71	0	1.2	1.2
20	2.7	13	376	19	17	13	12	4.2	.73	0	.85	1.0
21	2.4	10	163	17	43	14	13	3.7	.69	0	.77	.86
22	2.1	49	68	15	32	12	22	3.6	.56	.82	.65	.77
23	1.7	84	47	14	21	12	18	3.6	.78	.64	.58	.70
24	1.4	100	37	16	17	13	14	3.3	.87	.43	.55	.56
25	1.2	231	31	14	14	12	11	3.5	.76	.04	.48	.35
26	1.1	67	27	15	12	10	8.8	3.5	.62	0	.46	.45
27	1.2	27	593	17	12	18	7.7	3.4	.46	0	.28	.32
28	1.4	17	650	24	12	78	7.9	3.2	.09	0	0	.22
29	1.6	14	281	79	---	59	7.0	2.9	0	0	0	.34
30	1.6	12	125	42	---	32	6.7	2.7	.62	0	0	.53
31	1.4	---	79	24	---	22	---	2.6	---	0	0	---
TOTAL	34.85	775.9	4436.4	940	786	596	354.2	155.4	38.87	7.75	16.80	12.15
MEAN	1.12	25.9	143	30.3	28.1	19.2	11.8	5.01	1.30	.25	.54	.40
MAX	5.0	231	650	79	94	78	22	8.5	2.7	.92	2.1	1.7
MIN	0	1.1	9.2	14	12	10	6.7	2.6	0	0	0	0
AC-FT	69	1540	8800	1860	1560	1180	703	308	77	15	33	24
CAL YR 1984	TOTAL	11890.85	MEAN	32.5	MAX	650	MIN	0	AC-FT	23590		
WTR YR 1985	TOTAL	8154.32	MEAN	22.3	MAX	650	MIN	0	AC-FT	16170		

LOS PENASQUITOS CREEK BASIN

11023250 POWAY CREEK NEAR POWAY, CA

LOCATION.--Lat 32°57'13", long 117°00'50", in NE 1/4 SE 1/4 sec.18, T.14 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on right bank 100 ft downstream from unnamed tributary, 1,000 ft upstream from bridge on Standish Drive, and 1.4 mi southeast of Poway Post Office.

DRAINAGE AREA.--7.92 mi².

PERIOD OF RECORD.--October 1969 to September 1977 (gage heights and discharge measurements only), October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 540 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8, 24, Dec. 3, 8, 10, 11, 16-21, 26-30, Jan. 8-10, Feb. 2-4, 9, Mar. 2, 27, 28, Sept. 18. Records poor. Flow partly regulated by small conservation reservoirs.

AVERAGE DISCHARGE.--8 years, 1.79 ft³/s, 1,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft³/s, Feb. 21, 1980, gage height, 7.26 ft, on basis of rating extended above 40 ft³/s based on a step-backwater analysis up to gage height 8.3 ft; no flow many months each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 27	Unknown	*6.60	*4.46				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	0	0						0
2		0	0	0	.48	.01						0
3		0	.01	0	.06	0						0
4		0	0	0	.38	0						0
5		0	0	0	0	0						0
6		0	0	0	0	0						0
7		0	0	0	0	0						0
8		.01	.24	.21	0	0						0
9		0	0	.03	.01	0						0
10		0	.10	.01	0	0						0
11		0	1.8	0	0	0						0
12		0	0	0	0	0						0
13		0	0	0	0	0						0
14		0	0	0	0	0						0
15		0	0	0	0	0						0
16		0	.90	0	0	0						0
17		0	.10	0	0	0						0
18		0	1.6	0	0	0						.24
19		0	1.4	0	0	0						0
20		0	.25	0	0	0						0
21		0	.04	0	0	0						0
22		0	0	0	0	0						0
23		0	0	0	0	0						0
24		.76	0	0	0	0						0
25		0	0	0	0	0						0
26		0	.18	0	0	0						0
27		0	3.3	0	0	.02						0
28		0	.50	0	0	.04						0
29		0	.20	0	0	0						0
30		0	.04	0	---	0						0
31		---	0	0	---	0	---		---			---
TOTAL	0	0.77	10.66	0.25	0.93	0.07	0	0	0	0	0	0.24
MEAN	0	.026	.34	.008	.032	.002	0	0	0	0	0	.008
MAX	0	.76	3.3	.21	.48	.04	0	0	0	0	0	.24
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	1.5	21	.5	1.8	.1	0	0	0	0	0	.5
CAL YR 1984	TOTAL	11.95	MEAN	.033	MAX	3.3	MIN	0	AC-FT	24		
WTR YR 1985	TOTAL	12.92	MEAN	.035	MAX	3.3	MIN	0	AC-FT	26		

LOS PENASQUITOS CREEK BASIN

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11023310 RATTLESNAKE CREEK AT POWAY, CA

LOCATION.--Lat 32°57'07", long 117°02'56", in SE 1/4 SE 1/4 sec.14, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right bank 400 ft above mouth, and 1.0 mi southwest of Poway Post Office.

DRAINAGE AREA.--8.13 mi².

PERIOD OF RECORD.--October 1969 to September 1977 (gage heights and discharge measurements only), October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 457 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--8 years, 2.98 ft³/s, 2,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft³/s, Feb. 21, 1980, gage height, 2.88 ft, from rating curve extended above 100 ft³/s on basis of stepback-water computations and slope-conveyence study at gage height 1.20 ft; no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 27	1815	*100	*1.18				
No flow many days.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.02	.57	.17	.17	.18	.03	.01	0	.02	0
2	0	0	.02	.46	5.0	1.9	.15	.05	.01	.01	0	0
3	0	0	1.2	.34	1.5	1.7	.15	.04	.02	0	0	0
4	0	0	.07	.38	4.0	.21	.15	.03	.02	0	0	.07
5	0	0	.02	.34	.38	.28	.15	.03	.02	.02	0	.01
6	0	0	.02	.34	.26	.25	.15	.05	.03	.02	0	0
7	0	0	.55	2.2	.23	.23	.13	.05	.01	0	0	0
8	0	1.6	2.6	1.4	.22	.23	.08	.05	.04	0	0	0
9	0	.01	.03	.34	3.8	.23	.18	.04	.02	0	0	0
10	0	0	1.8	.34	.72	.23	.55	.07	.01	0	0	.01
11	0	0	19	.23	.26	.23	.20	.04	0	0	.01	0
12	.01	0	1.0	.23	.23	.26	.08	.04	0	0	0	0
13	0	0	.24	.23	.22	.23	.43	.03	.02	.01	0	0
14	0	0	.15	.23	.25	.35	.66	.02	.03	.01	0	0
15	0	0	.10	.23	.16	.26	.18	.02	.01	.01	.01	0
16	0	0	9.3	.23	.17	.23	.07	.03	.01	.02	.01	0
17	.63	.01	.66	.23	.16	.23	.08	.02	.01	.02	.01	.09
18	0	.01	16	.23	.15	.59	.46	.03	.01	.03	.01	2.5
19	0	.01	14	.23	.16	.26	.09	.03	0	.03	0	.08
20	0	0	4.2	.23	.82	.23	.10	.02	0	.02	0	0
21	0	.20	1.1	.23	.57	.23	.25	.02	0	.02	0	0
22	0	.68	.56	.24	.18	.23	.34	.02	0	.01	0	0
23	0	2.4	.40	.25	.17	.23	.08	.04	0	0	0	0
24	0	7.8	.34	.23	.15	.21	.08	.04	0	.01	.03	0
25	0	2.3	.34	.23	.16	.21	.11	.03	.01	.01	0	0
26	0	.04	1.1	.23	.15	.16	.07	.03	.01	.01	0	0
27	0	.05	34	.23	.16	2.6	.05	.08	0	0	0	0
28	.01	.04	5.4	1.2	.16	3.9	.04	.05	0	.01	0	0
29	.01	.02	1.8	.67	---	.43	.04	.17	0	0	0	0
30	.01	.02	1.2	.23	---	.23	.06	.02	.01	.01	0	0
31	0	---	.98	.23	---	.20	---	.03	---	0	0	---
TOTAL	0.67	15.19	118.20	12.98	20.56	16.93	5.34	1.25	0.31	0.28	0.10	2.76
MEAN	.022	.51	3.81	.42	.73	.55	.18	.040	.010	.009	.003	.092
MAX	.63	7.8	34	2.2	5.0	3.9	.66	.17	.04	.03	.03	2.5
MIN	0	0	.02	.23	.15	.16	.04	.02	0	0	0	0
AC-FT	1.3	30	234	26	41	34	11	2.5	.6	.6	.2	5.5
CAL YR 1984	TOTAL	186.21	MEAN	.51	MAX	34	MIN	0	AC-FT	369		
WTR YR 1985	TOTAL	194.57	MEAN	.53	MAX	34	MIN	0	AC-FT	386		

LOS PENASQUITOS CREEK BASIN

11023325 BEELEER CREEK AT POMERADO ROAD, NEAR POWAY, CA

LOCATION.--Lat 32°56'23", long 117°03'57", in NW 1/4 SW 1/4 sec.23, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right downstream wingwall of bridge on Pomerado Road, 0.8 mi. upstream from Poway Creek, and 1.7 mi southwest of Poway Post Office.

DRAINAGE AREA.--5.46 mi².

PERIOD OF RECORD.--November 1969 to September 1977 (gage heights and discharge measurements only), October 1977 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 465 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 7 to Nov. 21, Dec. 6 to Jan. 18, 23 to Mar. 4, 14-22. Records poor. Flow partially regulated by several conservation reservoirs above station.

AVERAGE DISCHARGE.--9 years, 2.02 ft³/s, 1,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, Jan. 29, 1980, gage height, 9.20 ft, from rating curve extended above 80 ft³/s on basis of slope-area measurement at gage height 8.79 ft; no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 27	Unknown	*28	*5.45				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.53	.44	.40	.19	.13	.02			
2		0	0	.53	.50	.39	.16	.13	.02			
3		0	.01	.53	.44	.42	.15	.12	.02			
4		0	.01	.53	.47	.40	.15	.12	.02			
5		0	.01	.53	.44	.40	.14	.12	.01			
6		0	.01	.52	.44	.40	.13	.12	0			
7		0	0	.52	.43	.38	.13	.11	0			
8		0	.25	.53	.43	.37	.13	.11	0			
9		0	0	.56	.47	.36	.13	.11	0			
10		0	0	.54	.43	.36	.15	.11	0			
11		0	1.8	.54	.43	.36	.15	.10	0			
12		0	.60	.54	.43	.37	.15	.10	0			
13		0	.40	.54	.42	.37	.15	.10	0			
14		0	.30	.54	.42	.37	.15	.08	0			
15		0	.27	.54	.42	.35	.15	.07	0			
16		0	.26	.54	.42	.34	.15	.07	0			
17		0	.25	.54	.42	.33	.15	.06	0			
18		0	1.5	.52	.41	.32	.13	.05	0			
19		0	1.4	.50	.41	.35	.11	.06	0			
20		0	.65	.45	.41	.29	.11	.06	0			
21		0	.55	.45	.41	.24	.11	.06	0			
22		0	.55	.45	.41	.18	.13	.03	0			
23		.01	.55	.45	.41	.18	.12	.03	0			
24		.05	.55	.45	.41	.16	.12	.02	0			
25		0	.55	.45	.41	.15	.13	.02	0			
26		0	.58	.45	.40	.15	.13	.02	0			
27		0	3.3	.45	.40	.16	.13	.02	0			
28		0	.60	.45	.40	.17	.13	.02	0			
29		0	.58	.47	---	.19	.13	.02	0			
30		0	.55	.44	---	.21	.13	.01	0			
31		---	.53	.44	---	.21	---	.01	---			---
TOTAL	0	0.06	16.61	15.52	11.93	9.33	4.12	2.19	0.09	0	0	0
MEAN	0	.002	.54	.50	.43	.30	.14	.071	.003	0	0	0
MAX	0	.05	3.3	.56	.50	.42	.19	.13	.02	0	0	0
MIN	0	0	0	.44	.40	.15	.11	.01	0	0	0	0
AC-FT	0	.1	33	31	24	19	8.2	4.3	.2	0	0	0

CAL YR 1984	TOTAL	18.57	MEAN	.05	MAX	3.3	MIN	0	AC-FT	37
WTR YR 1985	TOTAL	59.85	MEAN	.16	MAX	3.3	MIN	0	AC-FT	119

11023330 LOS PENASQUITOS CREEK BELOW POWAY CREEK, NEAR POWAY, CA

LOCATION.--Lat 32°56'58", long 117°04'08", in NE 1/4 NE 1/4 sec.22, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right bank 10 ft upstream from concrete ford on Cobblestone Creek Road, 0.2 mi downstream from confluence of Poway and Pomerado Creeks, and 2.0 mi southwest of Poway.

DRAINAGE AREA.--31.2 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 415 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1, 2, Oct. 12 to Nov. 21. Records fair. Flow partly regulated by small conservation reservoirs.

AVERAGE DISCHARGE.--15 years, 6.70 ft³/s, 4,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,990 ft³/s, Feb. 21, 1980, gage height, 11.11 ft, from rating curve extended above 300 ft³/s on basis of slope-area measurements at gage heights 9.58 ft and 11.11 ft; no flow parts of some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 11	0615	227	5.24	Dec. 18	1800	253	5.34
Dec. 16	0500	204	5.15	Dec. 27	1800	*438	*5.92

No flow Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.21	.30	3.8	1.2	1.2	.96	1.1	.12	.06	.08	.08
2	.02	.20	.30	3.2	21	3.8	1.0	1.2	.11	.06	.08	.07
3	0	.22	8.6	2.4	4.1	5.7	1.3	1.1	.11	.06	.11	.07
4	.01	.22	1.4	2.1	15	1.2	1.2	.87	.10	.06	.08	.14
5	.02	.21	.40	1.9	2.7	1.1	1.2	.83	.09	.06	.08	.11
6	.02	.23	.34	1.8	2.2	.91	1.2	.84	.13	.06	.08	.06
7	.02	.22	1.2	5.4	1.8	.91	1.5	.82	.08	.07	.08	.04
8	.02	3.5	16	6.0	1.8	.94	1.6	.81	.14	.08	.08	.06
9	.02	2.0	.74	2.4	14	.91	1.5	.91	.30	.06	.08	.07
10	.02	1.1	5.0	2.2	3.2	.92	1.4	.95	.30	.09	.08	.06
11	.02	.60	97	1.7	2.3	.96	1.1	.95	.18	.08	.25	.08
12	.09	.27	5.8	1.6	2.5	.90	.74	.95	.17	.08	.39	.04
13	.04	.29	1.4	1.5	2.0	.91	.88	.99	.17	.08	.11	.02
14	.03	.28	.70	1.2	1.8	.95	1.2	.90	.16	.08	.11	.06
15	.03	.27	.69	1.2	1.8	.93	.81	.88	.18	.08	.10	.05
16	.03	.35	47	1.2	2.4	.91	.51	.70	.14	.08	.13	.04
17	1.4	.50	1.9	1.2	2.6	.91	.45	.78	.15	.08	.13	.10
18	.70	.43	72	1.4	2.6	1.3	1.6	.74	.13	.08	.15	7.5
19	.23	.48	64	1.7	3.2	1.9	.94	.70	.18	.08	.16	.41
20	.22	.40	19	1.6	2.9	1.2	.81	.82	.10	.08	.14	.11
21	.21	2.5	2.6	1.6	2.8	1.0	1.2	.68	.08	.08	.11	.10
22	.21	1.9	1.8	1.6	1.6	.86	2.1	.70	.08	.08	.11	.10
23	.14	17	1.2	1.6	1.6	.80	.87	.49	.08	.10	.09	.08
24	.16	35	1.1	1.5	1.2	.73	.72	.38	.09	.19	.08	.08
25	.15	21	.91	1.4	1.2	.75	.81	.45	.08	.09	.08	.10
26	.12	.64	2.3	1.5	1.2	.67	.74	.27	.08	.08	.08	.10
27	.16	.33	166	1.6	1.2	4.8	.78	.22	.08	.08	.08	.09
28	.20	.32	57	3.9	1.1	12	.89	.28	.07	.08	.08	.10
29	.21	.35	10	4.3	---	1.6	.89	.18	.06	.08	.08	.10
30	.22	.30	5.6	1.6	---	1.0	1.1	.20	.06	.08	.07	.11
31	.21	---	4.2	1.2	---	.91	---	.22	---	.08	.08	---
TOTAL	4.95	91.32	596.48	67.3	103.0	53.58	32.00	21.91	3.80	2.50	3.44	10.13
MEAN	.16	3.04	19.2	2.17	3.68	1.73	1.07	.71	.13	.081	.11	.34
MAX	1.4	35	166	6.0	21	12	2.1	1.2	.30	.19	.39	7.5
MIN	0	.20	.30	1.2	1.1	.67	.45	.18	.06	.06	.07	.02
AC-FT	9.8	181	1180	133	204	106	63	43	7.5	5.0	6.8	20
CAL YR 1984	TOTAL	837.46	MEAN	2.29	MAX	166	MIN	0	AC-FT	1660		
WTR YR 1985	TOTAL	990.41	MEAN	2.71	MAX	166	MIN	0	AC-FT	1960		

LOS PENASQUITOS CREEK BASIN

11023340 LOS PENASQUITOS CREEK NEAR POWAY, CA

LOCATION.--Lat 32°56'35", long 117°07'15", in Los Penasquitos Grant, San Diego County, Hydrologic Unit 18070304, on left bank 1.0 mi downstream from Cypress Creek, and 5.5 mi southwest of Poway.

DRAINAGE AREA.--42.1 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 260 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated by several conservation reservoirs above station. Pumping from wells along stream for irrigation. Flow augmented by reclaimed water from Poway area.

AVERAGE DISCHARGE.--21 years, 8.35 ft³/s, 6,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Feb. 21, 1980, gage height, 10.26 ft, from rating curve extended above 1,400 ft³/s; no flow at times in 1968, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 27	2030	*526	*4.75				
Minimum daily, 0.35 ft ³ /s, Aug. 27, 29.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.79	1.1	5.9	2.3	1.7	2.2	1.0	.63	.45	.54	.69
2	.56	.74	1.1	5.0	22	2.9	1.7	.97	.62	.44	.45	.56
3	.57	.80	8.5	4.4	6.6	9.9	1.6	.86	.62	.42	.47	.60
4	.62	.81	6.5	3.7	13	3.3	1.7	.85	.62	.60	.44	.60
5	.61	.79	1.7	3.4	4.9	2.5	1.5	.81	.61	.54	.44	.55
6	.61	.87	1.3	3.2	2.7	2.3	1.6	.78	.59	.55	.40	.50
7	.62	.85	1.9	4.9	2.3	2.1	1.5	.72	.64	.56	.37	.43
8	.59	5.6	18	9.3	2.3	2.1	1.4	.71	.60	.54	.38	.41
9	.63	4.5	2.7	4.3	13	2.2	1.8	.83	.60	.53	.43	.39
10	.63	1.6	2.0	3.2	6.7	2.2	1.5	1.1	.59	.49	.42	.43
11	.65	1.2	134	3.0	3.0	2.1	1.6	.82	.71	.47	.40	.44
12	.82	1.0	18	2.7	3.0	2.2	1.4	.75	.66	.44	.36	.43
13	.82	1.1	3.5	2.5	2.9	2.1	1.5	.74	.66	.53	.40	.41
14	.69	1.1	2.2	2.5	2.4	2.1	1.7	.72	.60	.49	.39	.54
15	.67	1.0	1.8	2.4	2.2	2.5	2.0	.69	.59	.47	.40	.43
16	.67	1.2	69	2.3	2.5	2.4	1.5	.67	.57	.52	.44	.41
17	2.2	1.9	5.6	2.4	3.0	2.2	1.4	.73	.53	.49	.44	.47
18	1.5	1.6	79	2.3	3.1	2.9	3.3	.75	.50	.51	.42	4.5
19	.84	1.8	117	2.3	3.5	4.3	2.5	.70	.59	.52	.40	1.6
20	.80	1.5	42	2.5	4.0	3.2	1.5	.74	.59	.49	.41	1.1
21	.79	3.0	6.1	2.5	5.0	2.8	1.7	.88	.54	.44	.39	.62
22	.77	4.1	4.4	2.5	2.2	2.5	3.6	.68	.61	.44	.39	.51
23	.64	37	3.2	2.5	1.8	2.6	2.0	.65	.58	.47	.43	.46
24	.65	33	2.7	2.5	1.8	2.3	1.4	.68	.60	.44	.39	.46
25	.67	57	2.5	2.4	1.7	2.2	1.2	.69	.59	.48	.42	.44
26	.59	3.1	2.7	2.7	1.7	2.0	1.2	.71	.57	.47	.37	.48
27	.70	1.7	236	2.7	1.6	6.1	1.1	.63	.55	.45	.35	.50
28	.75	1.4	76	3.6	1.6	26	.88	.57	.54	.46	.36	.50
29	.76	1.3	18	7.3	---	6.4	.92	.61	.55	.43	.35	.56
30	.83	1.2	9.7	3.2	---	3.0	.92	.58	.50	.43	.37	.60
31	.80	---	7.2	2.6	---	2.5	---	.62	---	.60	.53	---
TOTAL	23.61	173.55	885.4	106.7	122.8	115.6	49.82	23.24	17.75	15.16	12.77	20.64
MEAN	.76	5.78	28.6	3.44	4.39	3.73	1.66	.75	.59	.49	.41	.69
MAX	2.2	57	236	9.3	22	26	3.6	1.1	.71	.60	.54	4.5
MIN	.56	.74	1.1	2.3	1.6	1.7	.88	.57	.50	.42	.35	.39
AC-FT	47	344	1760	212	244	229	99	46	35	30	25	41
CAL YR 1984	TOTAL	1335.79	MEAN	3.65	MAX	236	MIN	.16	AC-FT	2650		
WTR YR 1985	TOTAL	1567.04	MEAN	4.29	MAX	236	MIN	.35	AC-FT	3110		

11023400 CARROLL CREEK NEAR LA JOLLA, CA

LOCATION.--Lat 32°53'45", long 117°13'04", in Pueblo Lands, San Diego County, Hydrologic Unit 18070304, on left bank 0.9 mi upstream from Los Penasquitos Creek, 1.7 mi downstream from Soledad Creek, 4.5 mi northeast of La Jolla, and 7.5 mi downstream from Miramar Reservoir.

DRAINAGE AREA.--15.8 mi².

PERIOD OF RECORD.--March to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Mar. 1-20. Records fair. Flow partially regulated by Miramar Reservoir, capacity, 7,180 acre-ft, 7.5 mi upstream since 1960.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13 ft³/s, Apr. 17, gage height, 1.32 ft; minimum daily, 0.14 ft³/s, Sept. 15, 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						.50	1.0	.59	.41	.32	.75	.21
2						.50	1.2	.77	.43	.27	.51	.25
3						1.6	1.6	1.0	.44	.29	.44	.27
4						.65	1.7	.96	.44	.32	.41	.31
5						.55	1.7	.88	.52	.37	1.1	.33
6						.52	1.7	.97	.53	.45	.38	.27
7						.45	1.5	1.1	.68	.53	.25	.28
8						.46	1.5	.76	.58	.59	.32	.27
9						.47	1.5	.83	.59	.58	.37	.30
10						.48	1.7	.86	.66	.68	.27	.22
11						.47	1.9	.76	.59	.81	.31	.20
12						.48	2.0	.67	.69	.81	.34	.16
13						.50	2.2	.66	.67	.88	.25	.19
14						.48	2.1	.69	.73	1.2	.20	.18
15						.56	1.8	.59	.77	1.1	.21	.14
16						.54	1.6	.58	.77	.72	.23	.18
17						.52	2.2	.53	.77	.75	.25	.20
18						.68	2.1	.49	.77	.67	.24	1.5
19						.95	.66	.57	.77	.58	.23	.27
20						.55	.67	.50	.77	.51	.25	.14
21						.51	.74	.48	.80	.51	.25	.14
22						.51	.90	.44	.77	.51	.26	.16
23						.51	.73	.39	.77	.55	.22	.16
24						.56	1.3	.41	.71	.51	.19	.15
25						.72	.48	.39	.59	.48	.17	.16
26						.70	.38	.30	.59	.52	.24	.19
27						1.2	.36	.28	.57	.55	.19	.21
28						4.2	.38	.31	.51	.51	.22	.22
29					---	1.4	.35	.29	.44	.68	.23	.25
30					---	1.0	.41	.32	.34	.66	.23	.27
31		---			---	1.0	---	.37	---	.81	.24	---
TOTAL						24.22	38.36	18.74	18.67	18.72	9.75	7.78
MEAN						.78	1.28	.60	.62	.60	.31	.26
MAX						4.2	2.2	1.1	.80	1.2	1.1	1.5
MIN						.45	.35	.28	.34	.27	.17	.14
AC-FT						48	76	37	37	37	19	15

LOS PENASQUITOS CREEK BASIN

11023450 CARMEL CREEK NEAR DEL MAR, CA

LOCATION.--Lat 32°55'48", long 117°14'22", in SE 1/4 NE 1/4 sec.25, T.14 S., R.4 W., San Deigo County, Hydrologic Unit 18070304, on right bank 40 ft upstream from box culverts under Interstate 5, 1.2 mi upstream from mouth, and 2.2 mi southeast of Del Mar.

DRAINAGE AREA.--1.11 mi².

PERIOD OF RECORD.--May to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 1 to 16. Record good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 0.45 ft³/s, Sept. 18, gage height, 3.55 ft; minimum daily, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, MAY TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								0	0	0	.01	.01
2								0	0	0	.01	.01
3								0	0	0	.01	.01
4								0	0	0	0	.01
5								0	0	0	0	.01
6								0	0	0	0	.02
7								0	0	0	0	.02
8								0	0	0	0	.01
9								0	0	0	0	.02
10								0	0	0	0	.01
11								0	0	0	0	.01
12								0	0	.02	0	.01
13								0	0	.02	0	.01
14								0	0	.01	0	.01
15								0	0	.02	0	.01
16								0	0	.02	.01	.01
17								0	0	.06	.01	.01
18								.01	0	.04	.03	.03
19								.01	0	.01	.04	.10
20								.03	0	.01	.04	.09
21								0	0	0	.05	.06
22								0	0	0	.04	.05
23								0	0	0	0	.06
24								0	0	.01	.04	.06
25								0	.02	.01	.07	.05
26								0	.01	.02	.06	.03
27								0	0	.02	.04	.02
28								0	0	.01	.03	.02
29								0	0	.01	.01	.02
30								0	.01	.01	.01	.01
31	---		---	---		---		0	---	.01	.01	---
TOTAL								0.05	0.04	0.31	0.52	0.80
MEAN								.002	.001	.010	.017	.027
MAX								.03	.02	.06	.07	.10
MIN								0	0	0	0	.01
AC-FT								.1	.08	.6	1.0	1.6

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°06'25", long 116°51'55", in NW 1/4 NE 1/4 sec.27, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank 1.6 mi downstream from Temescal Creek, and 4.5 mi north of Ramona.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--February 1912 to February 1923 (monthly discharge only, for February 1912, published in WSP 1315-B), October 1943 to current year.

GAGE.--Water-stage recorder and concrete cutoff wall. Datum of gage is 847.88 ft above National Geodetic Vertical Datum of 1929 (levels by city of San Diego Water Department). See WSP 1315-B for history of changes prior to Feb. 3, 1923.

REMARKS.--Estimated daily discharges: Oct. 7 to Nov. 1, Nov. 14 to Dec. 7, Mar. 25 to Apr. 24, Aug. 18 to Sept. 30. Records good except for estimated daily discharges, which are poor. Flow regulated by Sutherland Reservoir (station 11024000) 5 mi upstream since July 1954. Some small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,400 ft³/s, Jan. 27, 1916, gage height, 14.0 ft, datum then in use, from rating curve extended above 1,500 ft³/s on basis of slope-conveyance computation of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 86 ft³/s, Dec. 28, gage height, 2.99 ft; minimum daily, 0.02 ft³/s, Aug. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.73	1.8	8.1	6.9	7.3	7.5	3.5	1.3	.25	.17	.04
2	.27	.80	1.7	6.9	11	10	7.4	3.3	1.3	.25	.15	.04
3	.32	.85	4.5	6.2	15	9.5	7.0	3.2	1.6	.25	.13	.04
4	.40	.85	3.5	6.0	16	8.1	6.8	3.1	1.6	.22	.11	.05
5	.42	.89	2.7	5.7	13	7.7	6.6	3.0	1.5	.20	.09	.05
6	.38	.99	2.8	5.8	11	7.3	6.5	2.9	1.3	.20	.08	.05
7	.41	1.3	2.3	6.6	9.5	6.9	6.3	2.9	1.0	.19	.07	.05
8	.43	1.3	4.3	11	9.5	6.9	6.1	2.7	.87	.17	.07	.05
9	.46	1.2	4.3	13	36	6.9	6.0	2.9	.77	.16	.06	.05
10	.48	1.1	4.6	8.8	25	6.1	5.8	3.1	.62	.16	.06	.05
11	.54	1.1	15	7.5	16	5.7	5.7	3.3	.59	.16	.05	.05
12	.60	1.2	10	6.8	13	6.1	5.5	3.3	.55	.16	.04	.05
13	.58	1.2	7.3	6.3	12	5.7	5.4	3.1	.53	.13	.04	.05
14	.56	1.1	5.5	6.0	10	5.7	5.3	2.8	.51	.12	.06	.05
15	.56	1.2	4.4	5.8	9.3	5.7	5.1	2.5	.48	.17	.03	.05
16	.60	1.2	5.3	5.7	8.8	5.7	5.0	2.4	.47	.16	.02	.05
17	1.1	1.3	8.8	5.6	8.6	5.7	5.0	2.2	.45	.16	.04	.05
18	.85	1.2	9.7	5.4	8.6	6.5	8.0	2.1	.41	.23	.04	.35
19	.75	1.1	37	5.5	9.0	6.5	6.0	2.1	.38	.28	.04	.11
20	1.0	1.1	36	5.4	9.8	5.7	5.2	2.1	.39	.21	.04	.11
21	.85	1.4	18	5.4	13	5.4	9.0	2.0	.40	.15	.04	.11
22	.79	1.4	10	5.4	10	5.1	7.0	1.9	.41	.17	.04	.11
23	.78	1.8	7.9	5.5	8.4	4.8	5.5	1.8	.40	.17	.04	.11
24	.78	3.0	6.6	5.4	7.7	4.8	5.0	1.7	.47	.11	.04	.11
25	.78	2.7	5.9	5.4	7.3	4.6	4.8	1.6	.55	.09	.04	.11
26	.78	1.9	5.5	5.4	7.3	4.7	4.5	1.6	.48	.09	.04	.11
27	.77	1.4	22	5.4	7.3	6.0	4.2	1.5	.36	.10	.04	.11
28	.76	1.6	49	6.5	7.3	10	4.0	1.4	.31	.14	.04	.13
29	.76	1.7	19	12	---	8.0	3.8	1.3	.27	.15	.04	.14
30	.75	1.6	12	9.0	---	7.5	3.6	1.3	.25	.13	.04	.16
31	.74	---	9.6	7.7	---	7.5	---	1.3	---	.16	.04	---
TOTAL	19.44	40.21	337.0	211.2	326.3	204.1	173.6	73.9	20.52	5.29	1.83	2.59
MEAN	.63	1.34	10.9	6.81	11.7	6.58	5.79	2.38	.68	.17	.059	.086
MAX	1.1	3.0	49	13	36	10	9.0	3.5	1.6	.28	.17	.35
MIN	.19	.73	1.7	5.4	6.9	4.6	3.6	1.3	.25	.09	.02	.04
AC-FT	39	80	668	419	647	405	344	147	41	10	3.6	5.1
CAL YR 1984	TOTAL	2107.52	MEAN	5.76	MAX	49	MIN	.13	AC-FT	4180		
WTR YR 1985	TOTAL	1415.98	MEAN	3.88	MAX	49	MIN	.02	AC-FT	2810		

SAN DIEGUITO RIVER BASIN

11028500 SANTA MARIA CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°03'08", long 116°56'41", in SE 1/4 SE 1/4 sec.11, T.13 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank 3.8 mi northwest of Ramona, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--57.6 mi².

PERIOD OF RECORD.--December 1912 to September 1920, October 1946 to current year.

GAGE.--Water-stage recorder. Concrete control since October 1946. Datum of gage is 1,294.44 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, at same site, but at datum 1.78 ft lower.

REMARKS.--Estimated daily discharges: May 18 to June 5. Records good except those below 2.0 ft³/s, which are fair. No regulation upstream from station.

AVERAGE DISCHARGE.--46 years (water years 1914-20, 1947-85), 6.19 ft³/s, 4,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft³/s, Feb. 21, 1980, gage height, 14.39 ft, from rating curve extended above 130 ft³/s on basis of slope-area measurement at gage height 4.56 ft, and slope-conveyance study at gage height 14.39 ft; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 28	0130	*97	*2.11				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.03	.19	2.2	1.2	5.8	.49	.36	.05	0	.21	.06
2	.10	.02	.15	1.4	6.5	3.0	.43	.45	.06	0	.02	0
3	.11	.02	.48	1.3	6.6	6.5	.47	.42	.07	0	.01	0
4	.13	.03	.33	1.1	7.4	2.3	.45	.38	.08	0	0	.06
5	.10	.02	.33	.96	5.3	1.1	.48	.42	.10	0	0	.07
6	.05	.03	.31	1.1	2.5	.97	.33	.30	.12	0	0	.03
7	.03	.44	.34	2.3	1.9	.85	.27	.26	.07	0	0	.03
8	.03	.12	1.1	6.4	2.0	1.1	.21	.25	.03	.01	0	.03
9	.03	.06	.39	3.9	4.5	1.0	.25	.28	.05	.05	0	.04
10	.04	.03	.99	2.1	3.9	1.0	.37	.37	.08	.07	0	.04
11	.13	.03	1.6	1.8	1.3	.95	.46	.28	.10	.10	.03	.04
12	.12	.02	.68	1.5	1.1	1.0	.44	.27	.20	.13	.12	.03
13	.10	.05	.64	1.4	1.0	.90	.50	.52	.21	.18	0	.01
14	.07	.04	.48	1.2	.90	.95	.57	.36	.04	.25	.08	.02
15	.08	.04	.41	1.3	.53	.94	.55	.18	.03	.24	.05	.03
16	.05	.06	1.3	1.2	.61	.89	.45	.19	.02	.10	0	.05
17	.13	.07	.41	1.2	.99	.84	.55	.25	.01	.04	0	.06
18	.03	.05	7.9	1.2	1.2	.91	.75	.17	.01	.05	0	.23
19	.03	.03	28	1.3	1.1	1.4	.57	.22	.01	.08	0	.08
20	.04	.02	16	1.4	3.8	.87	.53	.24	.06	.03	0	.02
21	.03	.10	4.8	1.3	7.0	.76	.58	.22	.07	.02	.01	.07
22	.03	.09	1.6	2.0	2.3	.71	.74	.20	.03	.02	.03	.10
23	.01	.22	1.2	3.7	1.7	.57	.43	.08	.01	.02	0	.10
24	.01	.33	.99	1.9	1.3	.48	.35	.05	.01	.02	0	.09
25	.01	.29	.90	1.1	1.4	.58	.32	.03	.01	.03	.03	.11
26	.02	.13	1.2	1.0	1.7	.37	.33	.02	.01	.02	.05	.26
27	.05	.08	37	.91	1.3	.97	.20	.03	0	.02	.06	.27
28	.04	.15	42	1.7	.81	4.6	.11	.05	0	.04	.07	.26
29	.04	.16	8.4	3.1	---	2.7	.10	.04	0	.06	.05	.29
30	.05	.14	4.1	1.9	---	1.1	.31	.02	0	.07	.04	.27
31	.05	---	2.9	1.4	---	.66	---	.04	---	.20	.04	---
TOTAL	1.86	2.90	167.12	56.27	71.84	46.77	12.59	6.95	1.54	1.85	0.90	2.75
MEAN	.060	.097	5.39	1.82	2.57	1.51	.42	.22	.051	.060	.029	.092
MAX	.13	.44	42	6.4	7.4	6.5	.75	.52	.21	.25	.21	.29
MIN	.01	.02	.15	.91	.53	.37	.10	.02	0	0	0	0
AC-FT	3.7	5.8	331	112	142	93	25	14	3.1	3.7	1.6	5.5
CAL YR 1984	TOTAL	501.31	MEAN	1.37	MAX	42	MIN	0	AC-FT	994		
WTR YR 1985	TOTAL	373.34	MEAN	1.02	MAX	42	MIN	0	AC-FT	741		

11030020 LAKE HODGES NEAR ESCONDIDO, CA

LOCATION.--Lat 33°02'41", long 117°07'39", in SE 1/4 NW 1/4 sec.18, T.13 S., R.2 W., San Diego County, Hydrologic Unit 18070304, 20 ft upstream from right upstream end of Hodges Dam on San Dieguito River, 6.4 mi southwest of Escondido, and 20 mi southwest of Sutherland Reservoir.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--October 1945 to September 1968 (published with San Dieguito River at Lake Hodges, station 11030000), October 1972 to current year. Monthend gage heights February 1919 to September 1945, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 200.0 ft above National Geodetic Vertical Datum of 1929 (levels by county of San Diego); gage readings have been reduced to NGVD. Prior to Oct. 1, 1972, nonrecording gage at site 800 ft upstream on right bank at same datum. October 1972 to current year, supplementary water-stage recorder used for flood warning only, on left upstream face of dam at same datum.

REMARKS.--Reservoir is formed by multiple-arch reinforced concrete dam, constructed in 1917-19. Storage began in February 1919. Capacity table based on a 1948 survey; table dated Sept. 18, 1951. Capacity of reservoir at spillway level, 33,550 acre-ft, elevation, 315.0 ft. Dead storage below lowest outlet, 1,160 acre-ft, elevation 254.0 ft included in these records. Reservoir can be drawn down to 207 acre-ft, elevation, 240.0 ft by pumping. Water drawn from Lake Hodges passes through a conduit to San Dieguito re-regulating reservoir, from which it is released as required for municipal use. Flow regulated since July 1954 by Sutherland Reservoir (station 11024000). Diversions for irrigation above Lake Hodges.

COOPERATION.--Gage-heights were provided by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 41,620 acre-ft, spilling, Feb. 21, 1980, elevation, 321.50 ft; minimum observed, 114 acre-ft, Oct. 31, 1965, elevation, 235.80 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 28,960 acre-ft, spilling, Mar. 31, elevation, 311.06 ft; minimum observed, 21,750 acre-ft, Sept. 30, elevation, 303.86 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	308.24	25,940	--
Oct. 31.....	307.00	24,690	-1,250
Nov. 30.....	306.70	24,400	-290
Dec. 31.....	309.46	27,210	+2,810
CAL YR 1984.....	--	--	-6,920
Jan. 31.....	309.81	27,580	+370
Feb. 28.....	310.90	28,760	+1,180
Mar. 31.....	311.08	28,960	+200
Apr. 30.....	310.42	28,240	-720
May 31.....	309.20	26,930	-1,310
June 30.....	307.88	25,570	-1,360
July 31.....	306.90	24,590	-980
Aug. 31.....	305.32	23,080	-1,510
Sept. 30.....	303.86	21,750	-1,330
WTR YR 1985.....	--	--	-4,190

SAN DIEGUITO CREEK BASIN

11030500 SAN DIEGUITO CREEK NEAR DEL MAR, CA

LOCATION.--Lat 32°54'23", long 117°12'45", in SE 1/4 SW 1/4, sec.6, T.14 S., R.3 W., San Diego County, Hydrologic Unit 18070304, on downstream side of second pier from right bank of El Camino Real bridge, 0.3 mi south of El Camino Real and Via Del La Valle intersection, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--338 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Lake Hodges, capacity, 33,550 acre-ft since 1919. No other regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 148 ft³/s, Dec. 27, 1984, gage height, 7.38 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 148 ft³/s, Dec. 27, gage height, 7.38 ft; no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.08	.29	3.0	.60	.54	.36	.11	.04			
2	0	.08	.28	2.1	1.3	.53	.32	.11	0			
3	0	.08	1.2	1.4	1.1	.46	.34	.10	0			
4	0	.09	1.1	1.3	.97	.43	.37	.09	0			
5	0	.10	.75	1.0	1.3	.43	.40	.09	0			
6	0	.11	.46	.90	.83	.38	.42	.08	0			
7	0	.11	.40	.99	.71	.36	.43	.07	0			
8	0	.15	1.6	.90	.70	.40	.42	.06	0			
9	0	.23	1.6	.81	1.3	.81	.39	.07	0			
10	0	.19	.62	.72	.90	.60	.38	.09	0			
11	0	.15	8.6	.79	1.8	.43	.32	.05	0			
12	0	.14	5.2	.68	1.4	.58	.30	.05	0			
13	0	.20	2.8	.58	1.1	.53	.29	.07	0			
14	0	.27	.43	.52	.77	.46	.28	.06	0			
15	.02	.22	.30	.53	.68	.40	.26	.05	0			
16	.01	.20	5.7	.50	.67	.35	.22	.01	0			
17	.05	.29	3.2	.55	.62	.36	.19	0	0			
18	.06	.27	1.7	.60	7.0	.35	.28	0	0			
19	.05	.26	32	.61	14	.34	.26	0	0			
20	.06	.20	62	.61	11	.31	.23	0	0			
21	.06	.17	19	.63	4.7	.32	.23	.01	0			
22	.06	.22	7.2	.62	2.5	.34	.26	0	0			
23	.04	1.4	2.6	.62	1.5	.30	.22	0	0			
24	.03	1.7	1.6	.59	1.2	.31	.19	0	0			
25	.02	1.6	1.2	.61	1.1	.31	.20	.04	0			
26	.02	.93	1.7	.60	.88	.28	.17	.07	0			
27	.03	.43	31	.59	.72	.63	.11	.07	0			
28	.05	.37	87	.77	.56	.82	.09	.05	0			
29	.07	.33	19	.76	---	.48	.09	.05	0			
30	.07	.30	8.6	.62	---	.38	.11	.08	0			
31	.08	---	4.9	.64	---	.33	---	.08	---			---
TOTAL	0.78	10.87	314.03	26.14	61.91	13.55	8.13	1.61	0.04	0	0	0
MEAN	.025	.36	10.1	.84	2.21	.44	.27	.052	.001	0	0	0
MAX	.08	1.7	87	3.0	14	.82	.43	.11	.04	0	0	0
MIN	0	.08	.28	.50	.56	.28	.09	0	0	0	0	0
AC-FT	1.5	22	623	52	123	27	16	3.2	.08	0	0	0
CAL YR 1984	TOTAL	2436.87	MEAN	6.66	MAX	87	MIN	0	AC-FT	4830		
WTR YR 1985	TOTAL	437.06	MEAN	1.20	MAX	87	MIN	0	AC-FT	867		

11030500 SAN DIEGUITO RIVER NEAR DEL MAR, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

SEDIMENT RECORDS: Water years 1982 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January to September 1984.

SEDIMENT RECORDS: January to September 1984.

REMARKS.--Published as periodic sediment record from January 1982 to September 1983.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM FLOW, INSTAN- TANEOUS (FT ³ /S)	TEMPER- ATURE (DEG C)	SEDI- MENT SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
OCT						
16...	1315	.06	26.0	4	0	--
NOV						
21...	1245	.18	20.0	11	.01	--
DEC						
10...	0800	.61	11.5	9	.01	--
11...	1200	6.8	16.0	154	2.6	--
28...	1000	104	12.5	129	36	96
JAN						
17...	1000	.43	9.0	463	.54	--
FEB						
13...	1045	1.2	18.0	318	1.0	--
MAR						
14...	1315	.47	18.0	652	.83	--
APR						
19...	1230	.28	27.0	36	.03	--
MAY						
22...	1330	.01	29.0	22	0	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM FLOW, INSTAN- TANEOUS (FT ³ /S)	BED MAT. SIEVE DIAM, % FINER THAN .062 MM	BED MAT. SIEVE DIAM, % FINER THAN .125 MM	BED MAT. SIEVE DIAM, % FINER THAN .250 MM	BED MAT. SIEVE DIAM, % FINER THAN .500 MM	BED MAT. SIEVE DIAM, % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM, % FINER THAN 2.00 MM
APR										
03...	1000	--	5	.39	27	55	86	95	99	100

ESCONDIDO CREEK BASIN

11030700 LAKE WOHLFORD NEAR ESCONDIDO, CA

LOCATION.--Lat 33°10'00", long 117°00'14", in NW 1/4 NE 1/4 sec.5, T.12 S., R.1 W., San Diego County, Hydrologic Unit 18070303, on face of Lake Wohlford Dam, 330 ft left of spillway, 3.9 mi southeast of Valley Center Post Office, and 5.7 mi northeast of Escondido.

DRAINAGE AREA.--7.96 mi².

PERIOD OF RECORD.--October 1972 to current year. October 1933 to September 1972, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 1,385.0 ft National Geodetic Vertical Datum of 1929 (levels by city of Escondido Engineering Department); gage readings have been reduced to NGVD. Since October 1972, supplementary water-stage recorder for flood warning only, at same site at datum 15.0 ft higher.

REMARKS.--Reservoir is formed by earthfill dam riprapped upstream and downstream, with concrete spillway anchored to natural rock. Dam was completed in 1932. Capacity table dated March 1955. Capacity at spillway level, 6,940 acre-ft, elevation, 1,480.0 ft. Dead storage below lowest outlet, 131 acre-ft, elevation, 1,420 ft. Reservoir storage includes supplemental water diverted from the San Luis Rey River via Escondido Mutual Water Co.'s canal to Lake Wohlford Reservoir. Stored water is released for municipal use by Vista Irrigation District and city of Escondido.

COOPERATION.--Gage readings were provided by Escondido Mutual Water Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 7,140 acre-ft, Feb. 21, 1980, elevation, 1,480.9 ft; minimum, 809 acre-ft, Dec. 1, 1953, elevation, 1,437.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 6,020 acre-ft, Oct. 9-12, elevation, 1,475.7 ft; minimum observed, 2,440 acre-ft, Dec. 18, elevation, 1,454.4 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0700, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,475.2	5,920	--
Oct. 31.....	1,468.3	4,590	-1,330
Nov. 30.....	1,458.4	2,990	-1,600
Dec. 31.....	1,455.3	2,550	-440
CAL YR 1984.....	--	--	-610
Jan. 31.....	1,457.3	2,830	+280
Feb. 28.....	1,463.2	3,720	+890
Mar. 31.....	1,468.0	4,540	+820
Apr. 30.....	1,470.1	4,930	+390
May 31.....	1,470.5	5,000	+70
June 30.....	1,469.4	4,800	-200
July 31.....	1,469.5	4,820	+20
Aug. 31.....	1,470.9	5,080	+260
Sept. 30.....	1,473.4	5,560	+480
WTR YR 1985.....	--	--	-360

11031500 AGUA CALIENTE CREEK NEAR WARNER SPRINGS, CA

LOCATION.--Lat 33°17'19", long 116°39'11", in San Jose del Valle Grant, San Diego County, Hydrologic Unit 18070303, on downstream end of right pier of bridge on State Highway 79, 1.2 mi upstream from Canada Verde Creek, and 1.2 mi northwest of Warner Springs.

DRAINAGE AREA.--19.0 mi².

PERIOD OF RECORD.--February 1961 to current year. Discharge measurements only, published in WSP 447, made about same site from Feb. 5, 1913 to Sept. 30, 1915.

GAGE.--Water-stage recorder. Elevation of gage is 2,950 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 30, 1966 to Nov. 5, 1982 at site 120 ft downstream at datum 2.40 ft lower.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--24 years, 2.81 ft³/s, 2,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft³/s, Feb. 21, 1980, gage height, 4.80 ft, site and datum then in use, from rating curve extended above 110 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 5.36 ft, Nov. 30, 1982; no flow for many days some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 19	0830	112	3.90	July 19	1645	*355	*4.31

Minimum daily, 0.13 ft³/s, Aug. 25-26, Aug. 28 to Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.16	.23	3.7	2.5	2.3	2.9	.90	.45	.20	.23	.13
2	.21	.17	.23	3.2	3.0	2.7	2.6	.86	.45	.20	.20	.14
3	.22	.17	.25	3.0	3.2	3.2	2.4	.84	.46	.20	.20	.15
4	.22	.16	.25	2.8	3.0	3.0	2.3	.86	.44	.20	.20	.18
5	.22	.16	.25	2.5	2.7	2.8	2.2	.88	.41	.21	.20	.17
6	.21	.17	.23	2.4	3.0	2.7	2.0	.84	.38	.22	.19	.17
7	.20	.18	.23	3.0	3.1	2.6	1.8	.82	.37	.23	.19	.16
8	.20	.19	.34	12	3.3	2.5	1.8	.83	.35	.22	.19	.17
9	.21	.18	.35	7.4	5.9	2.4	1.7	.75	.34	.23	.19	.17
10	.19	.17	.35	5.4	8.0	2.3	1.7	.78	.31	.23	.19	.17
11	.19	.17	2.2	4.3	5.2	2.3	1.6	.84	.29	.23	.19	.17
12	.19	.18	1.5	3.8	4.5	2.3	1.5	.84	.29	.23	.19	.16
13	.18	.18	1.0	3.5	4.0	2.2	1.4	.78	.29	.24	.19	.15
14	.18	.18	.75	3.1	3.8	2.1	1.3	.66	.29	.24	.19	.15
15	.19	.18	.63	2.9	3.8	2.1	1.3	.60	.29	.26	.18	.15
16	.19	.18	2.2	2.6	3.6	2.1	1.2	.53	.29	.25	.16	.16
17	.22	.18	1.9	2.5	3.4	2.1	1.3	.55	.29	.31	.18	.16
18	.19	.18	6.5	2.4	3.1	2.1	1.5	.55	.28	.32	.16	.16
19	.20	.20	50	2.3	3.0	2.2	1.6	.55	.26	18	.15	.17
20	.20	.20	26	2.2	3.2	2.1	1.5	.55	.26	2.1	.15	.16
21	.20	.21	11	2.2	3.6	2.0	1.7	.54	.26	.52	.15	.15
22	.19	.20	6.5	2.1	3.0	1.9	1.7	.54	.26	.36	.14	.14
23	.19	.22	4.7	2.1	2.8	1.8	1.4	.53	.26	.31	.14	.14
24	.19	.22	3.8	2.1	2.6	1.8	1.3	.54	.26	.28	.14	.14
25	.18	.68	3.2	2.0	2.6	1.8	1.3	.55	.26	.26	.13	.14
26	.17	.32	2.9	2.0	2.5	1.8	1.2	.52	.26	.24	.13	.15
27	.17	.25	15	2.0	2.4	2.5	1.2	.49	.22	.20	.14	.17
28	.17	.24	13	2.4	2.3	5.0	1.1	.49	.20	.19	.13	.17
29	.17	.23	7.3	4.5	---	5.4	1.0	.48	.20	.19	.13	.16
30	.17	.23	5.6	3.1	---	4.0	.98	.44	.20	.21	.13	.16
31	.17	---	4.5	2.8	---	3.4	---	.45	---	.22	.13	---
TOTAL	5.97	6.34	172.89	102.3	97.1	79.5	48.48	20.38	9.17	27.30	5.23	4.74
MEAN	.19	.21	5.58	3.30	3.47	2.56	1.62	.66	.31	.88	.17	.16
MAX	.22	.68	50	12	8.0	5.4	2.9	.90	.46	.18	.23	.18
MIN	.17	.16	.23	2.0	2.3	1.8	.98	.44	.20	.19	.13	.13
AC-FT	12	13	343	203	193	158	96	40	18	54	10	9.4
CAL YR 1984	TOTAL	541.91	MEAN	1.48	MAX	50	MIN	.16	AC-FT	1070		
WTR YR 1985	TOTAL	579.40	MEAN	1.59	MAX	50	MIN	.13	AC-FT	1150		

11033000 WEST FORK SAN LUIS REY RIVER NEAR WARNER SPRINGS, CA

LOCATION.--Lat 33°17'48", long 116°45'32", in San Jose del Valle Grant, San Diego County, Hydrologic Unit 18070303, on left bank 0.2 mi upstream from Fink Road, 2.6 mi upstream from mouth, and 7.5 mi west of Warner Springs.

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--January 1913 to November 1915, October 1956 to current year. Low-flow records not equivalent prior to Nov. 5, 1971, because of undetermined channel-flow loss between sites.

REVISED RECORDS.--WDR CA-74-1: 1973(P).

GAGE.--Water-stage recorder. Elevation of gage is 2,800 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1956, at different datum. Prior to Nov. 5, 1971, at site 500 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good, except those periods below 1.0 ft³/s, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--30 years (water years 1914-15, 1957-85), 10.4 ft³/s, 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,200 ft³/s, Feb. 21, 1980, gage height, 15.60 ft, from high-water marks, from rating curve extended above 130 ft³/s on basis of slope-area measurement of peak flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 9	0015	*430	*12.51				

Minimum daily, 0.04 ft³/s, Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.08	.32	14	5.1	5.2	12	2.4	.58	.19	.14	.05
2	.10	.09	.25	10	7.3	13	9.4	2.4	.62	.18	.13	.05
3	.12	.08	.36	7.4	9.2	15	8.4	2.5	.64	.17	.12	.07
4	.12	.08	.92	6.2	8.4	13	8.0	2.4	.70	.18	.12	.11
5	.11	.08	.68	5.2	6.8	12	6.6	2.8	.60	.18	.11	.15
6	.10	.08	.45	5.2	7.4	8.3	5.5	2.9	.49	.19	.10	.13
7	.10	.08	.44	12	7.4	7.0	4.6	2.7	.42	.20	.10	.12
8	.09	.11	7.6	134	9.5	6.2	4.1	2.8	.40	.18	.10	.12
9	.09	.10	5.0	51	186	5.7	3.9	2.5	.36	.17	.10	.12
10	.09	.10	4.5	26	95	5.5	3.2	2.5	.35	.17	.11	.12
11	.12	.10	19	16	46	5.2	2.8	2.8	.35	.16	.11	.13
12	.11	.10	12	13	32	5.2	2.8	2.8	.33	.15	.11	.12
13	.09	.11	7.2	10	25	4.3	2.8	2.6	.30	.14	.12	.10
14	.09	.11	4.6	9.1	20	4.3	2.5	2.2	.29	.13	.11	.09
15	.10	.10	3.4	8.1	17	4.3	2.4	1.6	.28	.17	.10	.09
16	.10	.10	11	7.2	16	4.3	2.4	1.3	.26	.16	.10	.09
17	.15	.10	9.1	6.3	14	3.7	2.3	1.3	.25	.18	.10	.09
18	.11	.10	59	5.8	12	3.8	3.7	1.5	.22	.29	.09	.26
19	.10	.10	167	5.3	11	7.0	4.3	1.1	.21	.59	.09	.24
20	.10	.10	95	5.2	12	4.6	4.4	1.2	.22	.34	.09	.15
21	.09	.10	37	4.8	15	3.7	6.9	1.1	.22	.23	.08	.11
22	.09	.10	18	4.6	11	3.4	10	.74	.21	.21	.08	.10
23	.09	.12	11	4.3	9.2	3.0	7.3	.60	.22	.19	.07	.09
24	.08	.15	8.7	3.9	7.8	2.8	5.2	.55	.25	.18	.06	.08
25	.08	25	6.8	3.8	7.5	2.8	4.5	.49	.26	.19	.06	.08
26	.08	4.3	6.3	3.5	6.9	2.8	4.3	.52	.22	.19	.05	.08
27	.08	.73	117	3.5	6.0	46	4.3	.55	.21	.16	.07	.10
28	.08	.41	95	7.2	5.2	113	3.9	.56	.20	.15	.06	.11
29	.08	.92	47	32	---	53	3.5	.51	.20	.15	.05	.10
30	.08	.57	28	9.7	---	22	3.0	.49	.19	.14	.04	.09
31	.08	---	19	6.8	---	15	---	.54	---	.15	.05	---
TOTAL	3.00	34.30	801.62	441.1	615.7	405.1	149.0	50.95	10.05	6.06	2.82	3.34
MEAN	.097	1.14	25.9	14.2	22.0	13.1	4.97	1.64	.34	.20	.091	.11
MAX	.15	25	167	134	186	113	12	2.9	.70	.59	.14	.26
MIN	.08	.08	.25	3.5	5.1	2.8	2.3	.49	.19	.13	.04	.05
AC-FT	6.0	68	1590	875	1220	804	296	101	20	12	5.6	6.6

CAL YR 1984	TOTAL	1524.09	MEAN	4.16	MAX	167	MIN	.08	AC-FT	3020
WTR YR 1985	TOTAL	2523.04	MEAN	6.91	MAX	186	MIN	.04	AC-FT	5000

11040000 SAN LUIS REY RIVER AT MONSERATE NARROWS, NEAR PALA, CA

LOCATION.--Lat 33°20'14", long 117°08'07", in SE 1/4 NW 1/4 sec.6, T.10 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 4 mi southwest of Pala, 6 mi northeast of Bonsall, and 27 mi downstream from Lake Henshaw.

DRAINAGE AREA.--373 mi².

PERIOD OF RECORD.--December 1935 to March 1938 (fragmentary), April 1938 to November 1941, October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 270.82 ft above National Geodetic Vertical Datum of 1929 (levels by State of California). Prior to October 1946, at same site but at different datum. Oct. 22, 1946 to Nov. 30, 1954, at datum 1.0 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Lake Henshaw since 1923, capacity, 194,300 acre-ft. Several diversions above station.

AVERAGE DISCHARGE.--42 years (water years 1939-41, 1947-85), 18.7 ft³/s, 13,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since 1938, 15,500 ft³/s, Feb. 21, 1980, gage height, 9.68 ft, on basis of slope-area measurement of peak flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 80 ft³/s, Dec. 28 and Feb. 9, gage height, 3.72 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.16	13	13	22	18	6.1	2.4	.75	.23	
2		0	.17	12	15	23	15	5.6	2.0	.77	.21	
3		0	.16	12	16	23	15	6.2	2.2	.62	.20	
4		0	.17	11	17	25	15	5.7	2.0	.52	.14	
5		.01	.17	12	17	23	14	5.0	1.8	.47	.13	
6		.08	.13	13	14	22	14	5.0	1.7	.48	.08	
7		.15	.13	13	13	21	12	4.9	1.6	.54	.04	
8		.13	.13	21	12	20	11	4.7	1.3	.57	.04	
9		.23	.04	23	30	19	11	5.9	1.2	.52	0	
10		.23	.06	17	57	19	12	6.0	1.4	.61	0	
11		.28	.09	15	38	19	10	4.7	1.1	.64	0	
12		.29	0	13	34	19	10	3.8	1.3	.53	0	
13		.30	0	13	32	16	9.9	4.3	1.2	.50	0	
14		.34	0	13	31	17	9.6	4.1	1.2	.45	0	
15		.35	0	12	31	16	9.3	4.0	1.2	.47	0	
16		.39	0	12	29	16	8.5	4.3	1.1	.44	0	
17		.39	0	12	29	16	8.5	4.0	1.3	.40	0	
18		.38	0	13	28	14	8.8	4.2	1.2	.42	0	
19		.35	.19	13	26	12	8.5	3.7	1.3	.50	0	
20		.33	16	12	26	14	8.1	4.4	1.2	.53	0	
21		.38	7.1	12	28	15	7.7	4.5	1.1	.46	0	
22		.38	4.8	12	25	15	8.0	4.2	.59	.51	0	
23		.35	4.1	13	25	14	8.4	3.8	.83	.50	0	
24		.37	3.5	12	24	13	8.6	3.4	1.0	.54	0	
25		.37	3.4	12	23	13	8.7	2.7	1.0	.49	0	
26		.21	3.2	12	22	13	8.8	2.4	1.0	.41	0	
27		.21	22	13	23	10	7.5	2.5	1.0	.29	0	
28		.21	58	14	21	16	5.8	2.8	1.1	.36	0	
29		.19	25	15	---	26	6.4	2.9	1.1	.35	0	
30		.13	18	16	---	21	7.5	2.8	.84	.31	0	
31		---	15	14	---	20	---	2.8	---	.28	0	---
TOTAL	0	7.03	181.70	420	699	554	305.6	131.4	39.26	15.25	1.07	0
MEAN	0	.23	5.86	13.5	25.0	17.9	10.2	4.24	1.31	.49	.035	0
MAX	0	.39	58	23	57	26	18	6.2	2.4	.77	.23	0
MIN	0	0	0	11	12	10	5.8	2.4	.59	.28	0	0
AC-FT	0	14	360	833	1390	1100	606	261	78	30	2.1	0
CAL YR 1984	TOTAL	2776.45	MEAN	7.59	MAX	75	MIN	0	AC-FT	5510		
WTR YR 1985	TOTAL	2354.31	MEAN	6.45	MAX	58	MIN	0	AC-FT	4670		

SAN LUIS REY BASIN

11040700 SAN LUIS REY RIVER BELOW MOOSA CANYON, NEAR BONSAI, CA

LOCATION.--Lat 33°16'35", long 117°13'30", in NW 1/4 SW 1/4, sec.29, T.10 S., R.3 W., San Diego County, Hydrologic Unit 18070303, on left bank 0.6 mi downstream from Moosa Canyon, and 0.9 mi south of Bonsai.

DRAINAGE AREA.--499 mi².

PERIOD OF RECORD.--October 1983 to September 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 120 ft above National Geodetic Vertical Datum of 1920, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft since 1923. Several diversions for irrigation and domestic use above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,060 ft³/s, Dec. 25, 1983, gage height, 5.86 ft; minimum daily, 1.0 ft³/s, Sept. 23, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 308 ft³/s, Dec. 27, gage height, 5.26 ft; minimum daily, 1.0 ft³/s, Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	7.4	13	65	53	49	46	19	17	8.5	4.5	4.7
2	9.1	10	8.8	58	62	49	41	20	17	5.8	3.4	10
3	9.2	12	13	58	68	52	39	18	17	6.2	2.3	6.7
4	5.1	14	13	57	77	49	39	19	17	5.9	3.3	3.6
5	5.4	14	8.8	58	71	49	39	19	15	6.1	4.5	4.0
6	5.0	9.0	11	57	60	48	37	18	15	6.5	2.1	6.8
7	7.4	7.9	11	56	56	46	36	17	15	5.6	1.8	5.6
8	14	12	16	71	54	46	36	17	14	6.6	2.6	4.5
9	17	12	14	71	104	46	35	16	14	6.4	3.4	4.4
10	19	11	15	63	136	45	32	17	16	6.2	3.1	3.5
11	21	10	27	64	94	44	29	17	17	7.1	4.2	2.9
12	21	7.8	21	60	82	44	27	16	16	7.1	3.7	3.0
13	17	9.5	17	55	70	43	27	15	17	6.9	3.1	2.1
14	17	13	15	55	63	43	25	15	17	6.4	3.1	2.3
15	19	14	12	55	61	42	24	15	16	6.6	4.6	4.9
16	16	12	18	54	61	41	24	15	16	4.8	4.1	5.4
17	21	12	19	53	59	40	24	15	16	3.5	4.2	2.5
18	16	8.3	23	54	56	39	24	15	16	3.3	5.3	4.3
19	15	11	101	54	56	39	26	15	15	3.9	4.5	5.0
20	11	11	110	54	55	40	24	15	14	3.5	3.4	2.3
21	12	7.3	57	55	62	40	24	14	13	5.2	5.9	2.2
22	12	7.8	44	53	55	40	24	14	13	4.5	4.9	1.3
23	11	8.8	40	53	55	36	26	13	11	3.1	3.3	1.0
24	7.4	13	37	52	54	37	25	12	8.8	3.1	5.7	7.0
25	6.3	24	35	53	54	35	24	14	8.6	4.2	6.6	9.3
26	5.4	16	31	49	52	35	22	15	9.6	3.6	5.1	5.0
27	6.6	13	129	49	53	36	21	15	7.2	2.2	3.7	5.5
28	7.4	15	209	51	51	50	20	15	6.9	2.5	4.2	4.6
29	5.9	14	108	59	---	58	21	16	8.1	2.9	4.8	4.2
30	4.6	14	85	54	---	53	21	15	11	2.3	2.9	3.6
31	6.1	---	74	53	---	48	---	16	---	2.4	3.4	---
TOTAL	356.1	350.8	1335.6	1753	1834	1362	862	492	414.2	152.9	121.7	132.4
MEAN	11.5	11.7	43.1	56.5	65.5	43.9	28.7	15.9	13.8	4.93	3.93	4.41
MAX	21	24	209	71	136	58	46	20	17	8.5	6.6	10
MIN	4.6	7.3	8.6	49	51	35	20	12	6.9	2.2	1.8	1.0
AC-FT	706	696	2650	3480	3640	2700	1710	976	822	303	241	263
CAL YR 1984	TOTAL	9714.8	MEAN	26.5	MAX	209	MIN	2.6	AC-FT	19270		
WTR YR 1985	TOTAL	9166.7	MEAN	25.1	MAX	209	MIN	1.0	AC-FT	18180		

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°13'05", long 117°22'34", in SE 1/4 SW 1/4 sec.13, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070303, on right bank 1.9 mi upstream from bridge on Interstate Highway 5, 2.4 mi upstream from mouth, and 1.9 mi northeast of Oceanside.

DRAINAGE AREA.--557 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1912 to September 1914 (published as "near Oceanside"), January 1916, October 1929 to January 1942, October 1946 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. April 1912 to September 1914, nonrecording gage at site 0.4 mi downstream at different datum. January 1916, nonrecording gage 1.4 mi downstream at different datum. Prior to Oct. 1, 1978, at datum 10.00 ft lower. Prior to Nov. 9, 1981, at site 0.8 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft since 1923. Several diversions for irrigation and domestic use above station. AVERAGE DISCHARGE represents flow to ocean during period of record regardless of upstream development.

AVERAGE DISCHARGE.--53 years (water years 1913-14, 1930-41, 1947-85), 35.0 ft³/s, 25,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,600 ft³/s, Jan. 27, 1916, from hydrograph based on discharge measurements; no flow for several months in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 427 ft³/s, Dec. 28, gage height, 13.12 ft, minimum daily, 0.89 ft³/s, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	8.7	21	93	59	57	50	22	9.8	4.9	2.0	2.0
2	4.8	9.1	19	87	68	56	47	21	9.9	4.6	2.0	1.2
3	3.9	9.1	21	81	69	59	45	21	10	4.7	2.0	1.2
4	5.0	10	23	75	90	58	42	21	9.1	4.3	2.1	.97
5	5.0	11	22	73	95	57	39	21	9.8	4.0	2.0	1.1
6	4.8	12	23	66	87	56	39	20	9.4	3.8	1.9	.89
7	6.6	13	23	66	78	55	37	19	9.0	4.0	1.9	1.3
8	6.6	14	36	84	75	55	37	19	8.3	4.2	1.9	1.2
9	5.2	15	33	97	107	55	35	19	8.6	4.2	1.7	1.2
10	5.0	13	28	81	195	54	32	19	8.6	3.9	1.6	2.0
11	4.4	11	38	73	161	52	32	19	8.5	3.7	1.5	2.0
12	5.9	12	56	68	131	53	31	18	8.6	3.6	1.4	1.5
13	6.3	13	49	62	113	49	29	19	8.5	3.9	1.5	1.5
14	4.9	11	36	60	100	51	30	18	8.3	3.8	1.4	1.3
15	4.8	11	34	60	87	47	29	18	7.9	4.4	1.4	1.9
16	4.4	11	41	59	77	49	28	18	7.5	4.4	1.4	2.1
17	6.7	12	40	59	72	44	25	18	7.4	4.1	1.4	1.5
18	7.3	12	42	59	69	47	24	17	7.1	4.1	1.2	2.2
19	7.1	13	79	59	68	47	24	17	7.0	3.8	1.7	4.1
20	7.2	13	177	59	66	44	23	17	6.7	3.5	1.6	2.8
21	7.4	12	134	59	68	43	22	16	6.0	3.8	1.5	2.9
22	7.2	13	85	60	69	45	24	15	5.6	4.2	1.4	2.9
23	6.6	14	70	60	65	42	24	15	5.6	3.6	1.3	2.9
24	6.6	17	62	57	62	41	25	13	6.0	3.5	1.4	1.8
25	6.6	31	57	54	60	39	22	12	6.2	3.2	1.4	1.6
26	6.4	29	55	54	60	37	22	12	5.8	3.2	1.5	1.6
27	6.6	24	124	54	54	42	22	12	5.9	2.7	1.2	1.9
28	7.3	21	327	58	57	51	22	11	5.8	2.3	1.0	1.9
29	7.6	21	189	66	---	59	22	11	5.4	2.2	1.1	1.9
30	8.0	20	131	66	---	59	23	9.8	5.0	2.3	1.2	2.0
31	8.5	---	113	63	---	54	---	10	---	2.1	1.4	---
TOTAL	188.9	435.9	2190	2072	2386	1557	906	517.8	227.7	115.4	46.2	55.36
MEAN	6.09	14.5	70.6	66.8	85.2	50.2	30.2	16.7	7.59	3.72	1.55	1.85
MAX	8.5	31	327	97	195	59	50	22	10	4.9	2.1	4.1
MIN	3.9	8.7	19	54	57	37	22	9.8	5.0	2.1	1.0	.69
AC-FT	375	865	4340	4110	4730	3090	1800	1030	452	229	96	110
CAL YR 1984	TOTAL	10965.78	MEAN	30.0	MAX	327	MIN	.51	AC-FT	21750		
WTR YR 1985	TOTAL	10700.26	MEAN	20.3	MAX	327	MIN	.89	AC-FT	21220		

SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.
 CHEMICAL ANALYSES: Water years 1978 to current year.
 BIOLOGICAL DATA: Water years 1978-81.
 SPECIFIC CONDUCTANCE: Water years 1978 to current year.
 WATER TEMPERATURES: Water years 1971 to current year.
 SEDIMENT RECORDS: Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

SEDIMENT RECORDS: October 1968 to September 1978, December 1983 to September 1984.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,580 mg/L, Jan. 17, 1978; minimum daily mean, 2 mg/L, several days in 1972 and 1977.

SEDIMENT LOAD: Maximum daily, 59,700 tons, Jan. 17, 1978; minimum daily, 0.01 ton, Nov. 4, 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
NOV 27...	1200	23	2110	8.1	12.0	770	85	13.4	124	K33	K110	700
JAN 17...	1200	56	1910	7.8	14.0	765	32	12.8	124	210	220	670
MAR 21...	1230	43	1920	8.0	17.0	760	11	11.2	117	350	180	670
MAY 30...	1100	10	2260	8.1	21.5	760	2.4	11.4	130	180	340	750
JUL 22...	1300	4.7	2570	8.1	30.0	760	3.3	12.8	171	220	560	800
SEP 24...	1100	1.9	2780	7.8	19.0	760	1.0	8.3	91	470	K1000	900

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CAC03)	ALKA- LINITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 27...	480	150	79	190	37	3	7.5	268	220	219	410	350
JAN 17...	450	150	71	180	37	3	6.7	266	218	219	400	290
MAR 21...	450	150	71	170	35	3	6.4	264	216	216	370	300
MAY 30...	520	170	79	210	38	3	7.7	287	235	235	440	380
JUL 22...	590	190	79	250	40	4	9.6	259	212	212	450	470
SEP 24...	650	210	92	280	40	4	8.3	315	258	258	480	510

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 27...	.30	26	1410	1300	1.9	88	.97	.060	1.0	.140	.130	.120
JAN 17...	.30	28	1280	1300	1.7	193	1.9	.180	.80	.230	.110	.110
MAR 21...	.30	27	1240	1200	1.7	144	1.9	.050	.60	.130	.090	.070
MAY 30...	.40	24	1530	1500	2.1	41	2.6	.240	.80	.300	.200	.170
JUL 22...	.40	20	1710	1600	2.3	22	3.6	.120	.90	.160	.120	.090
SEP 24...	.40	19	1820	1800	2.5	9.3	1.2	.120	.50	.060	.050	.060

See footnotes at end of table.

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
NOV 27...	1200	10	<1	<100	<10	1	5	1	2	30	3
MAR 21...	1230	20	<1	92	<.5	<1	<1	<3	1	40	<1
MAY 30...	1100	<10	<1	100	<10	<1	<1	1	2	30	4
SEP 24...	1100	10	<1	100	<10	1	<1	<1	1	50	1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 27...	<10	10	<.1	15	1	<1	<1	750	9	50
MAR 21...	18	130	<.1	20	1	2	<1	630	<6	19
MAY 30...	<10	340	<.1	8	<1	2	<1	900	12	50
SEP 24...	<10	100	<.1	10	1	<1	<1	910	10	30

K Results based on colony count outside the acceptable range (non-ideal colony count).
 < Actual value is known to be less than the value shown.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
MAR 21...	1030	15	1920	8.0	17.0	11.3
21...	1045	30	1920	8.0	17.0	11.2
21...	1100	45	1920	8.0	17.0	11.2
21...	1115	60	1930	8.0	17.0	11.3
21...	1130	74	1920	8.0	17.0	11.2
SEP 24...	1215	1.6	2780	7.8	19.5	8.3
24...	1230	3.3	2780	7.8	19.5	8.3
24...	1245	5.0	2780	7.8	19.5	8.3

SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /s)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT								
15...	1315	5.6	23.0	6	.10	--	--	--
NOV								
21...	1145	12	15.0	8	.26	--	--	--
27...	1200	23	12.0	6	.37	--	--	--
DEC								
10...	1100	30	13.0	4	.32	--	--	--
28...	1300	300	14.0	751	608	46	55	60
JAN								
17...	1200	59	14.0	175	28	--	--	--
FEB								
15...	1000	78	16.0	172	36	--	--	--
MAR								
18...	1030	47	16.0	105	13	--	--	--
21...	1230	43	17.0	116	13	--	--	--
APR								
26...	1415	22	24.0	244	14	--	--	--
MAY								
30...	1100	9.8	21.5	14	.37	--	--	--
JUN								
28...	0945	5.9	22.0	49	.78	--	--	--
JUL								
22...	1300	4.8	30.0	45	.58	--	--	--
AUG								
02...	1000	2.2	21.5	63	.37	--	--	--
SEP								
04...	0915	.94	19.5	32	.08	--	--	--
24...	1100	1.9	19.0	28	.14	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT							
15...	--	--	--	--	--	--	--
NOV							
21...	--	--	--	--	--	--	--
27...	--	--	31	--	--	--	--
DEC							
10...	--	--	--	--	--	--	--
28...	63	64	65	70	89	99	100
JAN							
17...	--	--	94	--	--	--	--
FEB							
15...	--	--	--	--	--	--	--
MAR							
18...	--	--	--	--	--	--	--
21...	--	--	56	--	--	--	--
APR							
26...	--	--	--	--	--	--	--
MAY							
30...	--	--	82	--	--	--	--
JUN							
28...	--	--	--	--	--	--	--
JUL							
22...	--	--	70	--	--	--	--
AUG							
02...	--	--	--	--	--	--	--
SEP							
04...	--	--	72	--	--	--	--
24...	--	--	--	--	--	--	--

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM FLOW, INSTAN- TANEOUS FT ³ /S	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM, % FINER THAN .125 MM
APR 05...	1100	--	6	39	5	13
	BED MAT. SIEVE DIAM, % FINER THAN	BED MAT. SIEVE DIAM, % FINER THAN	BED MAT. SIEVE DIAM, % FINER THAN	BED MAT. SIEVE DIAM, % FINER THAN	BED MAT. SIEVE DIAM, % FINER THAN	BED MAT. SIEVE DIAM, % FINER THAN
DATE	.250 MM	.500 MM	1.00 MM	2.00 MM	4.00 MM	8.00 MM
APR 05...	44	78	93	98	99	100

SANTA MARGARITA RIVER BASIN

11042400 TEMECULA CREEK NEAR AGUANGA, CA

LOCATION.--Lat 33°27'33", long 116°55'22", in SW 1/4 SW 1/4 sec.19, T.8 S., R.1 E., Riverside County, Hydrologic Unit 18070302, on right bank 1.6 mi downstream from Long Canyon, and 3.5 mi northwest of Aguanga.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 23-26, 31, Jan. 7, 10-23, Mar. 27 to May 23, July 20-31. Records good except for periods of estimated daily discharge, which are fair. No regulation above station. Pumping for irrigation upstream from station.

AVERAGE DISCHARGE.--28 years, 7.21 ft³/s, 5,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft³/s, Apr. 3, 1958, gage height, 6.57 ft, from rating curve extended above 1,200 ft³/s; maximum gage height, 12.0 ft, from floodmarks, Feb. 21, 1980; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 19	0715	*371	*3.43	July 19	1445	360	3.22
Dec. 27	2300	109	2.22				

Minimum daily, 1.1 ft³/s, July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.7	4.2	12	7.0	6.1	8.8	3.4	3.3	1.9	1.6	1.5
2	3.2	3.6	4.1	10	9.3	6.4	8.2	3.3	3.6	1.5	1.6	1.4
3	3.8	3.6	4.4	9.0	9.3	8.1	7.5	3.3	3.1	1.3	1.6	1.4
4	3.8	3.5	4.6	8.4	9.3	7.7	7.0	3.3	3.7	1.2	1.6	2.2
5	3.9	3.5	5.1	7.7	8.6	7.1	6.6	3.3	3.8	1.4	1.4	2.2
6	3.8	3.8	4.7	7.0	7.7	6.7	6.2	3.3	3.2	1.5	1.4	1.8
7	3.8	3.9	4.2	7.5	7.2	6.4	5.8	3.3	2.4	1.6	1.4	1.8
8	3.6	3.9	20	21	7.1	5.9	5.5	3.3	2.3	1.5	1.5	1.8
9	3.4	3.9	5.4	17	26	5.5	5.3	3.3	2.1	1.4	1.5	1.9
10	3.2	3.8	5.3	15	32	5.5	5.0	3.3	1.9	1.4	1.4	2.0
11	3.4	3.8	12	13	19	5.9	4.8	3.4	2.2	1.4	1.5	2.1
12	3.6	3.8	7.2	11	15	5.6	4.5	3.7	2.1	1.4	1.6	2.1
13	3.6	4.2	6.5	10	13	5.3	4.2	3.6	2.2	1.3	1.9	1.9
14	3.5	4.1	6.0	9.2	11	4.9	3.9	3.5	2.2	1.1	1.6	1.9
15	3.2	4.0	5.7	8.4	10	4.4	3.8	3.4	2.0	1.5	1.5	1.9
16	3.2	3.9	16	7.8	9.3	4.3	3.5	3.3	2.0	1.4	1.5	1.9
17	3.1	4.0	7.4	7.4	8.5	4.2	3.7	3.3	1.9	1.6	1.6	2.4
18	3.1	4.1	28	7.0	7.9	4.6	4.2	3.4	2.0	2.0	1.6	3.1
19	3.3	4.0	189	6.6	7.6	5.1	4.0	3.3	2.0	22	1.6	3.1
20	3.6	4.0	82	6.3	8.7	5.0	4.5	3.3	2.1	5.5	1.6	2.3
21	3.6	4.0	28	6.2	9.3	5.0	5.0	3.3	2.0	5.1	1.5	1.8
22	3.6	4.1	18	6.2	7.0	5.1	4.5	3.3	1.9	3.0	1.5	1.8
23	3.4	4.3	14	6.1	6.5	4.6	4.2	3.3	1.8	2.4	1.5	1.8
24	3.4	5.9	12	6.0	6.9	4.3	4.1	3.2	1.9	2.2	1.4	2.0
25	3.4	8.7	10	5.9	6.7	4.3	3.9	3.2	1.9	2.0	1.4	2.0
26	3.5	5.2	9.0	5.8	7.1	5.4	3.7	3.2	1.8	1.6	1.5	2.2
27	3.5	4.1	41	5.9	6.7	9.0	3.6	3.3	1.7	1.5	1.5	2.2
28	3.7	4.0	55	6.5	6.4	14	3.5	3.3	1.7	1.5	1.5	2.2
29	3.5	4.3	24	11	---	12	3.4	3.1	1.8	1.5	1.4	2.3
30	3.6	4.3	18	7.6	---	11	3.4	3.2	1.6	1.6	1.3	2.3
31	3.8	---	14	7.1	---	9.5	---	3.3	---	1.7	1.5	---
TOTAL	108.2	126.0	664.8	275.6	290.1	198.9	146.3	103.0	68.2	78.0	47.0	61.3
MEAN	3.49	4.20	21.4	8.89	10.4	6.42	4.88	3.32	2.27	2.52	1.52	2.04
MAX	3.9	8.7	189	21	32	14	8.8	3.7	3.8	22	1.9	3.1
MIN	3.1	3.5	4.1	5.8	6.4	4.2	3.4	3.1	1.6	1.1	1.3	1.4
AC-FT	215	250	1320	547	575	395	290	204	135	155	93	122
CAL YR 1984	TOTAL	2323.8	MEAN	6.35	MAX	189	MIN	2.2	AC-FT	4610		
WTR YR 1985	TOTAL	2167.4	MEAN	5.94	MAX	189	MIN	1.1	AC-FT	4300		

11042510 VAIL LAKE NEAR TEMECULA, CA

LOCATION.--Lat 33°29'44", long 116°58'33", in Pauba Grant, Riverside County, Hydrologic Unit 18070302, near center of Vail Dam, 0.2 mi downstream from Arroyo Seco, and 10 mi east of Temecula.

DRAINAGE AREA.--320 mi².

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1977, published with Temecula Creek at Vail Dam.

GAGE.--Nonrecording gage. Datum of gage is 1,350 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929. Prior to June 3, 1979, water-stage recorder at same site and datum.

REMARKS.--Reservoir is formed by a concrete arch-type dam with spillway on left end, completed in June 1949. Capacity of reservoir at spillway level, 49,370 acre-ft, elevation, 1,470 ft. Dead storage below lowest outlet, at elevation 1,352.5 ft. Area-capacity tables for reservoir are based on a survey made in 1947. There had been no spill from Nov. 13, 1948, date of closure, to Feb. 20, 1980, when a peak spill of about 8,000 ft³/s occurred (from theoretical discharge curve). Water is released as required down Temecula Creek for diversion about 1 mi below dam.

COOPERATION.--Records were provided by Rancho California Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, about 52,670 acre-ft, Feb. 21, 1980, elevation, 1,473.0 ft, from observed high-water mark; minimum, 1,038 acre-ft, Oct. 31, 1960, elevation, 1,379.44 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, about 43,600 acre-ft, Mar. 31, elevation, 1,464.45 ft; minimum observed, 38,290 acre-ft, Sept. 30, elevation, 1,458.95 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,462.00	41,190	--
Oct. 31.....	1,461.65	40,850	-340
Nov. 30.....	1,461.45	40,660	-190
Dec. 31.....	1,462.85	42,010	+1,350
CAL YR 1984.....	--	--	-6,570
Jan. 31.....	1,463.31	42,470	+460
Feb. 28.....	1,463.00	42,160	-310
Mar. 31.....	1,464.45	43,600	+1,440
Apr. 30.....	1,464.30	43,450	-150
May 31.....	1,463.65	42,800	-650
June 30.....	1,462.59	41,760	-1,040
July 31.....	1,461.55	40,760	-1,000
Aug. 31.....	1,460.30	39,560	-1,200
Sept. 30.....	1,458.95	38,290	-1,270
WTR YR 1985.....	--	--	-2,900

SANTA MARGARITA RIVER BASIN

11043000 MURRIETA CREEK AT TEMECULA, CA

LOCATION.--Lat 33°28'47", long 117°08'35", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on right bank 0.4 mi upstream from confluence with Temecula Creek, 1.0 mi south of Temecula, and 12 mi downstream from Skinner Reservoir on Tualota Creek.

DRAINAGE AREA.--222 mi².

PERIOD OF RECORD.--October 1924 to current year. Prior to September 1930 monthly discharges only, published in WSP 1315-B.

GAGE.--Water-stage recorder. Concrete control since Aug. 30, 1981. Elevation of gage is 970 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1735 for history of changes prior to Dec. 16, 1938.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated since 1974 by Skinner Reservoir. Pumping above station for irrigation of about 2,500 acres. Rancho California Water District can discharge into creek, approximately 0.10 mi upstream, to supplement low flow.

AVERAGE DISCHARGE.--61 years, 11.3 ft³/s, 8,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,800 ft³/s, Feb. 21, 1980, gage height, 13.70 ft on basis of slope-area measurement of peak flow; minimum daily, 0.02 ft³/s at times in 1969, no flow Dec. 11, 1976 (upstream channel work).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Dec. 28	0145	*292	*4.13				

Minimum daily, 0.26 ft³/s, Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.61	.64	2.3	1.4	1.2	.74	1.4	1.2	2.4	2.9	3.2
2	1.6	.61	.60	2.1	4.1	1.3	.68	1.7	1.2	.80	2.9	3.3
3	1.7	.58	.86	2.0	3.0	1.6	.66	2.0	1.3	.27	2.9	3.3
4	1.6	.56	1.5	2.3	2.0	1.6	.66	2.1	1.3	2.5	2.9	3.2
5	1.6	.54	.86	2.2	1.7	1.5	.66	1.6	2.1	3.6	2.8	3.3
6	1.6	.52	.60	1.9	1.5	1.5	.66	1.6	2.2	3.6	2.9	3.3
7	1.6	.50	.60	2.1	1.4	1.4	.66	1.6	2.2	3.6	2.9	3.1
8	1.6	.50	.88	4.1	1.3	1.3	.68	1.4	2.3	1.4	2.9	3.1
9	1.5	.60	.83	2.5	9.9	1.2	.68	1.4	2.3	.41	3.0	3.1
10	1.6	.50	.67	2.4	5.8	1.2	.66	1.4	2.4	.35	2.9	1.4
11	1.7	.50	1.7	3.2	2.5	1.1	.63	1.4	2.4	1.7	3.0	.35
12	1.8	.50	1.4	2.0	1.9	1.1	.61	1.4	2.5	2.7	3.0	.30
13	1.8	.70	.86	1.5	1.7	1.2	.59	1.4	2.5	2.8	3.1	.26
14	1.8	.56	.68	1.4	1.6	1.1	.59	1.3	2.5	2.8	3.1	.84
15	1.8	.54	.66	1.3	1.4	1.1	.60	1.2	2.5	2.9	3.0	2.3
16	1.7	.54	7.0	1.3	1.4	1.1	.60	1.1	2.4	2.9	3.0	1.4
17	1.9	.56	1.6	1.3	1.4	1.1	.59	1.2	2.4	2.9	3.0	.29
18	1.7	.56	4.7	1.3	1.3	1.1	.60	1.2	2.4	2.9	3.1	.37
19	1.6	.57	82	1.3	1.3	1.2	.60	1.2	2.4	2.9	3.0	1.4
20	1.6	.60	56	1.2	1.3	1.1	.61	1.2	2.4	2.7	3.0	2.3
21	1.6	.70	4.1	1.2	1.8	1.1	.64	1.2	2.4	2.7	3.1	.34
22	1.7	.67	1.7	1.3	1.4	1.1	.63	1.2	2.4	2.7	3.0	1.1
23	1.6	.62	1.4	1.3	1.4	1.1	.58	1.2	2.5	2.8	3.1	1.4
24	1.5	1.8	1.6	1.2	1.3	1.0	.57	1.2	2.5	2.9	3.2	1.4
25	1.5	5.0	1.4	1.3	1.2	1.0	.59	1.2	2.5	2.9	3.4	1.8
26	1.3	2.2	1.3	1.2	1.3	1.0	.55	1.2	2.5	2.8	3.3	1.7
27	.95	1.0	.65	1.2	1.2	1.5	.53	1.2	2.5	2.7	3.2	1.6
28	.64	.78	112	1.5	1.1	1.9	.53	1.2	2.5	2.8	3.3	1.5
29	.62	.71	5.4	3.6	---	1.3	.91	1.2	2.5	2.8	3.2	1.5
30	.62	.66	3.1	2.0	---	.89	1.5	1.2	2.5	2.9	3.2	1.5
31	.62	---	2.6	1.6	---	.78	---	1.2	---	2.9	3.2	---
TOTAL	45.85	25.29	364.24	57.1	58.6	37.67	19.79	42.0	67.7	77.03	94.5	53.95
MEAN	1.48	.84	11.7	1.84	2.09	1.22	.66	1.35	2.26	2.48	3.05	1.80
MAX	1.9	5.0	112	4.1	9.9	1.9	1.5	2.1	2.5	3.6	3.4	3.3
MIN	.62	.50	.60	1.2	1.1	.78	.53	1.1	1.2	.27	2.8	.26
AC-FT	91	50	722	113	116	75	39	83	134	153	187	107
CAL YR 1984	TOTAL	659.73	MEAN	1.80	MAX	112	MIN	.20	AC-FT	1310		
WTR YR 1985	TOTAL	943.72	MEAN	2.59	MAX	112	MIN	.26	AC-FT	1870		

11044000 SANTA MARGARITA RIVER NEAR TEMECULA, CA

LOCATION.--Lat 33°28'26", long 117°08'29", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on left bank at upper end of Temecula Canyon, 0.1 mi downstream from confluence of Murrieta and Temecula Creeks, 1.4 mi south of Temecula, 10 mi downstream from Vail Dam, and about 12 mi downstream from Skinner Reservoir.

DRAINAGE AREA.--588 mi².

PERIOD OF RECORD.--January 1923 to current year. Prior to October 1952, published as Temecula Creek at Railroad Canyon, near Temecula.

GAGE.--Water-stage recorder and crest-stage gage. Concrete control since Nov. 3, 1966. Elevation of gage is 950 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 3, 1966, at site 100 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated since November 1948 by Vail Dam (station 11042510) on Temecula Creek, and since 1974 by Skinner Reservoir on Tualota Creek which is tributary to Murrieta Creek. Rancho California Water District can discharge into Murrieta Creek, approximately 0.6 mi upstream, to supplement low flow.

AVERAGE DISCHARGE.--25 years (water years 1924-48), unregulated, 28.2 ft³/s, 20,420 acre-ft/yr; 37 years (water years 1949-85), 15.8 ft³/s, 11,450 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Feb. 16, 1927, gage height, 14.6 ft, at site then in use, from rating curve extended above 10,000 ft³/s; minimum daily, 0.30 ft³/s, Aug. 18-22, 1965, (during period of upstream construction).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 860 ft³/s, Dec. 28, gage height, 3.80, from rating curve extended above 140 ft³/s on basis of slope-area measurement on Murrieta Creek 0.5 mi upstream; minimum daily, 0.55 ft³/s, July 3 and 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1964 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.1	1.5	3.6	1.9	1.8	1.5	2.4	1.7	2.7	3.3	3.5
2	2.5	1.1	1.5	3.2	7.1	2.0	1.4	2.7	1.7	1.8	3.4	3.7
3	1.9	1.1	1.8	3.1	4.7	2.1	1.3	3.1	1.8	.55	3.4	3.7
4	2.2	1.2	2.3	3.1	2.8	2.3	1.3	3.2	2.1	2.0	3.4	3.8
5	2.2	1.2	1.9	3.2	2.6	2.1	1.3	2.5	3.0	3.9	3.3	4.1
6	2.2	1.2	1.6	2.8	2.2	2.1	1.4	2.4	2.9	3.9	3.3	4.2
7	2.2	1.2	1.5	3.1	2.0	1.9	1.4	2.7	2.8	4.0	3.4	4.1
8	2.2	1.5	2.2	8.0	2.0	1.9	1.4	2.2	2.9	2.4	4.8	3.8
9	2.1	1.5	2.2	3.4	19	1.9	1.4	2.2	2.9	.62	3.8	3.8
10	2.2	1.3	1.7	3.1	11	1.8	1.6	2.2	2.9	.55	3.3	2.3
11	2.3	1.3	4.4	4.6	3.7	1.8	1.3	2.1	2.8	1.7	3.4	.93
12	2.7	1.2	3.5	3.0	2.8	1.8	1.3	2.1	2.9	3.1	4.5	.92
13	2.7	2.8	2.1	2.2	2.6	1.9	1.3	2.0	2.9	3.0	3.8	.79
14	2.7	2.0	1.6	2.1	2.1	2.2	1.4	2.0	2.8	3.1	3.6	1.2
15	2.6	1.5	1.6	2.1	2.1	2.6	1.3	1.8	2.9	3.2	3.5	3.1
16	2.5	1.4	11	2.0	2.1	2.6	1.3	1.7	3.0	3.7	3.4	4.6
17	2.8	1.5	4.1	1.9	1.9	2.6	1.3	1.8	2.9	3.0	3.5	7.0
18	2.3	1.3	9.2	2.0	2.0	2.6	1.3	1.8	2.9	3.1	3.5	1.6
19	2.3	1.3	12P	1.9	1.9	2.6	1.3	1.8	3.0	3.2	3.5	2.3
20	2.3	1.3	77	1.9	2.1	2.6	1.3	2.0	3.0	3.1	3.6	3.5
21	2.3	1.4	10	2.0	2.5	2.7	1.3	1.6	2.9	3.2	3.5	1.3
22	2.7	1.4	4.4	2.0	2.1	2.7	1.3	1.8	2.9	3.3	3.4	1.9
23	2.1	1.3	3.5	2.0	2.1	2.6	1.3	1.8	3.0	3.3	3.4	2.7
24	2.3	3.3	3.4	1.9	1.9	2.5	1.2	1.5	2.9	3.2	3.4	2.6
25	2.3	7.9	3.3	2.1	1.8	2.5	1.3	1.5	3.0	3.3	3.5	2.6
26	2.2	2.8	3.0	1.9	1.9	2.6	1.2	1.6	2.9	3.2	3.4	2.5
27	1.8	1.9	158	1.9	1.9	3.6	1.2	1.5	2.8	3.2	3.5	2.2
28	1.1	1.6	211	2.5	1.8	4.6	1.2	1.6	2.9	3.2	3.6	2.2
29	1.1	1.7	12	5.4	---	3.5	1.5	1.7	2.8	3.4	4.7	2.2
30	1.0	1.6	5.6	2.8	---	2.9	2.4	1.7	2.7	3.3	3.6	2.1
31	1.1	---	4.3	2.3	---	2.3	---	1.7	---	3.3	3.6	---
TOTAL	67.1	52.9	679.2	87.1	94.6	75.7	41.0	62.9	82.6	88.52	111.3	65.24
MEAN	2.16	1.76	21.9	2.81	3.38	2.44	1.37	2.03	2.75	2.86	3.59	2.64
MAX	2.8	7.9	211	8.0	19	4.6	2.4	3.2	3.0	4.0	4.6	7.0
MIN	1.0	1.1	1.5	1.9	1.8	1.8	1.2	1.5	1.7	.55	3.3	.79
AC-FT	133	105	1350	173	188	150	81	125	164	176	221	169
CAL YR 1984	TOTAL	1238.23	MEAN	3.38	MAX	211	MIN	.40	AC-FT	2460		
WTR YR 1985	TOTAL	1528.16	MEAN	4.19	MAX	211	MIN	.55	AC-FT	3030		

SANTA MARGARITA RIVER BASIN

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA

LOCATION.--Lat 33°18'40", long 117°20'45", in NW 1/4 NW 1/4 sec.18, T.10 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on right bank at Basilone Road Bridge, 7.9 mi upstream from mouth, and 5.2 mi upstream from Ysidora.

DRAINAGE AREA.--740 mi².

PERIOD OF RECORD.--February 1923 to current year. Low-flow records not equivalent prior to Dec. 10, 1980, due to installation of conservation ponds above downstream site.

GAGE.--Water-stage recorder. Elevation of gage is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1735 for history of changes prior to Nov. 27, 1935. Nov. 27, 1935, to Feb. 25, 1970, at site 5.4 mi downstream, at different datum. Feb. 25, 1970, to Dec. 10, 1980, at site 6.2 mi downstream, at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated by Vail Lake (station 11042500) since November 1948. Diversions for irrigation on Rancho California (formerly Santa Margarita Ranch and Pauba Ranch).

AVERAGE DISCHARGE.--62 years, 35.1 ft³/s, 25,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft³/s, Feb. 16, 1927, gage height, 18.00 ft, site and datum then in use, on basis of slope-area measurement of peak flow; maximum gage height, 18.80 ft, Feb. 18, 1980 (possibly affected by tide); no flow for all or part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,210 ft³/s, Dec. 28, gage height, 6.18 ft; no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	37	23	25	23	9.0				
2			0	25	23	30	22	9.3				
3			0	19	27	27	20	13				
4			0	21	27	27	20	12				
5			0	22	27	28	19	14				
6			0	23	26	24	21	13				
7			0	24	25	26	23	11				
8			0	29	25	27	23	7.9				
9			0	27	164	24	22	7.8				
10			0	28	165	23	17	9.5				
11			0	29	53	24	14	10				
12			0	28	39	28	15	12				
13			0	26	37	23	14	10				
14			0	25	36	22	13	10				
15			0	25	35	22	12	13				
16			12	24	33	20	12	10				
17			18	24	32	21	12	6.6				
18			31	23	34	23	11	3.8				
19			217	24	36	21	11	2.4				
20			413	23	32	20	11	2.6				
21			119	23	32	23	13	7.3				
22			52	23	29	21	14	2.2				
23			38	22	29	21	13	.38				
24			38	21	29	20	12	.46				
25			35	20	31	20	9.6	0				
26			34	20	28	19	9.1	0				
27			104	20	32	21	7.4	0				
28			647	21	28	25	7.7	0				
29			130	23	---	25	6.8	0				
30			59	23	---	23	6.8	0				
31		---	44	21	---	23	---	0	---			---
TOTAL	0	0	1991	743	1137	726	434.4	197.24	0	0	0	0
MEAN	0	0	64.2	24.0	40.6	23.4	14.5	6.36	0	0	0	0
MAX	0	0	647	37	165	30	23	14	0	0	0	0
MIN	0	0	0	19	23	19	6.8	0	0	0	0	0
AC-FT	0	0	3950	1470	2260	1440	862	391	0	0	0	0
CAL YR 1984	TOTAL	4245.8	MEAN	11.6	MAX	647	MIN	0	AC-FT	8420		
WTR YR 1985	TOTAL	5228.64	MEAN	14.3	MAX	647	MIN	0	AC-FT	10370		

11046370 SAN MATEO CREEK AT SAN ONOFRE, CA

LOCATION.--Lat 33°23'28", long 117°35'23", in SE 1/4 NW 1/4 sec.14, T.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on left bank at downstream side of bridge on old Highway 101, 0.5 mi upstream from mouth, and 2.6 mi downstream from Cristianitos Creek.

DRAINAGE AREA.--132 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to September 1967, October 1984 to September 1985.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Station in backwater most of year. Records poor. Flow partly regulated by small detention reservoirs.

AVERAGE DISCHARGE.--22 years (water years 1946-67, 1985), 5.03 ft³/s, 3,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, estimated, Dec. 5, 1966, gage height, 10.42 ft; maximum gage height, 12.9 ft, Mar. 1, 1983 (backwater from channel vegetation); no flow for all or several months each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 9	2100	*123	7.59	Feb. 10	1300	(a)	*8.15

(a) Backwater from sand burm at mouth.

Minimum daily, 0.02 ft³/s, May 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	.12	.21	.27	3.1	.31	.43	.11	.49	.15	.25	.46
2	.16	.16	.21	.11	3.2	.57	.40	.04	.50	.08	.48	.40
3	.10	.16	1.4	.21	3.7	.45	.35	.11	.55	.06	.48	.34
4	.36	.16	.23	.08	3.5	.48	.28	.25	.90	.06	.26	.56
5	.36	.16	1.2	.10	3.4	.26	.24	.31	.85	.09	.26	.46
6	.43	.16	2.3	.21	3.8	.22	.29	.27	.50	.09	.26	.45
7	.52	.21	1.8	.64	4.2	.23	.35	.15	.30	.25	.27	.35
8	.57	.33	1.1	.31	4.4	.27	.54	.04	.23	1.1	.28	.30
9	.68	.21	.76	.26	15	.31	.50	.04	.19	.10	.32	.35
10	.68	.34	2.0	.42	8.0	.48	.60	.04	.19	.06	.33	.55
11	.63	.30	1.1	.63	5.0	.52	.43	.02	.20	.04	.35	.25
12	.55	.36	.66	1.1	3.0	.81	.45	.12	.22	.03	.57	.20
13	.77	1.7	.58	1.7	1.3	.72	.50	.25	.29	.03	.30	.15
14	1.0	.32	.47	1.5	1.3	.76	.57	.56	.49	.03	.33	.48
15	.95	.18	.47	1.0	1.1	.76	.87	.52	.30	.05	.38	.12
16	.62	.16	1.9	1.5	.95	.74	1.1	.35	.18	.06	.38	.18
17	1.2	.22	1.4	.88	.75	.70	1.0	.23	.15	.08	.46	.12
18	.65	.26	2.6	.66	.53	.88	.68	.20	.14	.06	.46	.43
19	.43	.36	9.4	.48	.54	.76	.85	.16	.14	.03	.40	.25
20	.32	.64	3.5	.41	.49	.72	.70	.12	.14	.03	.31	.09
21	.26	1.9	1.8	.26	.48	.72	.76	.10	.14	.03	.30	.12
22	.25	3.8	1.3	.26	.45	.66	.72	.20	.15	.03	.31	.06
23	.23	.30	.90	.43	.25	.50	.24	.31	.19	.04	.33	.08
24	.22	7.2	.70	.68	.43	.47	.13	.46	.21	.05	.33	.09
25	.20	1.5	.66	1.5	.46	.50	.12	.58	.28	.05	.35	.14
26	.18	.30	.77	1.6	.49	.45	.72	.63	.20	.07	.37	.42
27	.15	.27	3.1	1.5	.71	1.4	.59	.28	.36	.10	.35	.24
28	.13	.25	3.1	1.9	.52	.90	.75	.29	.30	.30	.38	.19
29	.12	.23	3.7	1.5	---	.55	.70	.58	.18	.47	.38	.53
30	.11	.22	3.0	2.6	---	.46	.18	.50	.20	.52	.36	.62
31	.10	---	1.3	3.0	---	.45	---	.49	---	.47	.34	---
TOTAL	13.47	22.48	53.62	27.70	71.05	18.01	16.04	8.31	9.16	4.61	10.93	8.98
MEAN	.43	.75	1.73	.89	2.54	.58	.53	.27	.31	.15	.35	.30
MAX	1.2	7.2	9.4	3.0	15	1.4	1.1	.63	.90	1.1	.57	.62
MIN	.10	.12	.21	.08	.25	.22	.12	.02	.14	.03	.25	.06
AC-FT	27	45	106	55	141	36	32	16	18	9.1	22	18
CAL YR 1984	TOTAL	1130.70	MEAN	3.09	MAX	43	MIN	.10	AC-FT	2240		
WTR YR 1985	TOTAL	264.36	MEAN	.72	MAX	15	MIN	.02	AC-FT	524		

WATER-QUALITY RECORDS

SEDIMENT RECORDS: January 1982 to current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /S)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
OCT 15...	1600	1.0	21.0	1	0
NOV 20...	1145	.55	15.0	6	.01
DEC 11...	1030	.67	18.0	3	.01
27...	1330	1.5	13.0	22	.09
JAN 18...	1245	.69	17.0	2	0
FEB 14...	1230	1.4	19.0	3	.01
MAR 15...	1100	.76	19.0	8	.02
APR 18...	1230	.71	22.0	5	.01
MAY 23...	1100	.48	19.0	4	.01
JUN 27...	1215	.32	20.0	4	0
AUG 01...	1145	.41	20.5	5	.01
SEP 03...	1130	.34	17.5	3	0

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /S)	BED MAT.	BED MAT.	BED MAT.
					% FINER THAN .062 MM	% FINER THAN .125 MM	% FINER THAN .250 MM
APR 05...	0900	--	5	--	0	2	11
					BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM
					BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
					BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	
APR 05...	32	57	72	80	85	90	97
							100

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA

LOCATION.--Lat 33°29'31", long 117°39'41", in SE 1/4 NE 1/4 sec.12, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on left bank 300 ft upstream from Camino Capistrano bridge, 0.3 mi upstream from Arroyo Trabuco, and 0.6 mi south of San Juan Capistrano.

DRAINAGE AREA.--117 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 67 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 10, 1979, at same site but at datum 10.00 ft higher. Prior to Aug. 29, 1979, at site 300 ft downstream on downstream side of bridge.

REMARKS.--Estimated daily discharges: Oct. 22 to Nov. 3. Records fair. No regulation above station. Capistrano Water Co. diverts 3.0 mi upstream. Various amounts of diverted water reach station as irrigation return flow and rising ground water. Data for San Juan Creek near San Juan Capistrano (station 11046500) previously collected at site 2.8 mi upstream was published as creek only and combined.

AVERAGE DISCHARGE.--16 years, 25.7 ft³/s, 18,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft³/s, estimated, Mar. 4, 1978, gage height, 7.0 ft, from floodmarks, on basis of velocity-area study; maximum gage height, 17.8 ft, Feb. 18, 1980, from floodmarks; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1969, 22,400 ft³/s, at site and datum then in use, 2.8 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Nov. 24	2000	238	11.06	Feb. 9	1930	427	11.41
Dec. 19	1700	*1,250	*12.28				

Minimum daily, 0.02 ft³/s, July 9-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	.73	.54	11	3.8	2.6	1.8	2.8	.61	.10	.45	.26
2	.90	.73	.54	10	25	3.0	1.6	3.0	.61	.09	.38	.21
3	.90	.73	.96	8.8	10	3.3	1.2	3.0	.61	.09	.09	.32
4	1.1	.73	.77	7.5	17	3.5	.92	3.0	1.0	.09	.09	.32
5	.90	.73	.69	6.7	7.1	3.0	.81	2.8	.92	.09	.09	.26
6	.73	.73	.69	6.3	6.3	2.8	1.0	3.0	.45	.09	.09	.26
7	.73	.90	.69	10	5.9	2.6	1.3	3.8	.32	.09	.10	.17
8	.90	1.1	14	13	5.3	2.8	2.0	4.0	.26	1.2	.10	.13
9	1.1	.90	1.1	7.9	187	3.0	1.8	4.3	.21	.02	.13	.17
10	1.1	.58	.86	5.9	140	3.0	2.0	3.8	.17	.02	.17	.32
11	.90	.90	1.2	5.6	56	3.3	2.0	2.8	.13	.02	.17	.09
12	.90	.73	1.8	5.9	28	3.3	1.3	2.2	.17	.03	.32	.09
13	.58	1.3	1.9	5.3	16	2.8	1.0	2.2	.32	.05	.13	.26
14	.58	.44	1.6	5.3	11	3.0	1.2	2.8	.13	.05	.17	.53
15	.58	.58	1.5	4.6	7.5	3.0	1.2	2.8	.13	.06	.21	.21
16	.44	.58	13	4.3	5.6	3.0	1.8	1.8	.10	.09	.21	.26
17	3.3	.58	5.3	4.3	5.3	2.8	2.2	1.3	.10	.10	.26	.21
18	.73	.58	72	4.3	5.3	3.5	2.2	1.0	.10	.09	.26	.53
19	.58	.44	209	4.3	4.3	3.0	2.0	1.0	.10	.05	.21	.17
20	.90	.58	73	4.0	4.6	2.8	2.4	.70	.10	.05	.13	.17
21	.73	.58	15	4.0	3.5	2.8	3.0	.53	.10	.05	.13	.17
22	.73	2.7	5.3	3.8	2.8	2.8	3.8	.53	.13	.05	.13	.13
23	.73	.73	3.4	3.3	2.0	2.0	4.0	.61	.13	.05	.17	.26
24	.73	31	2.3	3.0	3.0	1.8	3.8	.53	.32	.07	.17	.10
25	.73	1.9	2.1	3.0	3.0	2.0	3.0	.45	.13	.61	.17	.09
26	.73	.77	2.5	3.0	2.6	1.6	2.0	.53	.13	1.0	.21	.13
27	2.0	.69	67	3.3	2.4	5.5	2.0	.53	.26	.70	.17	.13
28	1.0	.61	82	7.5	2.4	2.8	2.0	.38	.26	1.2	.21	.10
29	.73	.61	32	6.3	---	2.4	2.2	.81	.26	.92	.21	.13
30	.73	.54	18	4.9	---	1.8	2.6	.61	.21	.09	.21	.13
31	.73	---	14	4.3	---	1.8	---	.61	---	.17	.17	---
TOTAL	28.32	54.70	644.74	181.4	572.7	87.4	60.13	58.22	8.47	7.38	5.71	6.31
MEAN	.91	1.82	20.8	5.85	20.5	2.82	2.00	1.88	.28	.24	.18	.21
MAX	3.3	.31	209	13	187	5.5	4.0	4.3	1.0	1.2	.45	.53
MIN	.44	.44	.54	3.0	2.0	1.6	.81	.38	.10	.02	.09	.09
AC-FT	56	108	1280	360	1140	173	119	115	17	15	11	13
CAL YR 1984	TOTAL	2139.40	MEAN	5.85	MAX	209	MIN	.20	AC-FT	4240		
WTR YR 1985	TOTAL	1715.48	MEAN	4.70	MAX	209	MIN	.02	AC-FT	3400		

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	32	.08	27	.05	22	.03	10	.30	14	.14	7	.05
2	35	.09	24	.05	22	.03	10	.27	491	67	7	.06
3	45	.11	15	.03	18	.05	8	.19	40	1.1	6	.05
4	48	.14	28	.06	13	.03	7	.14	383	43	6	.06
5	63	.15	41	.08	15	.03	9	.16	17	.33	66	.53
6	64	.13	40	.08	19	.04	10	.17	10	.17	75	.57
7	55	.11	36	.09	12	.02	33	1.2	10	.16	17	.12
8	50	.12	32	.10	320	53	62	2.9	9	.13	14	.11
9	47	.14	24	.06	15	.04	8	.17	1120	812	14	.11
10	48	.14	27	.04	12	.03	5	.08	462	230	15	.12
11	52	.13	23	.06	13	.04	5	.08	100	15	13	.12
12	63	.15	20	.04	14	.07	6	.10	94	7.1	12	.11
13	55	.09	25	.09	13	.07	5	.07	60	2.6	16	.12
14	32	.05	28	.03	12	.05	5	.07	72	2.1	23	.19
15	30	.05	31	.05	15	.06	4	.05	61	1.2	25	.20
16	20	.02	21	.05	260	29	5	.06	40	.60	25	.20
17	55	1.2	24	.04	16	.23	4	.05	18	.26	24	.18
18	33	.07	26	.04	1170	1750	32	.37	11	.16	20	.19
19	50	.08	28	.03	3490	3550	7	.08	12	.14	15	.12
20	36	.09	18	.03	1150	307	17	.18	19	.24	11	.08
21	41	.08	50	.08	108	4.4	17	.18	20	.19	12	.09
22	46	.09	105	1.8	48	.69	7	.07	15	.11	16	.12
23	42	.08	30	.06	15	.14	6	.05	8	.04	18	.10
24	48	.09	620	227	10	.06	9	.07	7	.06	19	.53
25	47	.09	62	.32	10	.06	8	.06	10	.08	17	.09
26	46	.09	34	.07	24	.30	5	.04	13	.09	11	.05
27	46	.25	24	.04	466	132	8	.07	14	.09	29	1.0
28	42	.11	40	.07	350	101	49	1.9	8	.05	10	.08
29	41	.08	23	.04	23	2.0	9	.15	---	---	7	.05
30	42	.08	20	.03	6	.29	10	.13	---	---	8	.04
31	30	.06	---	---	8	.30	15	.17	---	---	12	.06
TOTAL	---	4.24	---	230.36	---	5931.06	---	9.58	---	1184.14	---	5.50
DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	16	.08	24	.18	58	.10	100	.03	45	.05	44	.03
2	18	.08	22	.18	52	.09	57	.01	70	.07	45	.03
3	25	.08	21	.17	49	.08	105	.03	96	.02	43	.04
4	27	.07	22	.18	72	.19	100	.02	58	.01	42	.04
5	21	.05	24	.18	66	.16	80	.02	55	.01	43	.03
6	23	.06	26	.21	62	.08	75	.02	56	.01	46	.03
7	25	.09	27	.28	60	.05	40	.16	60	.02	45	.02
8	21	.11	26	.28	61	.04	40	.13	82	.02	44	.02
9	17	.08	23	.27	62	.04	63	.00	84	.03	40	.02
10	15	.08	26	.27	57	.03	73	.00	76	.03	48	.04
11	17	.09	33	.25	49	.02	81	.00	58	.03	75	.02
12	17	.06	32	.19	55	.03	83	.01	64	.06	70	.02
13	16	.04	23	.14	62	.05	77	.01	50	.02	65	.05
14	16	.05	19	.14	65	.02	52	.01	44	.02	40	.06
15	20	.06	19	.14	67	.02	50	.01	50	.03	29	.02
16	34	.17	20	.10	72	.02	88	.02	45	.03	45	.03
17	23	.14	19	.07	78	.02	88	.02	37	.03	46	.03
18	20	.12	19	.05	82	.02	98	.02	48	.03	34	.05
19	28	.15	19	.05	94	.03	95	.01	70	.04	43	.02
20	28	.18	20	.04	97	.03	77	.01	57	.02	59	.03
21	23	.19	25	.04	94	.03	95	.01	53	.02	35	.02
22	18	.18	23	.03	85	.03	80	.01	67	.02	22	.01
23	19	.21	30	.05	74	.03	70	.01	73	.03	40	.03
24	15	.15	53	.08	75	.06	88	.02	55	.03	61	.02
25	12	.10	59	.07	93	.03	94	.15	40	.02	77	.02
26	22	.12	66	.09	83	.03	110	.30	44	.02	47	.02
27	26	.14	67	.10	55	.04	120	.23	39	.02	44	.02
28	28	.15	70	.07	80	.06	103	.33	45	.03	34	.01
29	27	.16	60	.13	95	.07	108	.27	39	.02	18	.01
30	26	.18	73	.12	114	.06	103	.03	30	.02	27	.01
31	---	---	66	.11	---	---	70	.03	40	.02	---	---
TOTAL	---	2.95	---	4.26	---	1.56	---	1.93	---	0.78	---	0.65

SAN JUAN CREEK BASIN

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

MONTH	WATER DISCHARGE FT ³ /S-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1984	28.32	4.24	0	4
NOVEMBER ...	54.70	230.36	11	241
DECEMBER ...	644.74	5931.06	260	6190
JANUARY 1985	181.40	9.58	0	10
FEBRUARY ...	572.70	1184.14	188	1370
MARCH	87.40	5.50	0	6
APRIL	60.13	2.98	0	3
MAY	58.22	4.26	0	4
JUNE	8.47	1.56	0	2
JULY	7.38	1.91	0	2
AUGUST	5.71	0.80	0	1
SEPTEMBER ..	6.31	0.69	0	1
TOTAL.....	1715.48	7377.08	459	7834

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM FLOW, INSTAN- TANEOUS (FT ³ /S)	TEMPER- ATURE (DEG C)	SEDI- MENT SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
JAN 18...	1030	4.3	11.5	57	--	95

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /S)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM
APR 05...	1500	--	5	.81	1	4	11
DATE	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM	128.0 MM
APR 05...	16	23	34	52	81	98	100

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /S)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM
DEC								
19...	1215	13.5	25	78	50	5.6	--	8
27...	1000	12.0	25	68	51	4.1	1	19
DATE		SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM	
DEC								
19...		39	62	74	82	94	100	
27...		69	89	94	97	100	--	

SAN JUAN CREEK BASIN

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CA

LOCATION.--Lat 33°29'54", long 117°39'54", on line between sec. 1 and 12, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on left bank 30 ft downstream from bridge on Del Obispo Street in San Juan Capistrano.

DRAINAGE AREA.--54.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to September 1977, October 1983 to current year. Records prior to October 1963, in files of Orange County Environmental Management Agency.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--7 years (water years 1973-77, 1984-85), 6.34 ft³/s, 4,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s, Nov. 13, 1984, gage height, 13.94 ft, from rating curve extended above 220 ft³/s; maximum gage height, 14.07 ft, Nov. 24, 1983; no flow many days during most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*), from rating curve extended above 220 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 13	0845	*1,960	*13.94	Jan. 8	0200	415	12.92
Nov. 24	2030	1,050	13.48	Jan. 28	1930	232	12.63
Dec. 8	0145	893	13.37	Feb. 2	1000	555	13.08
Dec. 16	0400	1,440	13.70	Feb. 4	1400	269	12.70
Dec. 19	0230	1,540	13.75	Feb. 9	0900	1,260	13.60
Dec. 27	2100	1,710	13.83				

Minimum daily, 0.28 ft³/s, June 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	1.4	6.0	10	3.5	7.2	3.5	2.8	.62	2.4	.48	.74
2	3.3	1.4	5.8	4.3	90	11	3.2	2.9	.61	2.2	.49	2.7
3	3.5	.99	13	3.4	8.0	11	1.8	2.9	.52	2.5	.49	1.1
4	3.2	.81	9.5	3.0	28	9.0	1.6	3.2	.52	3.3	.46	1.1
5	1.7	1.4	8.3	2.2	15	9.8	1.4	2.5	.52	3.8	.48	2.9
6	1.6	1.5	8.0	1.9	6.4	8.5	1.7	2.5	.52	3.0	.48	9.1
7	2.6	1.3	8.0	8.7	5.6	7.4	1.5	2.6	.52	2.6	.52	1.7
8	2.2	14	96	76	5.9	8.1	1.4	2.8	.80	4.0	.49	3.6
9	1.0	1.5	6.2	7.3	371	8.0	1.4	3.4	.88	2.8	.53	4.3
10	2.0	.93	5.7	5.6	56	6.7	1.6	6.8	1.0	1.2	.46	1.9
11	2.3	.94	9.3	4.3	31	5.7	1.4	5.3	.69	.74	.41	9.7
12	1.6	1.0	5.7	3.9	19	6.2	1.4	4.4	.50	.70	.41	3.3
13	1.4	114	5.4	4.0	14	5.8	1.4	5.6	.36	.66	.47	2.6
14	1.4	3.7	5.4	4.2	12	6.1	1.4	4.3	.36	.85	.48	1.4
15	1.9	2.7	5.6	4.3	13	6.7	1.4	1.7	.38	1.1	.46	1.3
16	1.2	2.6	105	4.3	12	6.2	1.4	1.5	.33	.98	.54	1.8
17	6.2	3.3	5.2	3.5	12	4.9	2.1	2.9	.28	.78	.72	1.4
18	1.5	2.5	94	3.5	10	9.8	6.0	2.4	.32	.67	1.1	1.5
19	.93	2.4	431	3.5	10	7.0	3.2	1.8	.35	.61	1.1	2.2
20	1.2	2.5	149	3.4	18	5.7	3.0	1.6	.50	.67	1.0	2.0
21	1.5	3.4	39	3.2	12	5.0	3.1	1.6	1.8	.53	1.2	1.5
22	1.8	3.8	23	3.0	7.8	4.9	4.9	1.7	1.6	.63	3.1	.86
23	1.6	2.0	16	3.7	6.3	4.9	3.3	1.3	1.6	1.0	1.1	.83
24	1.1	200	13	3.3	6.7	4.7	3.5	1.5	2.2	1.3	.76	.88
25	1.4	24	12	3.7	7.2	4.5	3.5	1.8	1.9	.76	.69	.89
26	1.2	6.4	55	3.8	4.6	4.3	2.0	1.5	2.3	.61	.66	2.2
27	1.2	6.2	394	3.8	3.6	34	1.8	1.5	2.5	.55	.78	2.4
28	1.1	6.3	123	57	5.2	31	1.9	1.6	2.5	.46	.93	1.9
29	1.1	6.3	60	28	---	9.6	2.0	1.3	2.1	.47	.90	1.6
30	1.2	6.3	22	4.1	---	5.0	2.6	.94	1.9	.46	.85	2.0
31	1.2	---	14	3.2	---	3.8	---	.67	---	.47	.80	---
TOTAL	58.13	425.57	1753.1	278.1	793.8	262.5	70.4	79.31	30.96	42.80	23.34	71.42
MEAN	1.88	14.2	56.6	8.97	28.4	8.47	2.35	2.56	1.03	1.38	.75	2.36
MAX	6.2	200	431	76	371	34	6.0	6.8	2.5	4.0	3.1	9.7
MIN	.93	.81	5.2	1.9	3.5	3.8	1.4	.67	.28	.46	.41	.74
AC-FT	115	844	3480	552	1570	521	140	157	61	85	46	142
CAL YR 1984	TOTAL	3762.44		MEAN	10.3	MAX	431	MIN	.63	AC-FT	7460	
WTR YR 1985	TOTAL	3889.45		MEAN	10.7	MAX	431	MIN	.28	AC-FT	7710	

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTRANO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971-78, December 1983 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1970 to September 1977, December 1983 to September 1984.

SEDIMENT RECORDS: October 1970 to September 1977, December 1983 to September 1984.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,900 mg/L, Feb. 11, 1973; minimum daily mean, no flow for many days most years.

SEDIMENT DISCHARGE: Maximum daily, 7,820 tons, Feb. 11, 1973; minimum daily, 0 ton many days most years.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		STREAM- FLOW, INSTAN- TANEOUS (FT ³ /S)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	
DATE	TIME							
OCT								
16...	0915	1.2	15.0	13	.04	--	--	
NOV								
20...	0900	2.2	12.0	241	1.4	--	--	
25...	0915	13	13.5	916	32	--	--	
DEC								
11...	0845	11	13.5	534	16	--	--	
19...	1330	76	13.5	1670	343	--	--	
27...	1100	217	12.5	4490	2631	--	--	
JAN								
18...	0915	3.6	9.0	269	2.6	--	--	
FEB								
14...	1615	12	20.0	20	.65	--	--	
MAR								
14...	1415	5.8	18.0	26	.41	--	--	
27...	1030	52	15.0	2460	348	47	51	
27...	1200	43	16.0	1140	132	45	55	
28...	0900	16	15.0	138	6	--	--	
28...	1115	51	18.0	897	124	--	--	
28...	1200	74	18.0	1640	328	--	--	
APR								
18...	0900	6.6	16.5	225	4	--	--	
MAY								
23...	1430	1	30.0	1	0	--	--	
JUN								
27...	1500	2.1	31.0	6	.03	--	--	
AUG								
01...	1445	.34	31.5	5	0	--	--	
SEP								
03...	1430	.84	26.0	10	.02	--	--	
DATE		SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT								
16...	--	--	--	--	--	--	--	--
NOV								
20...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
DEC								
11...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
JAN								
18...	--	--	--	--	--	--	--	--
FEB								
14...	--	--	--	--	--	--	--	--
MAR								
14...	--	--	--	--	--	--	--	--
27...	58	71	83	93	95	97	100	100
27...	64	75	87	94	95	98	100	100
28...	--	--	--	98	--	--	--	--
28...	--	--	--	88	--	--	--	--
28...	--	--	--	90	--	--	--	--
APR								
18...	--	--	--	--	--	--	--	--
MAY								
23...	--	--	--	--	--	--	--	--
JUN								
27...	--	--	--	--	--	--	--	--
AUG								
01...	--	--	--	--	--	--	--	--
SEP								
03...	--	--	--	--	--	--	--	--

SAN JUAN CREEK BASIN

11047300 ARROYO TRABUCO AT SAN JUAN CAPISTANO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /s)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
APR								
05...	1400	--	1	--	0	0.1	0.2	5.7
05...	1400	--	1	--	0.7	1.1	3.1	11
05...	1400	--	1	--	1.7	3.2	13	50
05...	1400	--	1	--	22	50	87	96
05...	1400	--	1	--	34	70	86	92

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
APR						
05...	40	69	76	81	95	100
05...	18	23	32	52	93	100
05...	78	88	94	99	100	--
05...	100	100	--	--	--	--
05...	97	100	100	--	--	--

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /s)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM
NOV							
24...	1000	13.5	--	13	--	24	0
DEC							
19...	1330	13.5	22	76	47	218	3
27...	1115	12.5	25	217	55	304	8
DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (FT ³ /s)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM
NOV							
24...	16	55	81	95	100	--	--
DEC							
19...	22	48	66	80	90	98	100
27...	33	57	71	80	86	92	100

11047700 ALISO CREEK AT SOUTH LAGUNA, CA

LOCATION.--Lat 33°30'43", long 117°44'49", in NE1/4 sec.6, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on right bank, 0.35 mi upstream from Pacific Coast Highway.

DRAINAGE AREA.--34.4 mi².

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Most runoff is storm produced. Low flows affected by sewage treatment plant outfalls 1.0 and 5.0 mi upstream. About one half of the drainage area is residential and commercial development.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft³/s, Mar. 1, 1983, gage height, 11.30 ft; minimum daily, 1.5 ft³/s, Nov. 4, 5, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 13	0745	1,430	6.63	Dec. 19	0115	*1,970	*7.35
Nov. 24	1500	1,010	6.07	Dec. 27	1945	1,450	6.65
Dec. 8	0145	587	5.38	Feb. 2	0900	456	5.18
Dec. 16	0330	875	5.87	Feb. 9	0915	1,340	6.50

Minimum daily, 1.6 ft³/s, Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.0	4.1	3.9	11	6.1	3.4	3.1	3.3	2.9	3.3	4.3
2	2.3	2.9	4.4	3.9	61	7.6	3.4	3.0	3.4	3.1	3.3	4.7
3	2.0	3.0	8.5	3.8	8.7	6.8	3.4	3.2	3.3	3.2	2.8	4.7
4	1.9	3.1	6.0	4.0	20	6.4	3.3	2.7	3.3	3.2	2.6	6.8
5	1.8	3.0	4.3	3.6	11	5.9	3.3	3.7	3.3	3.2	2.8	11
6	1.7	3.0	4.0	3.9	9.9	5.8	3.7	3.7	3.5	3.0	2.6	7.5
7	1.6	3.1	4.1	10	9.2	6.4	3.9	3.7	3.2	3.0	3.0	6.2
8	1.9	11	57	38	8.6	6.0	3.5	3.1	3.2	2.9	3.0	6.5
9	2.2	4.0	5.2	8.2	255	4.8	3.3	3.4	3.7	2.9	3.2	6.8
10	2.4	3.9	5.1	5.9	7.8	4.8	3.7	3.4	3.7	3.3	2.8	6.0
11	2.7	3.9	6.2	5.7	5.5	4.8	3.5	3.4	3.8	3.0	3.0	10
12	2.8	4.0	4.9	5.5	4.7	5.1	3.5	2.9	3.7	3.6	3.2	4.9
13	2.5	113	4.1	5.5	4.4	5.0	3.0	3.3	3.7	3.6	3.2	4.7
14	3.0	8.4	3.7	4.8	4.8	5.9	3.7	3.7	3.7	2.9	3.4	4.3
15	3.5	7.5	4.1	5.8	4.6	5.4	3.7	3.7	3.7	3.3	3.4	3.9
16	3.3	7.7	86	5.7	4.2	5.5	3.6	3.9	3.1	3.5	3.2	4.1
17	24	7.8	6.0	5.9	4.2	5.9	2.9	3.6	3.3	3.2	3.3	4.5
18	4.6	7.3	40	5.7	4.3	7.4	3.4	3.0	4.0	3.3	3.2	4.5
19	4.3	7.5	343	5.9	4.4	5.9	2.7	3.0	3.3	3.1	3.6	5.6
20	5.7	7.5	106	5.6	5.5	6.0	2.8	3.0	3.1	2.9	3.7	4.0
21	3.9	8.6	35	5.7	4.7	6.3	2.7	3.2	3.5	2.8	3.9	4.2
22	3.4	9.9	30	6.0	4.7	6.2	2.9	3.1	3.7	2.9	4.5	3.6
23	2.7	7.7	28	5.8	4.5	6.5	2.9	3.2	3.7	3.3	4.0	4.1
24	2.5	150	25	6.1	4.6	6.4	2.8	3.1	3.7	3.7	3.4	4.0
25	3.3	18	25	7.2	5.1	6.1	3.0	3.1	3.7	3.6	3.7	4.5
26	3.1	4.7	66	7.2	5.3	6.1	2.6	3.0	3.2	2.8	3.6	5.2
27	2.9	7.6	326	7.1	5.9	28	2.9	2.7	3.6	2.9	4.0	5.6
28	3.1	5.4	21	30	5.9	22	3.0	3.1	3.9	2.8	4.5	4.5
29	3.3	4.7	5.4	15	---	3.7	3.0	3.2	3.1	2.7	4.2	4.1
30	3.3	4.2	5.2	11	---	3.4	3.3	3.5	3.2	2.9	4.3	4.2
31	3.1	---	4.8	11	---	3.2	---	3.5	---	3.0	4.3	---
TOTAL	111.0	435.4	1278.1	253.4	489.5	215.4	96.8	101.2	104.6	96.5	107.0	159.0
MEAN	3.58	14.5	41.2	8.17	17.5	6.95	3.23	3.26	3.49	3.11	3.45	5.30
MAX	24	150	343	38	255	28	3.9	3.9	4.0	3.7	4.5	11
MIN	1.6	2.9	3.7	3.6	4.2	3.2	2.6	2.7	3.1	2.7	2.6	3.6
AC-FT	220	864	2540	503	971	427	192	201	207	191	212	315
CAL YR 1984	TOTAL	3231.5	MEAN 8.83	MAX 343	MIN 1.6	AC-FT 6410						
WTR YR 1985	TOTAL	3447.9	MEAN 9.45	MAX 343	MIN 1.6	AC-FT 6840						

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA

LOCATION.--Lat 33°40'54", long 117°48'31", in San Joaquin Grant, Orange County, Hydrologic Unit 18070204, on right bank 400 ft above Culver Drive, 2.7 mi west of East Irvine and 1.0 mi northeast of Irvine.

DRAINAGE AREA.--41.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to September 1985 (discontinued). Published as "near Irvine" prior to October 1976 and as "at Sand Canyon Avenue near Irvine" October 1976 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1976, at site 1.5 mi upstream at different datum and from Oct. 1, 1976 to Sept. 30, 1982 published as "at Sand Canyon Avenue", at site 2.5 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Sewage treatment effluent and irrigation runoff cause low-flow fluctuations in discharge.

AVERAGE DISCHARGE.--36 years, 6.54 ft³/s, 4,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s Mar. 1, 1983, gage height, 14.48 ft, from study of flow through culvert; no flow for periods in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*), from study of flow through culvert:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	2115	*1,260	*4.78				
Minimum daily, 1.2 ft ³ /s, Dec. 6.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.1	1.8	2.9	2.2	2.5	3.0	2.0	3.4	3.3	3.5	2.2
2	3.7	4.4	1.7	2.8	64	5.1	2.2	2.0	2.4	4.1	2.6	2.3
3	4.1	4.9	7.6	2.4	5.1	6.3	1.9	2.1	2.1	4.5	2.9	2.3
4	3.9	7.4	2.4	2.9	11	3.6	2.3	2.5	3.1	4.9	3.4	2.6
5	3.6	5.2	1.7	2.6	5.1	3.4	2.9	2.9	2.8	7.1	3.0	7.7
6	4.5	4.6	1.2	2.5	3.0	2.2	3.1	2.6	2.9	6.7	2.5	1.8
7	3.5	4.1	2.1	4.7	2.2	2.4	3.0	2.1	3.3	6.7	3.1	1.4
8	3.6	3.4	70	34	2.2	2.0	3.2	2.7	3.4	5.7	3.5	1.7
9	4.4	3.8	5.5	5.5	200	2.0	4.0	3.1	2.9	4.5	3.4	1.5
10	4.8	3.1	4.1	3.6	7.1	2.0	4.7	3.9	3.3	4.6	3.6	1.7
11	3.6	3.8	3.0	2.4	4.3	2.2	4.4	4.1	4.0	3.7	4.3	5.1
12	3.3	3.5	1.9	3.6	3.9	2.1	3.2	3.1	4.1	4.0	4.2	2.0
13	3.7	81	1.8	3.8	2.9	2.2	4.4	2.6	4.1	4.0	4.4	2.2
14	3.1	6.7	1.4	2.9	2.6	2.4	3.5	3.6	3.4	4.1	3.7	2.3
15	2.4	4.4	1.9	2.9	2.9	2.6	3.0	3.7	3.3	5.1	3.7	3.1
16	3.1	3.5	107	2.8	2.8	2.9	2.7	3.8	4.2	3.8	3.2	3.1
17	9.1	2.5	4.8	2.8	3.0	2.8	3.1	3.0	3.5	3.9	2.8	2.5
18	3.5	2.6	97	2.6	3.1	7.8	5.5	3.2	3.3	3.9	3.5	3.7
19	2.8	2.1	371	3.6	3.1	3.5	2.4	3.6	3.2	3.3	2.7	6.0
20	3.4	2.0	77	3.4	3.9	3.7	2.3	4.2	4.6	3.0	2.1	3.6
21	3.6	5.6	6.3	3.5	9.6	1.5	2.8	3.7	4.5	3.1	2.3	3.8
22	2.8	3.1	5.1	2.3	3.5	2.2	2.4	5.3	5.3	2.9	2.4	3.9
23	2.9	2.3	3.4	2.6	3.0	2.2	1.9	5.6	3.9	2.9	2.6	3.1
24	4.1	187	2.3	3.5	3.3	3.1	3.1	5.1	3.8	2.9	2.4	2.9
25	4.8	27	2.0	3.7	2.9	3.8	3.7	3.6	4.0	2.8	2.1	3.7
26	4.1	3.7	48	2.8	2.9	4.1	4.2	4.1	4.7	3.1	2.3	4.8
27	5.2	3.2	326	2.6	2.8	20	3.4	3.5	4.3	3.7	2.5	4.4
28	4.8	2.4	39	9.9	2.7	15	3.8	3.2	4.6	3.6	2.5	4.2
29	4.1	1.4	6.7	8.6	---	2.9	3.2	4.1	4.3	3.6	2.2	2.3
30	3.4	1.5	5.6	2.4	---	2.8	2.3	3.9	3.1	4.2	2.6	3.3
31	2.7	---	3.5	1.9	---	3.3	---	3.5	---	3.0	2.1	---
TOTAL	120.7	393.3	1212.8	138.5	365.1	124.6	95.6	106.4	109.8	126.7	92.1	95.2
MEAN	3.89	13.1	39.1	4.47	13.0	4.02	3.19	3.43	3.66	4.09	2.97	3.17
MAX	9.1	187	371	34	200	20	5.5	5.6	5.3	7.1	4.4	7.7
MIN	2.4	1.4	1.2	1.9	2.2	1.5	1.9	2.0	2.1	2.8	2.1	1.4
AC-FT	239	780	2410	275	724	247	190	211	218	251	183	189
CAL YR 1984	TOTAL	3148.4	MEAN 8.60	MAX 371	MIN 1.2	AC-FT 6240						
WTR YR 1985	TOTAL	2980.8	MEAN 8.17	MAX 371	MIN 1.2	AC-FT 5910						

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1985 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1982 to September 1985 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: October 1982 to April 1985 (discontinued).

REMARKS.--Sediment samples were collected on most days where a water temperature is published. Sediment discharge values were estimated from a daily transport curve for those days that have no daily concentration values. Previously unpublished records for the 1983 and 1984 water years are presented herein.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 5,440 mg/L, Mar. 3, 1983; minimum daily mean, 10 mg/L, Mar. 12, 1985.

SEDIMENT LOAD: Maximum daily, 67,800 tons, Mar. 1, 1983; minimum daily, 0.06 ton, Mar. 12, 1985.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 4,660 mg/L, Dec. 27; minimum daily mean, 10 mg/L, Mar. 12.

SEDIMENT LOAD: Maximum daily, 6,690 tons, Dec. 19; minimum daily, 0.06 ton, Mar. 12.

EXTREMES FOR 1983 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--

SEDIMENT CONCENTRATION: Maximum daily mean, 5,440 mg/L, Mar. 3; minimum daily mean, 15 mg/L, several days during November and January.

SEDIMENT LOAD: Maximum daily, 67,800 tons, Mar. 1; minimum daily, 0.12 ton, Dec. 4, Jan. 5.

EXTREMES FOR 1984 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--

SEDIMENT CONCENTRATION: Maximum daily mean, 5,120 mg/L, Oct. 1; minimum daily mean, 13 mg/L, Jan. 3.

SEDIMENT LOAD: Maximum daily, 13,500 tons, Oct. 1; minimum daily, 0.10 ton, Jan. 3.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

ONCE-DAILY

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28.0	27.0	12.0	---	18.0	14.0	---	---	19.0	27.5	---	---
2	---	16.0	9.0	15.5	11.0	15.5	26.5	27.0	17.0	---	32.5	---
3	---	15.0	---	12.5	14.0	15.0	---	18.5	---	---	25.5	---
4	---	18.5	---	15.0	---	---	20.0	19.5	---	---	---	---
5	---	21.5	---	---	---	20.0	17.0	16.0	21.0	---	---	---
6	---	---	14.0	16.0	15.5	---	15.0	19.5	32.0	---	24.0	---
7	---	20.0	15.0	12.5	16.0	21.0	15.5	26.5	19.0	---	24.0	31.0
8	---	16.5	12.0	18.0	16.0	27.0	---	25.0	21.0	---	26.5	---
9	25.0	14.0	---	16.0	14.0	20.0	---	26.5	24.0	---	29.0	24.0
10	---	12.0	18.5	18.0	19.0	20.0	---	18.0	---	---	29.5	29.0
11	---	13.0	19.0	---	21.0	---	20.5	27.0	---	---	34.5	28.0
12	---	20.5	---	12.5	---	23.0	17.0	18.5	---	---	---	24.5
13	---	16.0	---	---	---	21.0	22.0	21.0	28.0	---	32.0	---
14	---	---	---	15.0	21.5	22.5	18.0	---	---	---	34.0	24.5
15	---	13.0	---	16.0	18.0	23.0	22.5	---	25.5	---	28.5	---
16	---	14.0	---	19.5	19.0	20.5	---	28.0	---	---	26.0	27.5
17	---	14.0	---	18.5	21.0	19.0	---	21.0	---	---	---	---
18	---	14.5	---	17.0	20.5	15.5	22.0	24.5	---	---	24.0	---
19	---	17.5	16.0	15.0	23.0	---	26.0	20.5	---	---	---	26.0
20	17.5	---	18.0	14.5	---	16.0	17.0	25.0	---	---	---	26.5
21	15.5	15.5	14.0	15.0	---	17.0	21.5	---	---	---	---	---
22	21.5	16.5	15.5	14.0	20.5	20.5	27.0	---	---	---	---	25.0
23	27.5	16.5	14.0	15.0	17.0	23.5	23.0	---	---	---	---	---
24	23.5	14.5	11.0	16.0	19.0	15.5	---	19.0	31.5	---	23.0	26.5
25	23.5	---	---	18.5	20.0	---	23.0	26.5	---	---	---	28.0
26	20.5	12.5	11.0	18.0	15.5	20.0	19.0	19.0	24.0	---	25.0	---
27	---	---	---	13.5	14.5	21.5	26.5	20.5	31.0	---	27.0	27.5
28	12.5	---	15.5	15.0	17.5	21.5	17.5	---	---	---	---	24.0
29	23.0	---	13.0	12.5	---	19.5	17.0	---	---	---	29.5	20.5
30	---	15.0	14.0	---	---	22.0	---	---	---	---	25.5	19.0
31	26.0	---	14.5	11.0	---	19.0	---	19.0	---	---	---	---
MONTH	---	---	---	15.5	18.0	19.5	---	---	---	---	---	---

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY
(NOT PREVIOUSLY PUBLISHED)

[illegible]

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO APRIL 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---					
2	---	---			---	---	---					
3	---	---	13.0	14.5	15.0	---	---					
4	---	---	---	---	---	---	---					
5	---	---	---	14.5	12.0	---	---					
6	---	---	18.5	---	---	14.5	---					
7	---	---	---	---	---	---	---					
8	---	22.0	---	---	---	---	---					
9	---	15.5	---	---	16.0	17.0	---					
10	---	---	---	17.5	---	---	---					
11	---	---	---	17.5	---	23.5	---					
12	27.0	---	---	---	---	17.5	---					
13	---	15.0	---	---	20.0	18.5	---					
14	---	---	---	---	---	---	---					
15	---	---	---	---	---	---	---					
16	---	---	---	15.5	---	---	24.0					
17	---	---	---	---	---	---	---					
18	---	---	12.5	---	---	---	---					
19	---	---	14.0	---	---	---	---					
20	---	---	13.0	---	14.5	---	---					
21	---	---	---	---	---	23.5	---					
22	---	---	---	---	---	---	---					
23	---	---	---	---	---	---	---					
24	---	---	---	16.0	---	---	---					
25	---	---	---	15.5	---	---	20.5					
26	---	13.5	12.0	---	---	---	---					
27	---	---	---	17.0	---	16.5	---					
28	---	---	13.0	13.5	---	---	---					
29	---	---	---	15.0	---	---	---					
30	---	---	---	---	---	14.0	---					
31	---	---	---	15.0	---	---	---					
MONTH	---	---	---	---	---	---	---					

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	40	.25	35	.39	160	3.8	25	.22	25	.22	5360	67800
2	45	.32	40	.44	35	.25	25	.28	1400	459	3900	12500
3	50	.38	80	1.1	25	.16	20	.21	400	16	5440	10100
4	60	.52	100	1.6	20	.12	15	.14	200	1.8	2500	175
5	70	.66	105	1.4	20	.15	15	.12	729	139	2200	113
6	85	.92	90	.87	20	.15	15	.13	420	23	1900	103
7	100	1.1	50	.42	20	.16	15	.15	668	45	250	6.8
8	200	3.2	50	.49	20	.13	15	.13	2140	1030	150	3.0
9	230	3.9	1470	404	30	.27	25	.28	85	1.2	220	3.5
10	180	2.7	2060	808	40	.36	25	.27	25	.23	150	1.9
11	160	2.2	275	8.9	30	.28	25	.34	40	.36	140	1.5
12	160	2.2	50	.49	30	.27	30	.43	30	.23	140	1.2
13	150	2.0	20	.19	30	.28	40	.73	100	1.5	125	1.1
14	200	3.2	15	.23	40	.37	40	.67	20	.18	797	30
15	180	2.6	15	.32	40	.40	30	.41	20	.16	500	5.9
16	160	1.8	20	.46	50	.46	20	.28	20	.18	320	3.9
17	100	.76	20	.36	50	.59	30	.46	25	.27	1570	275
18	150	1.4	35	.55	50	.59	30	.40	40	.51	4030	3480
19	210	2.3	657	78	50	.54	356	23	30	.28	1830	2750
20	200	2.1	30	.39	30	.31	40	.43	20	.19	420	5.7
21	150	2.1	15	.19	45	.46	40	.38	20	.26	2680	1030
22	130	1.4	15	.19	2490	1820	40	.41	20	.30	895	112
23	150	1.6	15	.17	1460	1000	1440	1150	35	.53	1840	160
24	140	1.7	15	.18	50	.61	999	320	532	62	3020	7520
25	90	1.0	20	.32	30	.24	200	5.1	120	1.9	500	11
26	120	1.7	20	.35	20	.14	20	.18	1860	3740	400	8.1
27	110	.98	20	.30	25	.21	2720	9860	3710	11100	400	8.0
28	130	1.6	15	.23	25	.23	398	22	3000	1830	350	7.7
29	75	1.0	140	4.2	20	.19	3270	6160	---	---	400	7.2
30	70	1.0	2960	4560	30	.36	110	2.3	---	---	350	5.7
31	50	.51	---	---	30	.32	60	.76	---	---	425	7.7
TOTAL	---	49.10	---	5874.73	---	2832.40	---	17550.21	---	18454.30	---	106237.9
DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	450	9.5	1890	585	1200	11	1200	21	160	2.5	260	2.6
2	475	9.6	800	15	1100	12	---	9.5	200	2.9	240	2.1
3	450	9.4	750	11	950	11	---	6.1	280	4.3	220	1.9
4	675	17	700	9.5	800	8.0	---	4.0	280	4.6	210	1.8
5	800	22	630	8.0	700	5.3	---	8.5	300	4.5	190	1.4
6	825	20	600	7.8	450	3.0	---	6.3	380	6.1	190	1.4
7	925	27	450	4.6	260	2.2	---	4.6	450	7.7	600	13
8	750	24	500	5.0	400	3.3	---	3.6	600	9.2	300	6.1
9	600	19	550	5.8	950	15	---	7.0	780	11	200	3.6
10	525	16	650	5.6	920	13	---	13	780	11	200	3.6
11	325	11	500	4.7	570	5.4	---	12	550	7.0	180	3.2
12	550	18	500	6.5	520	4.5	---	9.0	600	7.9	250	4.3
13	300	6.5	400	4.9	520	4.1	---	4.8	850	14	300	5.1
14	200	4.4	300	2.7	480	3.2	---	2.5	850	10	450	7.5
15	275	7.0	200	1.7	450	3.2	---	2.3	2680	968	450	7.7
16	300	4.1	150	.77	500	5.0	---	2.7	870	20	450	8.5
17	350	5.8	100	.54	450	3.4	---	4.6	650	10	500	10
18	1260	141	100	.49	450	3.2	---	2.8	850	13	400	6.8
19	400	5.3	150	1.1	550	5.8	---	2.3	225	4.7	350	5.4
20	3150	1180	400	4.1	550	5.6	---	2.2	170	2.9	913	46
21	1710	360	400	4.0	500	4.2	---	5.6	135	2.3	300	4.3
22	500	15	300	1.9	450	3.2	650	7.7	105	1.8	250	2.8
23	420	8.6	400	2.9	400	2.4	550	7.1	65	.53	250	1.9
24	370	7.2	450	3.8	500	4.5	450	4.9	40	.21	270	3.6
25	350	6.8	700	7.2	350	2.9	350	4.6	40	.19	200	2.8
26	450	9.5	600	7.0	350	3.1	400	6.7	45	.16	250	3.8
27	430	7.7	650	7.9	350	2.9	225	6.4	45	.15	200	2.6
28	650	14	800	11	300	2.2	125	1.5	110	.86	300	4.6
29	3290	3470	700	9.1	600	8.7	200	2.8	250	2.0	1140	129
30	1790	1270	950	12	550	6.8	170	2.7	260	2.2	2870	1090
31	---	---	1000	8.4	---	---	160	2.5	260	2.4	---	---
TOTAL	---	6725.4	---	760.00	---	168.1	---	181.3	---	1134.10	---	1387.4

TOTAL LOAD FOR YEAR: 161354.94 TONS.

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	5120	13500	536	8.5	735	8.1	14	.12	207	3.2	155	1.6
2	756	9.6	670	9.0	517	5.2	14	.11	210	3.3	144	1.6
3	425	5.7	1480	20	1820	365	13	.10	220	3.6	133	1.6
4	890	9.9	1180	17	1240	14	449	7.6	140	2.1	122	1.6
5	500	9.6	1440	23	495	2.1	500	5.4	60	.76	111	1.5
6	350	4.5	1690	26	230	1.1	800	7.3	60	.76	100	1.3
7	1080	80	1400	21	210	1.1	522	6.1	40	.48	91	1.0
8	257	3.6	1120	16	200	1.1	129	1.2	114	1.3	180	2.4
9	194	2.9	758	12	630	14	44	.36	335	4.0	300	4.9
10	189	3.0	1410	25	590	7.2	45	.27	312	3.2	300	4.9
11	184	3.2	1380	191	150	.89	44	.37	289	3.5	180	2.3
12	178	3.0	2680	612	40	.17	42	.36	266	2.9	200	2.7
13	179	2.9	1200	24	329	1.9	40	.42	243	2.6	192	2.9
14	180	2.9	228	1.1	108	.96	40	.44	220	2.8	1020	84
15	181	2.5	225	1.3	78	.65	40	.33	197	2.2	410	5.1
16	182	2.5	221	1.5	48	.35	38	.44	174	1.8	210	1.9
17	233	2.5	498	3.4	175	1.7	38	.37	148	1.8	180	2.1
18	284	4.3	775	18	304	3.3	38	.32	141	1.8	126	1.3
19	336	6.3	650	8.2	433	4.3	38	.33	164	1.6	131	1.5
20	323	5.4	524	33	562	4.9	38	.30	127	1.6	136	1.6
21	310	5.1	398	8.5	691	6.5	52	.45	120	1.4	141	1.9
22	297	5.9	628	5.1	811	8.5	37	.32	113	1.2	128	1.3
23	284	5.7	857	7.9	1000	12	60	.65	107	1.0	115	.96
24	271	5.7	1770	1750	1100	26	58	.61	100	1.0	102	.94
25	319	7.5	1760	1380	3490	1720	45	.43	126	1.7	89	.89
26	367	8.5	1100	18	2310	150	60	.65	157	2.2	76	.76
27	415	8.4	890	15	1680	164	90	1.2	188	2.2	63	.71
28	464	8.4	827	13	340	7.4	97	1.3	177	1.5	76	.84
29	361	8.4	890	13	65	.79	138	2.2	166	1.8	62	.62
30	319	6.6	953	12	34	.49	142	1.7	---	---	178	1.9
31	413	8.1	---	---	20	.23	142	1.8	---	---	187	2.1
TOTAL	---	13742.6	---	4293.5	---	2533.93	---	43.55	---	59.30	---	140.72
DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	174	2.2	105	.91	488	4.9	732	10	431	7.3	131	1.3
2	101	1.3	119	.90	558	7.2	742	8.6	425	15	130	1.4
3	81	.92	133	1.1	522	6.1	751	7.1	470	15	129	1.5
4	80	1.1	147	1.0	530	6.3	761	6.4	516	17	131	1.3
5	86	1.2	161	1.7	450	3.9	770	6.7	471	10	133	1.3
6	1090	147	175	1.8	460	4.1	780	8.4	427	8.8	134	1.5
7	240	7.1	189	1.6	720	15	790	9.0	383	7.5	136	1.4
8	110	1.8	203	1.5	560	7.4	799	11	339	6.7	138	1.3
9	63	.41	117	6.7	515	5.7	809	12	295	6.3	138	1.2
10	52	.27	230	7.2	560	7.4	818	9.5	251	5.6	137	1.6
11	50	.30	160	7.4	540	6.6	823	9.6	207	3.6	190	2.6
12	566	3.4	333	6.6	550	7.7	828	8.5	207	3.1	181	2.3
13	250	1.5	506	5.7	559	10	755	8.4	395	8.1	172	1.5
14	114	.83	679	5.9	569	10	682	9.4	731	26	112	1.0
15	115	1.4	680	4.9	578	10	608	7.7	719	29	117	1.4
16	120	1.6	560	7.3	588	11	534	6.6	198	3.0	122	1.5
17	70	.59	540	6.7	598	11	528	7.0	125	1.8	127	2.0
18	88	.88	625	10	607	10	521	7.2	139	2.2	132	2.1
19	1480	240	640	11	617	8.3	515	7.0	153	3.2	136	2.0
20	280	3.6	640	11	626	9.3	508	7.3	167	3.1	141	2.2
21	140	2.0	650	12	636	8.4	502	7.2	180	3.3	146	2.4
22	135	1.9	630	10	646	12	496	8.4	169	3.1	151	2.2
23	112	1.4	600	9.2	655	14	489	8.4	158	2.2	156	2.2
24	135	1.9	590	8.6	665	11	483	6.8	148	2.4	161	2.2
25	112	1.4	542	6.7	674	11	476	7.3	137	2.1	166	2.3
26	94	.99	558	7.2	684	10	470	6.1	132	1.7	149	1.7
27	1170	145	560	7.4	694	9.7	463	7.4	127	1.4	132	1.9
28	1200	45	540	6.6	703	11	457	7.7	168	1.7	122	1.6
29	350	5.5	515	5.7	713	12	451	6.5	208	2.1	113	1.6
30	152	1.7	520	5.9	722	12	444	5.9	170	1.8	104	1.6
31	---	---	488	4.9	---	---	438	6.3	132	1.2	---	---
TOTAL	---	624.19	---	185.11	---	273.0	---	245.4	---	205.3	---	52.2
TOTAL LOAD FOR YEAR:			22398.80		TONS.							

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

TOTAL LOAD FOR YEAR: 161354.94 TONS.

SAN DIEGO CREEK BASIN

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)	
	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS		
OCTOBER																								
1	5120	13500	536	8.5	735	8.1	14	.12	207	3.2	155	1.6												
2	756	9.6	670	9.0	517	5.2	14	.11	210	3.3	144	1.6												
3	425	5.7	1480	20	1820	365	13	.10	220	3.6	133	1.6												
4	890	9.9	1180	17	1240	14	449	7.6	140	2.1	122	1.6												
5	500	9.6	1440	23	495	2.1	500	5.4	60	.76	111	1.5												
NOVEMBER																								
6	350	4.5	1690	26	230	1.1	800	7.3	60	.76	100	1.3												
7	1080	80	1400	21	210	1.1	522	6.1	40	.48	91	1.0												
8	257	3.6	1120	16	200	1.1	129	1.2	114	1.3	180	2.4												
9	194	2.9	758	12	630	14	44	.36	335	4.0	300	4.9												
10	189	3.0	1410	25	590	7.2	45	.27	312	3.2	300	4.9												
DECEMBER																								
11	184	3.2	1380	191	150	.89	44	.37	289	3.5	180	2.3												
12	178	3.0	2680	612	40	.17	42	.36	266	2.9	200	2.7												
13	179	2.9	1200	24	329	1.9	40	.42	243	2.6	192	2.9												
14	180	2.9	228	1.1	108	.96	40	.44	220	2.8	1020	84												
15	181	2.5	225	1.3	78	.65	40	.33	197	2.2	410	5.1												
JANUARY																								
16	182	2.5	221	1.5	48	.35	38	.44	174	1.8	210	1.9												
17	233	2.5	498	3.4	175	1.7	38	.37	148	1.8	180	2.1												
18	284	4.3	775	18	304	3.3	38	.32	141	1.8	126	1.3												
19	336	6.3	650	8.2	433	4.3	38	.33	164	1.6	131	1.5												
20	323	5.4	524	33	562	4.9	38	.30	127	1.6	136	1.6												
FEBRUARY																								
21	310	5.1	398	8.5	691	6.5	52	.45	120	1.4	141	1.9												
22	297	5.9	628	5.1	811	8.5	37	.32	113	1.2	128	1.3												
23	284	5.7	857	7.9	1000	12	60	.65	107	1.0	115	.96												
24	271	5.7	1770	1750	1100	26	58	.61	100	1.0	102	.94												
25	319	7.5	1760	1380	3490	1720	45	.43	126	1.7	89	.89												
MARCH																								
26	367	8.5	1100	18	2310	150	60	.65	157	2.2	76	.76												
27	415	8.4	890	15	1680	164	90	1.2	188	2.2	63	.71												
28	464	8.4	827	13	340	7.4	97	1.3	177	1.5	76	.84												
29	361	8.4	890	13	65	.79	138	2.2	166	1.8	62	.62												
30	319	6.6	953	12	34	.49	142	1.7	---	---	178	1.9												
31	413	8.1	---	---	20	.23	142	1.8	---	---	187	2.1												
TOTAL	---	13742.6	---	4293.5	---	2533.93	---	43.55	---	59.30	---	140.72												
DAY	MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)		MEAN CONCENTRATION (MG/L)		LOADS (T/DAY)	
	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS	CONCENTRATION	LOADS		
APRIL																								
1	174	2.2	105	.91	488	4.9	732	10	431	7.3	131	1.3												
2	101	1.3	119	.90	558	7.2	742	8.6	425	15	130	1.4												
3	81	.92	133	1.1	522	6.1	751	7.1	470	15	129	1.5												
4	80	1.1	147	1.0	530	6.3	761	6.4	516	17	131	1.3												
5	86	1.2	161	1.7	450	3.9	770	6.7	471	10	133	1.3												
MAY																								
6	1090	147	175	1.8	460	4.1	780	8.4	427	8.8	134	1.5												
7	240	7.1	189	1.6	720	15	790	9.0	383	7.5	136	1.4												
8	110	1.8	203	1.5	560	7.4	799	11	339	6.7	138	1.3												
9	63	.41	117	6.7	515	5.7	809	12	295	6.3	138	1.2												
10	52	.27	230	7.2	560	7.4	818	9.5	251	5.6	137	1.6												
JUNE																								
11	50	.30	160	7.4	540	6.6	823	9.6	207	3.6	190	2.6												
12	566	3.4	333	6.6	550	7.7	828	8.5	207	3.1	181	2.3												
13	250	1.5	506	5.7	559	10	755	8.4	395	8.1	172	1.5												
14	134	.83	679	5.9	569	10	682	9.4	731	26	112	1.0												
15	115	1.4	680	4.9	578	10	608	7.7	719	29	117	1.4												
JULY																								
16	120	1.6	560	7.3	588	11	534	6.6	198	3.0	122	1.5												
17	70	.59	540	6.7	598	11	528	7.0	125	1.8	127	2.0												
18	88	.88	625	10	607	10	521	7.2	139	2.2	132	2.1												
19	1480	240	640	11	617	8.3	515	7.0	153	3.2	136	2.0												
20	280	3.6	640	11	626	9.3	508	7.3	167	3.1	141	2.2												
AUGUST																								
21	140	2.0	650	12	636	8.4	502	7.2	180	3.3	146	2.4												
22	135	1.9	630	10	646	12	496	8.4	169	3.1	151	2.2												
23	112	1.4	600	9.2	655	14	489	8.4	158	2.2	156	2.2												
24	135	1.9	590	8.6	665	11	483	6.8	148	2.4	161	2.2												
25	112	1.4	542	6.7	674	11	476	7.3	137	2.1	166	2.3												
SEPTEMBER																								
26	94	.99	558	7.2	684	10	470	6.1	132	1.7	149	1.7												
27	1170	145	560	7.4	694	9.7	463	7.4	127	1.4	132	1.9												
28	1200	45	540	6.6	703	11	457	7.7	168	1.7	122	1.6												
29	350	5.5	515	5.7	713	12	451	6.5	208	2.1	113	1.6												
30	152	1.7	520	5.9	722	12	444	5.9	170	1.8	104	1.6												
31	---	---	488	4.9	---	---	438	6.3	132	1.2	---	---												
TOTAL	---	624.19	---	185.11	---	273.0	---	245.4	---	205.3	---	52.2												
TOTAL LOAD FOR YEAR: 22398.80 TONS.																								

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT, OCTOBER 1984 TO APRIL 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	100	1.1	100	.84	110	.53	120	.94	40	.24	25	.17
2	96	.96	120	1.4	103	.47	110	.83	1270	754	90	1.2
3	100	1.1	125	1.7	306	11	100	.65	120	1.7	100	1.7
4	98	1.0	200	4.0	168	1.1	120	.94	190	7.6	30	.29
5	94	.91	135	1.9	92	.42	110	.77	110	1.5	24	.22
6	120	1.5	130	1.6	86	.28	100	.68	80	.65	18	.11
7	90	.85	125	1.4	126	1.1	180	2.3	60	.36	25	.16
8	90	.87	120	1.1	1430	803	1040	263	45	.27	25	.14
9	180	2.1	125	1.3	250	3.7	150	2.2	2710	3300	25	.14
10	250	3.2	110	.92	200	2.2	92	.89	150	2.9	20	.11
11	380	3.7	125	1.3	160	1.3	88	.57	70	.81	15	.09
12	112	1.0	120	1.1	120	.62	150	1.5	45	.47	10	.06
13	115	1.1	1540	935	110	.53	160	1.6	25	.20	12	.07
14	120	1.0	240	4.3	95	.36	120	.94	25	.18	16	.10
15	125	.81	185	2.2	120	.62	110	.86	30	.23	22	.15
16	180	1.5	170	1.6	1980	1710	145	1.1	35	.26	30	.23
17	230	5.7	150	1.0	230	3.0	135	1.0	38	.31	26	.20
18	140	1.3	135	.95	1460	761	100	.70	40	.33	160	3.4
19	115	.87	130	.74	4610	6690	140	1.4	36	.30	50	.47
20	112	1.0	125	.68	2060	886	120	1.1	55	.58	45	.45
21	114	1.1	246	5.4	270	4.6	120	1.1	210	5.4	19	.08
22	114	.86	125	1.0	230	3.2	80	.50	50	.47	30	.18
23	116	.91	87	.54	170	1.6	90	.63	40	.32	30	.18
24	120	1.3	2240	4600	130	.81	100	.95	46	.41	45	.38
25	110	1.4	1220	217	120	.65	100	1.0	36	.28	55	.56
26	95	1.1	130	1.3	896	384	100	.76	34	.27	60	.66
27	95	1.3	110	.95	4660	5780	106	.74	32	.24	365	28
28	94	1.2	135	.87	1850	430	225	16	30	.22	239	15
29	94	1.0	127	.48	200	3.6	176	7.0	---	---	150	1.2
30	108	.99	118	.48	160	2.4	55	.36	---	---	120	.91
31	90	.66	---	---	130	1.2	23	.12	---	---	130	1.2
TOTAL	---	43.39	---	5793.05	---	17489.29	---	313.13	---	4080.50	---	57.81

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	90	.73										
2	65	.39										
3	60	.31										
4	70	.43										
5	90	.70										
6	90	.75										
7	90	.73										
8	90	.78										
9	120	1.3										
10	140	1.8										
11	130	1.5										
12	120	1.0										
13	130	1.5										
14	100	.95										
15	90	.73										
16	80	.58										
17	90	.75										
18	160	2.4										
19	70	.45										
20	70	.43										
21	80	.60										
22	70	.45										
23	60	.31										
24	90	.75										
25	103	1.0										
26	120	1.4										
27	100	.92										
28	110	1.1										
29	90	.78										
30	70	.43										
31	---	---										
TOTAL	---	25.95										

TOTAL LOAD FOR YEAR: 27803.12 TONS.

SAN DIEGO CREEK BASIN

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1982	134.50	49.10	13	62
NOVEMBER ...	668.70	5874.73	140	6010
DECEMBER ...	290.70	2832.40	47	2880
JANUARY 1983	1009.70	17550.21	147	17700
FEBRUARY ...	1199.50	18454.30	194	18600
MARCH	4084.00	106237.90	436	107000
APRIL	652.20	6725.40	158	6880
MAY	176.80	760.00	25	785
JUNE	103.10	168.10	5	173
JULY	151.00	181.30	18	199
AUGUST	182.50	1134.10	30	1160
SEPTEMBER ..	273.50	1387.40	61	1450
TOTAL	8926.20	161354.94	1274	162899

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	588.90	13742.60	39	13800
NOVEMBER ...	437.10	4293.50	36	4330
DECEMBER ...	309.20	2533.93	23	2560
JANUARY 1984	116.80	43.55	0	44
FEBRUARY ...	129.90	59.30	0	59
MARCH	149.10	140.72	0	141
APRIL	204.30	624.19	7	631
MAY	143.20	185.11	0	185
JUNE	165.90	273.00	0	273
JULY	150.60	245.40	0	245
AUGUST	222.40	205.30	0	205
SEPTEMBER ..	139.40	52.20	0	52
TOTAL	2756.80	22398.80	105	22525

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO APRIL 1985

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1984	120.70	43.39	0	43
NOVEMBER ...	393.30	5793.05	35	5830
DECEMBER ...	1212.80	17489.29	162	17000
JANUARY 1985	138.50	313.13	4	317
FEBRUARY ...	365.10	4080.50	38	4120
MARCH	124.60	57.81	0	58
APRIL	95.60	25.95	0	26
TOTAL	2450.60	27803.12	239	28100

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT 09...	1450	7.3	25.0	246	4.8	63	74	82
NOV 09...	1100	11	14.0	1530	45	--	49	59
10...	1600	111	14.0	1840	551	--	53	59
29...	1640	14	--	411	16	73	85	92
30...	1510	193	15.0	2790	1450	--	57	62
JAN 19...	1030	35	15.0	1620	153	--	64	69
27...	1055	1030	13.5	3880	10800	--	66	71
29...	1320	31	16.0	698	58	72	82	89
FEB 26...	1230	2110	15.5	5880	33500	--	59	63
MAR 18...	1100	118	15.5	3670	1170	--	33	35
21...	1500	43	17.5	3550	412	--	19	20
JUL 01...	1210	7.3	27.5	2100	41	51	61	74
DATE		SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
OCT 09...	90	94	--	96	--	99	--	100
NOV 09...	69	79	--	85	--	95	--	100
10...	65	72	79	--	97	--	100	--
29...	97	98	--	99	--	100	--	--
30...	71	78	--	90	--	98	--	100
JAN 19...	82	88	--	94	--	99	--	100
27...	81	91	98	--	100	--	--	--
29...	95	98	--	99	--	99	--	100
FEB 26...	74	84	96	--	100	--	--	--
MAR 18...	40	49	64	--	98	--	100	--
21...	22	26	--	40	--	86	--	100
JUL 01...	86	91	--	94	--	98	--	100

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
APR 12...	1225	2.4	22.0	981	6.4
AUG 15...	1350	17	30.0	684	31

SAN DIEGO CREEK BASIN

11048500 SAN DIEGO CREEK AT CULVER DRIVE, NEAR IRVINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, TOTAL (MG/L)	SED. TOTAL, FALL DIAM. % FINER THAN .002 MM	SED. TOTAL, FALL DIAM. % FINER THAN .004 MM	SED. TOTAL, FALL DIAM. % FINER THAN .008 MM
NOV 13...	1135	15.0	137	3320	47	52	59
DEC 18...	1505	12.5	405	5070	45	51	57
19...	1625	13.0	78	2670	--	--	--
20...	1250	13.0	25	789	65	74	78
28...	1200	13.0	24	935	63	71	75
JAN 02...	1350	--	3.8	117	--	--	--

DATE	SED. TOTAL, FALL DIAM. % FINER THAN .016 MM	SED. TOTAL, FALL DIAM. % FINER THAN .031 MM	SED. TOTAL, FALL DIAM. % FINER THAN .062 MM	SED. TOTAL, FALL DIAM. % FINER THAN .125 MM	SED. TOTAL, FALL DIAM. % FINER THAN .250 MM	SED. TOTAL, FALL DIAM. % FINER THAN .500 MM
NOV 13...	68	74	78	90	100	--
DEC 18...	65	74	83	94	100	--
19...	--	--	45	--	--	--
20...	82	85	89	95	100	--
28...	79	82	83	87	99	100
JAN 02...	--	--	99	--	--	--

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA

LOCATION.--Lat 33°41'29", long 117°49'23", Orange County, Hydrologic Unit 18070204, on right bank
130 ft downstream from bridge on Barranca Road, 1,200 ft above the confluence with San Diego Creek
and 1.5 mi north of Irvine.
DRAINAGE AREA.--45.2 mi² (provided by Orange County Environmental Management Agency).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to September 1985 (discontinued).

GAGE.--Water-stage recorder and concrete low-flow channel. Elevation of gage is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 9, Jan. 19-24, Mar. 16 to Apr. 3, Apr. 28 to May 11, and most of the period from May 16 to Sept. 30. Records fair. Flow slightly regulated by reservoirs and pumping for irrigation upstream. Low flows augmented by irrigation return flows. Previously unpublished discharges for the 1984 water year are published herein.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,530 ft³/s, Mar. 1, 1983, gage height, 13.36 ft; minimum daily, 3.9 ft³/s, Nov. 26, 1982.EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 24	1900	*1,480	9.12	Feb. 9	0630	(a)	*9.23

(a) Scour in channel bottom.

Minimum daily, 6.9 ft³/s, Dec. 1.EXTREMES FOR 1984 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--Maximum discharge, 2,620 ft³/s, Oct. 1, gage height, 10.70 ft, from floodmark; minimum daily, 8.8 ft³/s, Dec. 18.

REVISIONS.--Revised daily discharges, in cubic feet per second, for the water year 1983, are given below. These figures supersede those published in the report for 1983.

Nov. 10, 1982... 218
Feb. 26, 1983... 309
Feb. 27..... 458
Feb. 28..... 95

Month	Total	Mean	Max	Min	Acre-ft
Feb. 1983	1561.9	55.8	458	8.9	3098
WTR YR 1983	14356.4	39.3	1570	4.0	28480

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

MEAN VALUES
(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	498	20	52	15	16	21	14	16	15	14	15	11
2	20	18	27	15	16	21	14	15	16	13	17	12
3	12	17	74	15	16	19	13	14	15	13	16	12
4	12	16	13	16	16	19	15	14	14	12	16	12
5	20	15	11	15	16	17	14	15	13	13	13	12
6	19	16	10	13	16	17	20	14	13	13	13	13
7	29	16	10	14	17	16	13	15	24	14	13	12
8	23	15	11	14	18	16	13	15	16	14	13	12
9	20	16	25	14	17	16	14	16	15	15	13	11
10	20	20	11	14	16	16	15	18	15	14	13	12
11	21	49	12	14	16	16	16	17	15	15	12	21
12	23	140	9.9	14	17	16	16	18	15	16	12	18
13	22	22	10	14	17	17	17	17	15	16	12	16
14	21	17	9.6	14	17	28	18	18	15	17	13	16
15	20	15	10	14	17	21	18	17	15	16	27	15
16	20	13	9.7	20	18	17	17	15	15	16	15	16
17	19	12	9.6	18	19	15	18	14	15	17	12	17
18	20	13	8.8	16	20	15	20	14	15	16	12	16
19	21	12	9.1	16	19	15	47	14	15	15	13	15
20	20	85	9.3	15	20	16	21	15	14	15	14	16
21	21	19	9.3	15	20	17	20	16	14	15	14	16
22	22	15	9.6	15	20	16	21	16	15	16	13	16
23	22	14	9.5	15	20	15	21	16	16	16	13	15
24	22	175	65	15	20	15	21	16	15	15	12	14
25	24	105	119	15	19	15	22	16	15	16	13	14
26	25	37	26	15	17	15	22	15	15	15	13	15
27	24	35	40	16	18	15	36	15	15	16	12	16
28	21	30	16	16	20	15	25	14	15	16	12	15
29	20	28	15	16	22	15	18	13	15	15	11	15
30	23	26	15	16	---	17	17	13	15	14	11	15
31	22	---	15	16	---	16	---	14	---	13	11	---
TOTAL	1126	1031	681.4	470	520	525	576	475	455	461	419	436
MEAN	36.3	34.4	22.0	15.2	17.9	16.9	19.2	15.3	15.2	14.9	13.5	14.5
MAX	498	175	119	20	22	28	47	18	24	17	27	21
MIN	12	12	8.8	13	16	15	13	13	13	12	11	11
AC-FT	2230	2040	1350	932	1030	1040	1140	942	902	914	831	865
CAL YR 1983	TOTAL	14957.6	MEAN 41.0	MAX 1570	MIN 4.0	AC-FT 29670						
WTR YR 1984	TOTAL	7175.4	MEAN 19.6	MAX 498	MIN 8.8	AC-FT 14230						

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	6.9	16	15	12	11	15	15	20	17	17
2	15	18	7.0	15	83	14	13	15	15	21	17	16
3	15	17	15	14	14	12	14	15	14	21	17	16
4	16	15	9.5	14	14	12	14	15	16	21	13	20
5	15	16	8.5	14	13	13	13	16	17	21	13	57
6	15	16	8.5	13	13	12	12	17	17	21	13	16
7	16	17	10	16	13	13	12	18	18	22	14	15
8	16	25	98	28	13	13	13	17	18	20	15	16
9	15	18	11	12	284	15	13	17	18	20	14	15
10	15	17	10	11	18	15	13	15	18	20	13	16
11	15	17	12	13	16	10	13	16	17	20	13	18
12	15	17	9.3	14	15	12	14	16	16	19	15	19
13	15	75	8.8	15	15	13	13	16	15	17	16	19
14	15	16	9.0	15	15	13	13	16	15	19	16	19
15	16	17	11	16	15	14	13	16	17	23	16	19
16	16	17	87	14	15	13	14	16	18	26	15	19
17	22	16	10	12	13	12	15	16	17	26	16	19
18	16	15	149	12	13	34	15	17	16	23	18	18
19	15	15	275	12	13	16	14	17	16	24	17	17
20	16	16	55	11	14	16	15	16	17	23	16	18
21	17	20	13	11	13	17	14	15	16	23	16	17
22	17	15	11	11	13	16	14	16	20	22	16	16
23	16	15	9.9	11	12	15	14	18	18	22	17	16
24	16	207	9.3	12	11	15	13	19	19	22	17	16
25	16	24	8.8	14	11	16	14	19	20	20	16	17
26	15	11	87	13	12	15	14	18	21	18	16	16
27	15	8.0	312	12	12	46	15	17	21	19	17	14
28	15	7.9	31	72	12	15	15	18	22	19	17	14
29	16	7.7	17	21	---	12	14	18	21	21	17	14
30	17	7.9	16	14	---	12	14	16	20	19	17	13
31	16	---	16	15	---	13	---	14	---	18	17	---
TOTAL	490	720.5	1341.5	493	720	476	408	510	528	650	487	542
MEAN	15.8	24.0	43.3	15.9	25.7	15.4	13.6	16.5	17.6	21.0	15.7	18.1
MAX	22	207	312	72	284	46	15	19	22	26	18	57
MIN	15	7.7	6.9	11	11	10	11	14	14	17	13	13
AC-FT	972	1430	2660	978	1430	944	809	1010	1050	1290	966	1080
CAL YR 1984	TOTAL	6889.0	MEAN 18.8	MAX 312	MIN 6.9	AC-FT 13660						
WTR YR 1985	TOTAL	7366.0	MEAN 20.2	MAX 312	MIN 6.9	AC-FT 14610						

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1985 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1982 to September 1985 (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: October 1982 to April 1985 (discontinued).

REMARKS.--Sediment samples were collected on most days where a water temperature is published. Sediment discharge values were estimated from a daily transport curve for those days that have daily concentration values. Previously unpublished records for the 1983 and 1984 water years are presented herein.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 9,380 mg/L, Mar. 2, 1983; minimum daily mean, 10 mg/L, Nov. 25, 1982.

SEDIMENT LOAD: Maximum daily, 53,300 tons, Mar. 1, 1983; minimum daily, 0.10 ton, Jan. 3, 1984.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 2,330 mg/L, Dec. 27; minimum daily mean, 15 mg/L, Mar. 22-24.

SEDIMENT LOAD: Maximum daily, 3,510 tons, Feb. 9; minimum daily, 0.61 ton, Mar. 23, 24.

EXTREMES FOR 1983 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--

SEDIMENT CONCENTRATION: Maximum daily mean, 9,380 mg/L, Mar. 2, 1983; minimum daily mean, 10 mg/L, Nov. 25, 1982.

SEDIMENT LOAD: Maximum daily, 53,300 tons, Mar. 1, 1983; minimum daily, 0.13 ton, Nov. 25, 1982.

EXTREMES FOR 1984 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--

SEDIMENT CONCENTRATION: Maximum daily mean, 4,030 mg/L (estimated), Oct. 1, 1983; minimum daily mean, 25 mg/L, several days in January and February.

SEDIMENT LOAD: Maximum daily, 9,850 tons, Oct. 1, 1983; minimum daily, 0.10 ton, Jan. 3, 1984.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

ONCE-DAILY

(NOT PREVIOUSLY PUBLISHED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.0	23.0	12.0	---	18.0	14.0	---	---	19.0	28.5	30.0	30.0
2	---	16.0	17.0	16.0	10.0	15.5	26.0	26.5	17.0	---	---	---
3	---	16.5	---	16.5	16.0	15.5	---	20.0	---	---	---	27.0
4	---	18.5	19.0	16.5	15.0	20.0	20.0	19.0	---	---	---	22.5
5	---	23.0	---	---	---	---	19.0	17.5	21.0	---	---	---
6	---	---	15.0	17.0	17.0	21.0	17.0	21.5	26.0	---	---	---
7	---	20.0	14.0	14.0	17.0	21.0	17.0	26.5	19.0	---	---	25.0
8	---	17.0	11.0	17.5	17.0	23.0	---	25.0	20.5	---	---	---
9	20.5	16.0	---	17.5	16.0	20.0	---	25.0	24.0	---	---	24.5
10	---	14.0	19.5	18.0	20.0	19.0	---	17.0	---	---	---	27.5
11	---	12.5	20.0	---	19.5	---	20.0	26.0	---	---	---	27.0
12	---	20.0	---	13.0	---	23.0	18.0	19.5	---	---	---	27.5
13	---	16.5	---	---	---	21.0	21.0	20.5	27.0	---	---	---
14	---	---	---	16.0	22.0	22.0	19.0	---	---	---	---	25.0
15	---	14.0	---	17.0	19.0	23.0	24.0	---	24.5	---	---	---
16	---	15.0	---	19.5	19.0	21.5	---	26.0	---	---	---	25.0
17	---	15.5	---	18.5	21.0	18.0	---	21.0	---	---	---	---
18	---	16.0	---	17.5	20.5	16.0	21.0	24.0	---	---	---	---
19	---	20.5	18.0	18.5	23.0	---	25.0	20.0	---	---	---	25.5
20	20.0	---	18.0	15.0	---	17.0	18.5	24.0	---	---	---	25.0
21	17.0	16.0	15.0	16.0	---	17.5	20.0	---	---	---	---	---
22	23.0	17.0	15.0	15.0	21.0	19.0	---	---	25.0	30.0	---	26.0
23	27.5	---	16.0	16.5	18.0	23.0	23.0	---	23.0	---	---	---
24	25.0	14.5	12.0	15.5	21.0	17.5	---	19.0	30.0	---	21.0	24.0
25	24.0	---	---	22.0	15.0	---	21.0	25.0	---	---	---	27.0
26	20.5	13.5	15.5	17.0	15.5	21.0	19.0	19.5	31.0	---	---	---
27	13.5	---	---	14.5	15.0	22.0	25.0	20.5	---	---	---	25.5
28	23.0	---	16.5	14.5	15.0	20.0	22.0	---	---	---	---	23.0
29	---	17.5	14.0	15.0	---	20.5	22.5	---	---	---	---	24.0
30	24.0	15.0	15.0	---	---	21.0	---	---	---	---	26.0	20.0
31	---	---	15.5	13.5	---	21.0	---	18.5	---	---	---	---
MONTH	---	---	---	16.5	18.0	19.5	---	---	---	---	---	---

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

TOTAL LOAD FOR YEAR: 183074.05 TONS.

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DAY	MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)		MEAN CONCEN- TRATION (MG/L)	
	LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)		LOADS (T/DAY)	
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	9850	75	4.1	840	226	460	19	25	1.1	180	10
2	---	550	100	4.9	200	15	440	18	30	1.3	190	11
3	260	8.4	135	6.2	1160	666	420	17	30	1.3	190	9.7
4	260	8.4	90	3.9	700	25	400	17	40	1.7	195	10
5	415	37	45	1.8	600	18	350	14	60	2.6	210	9.6
6	245	13	50	2.2	600	16	290	10	80	3.5	225	10
7	---	100	95	4.1	600	16	150	5.7	85	3.9	235	10
8	250	16	120	4.9	600	18	60	2.3	80	3.9	215	9.3
9	180	9.7	120	5.2	690	91	30	1.1	75	3.4	190	8.2
10	165	8.9	90	4.9	310	9.2	30	1.1	75	3.2	150	6.5
11	155	8.8	520	200	175	5.7	30	1.1	75	3.2	135	5.8
12	145	9.0	2480	1350	95	2.5	25	.95	75	3.4	110	4.8
13	135	8.0	750	45	75	2.0	25	.95	75	3.4	120	5.5
14	125	7.1	130	6.0	80	2.1	40	1.5	75	3.4	520	86
15	115	6.2	85	3.4	95	2.6	210	7.9	75	3.4	170	9.6
16	105	5.7	60	2.1	70	1.8	241	15	75	3.6	130	6.0
17	105	5.4	75	2.4	50	1.3	140	6.8	75	3.8	115	4.7
18	115	6.2	135	4.7	30	.71	50	2.2	80	4.3	115	4.7
19	140	7.9	150	4.9	30	.74	35	1.5	80	4.1	105	4.3
20	140	7.6	1700	829	30	.75	140	5.7	80	4.3	90	3.9
21	140	7.9	950	49	35	.88	70	2.8	80	4.3	70	3.2
22	130	7.7	800	32	30	.78	35	1.4	85	4.6	60	2.6
23	115	6.8	700	26	30	.77	35	1.4	90	4.9	60	2.4
24	85	5.0	1640	2720	1050	652	30	1.2	90	4.9	55	2.2
25	75	4.9	1070	652	2120	1060	25	1.0	90	4.6	50	2.0
26	70	4.7	450	45	650	46	25	1.0	90	4.1	50	2.0
27	70	4.5	240	23	600	136	25	1.1	90	4.4	50	2.0
28	85	4.8	185	15	550	24	25	1.1	95	5.1	60	2.4
29	115	6.2	165	12	520	21	25	1.1	140	8.3	60	2.4
30	85	5.3	160	11	500	20	25	1.1	---	---	70	3.2
31	65	3.9	---	---	480	19	25	1.1	---	---	60	2.6
TOTAL	---	10735.0	---	6074.7	---	3100.83	---	163.10	---	108.0	---	256.6

DAY	MEAN CONCENTRATION		MEAN CONCENTRATION		MEAN CONCENTRATION		MEAN CONCENTRATION		MEAN CONCENTRATION		MEAN CONCENTRATION	
	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	65	2.5	590	25	280	11	205	7.7	300	12	150	4.5
2	70	2.6	605	25	300	13	205	7.2	300	14	140	4.5
3	75	2.6	615	23	280	11	205	7.2	300	13	140	4.5
4	70	2.8	630	24	250	9.5	200	6.5	280	12	155	5.0
5	70	2.6	640	26	240	8.4	200	7.0	270	9.5	165	5.3
6	---	31	655	25	240	8.4	195	6.8	250	8.8	170	6.0
7	150	5.3	665	27	500	32	190	7.2	230	8.1	190	6.2
8	150	5.3	680	28	300	13	190	7.2	220	7.7	200	6.5
9	155	5.9	690	30	280	11	190	7.7	210	7.4	205	6.1
10	165	6.7	690	34	280	11	180	6.8	210	7.4	209	6.8
11	270	12	520	24	280	11	170	6.9	215	7.0	304	25
12	180	7.8	425	21	275	11	280	12	230	7.5	205	10
13	180	8.3	430	20	275	11	270	12	230	7.5	205	8.9
14	180	8.7	570	28	270	11	260	12	260	9.1	195	8.4
15	180	8.7	450	21	270	11	255	11	630	68	190	7.7
16	170	7.8	400	16	270	11	255	11	230	9.3	190	8.2
17	160	7.8	400	15	260	11	260	12	220	7.1	190	8.7
18	160	8.6	400	15	260	11	260	11	220	7.1	190	8.2
19	1050	300	400	15	250	10	270	11	220	7.7	190	7.7
20	450	26	400	16	250	9.5	275	11	220	8.3	190	8.2
21	420	23	400	17	250	9.5	280	11	365	14	190	8.2
22	450	26	400	17	250	10	280	12	262	9.2	185	8.0
23	450	26	390	17	250	11	290	13	210	7.4	185	7.5
24	450	26	380	16	245	9.9	290	12	190	6.2	175	6.6
25	480	29	360	16	240	9.7	290	13	210	7.4	170	6.4
26	480	29	340	14	230	9.3	295	12	260	9.1	140	5.7
27	970	232	330	13	225	9.1	300	13	285	9.2	120	5.2
28	590	40	320	12	210	8.5	300	13	285	9.2	120	4.9
29	580	28	320	11	205	8.3	300	12	265	7.9	120	4.9
30	580	27	300	11	205	8.3	300	11	220	6.5	115	4.7
31	---	---	300	11	---	---	300	11	170	5.0	---	---
TOTAL	---	949.0	---	613	---	329.4	---	314.2	---	329.6	---	218.5

TOTAL LOAD FOR YEAR: 23191.93 TONS.

SAN DIEGO CREEK BASIN

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1982	429.00	105.80	1	107
NOVEMBER ...	1274.10	22982.46	3740	26700
DECEMBER ...	534.10	3799.94	820	4620
JANUARY 1983	1458.70	25878.88	5780	31600
FEBRUARY ...	1561.90	22035.10	4640	26700
MARCH	4489.00	92757.40	14800	110000
APRIL	1182.00	8530.90	1880	10400
MAY	676.00	987.67	122	1110
JUNE	658.00	1429.00	5	1430
JULY	549.00	1062.60	1	1060
AUGUST	679.60	1997.10	79	2080
SEPTEMBER ..	865.00	1507.20	336	1840
TOTAL	14356.40	183074.05	32204	217647

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	1126.00	10735.00	2360	13100
NOVEMBER ...	1031.00	6074.70	1410	7480
DECEMBER ...	681.40	3100.83	546	3650
JANUARY 1984	470.00	163.00	1	164
FEBRUARY ...	520.00	108.00	1	109
MARCH	525.00	256.60	6	263
APRIL	576.00	949.00	50	1010
MAY	475.00	613.00	0	613
JUNE	455.00	329.40	0	329
JULY	461.00	314.20	0	314
AUGUST	419.00	329.60	3	333
SEPTEMBER ..	436.00	218.50	1	219
TOTAL	7175.40	23191.93	4378	27584

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO APRIL 1985

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1984	490.00	209.30	0	209
NOVEMBER ...	720.50	3480.10	920	4400
DECEMBER ...	1341.50	8774.20	2610	11400
JANUARY 1985	493.00	600.40	80	680
FEBRUARY ...	720.00	4169.96	1330	5500
MARCH	476.00	161.91	31	193
APRIL	408.00	73.75	0	74
TOTAL	4649.00	17469.62	4971	22456

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
OCT 1982											
09...	1530	13	20.5	161	5.7	--	--	--	--	--	--
NOV											
09...	1330	519	16.0	5890	8250	--	38	39	49	60	72
29...	1525	50	17.0	477	64	54	65	72	79	84	--
30...	1150	388	15.0	6780	7100	--	42	45	53	61	--
JAN 1983											
27...	1440	1010	14.5	7180	19600	--	28	30	34	42	--
29...	1030	27	15.0	429	31	68	80	86	91	92	--
FEB											
26...	1320	178	15.5	3300	1590	--	50	57	66	74	--
MAR											
01...	1130	4950	14.0	12500	167000	--	37	39	47	57	71
02...	1530	1080	16.0	6080	17700	--	33	35	42	49	61
29...	1510	26	--	92	6.5	--	--	--	--	--	--
APR											
29...	1645	32	22.5	203	18	--	--	--	--	--	--
SEP											
29...	1325	44	24.0	2080	247	38	40	44	51	65	86

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
OCT 1982										
09...	97	--	99	--	100	--	--	--	--	--
NOV										
09...	--	89	--	96	--	100	--	--	--	--
29...	86	--	90	--	95	--	100	--	--	--
30...	66	--	71	--	76	--	82	--	89	97
JAN 1983										
27...	49	--	60	--	70	--	81	--	93	98
29...	93	--	96	--	99	--	100	--	--	--
FEB										
26...	82	--	90	--	99	--	100	--	--	--
MAR										
01...	--	86	--	97	--	100	--	--	--	--
02...	--	88	--	99	--	100	--	--	--	--
29...	91	--	95	--	100	--	--	--	--	--
APR										
29...	97	--	99	--	99	--	100	--	--	--
SEP										
29...	--	99	--	100	--	--	--	--	--	--

SAN DIEGO CREEK BASIN

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
OCT 1983											
03...	1425	12	28.0	262	8.4	--	--	--	--	--	--
NOV											
09...	1425	16	23.0	121	5.2	--	--	--	--	--	--
DEC											
01...	1530	99	--	3740	1000	38	50	54	70	89	--
27...	1310	21	18.0	308	17	--	--	--	--	--	--
JAN 1984											
04...	1405	16	21.0	1070	45	--	--	--	--	--	--
FEB											
09...	1350	16	20.0	72	3.0	--	--	--	--	--	--
MAR											
05...	1545	16	21.0	208	9.2	--	--	--	--	--	--
APR											
03...	1545	13	25.0	75	2.7	--	--	--	--	--	--
27...	1515	218	13.0	4650	2740	35	37	43	52	70	--
MAY											
11...	1230	17	30.0	484	22	--	--	--	--	--	--
JUN											
11...	1505	15	29.0	279	11	--	--	--	--	--	--
JUL											
11...	1310	13	32.5	172	6.2	--	--	--	--	--	--

[illegible]

11048540 PETERS CANYON WASH AT BARRANCA ROAD, NEAR IRVINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

					SEDI- MENT, DIS- CHARGE, SUS- PENDE	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)			
DEC 18...	1425	514	14.0	1680	2330	36	42
DATE		SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
DEC 18...	49	55	63	72	82	93	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED	BED	
					MAT. SIEVE DIAM % FINER THAN .062 MM	MAT. SIEVE DIAM % FINER THAN .125 MM	
DEC 06...	1615	20.0	4	8.3	1	3	
DATE		BED MAT. SIEVE DIAM % FINER THAN .250 MM	BED MAT. SIEVE DIAM % FINER THAN .500 MM	BED MAT. SIEVE DIAM % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM % FINER THAN 8.00 MM
	DEC 06...	12	62	91	98	99	100

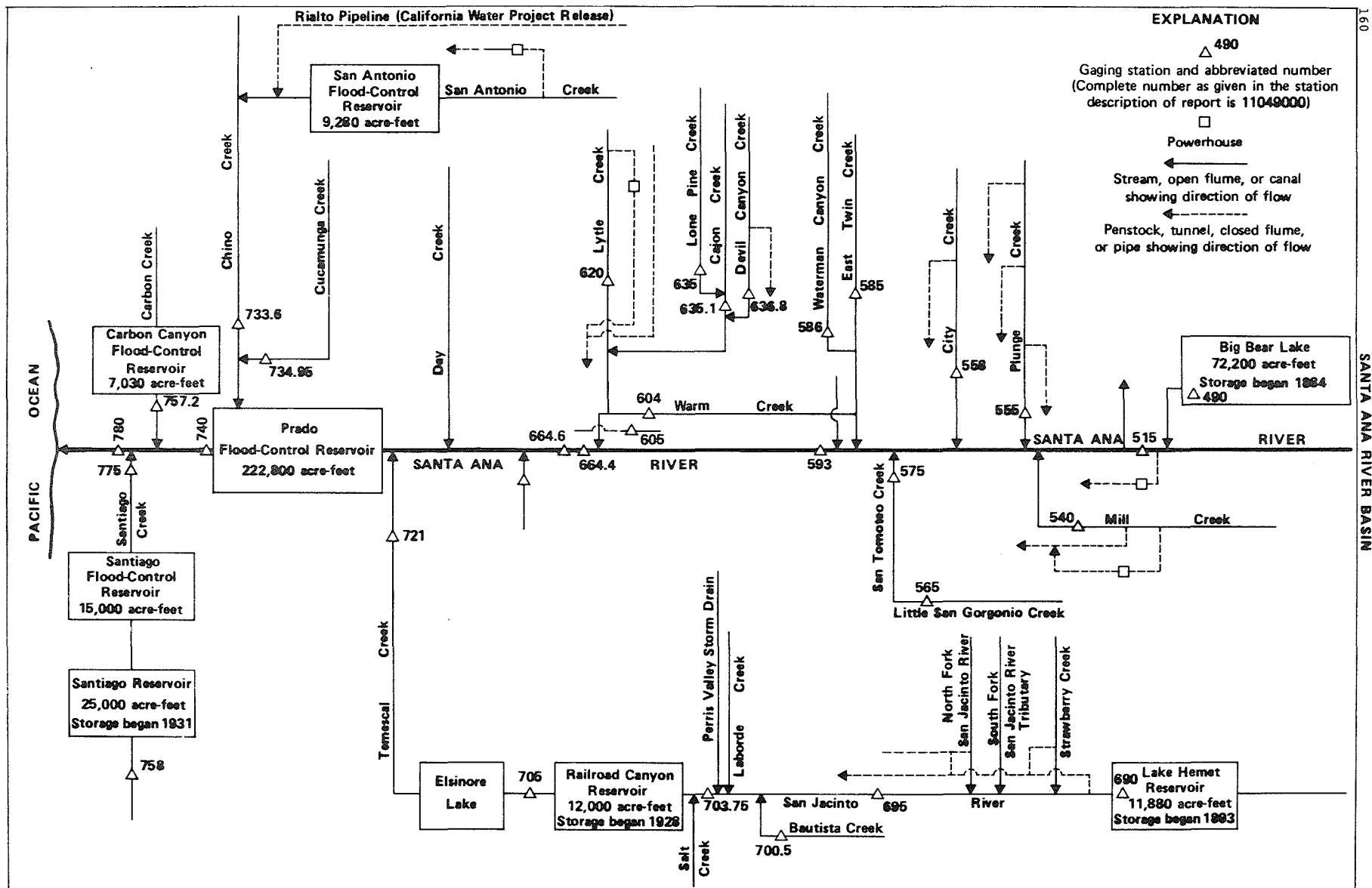


FIGURE 16. — Schematic diagram showing diversions and storage in Santa Ana River basin.

11049000 BIG BEAR LAKE NEAR BIG BEAR LAKE, CA

LOCATION.--Lat 34°14'33", long 116°58'33", in SW 1/4 sec.22, T.2 N., R.1 W., San Bernardino County, Hydrologic Unit 18070203, at Big Bear Lake Dam on Bear Creek, 4 mi west of town of Big Bear Lake, and 7.5 mi upstream from mouth.

DRAINAGE AREA.--38.9 mi², excludes Baldwin Lake drainage included in previous reports.

PERIOD OF RECORD.--October 1950 to current year in reports of Geological Survey. February 1884 to September 1950 in files of Bear Valley Mutual Water Company.

REVISED RECORDS.--WDR CA-83-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 6,670.9 ft above National Geodetic Vertical Datum of 1929 (levels by Bear Valley Mutual Water Company). Prior to 1912 at old dam 200 ft upstream at same datum; spillway at gage height 52.4 ft.

REMARKS.--Lake is formed by multiple-arch concrete dam, completed in 1912, replacing existing lower dam built in 1884; storage began in spring of 1884. Capacity (based on July 1977 resurvey, new capacity table put into use August 1977) 73,320 acre-ft at elevation 6,743.3 ft, top of dam. No dead storage. Water used for irrigation only. See schematic diagram of Santa Ana River basin.

COOPERATION.--Record of contents was provided by Big Bear Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents unknown, lake spilled in 1916, 1917, 1922, 1923, 1938, 1939, 1969, 1970, 1980, 1983; lake dry October, November 1898, August to November 1899, October, November 1904.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 64,890 acre-ft, Apr. 30; minimum contents observed, 57,040 acre-ft, Sept. 30.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	61,150	--
Oct. 31.....	59,400	-1,750
Nov. 30.....	59,260	-140
Dec. 31.....	61,300	+2,040
CAL YR 1984.....	--	-3,400
Jan. 31.....	61,700	+400
Feb. 28.....	62,540	+840
Mar. 31.....	63,710	+1,170
Apr. 30.....	64,890	+1,180
May 31.....	63,560	-1,330
June 30.....	61,330	-2,230
July 31.....	60,510	-820
Aug. 31.....	58,710	-1,800
Sept. 30.....	57,040	-1,670
WTR YR 1985.....	--	-4,110

11051500 SANTA ANA RIVER NEAR MENTONE, CA

LOCATION.--Lat 34°06'30", long 117°05'59", in SW 1/4 SW 1/4 sec.4, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on right bank near mouth of canyon, 1.6 mi upstream from Mill Creek, 3.2 mi northeast of Mentone, and 16 mi downstream from Big Bear Lake.

DRAINAGE AREA.--210 mi², including area tributary to Baldwin Lake at head of Bear Valley.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1896 to current year. Prior to October 1914, records for river only not equivalent owing to Greenspot pipeline diversion between sites and exclusion of discharge from Warm Springs Canyon. Monthly discharge only for January 1910, January and February 1916 published in WSP 1315-B.

GAGE.--Three water-stage recorders. Main gage on right bank of river, canal gage on powerhouse diversion, and since 1970 supplementary gage on left bank of river. Elevation of the main and supplementary gages is 1,950 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 2, 1917, nonrecording gages at several sites within 1.5 mi upstream at various datums. Sept. 3, 1917, to May 27, 1969, water-stage recorder at site 0.2 mi upstream at different datum. Canal gage at different datum.

REMARKS.--Estimated daily discharges: Dec. 19, 20. Records good. Flow partly regulated by Big Bear Lake (station 11049000). For records of combined discharge of Santa Ana River and Southern California Edison Co.'s canal below powerplant No. 2, which diverts above station, see following page. Prior to Oct. 1, 1952, and since Apr. 26, 1976, Bear Valley Mutual Water Co. pumps water into channel above canal gage. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--River only: 71 years (water years 1915-85), 37.3 ft³/s, 27,020 acre-ft/yr.
Combined river and canal: 89 years, 84.1 ft³/s, 60,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 52,300 ft³/s, Mar. 2, 1938, gage height, 14.3 ft, site and datum then in use, on basis of slope-area measurement of peak flow; no flow at times in some years.
Combined river and canal: Maximum discharge, 52,300 ft³/s, Mar. 2, 1938; minimum daily, 7.4 ft³/s, Sept. 21, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Combined river and canal: Flood of Feb. 23, 1891, 53,700 ft³/s, from notes furnished by F. C. Finkle, consulting engineer, Los Angeles.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 1190 ft³/s, Dec. 19, gage height, 9.00 ft; no flow many days.
Combined river and canal: Maximum discharge, 1200 ft³/s, Dec. 19; minimum daily, 21 ft³/s, for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.1	4.5	59	4.1	3.0	10	1.9	.42	.12	.17	.01
2	2.1	1.1	4.9	57	5.2	3.2	9.0	1.9	.42	.08	.16	.01
3	2.1	2.2	4.9	55	4.8	3.5	7.9	1.9	.62	.06	.14	.01
4	1.6	8.2	4.2	52	4.5	3.2	7.4	1.9	.42	.06	.14	0
5	1.6	3.9	3.9	53	6.1	3.0	7.4	1.9	.31	.06	.14	0
6	1.3	3.9	3.9	52	9.4	3.0	7.9	1.9	.31	.06	.13	0
7	.94	3.9	3.6	68	7.4	2.7	6.9	1.9	.26	.05	.12	0
8	.83	8.5	4.2	100	4.5	2.7	5.2	1.7	.24	.04	.12	.01
9	.73	3.9	3.9	64	20	2.7	3.8	1.5	.21	.06	.12	0
10	.73	2.6	3.9	62	17	2.7	3.5	1.4	.24	.06	.13	.01
11	.63	2.2	34	53	12	2.7	3.2	1.4	.24	.05	.12	0
12	.63	2.0	32	57	6.9	2.5	3.0	1.2	.24	.05	.12	0
13	.54	4.8	10	53	6.0	2.5	2.7	1.1	.21	.04	.12	0
14	.46	3.9	9.7	23	5.2	2.5	2.5	1.0	.21	.04	.12	0
15	4.3	2.6	7.2	7.4	4.8	2.5	2.5	.88	.21	.04	.10	0
16	1.6	2.4	11	6.9	4.5	2.5	2.3	.88	.19	.02	.12	0
17	2.2	2.4	9.2	6.5	4.5	2.5	2.3	.88	.17	.01	.10	0
18	2.1	2.6	32	6.0	4.1	3.5	3.5	.78	.16	0	.10	.02
19	1.5	2.6	316	6.0	4.1	4.1	3.2	.78	.16	.18	.10	0
20	1.3	2.6	90	5.6	4.1	3.2	3.2	.78	.16	.98	.10	0
21	1.3	2.4	28	5.6	3.8	3.0	3.0	.78	.16	.54	.10	0
22	1.2	3.1	19	5.2	3.8	2.7	3.0	.70	.16	.48	.09	0
23	1.1	2.8	16	5.2	3.8	2.5	2.7	.70	.16	.42	.09	0
24	1.1	9.3	16	4.8	3.5	2.5	2.5	.70	.17	.36	.07	0
25	1.1	50	15	4.8	3.2	2.5	2.5	.62	.16	.36	.07	0
26	1.1	24	14	4.8	3.2	2.5	3.0	.62	.14	.31	.06	0
27	1.1	9.7	45	4.8	3.2	14	2.5	.62	.17	.26	.05	0
28	1.1	6.0	77	7.4	3.0	48	2.7	.54	.19	.24	.04	0
29	1.1	5.2	49	6.9	---	34	2.3	.54	.16	.24	.04	0
30	1.1	4.5	46	6.0	---	18	2.1	.54	.13	.21	.03	0
31	1.1	---	44	4.1	---	20	---	.48	---	.19	.03	---
TOTAL	41.99	184.4	962.0	906.0	166.7	207.9	123.7	34.42	7.00	5.67	3.14	0.07
MEAN	1.35	6.15	31.0	29.2	5.95	6.71	4.12	1.11	.23	.18	.10	.002
MAX	4.3	50	316	100	20	48	10	1.9	.62	.98	.17	.02
MIN	.46	1.1	3.6	4.1	3.0	2.5	2.1	.48	.13	0	.03	0
AC-FT	83	366	1910	1800	331	412	245	68	14	11	6.2	.1

CAL YR 1984 TOTAL 3593.66 MEAN 9.85 MAX 316 MIN .32 AC-FT 7130
WTR YR 1985 TOTAL 2642.99 MEAN 7.24 MAX 316 MIN 0 AC-FT 5240

11051501 SANTA ANA RIVER NEAR MENTONE, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SANTA ANA RIVER AND SOUTHERN
CALIFORNIA EDISON CO.'S CANAL NEAR MENTONE, CA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	36	37	59	41	48	63	43	38	23	22	22
2	37	33	36	57	47	53	63	42	38	22	22	23
3	36	21	38	55	45	50	63	42	41	22	21	24
4	35	24	37	52	46	48	62	42	37	22	21	28
5	41	29	37	53	43	48	62	42	36	21	23	31
6	42	30	37	52	43	47	65	42	37	23	23	31
7	43	31	36	68	47	47	65	42	38	23	25	30
8	43	44	42	100	47	47	64	43	38	23	25	30
9	43	41	38	64	75	47	64	43	38	25	25	29
10	44	38	38	62	64	48	62	43	37	27	24	30
11	45	34	45	53	58	49	59	43	40	25	25	30
12	45	31	51	57	54	48	58	43	40	23	25	29
13	45	41	44	53	53	48	57	41	41	23	25	27
14	44	37	40	45	52	47	57	40	43	22	25	26
15	44	35	38	51	52	47	56	38	42	24	25	25
16	48	33	45	51	52	47	54	35	40	25	24	25
17	49	35	39	50	53	46	55	35	40	23	25	24
18	45	37	58	48	53	51	57	34	40	25	24	29
19	46	36	318	49	53	50	53	34	41	31	24	29
20	45	36	119	49	54	48	52	33	42	35	24	27
21	45	37	76	49	52	47	52	35	44	29	24	25
22	45	37	63	48	51	47	50	36	45	27	23	24
23	44	37	59	46	50	47	48	36	43	26	23	23
24	42	43	55	46	49	51	47	35	43	23	22	27
25	41	50	54	45	48	56	47	36	44	22	22	33
26	44	37	54	45	48	48	46	36	33	22	22	30
27	46	41	101	45	48	67	46	36	26	22	23	42
28	46	41	119	50	48	107	46	35	24	21	22	43
29	44	39	49	51	---	83	44	35	24	22	22	43
30	40	38	46	47	---	70	44	34	24	21	22	43
31	38	---	44	41	---	74	---	37	---	22	22	---
TOTAL	1332	1082	1893	1641	1426	1661	1661	1191	1137	744	724	882
MEAN	43.0	36.1	61.1	52.9	50.9	53.6	55.4	38.4	37.9	24.0	23.4	29.4
MAX	49	50	318	100	75	107	65	43	45	35	25	43
MIN	35	21	36	41	41	46	44	33	24	21	21	22
AC-FT	2640	2150	3750	3250	2830	3290	3290	2360	2260	1480	1440	1750
CAL YR 1984	TOTAL	19517	MEAN	53.5	MAX	318	MIN	21	AC-FT	38710		
WTR YR 1985	TOTAL	15374	MEAN	42.1	MAX	318	MIN	21	AC-FT	30490		

SANTA ANA RIVER BASIN

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURES: Water years 1982 to current year.

SEDIMENT RECORDS: Water years 1982 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January 1982 to current year.

SUSPENDED SEDIMENT DISCHARGE: January 1982 to current year.

REMARKS.--Sediment discharge values were estimated for those days that have no daily concentration value.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 10,100 mg/L, Mar. 1, 2, 1983; minimum daily, 0 mg/L many days during each year.

SEDIMENT DISCHARGE: Maximum daily, 49,300 tons, Mar. 1, 1983; minimum daily, 0 ton many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, unknown, Dec. 19; minimum daily mean, 0 mg/L, many days.

SEDIMENT LOAD: Maximum daily, 3,490 tons (estimated), Dec. 19; minimum daily, 0 ton many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	15.0	7.5	13.0	19.0	23.0	20.0	16.0	28.0	24.0	31.0
2		---	14.0	10.5	10.0	11.0	16.0	20.0	15.5	27.0	15.0	30.0
3		---	---	10.5	8.0	15.0	23.0	16.0	20.0	28.0	18.0	27.0
4		---	14.0	10.0	14.0	18.0	24.0	17.5	21.0	24.0	20.0	---
5		---	13.5	8.0	11.0	16.0	24.0	17.0	17.0	19.0	24.0	---
6		---	16.0	9.0	14.0	18.0	15.0	19.0	25.0	18.0	25.0	---
7		17.0	14.0	10.0	14.5	18.0	17.0	20.0	27.0	28.0	15.0	---
8		16.5	13.0	12.0	14.0	19.0	25.0	18.0	18.0	28.0	25.0	23.5
9		17.0	15.5	11.0	12.0	14.0	25.0	18.0	26.0	28.0	16.0	---
10		---	15.0	15.0	10.0	14.0	17.0	17.0	25.0	26.0	15.0	16.0
11		---	11.0	11.0	16.0	15.0	23.0	16.0	26.0	27.0	28.0	---
12		---	11.0	7.0	19.0	11.0	24.0	14.0	18.0	18.0	24.0	---
13		15.5	9.0	6.5	20.0	11.0	23.0	25.0	25.0	20.0	16.0	---
14		16.0	10.5	14.0	20.0	15.0	19.0	22.0	18.0	19.0	23.0	---
15		16.0	10.5	15.0	20.0	15.0	23.0	16.0	18.0	28.0	24.0	---
16		15.0	---	9.0	20.0	18.5	23.5	24.0	18.0	27.0	24.0	---
17		15.5	8.0	16.0	12.0	19.0	22.0	20.0	24.0	21.0	18.0	---
18		16.0	9.0	16.5	17.0	15.0	16.0	17.0	25.0	28.0	24.0	16.0
19		17.0	8.0	10.0	20.0	20.0	18.0	23.0	23.0	24.0	29.0	---
20		16.5	6.0	14.0	15.0	11.0	15.0	18.0	17.0	20.0	28.0	---
21		11.5	13.0	13.5	16.0	20.0	---	23.0	17.0	27.0	29.0	---
22		10.0	13.5	15.0	16.0	20.0	16.0	27.0	17.0	26.0	28.0	---
23		10.0	13.5	17.0	11.0	13.5	24.0	24.0	19.0	25.0	16.0	---
24		11.0	14.0	15.0	20.0	14.0	19.0	17.0	23.0	19.0	15.0	---
25		8.0	7.5	15.0	10.0	14.0	20.0	18.0	22.0	25.0	28.0	---
26		9.5	11.0	12.5	19.0	19.0	17.0	17.0	25.0	20.0	32.0	---
27		12.0	11.5	16.0	20.0	15.0	14.0	17.0	25.0	21.0	33.0	---
28		12.5	10.0	10.5	20.0	10.0	14.0	23.0	18.0	27.0	33.0	---
29		14.0	9.5	13.0	---	13.0	25.0	21.0	18.0	26.0	34.0	---
30		14.0	8.5	13.0	---	12.0	25.0	20.0	25.0	25.0	35.0	---
31		---	7.5	13.0	---	12.0	---	16.0	---	17.0	33.0	---
MONTH		---	11.5	12.0	15.5	15.5	20.5	19.5	21.0	24.0	24.0	---
YEAR	MAX	35.0	MIN	6.0	MEAN	18.0						

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	0	.00	---	.00	2	.02	25	4.0	1	.01	2	.02
2	0	.00	---	.00	2	.03	25	3.8	23	.32	1	.01
3	0	.00	---	.27	2	.03	25	3.7	1	.01	1	.01
4	0	.00	20	.44	2	.02	13	1.8	1	.01	1	.01
5	0	.00	4	.04	2	.02	13	1.9	---	.65	1	.01
6	0	.00	4	.04	2	.02	12	1.7	---	1.5	1	.01
7	0	.00	4	.04	3	.03	70	13	20	.40	2	.01
8	0	.00	---	2.3	4	.05	112	30	7	.09	1	.01
9	0	.00	10	.11	2	.02	42	7.3	---	7.9	1	.01
10	0	.00	7	.05	2	.02	20	3.3	25	1.1	1	.01
11	0	.00	6	.04	---	18	17	2.4	15	.49	1	.01
12	0	.00	5	.03	55	4.8	12	1.8	6	.11	1	.01
13	0	.00	---	.42	8	.22	11	1.6	4	.06	1	.01
14	0	.00	3	.03	2	.05	5	.31	4	.06	1	.01
15	0	.00	2	.01	2	.04	2	.04	4	.05	1	.01
16	0	.00	1	.01	20	.59	2	.04	4	.05	2	.01
17	0	.00	0	.00	12	.30	2	.04	3	.04	2	.01
18	0	.02	0	.00	---	48	1	.02	2	.02	3	.03
19	0	.00	0	.00	---	3490	1	.02	2	.02	2	.02
20	0	.00	2	.01	270	66	1	.02	2	.02	1	.01
21	0	.00	2	.01	28	2.1	2	.03	2	.02	2	.02
22	0	.00	2	.02	8	.41	2	.03	2	.02	2	.01
23	0	.00	2	.02	5	.22	2	.03	1	.01	2	.01
24	0	.00	---	16	4	.17	2	.03	1	.01	1	.01
25	0	.00	---	62	3	.12	2	.03	1	.01	1	.01
26	0	.00	52	3.4	4	.15	1	.01	1	.01	2	.01
27	0	.00	12	.31	---	40	1	.01	2	.02	---	5.6
28	0	.00	4	.06	---	48	20	.40	2	.02	---	49
29	0	.00	4	.06	16	2.1	30	.56	---	---	90	8.3
30	0	.00	30	.36	6	.75	5	.08	---	---	16	.78
31	0	.00	---	---	8	.95	1	.01	---	---	14	.76
TOTAL	---	0.02	---	86.08	---	3723.23	---	78.01	---	13.03	---	64.75
DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7	.19	3	.02	3	.00	1	.00	4	.00	1	.00
2	6	.15	3	.02	3	.00	2	.00	4	.00	2	.00
3	5	.11	3	.02	2	.00	6	.00	4	.00	2	.00
4	4	.08	3	.02	5	.01	1	.00	4	.00	0	.00
5	3	.06	3	.02	3	.00	3	.00	3	.00	0	.00
6	4	.09	3	.02	4	.00	3	.00	4	.00	0	.00
7	3	.06	2	.01	4	.00	2	.00	5	.00	0	.00
8	4	.06	3	.01	4	.00	1	.00	5	.00	2	.00
9	4	.02	2	.01	4	.00	2	.00	4	.00	0	.00
10	1	.01	2	.01	4	.00	3	.00	3	.00	0	.00
11	1	.01	2	.01	4	.00	0	.00	5	.00	0	.00
12	1	.01	3	.01	5	.00	0	.00	3	.00	0	.00
13	2	.01	3	.01	3	.00	1	.00	2	.00	0	.00
14	1	.01	2	.01	3	.00	2	.00	2	.00	0	.00
15	3	.02	2	.00	1	.00	0	.00	2	.00	0	.00
16	1	.01	3	.01	2	.00	0	.00	7	.00	0	.00
17	1	.01	2	.00	3	.00	0	.00	4	.00	0	.00
18	2	.02	3	.01	1	.00	0	.00	11	.00	0	.00
19	1	.01	2	.00	3	.00	0	.00	6	.00	0	.00
20	1	.01	3	.01	2	.00	85	.22	4	.00	0	.00
21	1	.01	3	.01	7	.00	18	.03	19	.01	0	.00
22	0	.00	3	.01	2	.00	16	.02	19	.00	0	.00
23	0	.00	3	.01	2	.00	14	.02	1	.00	0	.00
24	2	.01	2	.00	5	.00	15	.01	3	.00	0	.00
25	3	.02	2	.00	6	.00	11	.01	8	.00	0	.00
26	4	.03	1	.00	1	.00	12	.01	3	.00	0	.00
27	2	.01	2	.00	1	.00	8	.01	5	.00	0	.00
28	4	.03	2	.00	5	.00	7	.00	4	.00	0	.00
29	3	.02	1	.00	3	.00	6	.00	5	.00	0	.00
30	3	.02	3	.00	1	.00	4	.00	2	.00	0	.00
31	---	---	1	.00	---	---	4	.00	1	.00	---	---
TOTAL	---	1.10	---	0.26	---	0.01	---	0.33	---	0.01	---	0.00

SANTA ANA RIVER BASIN

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC 19...	0900	169	8.0	1250	570	21	27	35

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
DEC 19...	44	56	68	77	86	92	96	100

11054000 MILL CREEK NEAR YUCAIPA, CA

LOCATION.--Lat 34°05'27", long 117°02'12", in NE 1/4 NE 1/4 sec.13, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 50 ft downstream from bridge on State Highway 38, 3.9 mi north of Yucaipa, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--42.4 mi².

PERIOD OF RECORD.--January 1919 to September 1938, October 1947 to current year. Monthly figures only for April and May 1923, published in WSP 1315-B. Prior to October 1954, published as "near Craftonville."

GAGE.--Water-stage recorder on creek; water-stage recorder and sharp-crested weir on power canal No. 1; water-stage recorder and Parshall flume on power canals Nos. 2 and 3. Elevation of creek gage is 2,916.36 ft, Southern California Edison Company datum. Canals are all at different datums. See WSP 1735 for history of changes prior to Mar. 2, 1938.

REMARKS.--Estimated daily discharges: Oct. 1-6, Oct. 11 to Nov. 12, Jan. 9, 10, Mar. 11, May 12, 19, 24, 25, 27, and June 10, 14, 15, 27. Records fair. No regulation above station. Mill Creek power canals Nos. 1, 2, and 3 divert from points 100 ft, 3 mi, and 6 mi above station, respectively. Combined flow of Mill Creek and Mill Creek power canals Nos. 1, 2, and 3 is given on following page. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--Creek only: 57 years (water years 1920-38, 1948-85), 16.2 ft³/s, 11,740 acre-ft/yr. Combined creek and canals: 57 years, 38.4 ft³/s, 27,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,400 ft³/s, Jan. 25, 1969, gage height, 16.8 ft, from floodmark, from rating curve extended above 1,100 ft³/s on basis of two field estimates at gage height 14.5 ft and slope-area measurement of peak flow; no flow at times in some years. Combined creek and canals: Maximum discharge, 35,400 ft³/s, Jan. 25, 1969; minimum daily, 2.7 ft³/s, Feb. 23, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Creek only		Combined Creek and Canals	
		Discharge (ft ³ /s)	Gage height (ft)	Discharge (ft ³ /s)	
Nov. 13	1200	140	6.85	147	
Nov. 24	2100	128	6.82	154	
Dec. 18	2200	132	6.83	150	
Jan. 7	1100	107	6.77	114	
Mar. 27	1815	111	6.78	115	
July 19	1815	*741	*8.07	*754	

Creek only: Minimum daily, 0.03 ft³/s for several days.

Combined creek and canals: Minimum daily, 15 ft³/s for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.08	.27	.30	.07	.11	.11	.09	.11	.07	12	.03
2	.09	.08	.13	.27	.08	.11	.12	.40	.09	.06	10	.03
3	.09	.08	.13	.27	.07	.11	.12	.10	.21	.06	10	.03
4	.09	.08	.13	.24	.07	.11	.11	.08	.16	.07	8.4	.03
5	.09	.08	.12	.14	.07	.11	.62	.08	.12	.06	7.8	.03
6	.09	.08	.13	.14	.06	.11	.15	1.4	.12	.07	7.2	.03
7	.13	.08	.12	23	.06	.11	2.7	4.3	.12	.07	3.4	.04
8	1.1	.08	.27	24	.06	.11	5.3	12	.08	.21	.18	.06
9	.72	.08	.12	1.8	19	.11	.68	17	.08	.16	.11	.06
10	.22	.08	.16	.24	9.6	.11	.10	18	.12	.09	.22	.06
11	.09	.08	5.9	.24	.43	.10	.69	7.4	.07	.16	.13	.05
12	.09	.08	2.8	.27	.21	.10	.13	.12	.07	.09	.09	.05
13	.09	44	1.3	.24	.21	4.3	.12	7.6	.07	.14	.09	.05
14	.09	30	.82	.16	.21	5.2	.15	12	.09	.12	.04	.04
15	.09	3.0	.16	.16	.21	.21	2.8	11	.16	.06	.04	.04
16	.09	.18	5.7	.16	.21	.12	4.8	9.6	.21	.06	.04	.04
17	.09	.14	.09	.16	.21	.11	.11	1.4	.48	.06	.03	.03
18	.09	.14	25	.16	.27	9.5	.11	.16	.21	.06	.03	.60
19	.09	.13	82	.16	.30	4.9	.47	.18	.08	94	.05	.22
20	.08	.13	7.8	.16	.12	2.6	.15	.14	.09	50	.05	.07
21	.08	.15	.74	.16	.12	.16	.15	.11	.06	24	.04	.05
22	.08	.13	.27	.16	.11	.10	.45	.09	.06	16	.03	.05
23	.08	.13	.24	.12	.11	.11	.12	.08	.06	12	.03	.05
24	.08	19	.24	.07	.11	.10	.11	.14	.06	10	.03	.05
25	.08	23	.24	.05	.11	.10	.11	.14	.06	8.4	.03	.04
26	.08	4.4	.24	.05	.11	.10	.11	.16	.06	8.4	.03	.05
27	.08	.12	16	.04	.11	35	.10	.30	.09	4.6	.05	.05
28	.08	.13	4.6	.34	.11	66	.10	.09	.09	1.9	.05	.05
29	.08	.13	.82	.14	---	9.5	.10	.43	.07	2.1	.04	.05
30	.08	.12	.82	.07	---	.21	.62	.82	.08	2.5	.03	.05
31	.08	---	.82	.07	---	.15	---	.30	---	3.9	.03	---
TOTAL	4.48	125.99	158.18	53.54	32.41	139.77	21.51	105.71	3.43	239.47	60.29	2.08
MEAN	.14	4.20	5.10	1.73	1.16	4.51	.72	3.41	.11	7.72	1.94	.069
MAX	1.1	44	82	24	19	66	5.3	18	.48	94	12	.60
MIN	.08	.08	.09	.04	.06	.10	.10	.06	.06	.06	.03	.03
AC-FT	8.9	250	314	106	64	277	43	210	6.8	475	120	4.1
CAL YR 1984	TOTAL	892.19	MEAN	2.44	MAX	82	MIN	.06	AC-FT	1771		
WTR YR 1985	TOTAL	946.86	MEAN	2.59	MAX	94	MIN	.03	AC-FT	1880		

SANTA ANA RIVER BASIN

11054001 MILL CREEK NEAR YUCAIPA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF MILL CREEK AND MILL CREEK POWER
CANALS NOS. 1, 2, AND 3 NEAR YUCAIPA, CA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	21	21	22	21	25	28	30	28	22	30	17
2	22	21	21	22	23	25	29	31	28	22	27	16
3	21	21	21	21	22	24	29	32	29	21	27	17
4	19	20	21	23	22	24	30	32	28	20	24	18
5	22	20	20	25	21	24	30	32	27	20	24	18
6	22	21	19	25	22	24	28	30	26	20	23	18
7	20	21	19	36	22	24	32	32	25	20	22	17
8	20	23	21	38	22	24	34	35	25	20	20	17
9	21	22	20	23	40	24	31	39	24	20	20	17
10	20	21	20	25	31	24	30	40	26	20	19	17
11	21	21	25	23	24	24	30	33	24	19	19	17
12	21	21	21	23	24	23	29	30	24	19	19	17
13	20	56	20	22	25	23	30	34	23	19	19	16
14	20	43	20	22	24	22	31	36	24	19	19	15
15	20	23	19	22	25	20	32	35	24	20	19	15
16	21	22	26	23	25	21	32	34	23	20	19	15
17	22	22	20	23	26	22	30	28	23	19	19	15
18	22	21	46	23	25	27	30	28	23	20	18	19
19	22	21	99	23	26	23	28	28	23	111	17	17
20	22	21	29	24	27	22	27	28	23	56	17	17
21	21	22	27	24	25	20	27	28	23	30	17	17
22	17	21	25	23	24	22	27	28	23	22	17	17
23	18	22	25	23	24	24	27	27	22	25	17	16
24	20	41	23	23	24	24	27	28	23	29	17	15
25	21	41	23	22	24	25	28	28	23	26	17	15
26	22	24	24	22	24	23	27	25	22	26	16	16
27	22	21	41	22	25	53	26	27	22	23	16	16
28	22	22	27	23	24	79	26	26	24	21	16	17
29	22	22	25	23	---	34	28	26	23	21	16	16
30	21	21	24	22	---	27	30	28	23	22	16	19
31	21	---	23	22	---	27	---	28	---	23	17	---
TOTAL	647	739	815	737	691	827	873	946	728	795	603	499
MEAN	20.9	24.6	26.3	23.8	24.7	26.7	29.1	30.5	24.3	25.6	19.5	16.6
MAX	22	56	99	38	40	79	34	40	29	111	30	19
MIN	17	20	19	21	21	20	26	25	22	19	16	15
AC-FT	1280	1470	1620	1460	1370	1640	1730	1880	1440	1580	1200	990
CAL YR 1984	TOTAL	10369	MEAN	28.4	MAX	99	MIN	17	AC-FT	20570		
WTR YR 1985	TOTAL	8900	MEAN	24.4	MAX	111	MIN	15	AC-FT	17650		

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA

LOCATION.--Lat 34°07'06", long 117°08'27", in NE 1/4 NE 1/4 sec.1, T.1 S., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on left bank at mouth of canyon at crossing of North Fork ditch siphon, 1.8 mi northeast of East Highlands.

DRAINAGE AREA.--16.9 mi².

PERIOD OF RECORD.--January 1919 to current year; combined records of creek and diversions, March 1951 to current year.

GAGE.--Water-stage recorder on creek. Since March 1951 water-stage recorder and weir on upper diversion; water-stage recorder and concrete-lined canal on middle diversion; crest-stage gage and sharp-crested weir on lower diversion. Elevation of creek gage is 1,590 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1969, creek gage at datum 4.00 ft higher. Diversions are all at different datums.

REMARKS.--Estimated daily discharges: Feb. 4-7, Apr. 3, 4, June 5-14, and Aug. 19, 20. Records fair. No regulation above station. Diversion from Alder Creek to Upper Plunge Creek area was active 1904-67. Diversions for irrigation are made at sites 0.5 mi, 1.0 mi, and 2.5 mi above station. Water has been diverted above station for irrigation during entire period of record. Combined discharge of Plunge Creek and upper, middle, and lower diversions is given on following page. No flow in lower diversion since May 29, 1966. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--Creek only: 66 years, 6.88 ft³/s, 4,980 acre-ft/yr.
Combined creek and diversions: 34 years, 9.11 ft³/s, 6,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 5,340 ft³/s, Mar. 2, 1938, on basis of slope-area measurement of peak flow; no flow at times in some years.
Combined creek and diversions: Maximum discharge, 4,770 ft³/s, Dec. 6, 1966; no flow Nov. 12, 1964, Sept. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Creek only Discharge (ft ³ /s)	Gage height (ft)	Combined Creek and Diversions Discharge (ft ³ /s)
Dec. 19	0630	*122	*4.07	*122

Creek only: No flow for many days, June through September.
Combined creek and diversions: Minimum daily, 0.61 ft³/s, Aug. 5, 31, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.52	.41	8.3	4.6	1.4	4.2	.56	.32	0		0
2	.73	.52	.36	7.9	5.8	1.7	4.1	.55	.31	0		0
3	.75	.55	.38	7.7	5.1	1.5	4.0	.58	.39	0		0
4	.72	.58	.42	7.4	5.0	1.4	4.8	.59	.31	0		0
5	.72	.58	.47	7.0	5.0	1.3	4.4	.65	.31	0		0
6	.63	.62	.41	6.7	5.0	1.3	4.0	.68	.31	0		.34
7	.42	.67	.31	7.8	5.3	1.3	3.6	.66	.31	0		.29
8	.43	.82	.54	17	5.5	1.3	3.2	.66	.31	0		.31
9	.46	.57	.48	11	21	1.4	2.5	.70	.31	0		.38
10	.50	.52	.51	8.8	14	1.5	2.1	.73	.30	0		.39
11	.57	.51	1.5	8.0	10	1.5	2.0	.70	.30	0		.50
12	.56	.51	.73	7.1	9.0	1.5	1.9	.66	.30	0		.49
13	.52	1.1	.58	6.6	8.3	1.4	1.7	.60	.30	0		.33
14	.58	.73	.35	6.2	7.7	1.4	1.5	.52	.30	0		.09
15	.82	.64	.55	6.1	7.4	1.5	1.3	.49	.29	0		.01
16	.86	.64	1.3	5.9	5.0	1.7	1.4	.49	.25	.01		0
17	1.3	.64	1.0	5.7	2.5	1.7	1.5	.56	.25	0		.01
18	1.0	.64	19	5.5	2.4	2.4	1.9	.54	.24	.03		.42
19	.74	.64	64	5.5	2.4	1.6	1.6	.57	.24	.32		.66
20	.58	.64	34	5.3	2.5	1.6	1.6	.58	.24	.27		.42
21	.42	.79	14	5.3	2.1	1.4	1.7	.53	.25	.17		.24
22	.41	.76	9.2	5.3	1.9	1.4	1.6	.48	.25	.15		.12
23	.42	.73	7.5	5.2	1.7	1.2	1.3	.44	.24	.15		.08
24	.42	2.2	6.6	5.0	1.5	1.1	1.0	.44	.32	.19		.04
25	.39	7.5	6.0	4.9	1.5	1.3	.77	.45	.40	.10		.02
26	.39	2.7	6.2	4.8	1.4	1.3	.61	.47	.33	.03		.08
27	.46	1.1	40	4.8	1.4	7.4	.60	.48	.05	.01		.29
28	.45	.62	29	6.3	1.4	12	.60	.39	.01	0		.39
29	.42	.66	15	6.8	---	5.7	.63	.33	0	0		.45
30	.45	.46	11	5.2	---	3.6	.60	.33	0	0		.36
31	.50	---	9.4	4.9	---	3.5	---	.33	---	0		---
TOTAL	18.26	30.16	281.20	210.0	146.4	70.3	62.71	16.74	7.74	1.43	0	6.71
MEAN	.59	1.01	9.07	6.77	5.23	2.27	2.09	.54	.26	.046	0	.22
MAX	1.3	7.5	64	17	21	12	4.8	.73	.40	.32	0	.66
MIN	.39	.46	.31	4.8	1.4	1.1	.60	.33	0	0	0	0
AC-FT	36	60	558	417	290	139	124	33	15	2.8	0	13
CAL YR 1984	TOTAL	809.11	MEAN	2.22	MAX	64	MIN	.31	AC-FT	1600		
WTR YR 1985	TOTAL	851.65	MEAN	2.33	MAX	64	MIN	0	AC-FT	1690		

SANTA ANA RIVER BASIN

11055501 PLUNGE CREEK NEAR EAST HIGHLANDS, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF PLUNGE CREEK AND
DIVERSIONS NEAR EAST HIGHLANDS, CA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	2.4	2.5	8.3	4.6	5.4	8.3	3.3	2.1	.78	.67	.61
2	1.7	2.1	2.6	7.9	5.8	6.0	8.1	3.2	2.1	.77	.65	.63
3	1.9	2.3	2.8	7.7	5.1	5.7	7.7	3.1	3.1	.74	.64	.70
4	1.8	2.2	2.9	7.4	5.0	5.5	8.5	3.1	2.8	.73	.63	.74
5	2.0	2.2	2.9	7.0	5.0	5.3	8.0	3.4	2.2	.74	.61	.74
6	1.8	2.3	2.8	6.7	5.0	5.2	7.6	3.3	1.9	.78	.66	1.1
7	1.4	2.5	2.5	7.8	5.3	5.1	7.0	3.3	1.7	.77	.74	1.0
8	1.4	3.8	3.4	17	5.5	5.1	6.5	3.2	1.6	.73	.75	1.0
9	1.5	3.2	3.2	11	21	5.0	6.1	3.4	1.5	.80	.75	1.1
10	1.6	2.8	3.2	8.8	14	5.1	5.9	3.5	1.5	.80	.76	1.1
11	1.9	2.6	5.1	8.0	10	5.0	5.6	3.6	1.4	.77	.78	1.2
12	2.0	2.5	4.0	7.1	9.0	5.1	5.4	3.6	1.4	.75	.81	1.2
13	1.7	4.9	4.0	6.6	8.3	4.9	4.9	3.1	1.4	.74	.81	1.1
14	1.5	3.5	3.9	6.2	7.7	5.0	4.9	2.8	1.3	.73	.79	.93
15	1.3	3.1	4.6	6.1	7.4	5.0	4.7	2.6	1.3	.79	.76	.84
16	1.3	2.7	5.9	5.9	7.5	4.9	4.8	2.7	1.1	.77	.77	.83
17	1.7	2.8	5.3	5.7	7.2	4.7	5.0	2.8	1.1	.75	.79	.84
18	1.7	2.7	23	5.5	7.0	6.0	5.7	2.5	1.0	.81	.76	1.3
19	1.7	2.7	64	5.5	7.0	5.4	5.3	2.8	1.0	1.1	.74	1.6
20	2.0	2.6	34	5.3	7.2	5.3	5.1	2.8	.98	1.0	.74	1.3
21	2.2	3.5	14	5.3	6.8	4.9	5.4	2.5	1.0	.88	.73	1.1
22	2.0	3.6	9.2	5.3	6.6	4.7	5.1	2.3	.98	.84	.72	.94
23	2.0	3.2	7.5	5.2	6.5	4.3	4.4	2.0	.91	.81	.70	.88
24	2.1	4.4	6.6	5.0	6.0	4.4	4.1	2.0	1.2	.91	.68	.81
25	1.9	7.6	6.0	4.9	5.9	4.4	4.1	2.1	1.4	.88	.67	.78
26	1.9	3.0	6.2	4.8	5.7	4.6	3.8	2.3	1.2	.79	.69	.89
27	2.1	2.8	40	4.8	5.6	11	3.7	2.3	.84	.72	.68	1.1
28	2.2	3.1	29	6.3	5.4	16	3.7	2.1	.77	.71	.66	1.3
29	2.1	3.0	15	6.8	---	9.7	3.6	2.0	.84	.69	.64	1.3
30	2.2	2.6	11	5.2	---	7.8	3.5	2.1	.83	.70	.63	1.2
31	2.4	---	9.4	4.9	---	7.6	---	2.1	---	.68	.61	---
TOTAL	56.5	92.7	336.5	210.0	203.1	184.1	166.5	85.9	42.45	24.46	22.02	30.16
MEAN	1.82	3.09	10.9	6.77	7.25	5.94	5.55	2.77	1.42	.79	.71	1.01
MAX	2.4	7.6	64	17	21	16	8.5	3.6	3.1	1.1	.81	1.6
MIN	1.3	2.1	2.5	4.8	4.6	4.3	3.5	2.0	.77	.68	.61	.61
AC-FT	112	184	667	417	403	365	330	170	84	49	44	60
CAL YR 1984	TOTAL	1452.91	MEAN	3.97	MAX	64	MIN	.85	AC-FT	2880		
WTR YR 1985	TOTAL	1454.39	MEAN	3.98	MAX	64	MIN	.61	AC-FT	2880		

11055800 CITY CREEK NEAR HIGHLAND, CA

LOCATION.--Lat 34°08'38", long 117°11'16", in SW 1/4 NW 1/4 sec.27, T.1 N., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 0.6 mi upstream from Highland Avenue, and 1.5 mi northeast of Highland.

DRAINAGE AREA.--19.6 mi².

PERIOD OF RECORD.--October 1919 to current year; combined records of creek and canal, June 1924 to current year.

GAGE.--Water-stage recorder on creek; water-stage recorder on canal. Elevation of creek gage is 1,580 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 1, 1939, at site 0.2 mi downstream at different datum. Canal gage at different datum.

REMARKS.--Estimated daily discharges: Aug. 20 to Sept. 5. Records fair except for estimated daily discharges, which are poor. No regulation above station. City Creek Water Co.'s canal has diverted from a site 0.5 mi above station for irrigation throughout period of record. See schematic diagram of Santa Ana River basin. Combined discharge of City Creek and canal is given on following page.

AVERAGE DISCHARGE.--Creek only: 66 years, 9.82 ft³/s, 7,110 acre-ft/yr.
Combined creek and canal: 61 years, 11.4 ft³/s, 8,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 7,000 ft³/s, Feb. 25, 1969, gage height, 9.39 ft, from rating curve extended above 580 ft³/s on basis of slope-area measurement at gage height 8.82 ft; no flow for several months in some years.
Combined creek and canal: Maximum discharge, 7,000 ft³/s, Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Creek only Discharge (ft ³ /s)	Gage height (ft)	Combined Creek and Canal Discharge (ft ³ /s)
Dec. 19	0530	*200	*5.07	*200

Creek only: Minimum daily, 0.01 ft³/s, Aug. 19, 20.

Combined creek and canal: Minimum daily, 0.09 ft³/s, Aug. 24, 25, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	1.9	3.6	12	6.6	5.9	11	4.0	2.0	.17	.12	.02
2	1.3	1.6	3.5	11	8.6	7.4	10	3.9	2.0	.15	.11	.02
3	1.3	1.6	3.9	9.7	7.3	7.0	9.2	3.5	4.4	.12	.10	.06
4	1.3	1.6	3.7	8.9	6.9	6.5	8.6	3.0	2.9	.10	.09	.30
5	1.6	1.5	3.6	8.5	6.6	6.2	8.2	3.1	1.9	.09	.08	.40
6	1.5	1.8	3.6	8.1	6.6	6.2	7.8	3.2	1.4	.08	.08	.41
7	1.2	2.0	3.5	9.9	6.5	6.2	7.1	3.2	1.0	.08	.08	.19
8	1.0	4.3	5.9	21	6.6	6.1	6.5	3.0	.84	.07	.08	.16
9	1.1	3.2	4.2	13	27	5.8	6.3	3.3	.77	.06	.08	.28
10	1.3	2.6	4.1	11	18	5.8	6.2	3.8	.77	.22	.08	.28
11	1.5	2.4	6.5	9.8	12	5.9	5.9	3.7	.73	.17	.08	.67
12	1.6	2.3	4.9	9.0	10	5.9	5.7	3.5	.67	.13	.08	.47
13	1.2	7.2	5.8	8.5	9.7	5.5	5.4	2.9	.71	.12	.08	.12
14	1.2	3.7	4.5	8.1	8.9	5.4	5.3	2.4	1.0	.11	.07	.09
15	1.3	2.9	4.4	7.7	8.4	5.5	5.1	2.2	.94	.10	.05	.09
16	1.1	2.8	8.2	7.5	8.0	5.5	5.4	2.2	.84	.26	.04	.09
17	2.8	2.8	6.0	7.2	7.6	5.2	5.8	2.3	.80	.15	.02	.09
18	1.9	2.7	42	7.0	7.3	7.2	7.1	2.2	.72	.12	.02	1.1
19	1.6	2.6	95	7.0	7.1	6.6	6.7	2.4	.72	.23	.01	1.4
20	1.9	2.5	44	6.9	7.4	6.0	6.7	2.4	.70	.38	.01	.68
21	1.9	4.2	19	6.8	6.8	5.5	7.1	2.0	.77	.24	.02	.32
22	1.6	3.9	12	6.6	6.6	5.3	7.0	1.7	.77	.21	.02	.14
23	1.5	3.3	9.6	6.6	6.4	5.0	5.9	1.5	.56	.21	.03	.11
24	1.5	7.4	8.2	6.5	6.2	4.8	5.1	1.4	.55	.20	.03	.10
25	1.5	11	7.4	6.2	6.1	4.9	4.8	1.6	.93	.20	.04	.10
26	1.5	4.7	8.6	6.4	5.9	5.0	4.6	1.9	.62	.16	.06	.25
27	1.7	4.0	57	6.9	6.0	19	4.5	2.1	.28	.13	.06	.59
28	1.9	4.1	38	9.9	6.0	45	4.5	1.9	.22	.10	.04	.90
29	1.8	3.9	23	10	---	26	4.5	1.7	.20	.09	.03	.90
30	1.6	3.7	18	7.4	---	17	4.3	1.7	.20	.09	.03	.72
31	1.8	---	15	6.8	---	14	---	2.0	---	.11	.02	---
TOTAL	46.96	104.2	476.7	271.9	237.1	273.3	192.3	79.7	30.91	4.65	1.74	11.05
MEAN	1.51	3.47	15.4	8.77	8.47	8.82	6.41	2.57	1.03	.15	.056	.37
MAX	2.8	11	95	21	27	45	11	4.0	4.4	.38	.12	1.4
MIN	.96	1.5	3.5	6.2	5.9	4.8	4.3	1.4	.20	.06	.01	.02
AC-FT	93	207	946	539	470	542	381	158	61	9.2	3.5	22
CAL YR 1984	TOTAL	1653.63	MEAN	4.53	MAX	95	MIN	.29	AC-FT	3280		
WTR YR 1985	TOTAL	1730.51	MEAN	4.74	MAX	95	MIN	.01	AC-FT	3430		

SANTA ANA RIVER BASIN

11055801 CITY CREEK NEAR HIGHLAND, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF CITY CREEK AND CITY CREEK
WATER CO.'S CANAL NEAR HIGHLAND, CA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.5	4.1	12	6.6	5.9	11	4.0	3.0	.66	.32	.11
2	2.1	2.2	4.0	11	8.6	7.4	10	3.9	3.0	.55	.32	.14
3	2.0	2.2	4.4	9.7	7.3	7.0	9.2	3.5	5.6	.43	.26	.22
4	2.0	2.2	4.2	8.9	6.9	6.5	8.6	3.9	4.1	.31	.17	.54
5	2.3	2.1	4.1	8.5	6.6	6.2	8.2	4.1	3.1	.34	.15	1.3
6	2.2	2.4	4.1	8.1	6.6	6.2	7.8	4.2	2.6	.47	.14	1.6
7	1.9	2.6	4.0	9.9	6.5	6.2	7.1	4.2	2.1	.56	.15	1.4
8	1.6	4.9	6.4	21	6.6	6.1	6.5	4.1	1.8	.49	.16	1.4
9	1.7	3.8	4.7	13	27	5.8	6.3	4.4	1.7	.39	.22	1.4
10	1.9	3.2	4.6	11	18	5.8	6.2	4.9	1.7	.87	.23	1.5
11	2.1	3.0	7.0	9.8	12	5.9	5.9	4.9	1.7	.65	.28	1.9
12	2.2	2.9	5.4	9.0	10	5.9	5.7	4.7	1.7	.50	.42	1.7
13	1.8	7.8	6.3	8.5	9.7	5.5	5.4	4.1	1.6	.41	.59	1.2
14	1.7	4.3	5.0	8.1	8.9	5.4	5.3	3.6	1.5	.38	.55	.96
15	1.8	3.5	4.9	7.7	8.4	5.5	5.1	3.4	1.5	.39	.46	.87
16	1.6	3.4	8.7	7.5	8.0	5.5	5.4	3.4	1.3	.85	.40	.88
17	3.4	3.4	6.4	7.2	7.6	5.2	5.8	3.7	1.3	.54	.42	.99
18	2.5	3.3	42	7.0	7.3	7.2	7.1	3.7	1.2	.52	.42	2.1
19	2.2	3.2	95	7.0	7.1	6.6	6.7	3.9	1.2	.81	.34	2.5
20	2.6	3.1	44	6.9	7.4	6.0	6.7	3.8	1.1	1.0	.23	1.8
21	2.6	4.8	19	6.8	6.8	5.5	7.1	3.5	1.2	.72	.18	1.4
22	2.3	4.5	12	6.6	6.6	5.3	7.0	3.1	1.2	.57	.14	1.2
23	2.1	3.9	9.6	6.6	6.4	5.0	5.9	2.8	1.1	.53	.12	1.2
24	2.1	8.0	8.2	6.5	6.2	4.8	5.1	2.7	1.3	.50	.09	1.1
25	2.1	12	7.4	6.2	6.1	4.9	4.8	2.9	1.9	.51	.09	.92
26	2.1	5.2	8.6	6.4	5.9	5.0	4.6	3.1	1.5	.40	.11	1.1
27	2.4	4.5	57	6.9	6.0	19	4.5	3.3	.96	.30	.11	1.5
28	2.7	4.6	38	9.9	6.0	45	4.5	3.1	.81	.21	.11	1.9
29	2.6	4.4	23	10	---	26	4.5	2.8	.77	.15	.10	1.9
30	2.4	4.2	18	7.4	---	17	4.3	2.8	.78	.17	.10	1.8
31	2.5	---	15	6.8	---	14	---	3.0	---	.26	.09	---
TOTAL	67.2	122.1	485.1	271.9	237.1	273.3	192.3	113.5	54.32	15.44	7.47	38.53
MEAN	2.17	4.07	15.6	8.77	8.47	8.82	6.41	3.66	1.81	.50	.24	1.28
MAX	3.4	12	95	21	27	45	11	4.9	5.6	1.0	.59	2.5
MIN	1.6	2.1	4.0	6.2	5.9	4.8	4.3	2.7	.77	.15	.09	.11
AC-FT	133	242	962	539	470	542	381	225	108	31	15	76
CAL YR 1984	TOTAL	2084.32	MEAN	5.71	MAX	95	MIN	.64	AC-FT	4130		
WTR YR 1985	TOTAL	1878.26	MEAN	5.15	MAX	95	MIN	.09	AC-FT	3730		

11056500 LITTLE SAN GORGONIO RIVER NEAR BEAUMONT, CA

LOCATION.--Lat 34°01'45", long 116°56'43", in SW 1/4 NW 1/4 sec.1, T.2 S., R.1 W., San Bernardino County, Hydrologic Unit 18070203, on right bank at upstream side of bridge on Oak Glen Road, 3.0 mi upstream from Wallace Creek, and 7 mi north of Beaumont.

DRAINAGE AREA.--1.74 mi².

PERIOD OF RECORD.--October 1948 to September 1985 (discontinued).

REVISED RECORDS.--WDR-CA-79-1: 1969(M).

GAGE.--Water-stage recorder and V-notched concrete control. Elevation of gage is 4,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 30, 1970 to Sept. 15, 1982, concrete control 20 ft downstream at same datum. Prior to July 30, 1970, at site 62 ft downstream on left bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 1-9, Oct. 31 to Nov. 6, Nov. 11-28, Jan. 11-15, Feb. 26 to Mar. 9, Mar. 18 to Apr. 1, Apr. 8-14, May 8 to June 11, June 12 to July 15, and Sept. 24-27. Records poor. No regulation above station. Several small diversions above station for irrigation. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--37 years, 0.65 ft³/s, 471 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s, Feb. 25, 1969, gage height, 8.50 ft, from flood-marks on basis of slope-area measurement of peak flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20 ft³/s and maximum (*), from rating curve extended above 4.0 ft³/s on basis of slope-area measurement of peak flow at gage height 6.62 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0730	*13	*5.77				

No flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.34	.67	.71	.61	.49	.35	.34	.38	.06	.07	0
2	.40	.34	.53	.83	.54	.48	.41	.38	.39	.06	.07	0
3	.40	.33	.70	1.5	.53	.47	.50	.41	.41	.06	.06	0
4	.41	.33	.52	1.5	.55	.46	.61	.44	.39	.05	.07	.02
5	.42	.33	.51	.70	.84	.46	.47	.39	.35	.05	.07	.07
6	.42	.34	.38	.92	1.4	.45	.69	.40	.30	.05	.06	.03
7	.43	.37	.49	1.4	3.8	.45	.50	.41	.28	.04	.05	.01
8	.43	.51	.92	2.0	6.0	.47	.50	.34	.25	.04	.04	0
9	.43	.57	1.2	3.4	4.0	.52	.50	.32	.23	.04	.04	.01
10	.53	.59	.80	3.1	2.0	.58	.49	.30	.22	.04	.05	.02
11	.45	.60	.73	.70	1.6	.63	.49	.30	.21	.04	.05	.04
12	.52	.60	.80	.72	1.3	.52	.48	.30	.20	.04	.05	.02
13	.47	.60	.74	.74	1.1	.51	.48	.30	.18	.04	.05	.01
14	.42	.60	.84	.76	1.2	.37	.48	.30	.17	.04	.05	.02
15	.47	.60	.47	.76	1.0	.34	.48	.30	.16	.08	.04	0
16	.41	.60	.45	.79	1.0	.32	.46	.30	.15	.04	.03	.01
17	.36	.60	.91	.92	1.0	.30	.46	.30	.14	.06	.04	.01
18	.35	.62	1.5	.79	.92	.30	.67	.30	.13	.23	.03	.15
19	.33	.64	4.1	.83	.56	.30	.69	.30	.12	.42	.03	.13
20	.38	.66	2.0	.92	.54	.30	1.1	.30	.11	.16	.02	.02
21	.33	.66	1.1	.97	.41	.30	.92	.30	.11	0	.02	.02
22	.36	.68	.97	.89	.65	.30	.53	.30	.10	0	.02	.01
23	.37	.68	.84	1.0	.53	.30	.50	.30	.10	.04	.01	.01
24	.43	.70	.48	.85	.44	.30	.50	.30	.09	.11	.01	.03
25	.39	4.0	.45	1.1	.43	.30	.37	.31	.09	.11	0	.04
26	.44	1.5	.55	.82	.47	.30	.41	.32	.08	.09	.01	.06
27	.44	.40	2.1	.57	.49	2.0	.40	.32	.08	.09	0	.06
28	.40	.40	1.5	1.1	.49	1.9	.42	.33	.07	.08	0	.06
29	.37	.48	1.3	.79	---	1.5	.37	.34	.07	.08	0	.04
30	.37	.62	1.8	.58	---	.80	.34	.35	.07	.08	0	.03
31	.35	---	1.3	.61	---	.80	---	.37	---	.08	0	---
TOTAL	12.68	20.29	31.65	33.27	34.40	17.52	15.57	10.27	5.63	2.40	1.04	0.93
MEAN	.41	.68	1.02	1.07	1.23	.57	.52	.33	.19	.077	.034	.031
MAX	.53	4.0	4.1	3.4	6.0	2.0	1.1	.44	.41	.42	.07	.15
MIN	.33	.33	.38	.57	.41	.30	.34	.30	.07	0	0	0
AC-FT	25	40	63	66	68	35	31	20	11	4.8	2.1	1.8

CAL YR 1984	TOTAL	372.35	MEAN	1.02	MAX	4.1	MIN	.18	AC-FT	739
WTR YR 1985	TOTAL	185.65	MEAN	.51	MAX	6.0	MIN	0	AC-FT	368

SANTA ANA RIVER BASIN

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA

LOCATION.--Lat 34°03'46", long 117°16'16", in NE 1/4 NW 1/4 sec.26, T.1 S., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 200 ft upstream of Redlands Boulevard bridge, and 0.6 mi northwest of Loma Linda.

DRAINAGE AREA.--125 mi².

PERIOD OF RECORD.--October 1954 to September 1965, February 1968 to October 1973, April 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,030 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to April 1979, water-stage recorders at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records fair. No regulation above station. Natural flow affected by pumping and return flow from irrigated areas.

AVERAGE DISCHARGE.--22 years (1955-65, 1969-73, 1980-85), 2.86 ft³/s, 2,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s, Feb. 25, 1969, gage height, 8.2 ft from floodmark, from rating curve extended above 2,100 ft³/s on basis of slope-conveyance study of peak flow, at site and datum then in use; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0745	*586	*4.51	Dec. 27	2330	396	4.16

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	1.1	.50	0	0	0	1.0	.47	.12	.24	.53	.05
2	1.4	1.8	.37	0	5.4	.29	1.2	.22	.61	.56	.46	.39
3	.88	2.3	.70	0	.01	.66	2.9	0	1.1	.66	.19	.21
4	.30	2.2	.86	0	0	.74	2.8	0	.39	.13	.46	.55
5	.12	2.7	.98	0	0	.29	.72	.03	.80	.28	.94	1.8
6	.44	3.0	.61	0	0	.05	.35	.13	.84	.22	.67	1.7
7	.45	2.3	.07	1.4	0	.06	.49	.33	.18	.40	.17	.44
8	.15	2.6	4.1	2.4	0	.04	1.3	1.0	.20	1.0	.13	.98
9	.16	1.2	.53	0	11	.62	.28	1.8	.20	.87	.03	.49
10	.06	.55	.40	0	.10	.95	0	.37	.21	.47	.06	.04
11	.34	1.1	1.8	0	0	1.1	.19	.09	.45	.01	.52	.43
12	1.5	1.3	1.1	0	0	.45	.39	.08	.31	.07	1.4	.69
13	.17	3.7	.63	0	0	.46	1.3	2.0	.33	.35	1.3	.74
14	1.5	2.9	.62	0	0	.83	.70	1.9	1.5	.32	1.1	.57
15	2.5	3.2	.63	0	0	1.3	.82	1.4	2.6	.57	.66	.72
16	3.6	2.5	5.1	0	0	.65	.80	1.6	2.3	.60	.75	.80
17	5.2	1.7	2.0	0	0	1.3	.51	1.5	1.9	.46	.63	1.3
18	3.7	.76	35	0	0	6.2	.46	.63	.99	.25	.30	1.8
19	1.7	.24	154	0	0	2.4	.16	.58	.21	.15	0	.14
20	1.1	.75	33	0	0	2.4	.03	2.4	.56	.05	0	.21
21	.59	1.7	1.1	0	0	2.4	.13	1.0	.38	.06	0	.17
22	.70	.23	.15	0	0	2.9	.04	1.0	.49	.06	0	.08
23	1.1	.85	.10	0	0	2.7	.11	2.0	.99	.44	.01	.08
24	1.4	3.8	0	0	0	2.2	.09	2.1	.53	.08	.05	.19
25	1.4	3.1	0	0	0	.83	.24	1.5	.96	.25	.03	.05
26	1.2	.92	11	.46	0	.10	.03	1.4	1.5	.05	.31	.04
27	.41	.41	76	0	0	3.9	0	.75	.42	.02	.14	.02
28	.63	.80	27	8.6	0	6.1	0	1.0	.35	.08	.02	.05
29	1.2	1.3	.94	.54	---	2.1	0	.42	.17	.03	0	.25
30	.62	1.1	.39	0	---	1.9	.01	.42	.04	.10	.26	.29
31	.60	---	0	0	---	1.2	---	.24	---	.31	0	---
TOTAL	36.00	52.11	359.68	13.40	16.51	47.12	17.05	28.36	21.63	9.14	11.12	15.27
MEAN	1.16	1.74	11.6	.43	.59	1.52	.57	.91	.72	.29	.36	.51
MAX	5.2	3.8	154	8.6	11	6.2	2.9	2.4	2.6	1.0	1.4	1.8
MIN	.06	.23	0	0	0	0	0	0	.04	.01	0	.02
AC-FT	71	103	713	27	33	93	34	56	43	18	22	30
CAL YR 1984	TOTAL	602.36	MEAN	1.65	MAX	154	MIN	0	AC-FT	1190		
WTF YR 1985	TOTAL	627.39	MEAN	1.72	MAX	154	MIN	0	AC-FT	1240		

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°10'45", long 117°15'53", in NE 1/4 NE 1/4 sec.14, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 1000 ft upstream from Del Rosa Water Co.'s diversion, 0.5 mi south of Arrowhead Springs, and 1.0 mi downstream from Strawberry Creek.

DRAINAGE AREA.--8.80 mi².

PERIOD OF RECORD.--December 1919 to current year. Prior to October 1952, published as Strawberry Creek near Arrowhead Springs.

GAGE.--Water-stage recorder. Elevation of gage is 1,590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 3-5, Dec. 21-26, Dec. 29 to Feb. 5, Mar. 29 to Apr. 3, and May 5, 6. Records fair except for estimated daily discharges which are poor. No regulation above station. One small diversion for domestic use above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--65 years (water years 1921-85), 4.95 ft³/s, 3,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,710 ft³/s, Jan. 29, 1980, gage height, 8.35 ft, on basis of slope-area measurement of peak flow; no flow at times in 1929, 1931-35.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*), from rating curve extended above 120 ft³/s on basis of slope-area measurement at gage height 8.35 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0300	*156	*3.50	Feb. 9	1115	70	3.17
Dec. 27	2230	72	3.14	Mar. 27	1300	85	3.21

Minimum daily, 0.42 ft³/s, Aug. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	2.2	2.2	2.3	3.3	2.8	4.1	2.4	1.9	.71	.57	.57
2	2.1	1.8	2.3	2.1	4.4	3.3	3.9	2.3	1.9	.68	.52	.64
3	2.1	1.8	2.5	2.1	4.1	3.2	3.8	2.5	3.4	.63	.52	.73
4	2.3	1.6	2.4	2.1	3.9	3.0	3.7	2.7	2.0	.62	.52	1.1
5	1.8	1.5	2.4	1.9	3.8	3.7	3.6	2.7	1.7	.65	.47	1.1
6	1.6	1.9	2.0	1.9	3.8	3.6	3.3	2.7	1.4	.74	.48	1.1
7	1.2	2.1	2.2	2.3	3.8	3.4	3.3	2.9	1.2	.68	.47	1.1
8	1.1	8.8	5.8	6.4	3.9	3.2	2.9	2.8	1.0	.60	.47	.97
9	1.3	2.2	2.8	5.1	2.9	3.2	2.8	3.1	1.0	.73	.49	1.1
10	1.4	1.5	2.6	4.0	8.8	3.5	2.9	3.4	1.0	.76	.52	1.1
11	1.5	1.3	4.0	3.5	5.4	3.4	3.0	3.2	1.1	.62	.54	1.7
12	1.5	1.3	2.7	3.2	4.5	3.2	3.0	3.0	1.1	.60	.58	1.2
13	1.2	1.1	2.7	3.0	3.8	3.2	2.9	2.7	1.1	.59	.68	.90
14	1.3	2.6	2.5	2.9	3.4	3.0	2.9	2.5	1.1	.55	.63	.83
15	1.3	1.9	2.7	2.8	3.2	2.9	3.6	2.5	1.1	.59	.57	.83
16	1.3	1.9	6.4	2.7	3.1	2.8	3.7	2.4	1.0	.67	.56	.85
17	5.2	1.7	3.2	2.7	3.2	2.9	3.9	2.6	.99	.60	.66	.90
18	2.2	2.2	4.7	2.6	3.2	2.9	4.5	2.5	1.0	.67	.66	2.1
19	1.9	1.7	6.1	2.4	3.0	2.5	3.6	2.8	.97	.70	.58	1.6
20	2.3	1.5	1.3	2.3	3.4	2.4	3.9	2.6	.95	.68	.54	1.3
21	2.3	5.1	4.6	2.2	3.1	2.2	3.5	2.2	1.0	.61	.51	1.2
22	1.8	2.8	3.8	2.2	3.1	2.2	3.4	2.0	1.0	.58	.51	1.1
23	1.6	2.3	3.5	2.1	3.1	2.0	2.9	1.9	.94	.63	.45	1.0
24	1.7	1.0	3.3	2.1	3.0	1.9	2.6	1.9	1.2	.64	.49	.91
25	1.5	8.8	3.3	2.0	3.0	1.8	2.5	1.9	1.3	.66	.49	.87
26	1.5	3.5	5.6	1.9	2.9	2.0	2.5	2.0	1.0	.59	.42	.98
27	1.8	2.9	1.8	1.9	2.9	1.6	2.3	2.0	.81	.51	.63	1.2
28	2.1	2.9	1.1	3.5	2.9	3.6	2.6	1.8	.70	.52	.68	1.3
29	2.1	2.5	5.8	5.0	---	1.3	2.6	1.8	.72	.53	.57	1.5
30	1.9	2.3	3.2	4.0	---	6.0	2.5	1.8	.92	.57	.56	1.3
31	2.4	---	2.7	3.5	---	4.5	---	1.8	---	.58	.51	---
TOTAL	57.0	95.6	237.2	88.7	129.0	149.7	96.7	75.4	36.50	19.49	16.85	33.08
MEAN	1.84	3.19	7.65	2.86	4.61	4.83	3.22	2.43	1.22	.63	.54	1.10
MAX	5.2	11	61	6.4	29	36	4.5	3.4	3.4	.76	.68	2.1
MIN	1.1	1.3	2.0	1.9	2.9	1.8	2.3	1.8	.70	.51	.42	.57
AC-FT	113	190	470	176	256	297	192	150	72	39	33	66
CAL YR 1984	TOTAL	1433.33	MEAN	3.92	MAX	61	MIN	.77	AC-FT	2840		
WTR YR 1985	TOTAL	1035.22	MEAN	2.84	MAX	61	MIN	.42	AC-FT	2050		

SANTA ANA RIVER BASIN

11058600 WATERMAN CANYON CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°11'36", long 117°16'25", in NW 1/4 NW 1/4 sec.11, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 0.8 mi northwest of Arrowhead Springs, and 1.3 mi north of San Bernardino National Forest boundary.

DRAINAGE AREA.--4.65 mi².

PERIOD OF RECORD.--November 1911 to October 1914 (published as "near San Bernardino"), December 1919 to September 1985 (discontinued).

GAGE.--Water-stage recorder. Broad-crested weir since September 1938. Datum of gage is 2,045.46 ft above National Geodetic Vertical Datum of 1929. Prior to December 1919, nonrecording gage at site 300 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Dec. 7, Jan. 14-30, Feb. 27, 28, and June 19 to Sept. 30. Records fair. No regulation above station. One small diversion for domestic use above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--67 years (water years 1913-14, 1921-85), 2.86 ft³/s, 2,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1920).--Maximum discharge, 2,350 ft³/s, Mar. 2, 1938, based on rainfall-runoff studies; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1900	38	2.69	Mar. 28	1145	*89	*2.97

Minimum daily, 0.37 ft³/s, Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	1.2	1.2	3.2	2.1	2.3	2.5	1.6	1.2	.68	.52	.39
2	1.0	1.1	1.3	3.0	2.4	2.5	2.4	1.7	1.4	.64	.48	.42
3	1.1	1.0	1.5	2.9	2.2	2.3	2.3	1.5	2.6	.62	.47	.46
4	1.2	.94	1.4	2.8	2.1	2.3	2.3	1.6	2.2	.60	.46	.60
5	1.1	.90	1.4	2.8	2.0	2.3	2.2	1.6	2.0	.64	.45	.70
6	.89	.90	1.1	2.7	2.0	2.3	2.1	1.6	1.7	.64	.45	.70
7	.72	.90	1.2	3.8	2.0	2.3	2.0	1.5	.92	.62	.45	.70
8	.64	5.2	1.9	5.6	2.0	2.3	2.0	1.5	1.0	.60	.46	.66
9	.67	2.0	1.5	3.1	9.7	2.2	2.0	1.4	.96	.62	.47	.70
10	.72	.94	1.5	2.9	3.5	2.1	1.9	1.5	.97	.68	.47	.74
11	.76	.80	1.7	2.8	2.7	2.1	1.9	1.5	.97	.62	.49	.92
12	.80	.74	1.5	2.7	2.5	2.1	1.8	1.5	.93	.58	.52	.82
13	.70	6.2	1.5	2.7	2.4	2.1	1.8	1.4	.91	.56	.58	.76
14	.68	2.8	1.5	2.5	2.6	2.2	1.8	1.3	.92	.54	.56	.68
15	.68	1.2	1.4	2.3	2.8	2.1	1.8	1.3	.85	.52	.54	.68
16	.70	1.0	2.1	2.0	2.2	2.1	1.8	1.3	.79	.54	.52	.74
17	3.2	.90	2.7	1.9	2.2	2.1	1.9	1.3	.79	.52	.60	.78
18	1.1	1.2	17	1.8	2.2	2.4	2.5	1.3	.81	.56	.60	1.5
19	1.0	.90	20	1.8	2.2	2.2	2.3	1.6	.80	.60	.56	1.3
20	1.2	.80	10	1.7	2.3	2.2	2.4	1.6	.78	.56	.52	1.1
21	1.2	2.8	5.3	1.7	2.2	2.2	2.4	1.4	.72	.54	.49	1.0
22	1.0	2.0	3.6	1.6	2.2	2.1	2.5	1.3	.70	.52	.46	.90
23	.84	1.2	3.0	1.6	2.1	2.1	2.1	1.3	.74	.54	.45	.86
24	.88	5.6	2.7	1.5	2.2	2.0	1.9	1.2	.76	.56	.43	.82
25	.82	5.0	2.6	1.4	2.3	2.0	1.8	1.3	.80	.60	.45	.78
26	.80	1.9	4.5	1.4	2.2	2.0	1.9	1.3	.74	.54	.41	.80
27	.80	1.8	13	1.4	2.2	11	1.7	1.3	.72	.50	.44	.86
28	1.1	1.7	7.0	1.3	2.3	36	1.8	1.2	.68	.50	.50	.94
29	1.1	1.5	4.9	4.0	---	8.4	1.8	1.2	.68	.52	.46	1.0
30	1.1	1.3	3.9	2.3	---	3.7	1.6	1.2	.74	.54	.41	.96
31	1.3	---	3.4	2.1	---	2.8	---	1.3	---	.56	.37	---
TOTAL	30.62	56.42	127.3	75.3	71.8	118.8	61.2	43.6	30.78	17.86	15.04	24.27
MEAN	.99	1.88	4.11	2.43	2.56	3.83	2.04	1.41	1.03	.58	.49	.81
MAX	3.2	6.2	20	5.6	9.7	36	2.5	1.7	2.6	.68	.60	1.5
MIN	.64	.74	1.1	1.3	2.0	2.0	1.6	1.2	.68	.50	.37	.39
AC-FT	61	112	252	149	142	236	121	86	61	35	30	48

CAL YR 1984	TOTAL	786.36	MEAN	2.15	MAX	20	MIN	.40	AC-FT	1560
WTR YR 1985	TOTAL	672.99	MEAN	1.84	MAX	36	MIN	.37	AC-FT	1330

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°03'54", long 117°17'58", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, 0.4 mi downstream from E Street bridge, 1.2 mi downstream from San Timoteo Creek, 0.4 mi upstream from Warm Creek, 2.8 mi south of San Bernardino, and 26 mi downstream from Big Bear Lake.

DRAINAGE AREA.--541 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1939 to September 1954, October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 940 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 10, 1950, water-stage recorder on right bank 0.4 mi upstream at datum 964.50 ft above NGVD. Nov. 11, 1950 to Sept. 30, 1954, water-stage recorder on both banks 0.4 mi upstream at datum 964.50 ft above NGVD. Oct. 1, 1966 to Sept. 30, 1976, water-stage recorder on right bank 0.4 mi upstream at datum 954.50 ft above NGVD. Oct. 1, 1976 to Sept. 30, 1977, gage was removed for channel construction. Oct. 1, 1977 to Jan. 28, 1981, water-stage recorder on right bank 0.5 mi upstream at elevation 950 ft above NGVD, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 2-16, Jan. 5-7, Apr. 30 to May 9, and Sept. 23, 24. Records poor. Flow partly regulated by Big Bear Lake (station 11049000). Natural flow of stream affected by ground-water withdrawals and diversion for domestic use and irrigation above station. Effluent from sewage reclamation plant 1.0 mi upstream has caused sustained flow past gage since 1967. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--15 years (water years 1940-54), 12.5 ft³/s, 9,050 acre-ft/yr; 19 years (water years 1967-85), 102 ft³/s, 73,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s, Feb. 25, 1969, gage height, 11.9 ft, site and datum then in use; maximum gage height, 16.50 ft, Jan. 23, 1943, site and datum then in use, discharge uncertain, but was probably less than 8,000 ft³/s; no flow many days prior to 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0830	*1,260	*5.28	Dec. 27	0700	1,150	5.23

Minimum daily, 28 ft³/s, Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	47	57	70	90	64	59	45	51	41	42	30
2	52	44	60	72	173	70	61	46	51	40	42	37
3	52	43	50	70	98	66	59	46	52	41	42	38
4	52	43	51	63	98	68	56	47	53	39	40	38
5	52	44	50	63	92	66	55	47	53	38	42	47
6	52	43	50	63	98	66	57	48	55	38	43	44
7	52	43	49	96	95	64	56	48	53	37	41	42
8	52	53	103	242	90	67	56	49	51	39	42	45
9	52	51	38	96	362	74	53	49	51	39	42	39
10	52	48	43	86	144	72	52	49	52	38	42	39
11	52	45	60	86	108	66	50	49	51	36	40	45
12	52	46	57	86	101	65	52	48	52	37	42	46
13	52	96	45	86	98	63	52	51	52	37	44	46
14	52	48	53	80	95	61	51	52	53	37	43	35
15	52	54	54	62	93	63	50	49	53	40	44	33
16	52	55	125	61	78	59	47	45	51	40	44	32
17	55	62	64	62	75	59	48	51	52	38	36	32
18	47	59	364	66	69	112	52	51	53	38	35	45
19	49	56	861	68	68	57	50	51	53	38	37	42
20	49	57	362	72	72	50	51	53	54	60	32	33
21	49	59	98	72	80	50	47	52	53	44	37	33
22	45	46	80	75	74	51	55	52	55	46	39	32
23	39	48	66	90	70	50	53	55	53	45	38	31
24	49	113	60	76	63	49	45	54	55	40	36	31
25	43	186	52	76	68	50	46	51	55	40	35	30
26	42	77	79	73	71	48	45	49	52	41	37	29
27	43	54	548	74	65	140	44	49	45	40	37	30
28	45	60	242	176	61	237	45	51	43	39	49	29
29	42	63	92	112	---	107	45	50	42	41	46	28
30	42	55	70	90	---	67	45	50	41	41	45	29
31	46	---	58	84	---	62	---	49	---	42	53	---
TOTAL	1511	1798	4041	2648	2749	2243	1537	1536	1540	1250	1267	1090
MEAN	48.7	59.9	130	85.4	98.2	72.4	51.2	49.5	51.3	40.3	40.9	36.3
MAX	55	186	861	242	362	237	61	55	55	60	53	47
MIN	39	43	38	61	61	48	44	45	41	36	32	28
AC-FT	3000	3570	8020	5250	5450	4450	3050	3050	3050	2480	2510	2160
CAL YR 1984	TOTAL	22198	MEAN	60.7	MAX	861	MIN	26	AC-FT	44040		
WTR YR 1985	TOTAL	23210	MEAN	63.6	MAX	861	MIN	28	AC-FT	46040		

SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983 to current year.

WATER TEMPERATURES: November 1982 to current year.

SEDIMENT RECORDS: Water years 1983 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1982 to September 1983.

SEDIMENT RECORDS: October 1982 to September 1983.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					
02...	1035	52	25.5	15	2.1
16...	1455	58	24.0	124	19
29...	1305	52	24.5	13	1.8
NOV					
08...	0922	60	21.5	190	31
13...	1005	56	22.0	24	3.6
20...	0725	29	17.0	46	3.6
26...	1330	85	19.0	232	53
DEC					
03...	1450	60	19.0	47	7.6
12...	1030	71	18.0	210	40
19...	0815	1390	13.0	36800	138000
19...	0930	1130	12.0	29100	88600
26...	1305	52	18.0	133	19
27...	1035	604	10.0	1410	2300
27...	1135	604	10.0	1360	2220
27...	1235	530	12.0	2240	3210
27...	1255	495	12.0	2010	2690
JAN					
07...	1155	86	17.5	161	37
16...	1335	75	18.5	60	12
21...	1430	75	19.0	30	6.1
FEB					
05...	1350	92	18.0	57	14
09...	0935	630	11.0	1680	2860
MAR					
01...	1440	77	20.5	12	2.5
18...	1100	72	19.5	19	3.7
28...	1400	451	--	1280	1560
APR					
01...	1400	65	--	20	3.5
25...	1025	60	22.0	196	32
MAY					
06...	1600	47	24.5	14	1.8
28...	1200	58	25.0	19	3.0
JUN					
25...	1145	54	26.0	8	1.2
JUL					
08...	1930	43	29.0	6	0.7
AUG					
19...	1215	43	28.0	8	0.93
SEP					
21...	120	50	28.0	10	1.4

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC								
19...	0930	1130	12.0	29100	88600	21	25	37
27...	1235	530	12.0	2240	3210	26	39	49
SED. SED. SED. SED. SED. SED. SED.								
SUSP. SUSP. SUSP. SUSP. SUSP. SUSP. SUSP.								
FALL FALL FALL FALL FALL FALL FALL								
DIAM. DIAM. DIAM. DIAM. DIAM. DIAM. DIAM.								
% FINER % FINER % FINER % FINER % FINER % FINER % FINER								
THAN THAN THAN THAN THAN THAN THAN								
.016 MM .031 MM .062 MM .125 MM .250 MM .500 MM 1.00 MM								
DEC								
19...		51	66	81	96	99	100	--
27...		56	61	67	75	89	99	100

11060400 WARM CREEK NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°04'42", long 117°17'58", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank 0.2 mi downstream from Interstate 215 bridge, and 2.0 mi southwest of San Bernardino.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--February 1964 to September 1972, October 1974 to current year.

REVISED RECORDS.--WDR CA-83-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 960 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1974, at site 0.1 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Mar. 14-17. Records good. Natural channel prior to September 1972; concrete-lined channel October 1974 to current year. Possible regulation at high flows by flood control gates on Warm Creek Floodway, 3.0 mi upstream. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years (water years 1965-72), 1.61 ft³/s, 1,170 acre-ft/yr; 11 years (water years 1975-85), 20.1 ft³/s, 14,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s, estimated, Mar. 1, 1978, gage height unknown; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 649 ft³/s, Dec. 18, gage height, 2.35 ft; minimum daily, 16 ft³/s, Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	28	26	23	30	46	29	26	22	21	19	16
2	23	28	26	23	59	55	31	26	22	21	19	17
3	25	28	27	24	28	42	31	26	23	20	19	17
4	24	28	26	25	28	42	31	26	22	19	19	18
5	25	28	28	25	29	44	31	26	23	19	19	23
6	25	28	28	26	30	36	31	25	23	19	19	21
7	25	28	29	47	31	31	31	25	22	20	18	20
8	25	43	68	57	31	30	31	25	21	20	18	19
9	26	28	28	25	127	29	31	25	21	20	18	21
10	26	28	30	25	29	30	31	25	21	19	18	23
11	26	28	34	24	29	28	30	25	20	20	18	25
12	26	28	30	24	31	23	31	25	19	20	18	21
13	26	44	29	25	31	24	31	24	20	21	18	21
14	26	24	28	26	31	24	31	24	21	20	18	21
15	27	25	28	27	33	24	31	26	21	20	18	22
16	26	25	56	27	33	24	29	26	21	19	19	22
17	36	26	29	28	35	24	29	25	21	19	19	21
18	26	26	176	30	35	69	31	25	21	19	18	29
19	28	26	120	33	37	26	31	25	21	21	18	24
20	28	26	44	32	36	26	31	24	21	19	19	21
21	28	33	22	31	34	26	31	24	21	19	18	21
22	28	26	22	31	35	26	30	23	21	19	18	21
23	27	26	22	32	35	26	30	23	21	19	19	21
24	28	70	23	32	37	27	29	23	21	19	19	21
25	28	26	23	33	39	28	28	23	20	19	18	21
26	28	25	63	38	41	27	28	23	20	20	19	20
27	28	25	133	32	43	91	27	23	21	19	21	21
28	28	27	24	89	44	63	27	23	21	19	20	21
29	28	27	23	30	---	26	26	23	21	20	19	20
30	28	26	23	29	---	26	26	23	21	19	19	20
31	28	---	23	30	---	27	---	22	---	19	17	---
TOTAL	829	884	1291	983	1061	1070	895	757	634	607	576	629
MEAN	26.7	29.5	41.6	31.7	37.9	34.5	29.8	24.4	21.1	19.6	18.6	21.0
MAX	36	70	176	89	127	91	31	26	23	21	21	29
MIN	23	24	22	23	28	23	26	22	19	19	17	16
AC-FT	1640	1750	2560	1950	2100	2120	1780	1500	1260	1200	1140	1250

CAL YR 1984 TOTAL 9855
WTR YR 1985 TOTAL 10216

MEAN 27.0 MAX 176 MIN 19
MEAN 28.0 MAX 176 MIN 16

AC-FT 19550
AC-FT 20260

SANTA ANA RIVER BASIN

11062000 LYTLE CREEK NEAR FONTANA, CA

LOCATION.--Lat 34°12'44", long 117°27'26", in NW 1/4 SE 1/4 sec.36, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 75 ft upstream from highway culvert crossing, 0.7 mi upstream from right tributary, 2.3 mi downstream from Lytle Creek conduit, and 8 mi north of Fontana.

DRAINAGE AREA.--46.6 mi².

PERIOD OF RECORD.--October 1918 to current year. Combined records of Lytle Creek and diversions, October 1898 to December 1899, October 1904 to current year (published as "at mouth of canyon near Rialto" 1898-99, as "near San Bernardino" 1904-18, and as Lytle Creek and Fontana pipeline near Fontana 1919-31). Monthly discharge only for some periods published in WSP 1315-B.

REVISED RECORDS.--WDR CA-83-1: Drainage area.

GAGE.--Water-stage recorder on creek. Dual arch-culvert control since 1964. Water-stage recorders and sharp-crested weirs on conduit since June 3, 1949, and infiltration line since Oct. 1, 1971. Elevation of creek gage is 2,380 ft above National Geodetic Vertical Datum of 1929, from topographic map. October 1918 to Mar. 21, 1938, at site 1 mi downstream at different datum. Mar. 22, 1938 to Nov. 20, 1963, at site 75 ft downstream at datum 4.58 ft lower. Sharp-crested weirs at different datum.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 3, and Feb. 24 to Mar. 1. Records, creek only, fair, except for periods of estimated daily discharges which are poor; combined creek and diversion, fair. No regulation above station. Southern California Edison Company's Lytle Creek conduit diverts 2.3 mi upstream for power development, and Fontana Union Water Company collects water from an infiltration line upstream for irrigation. See schematic diagram of Santa Ana River basin. For records of combined discharge of Lytle Creek and diversions, see following page.

AVERAGE DISCHARGE.--Creek only: 67 years, 18.6 ft³/s, 13,480 acre-ft/yr.

Combined creek and diversions: 82 years (water years 1899, 1905-85), 45.7 ft³/s, 33,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,900 ft³/s, Jan. 25, 1969, gage height, 15.0 ft, from floodmark, from rating curve extended above 570 ft³/s on basis of slope-area measurements at gage heights 10.78 ft and 15.0 ft; no flow at times most years.

Combined creek and diversions: Maximum discharge, 35,900 ft³/s, Jan. 25, 1969; minimum daily, 0.12 ft³/s, June 21, 22, 1976.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Creek only Discharge (ft ³ /s)	Gage height (ft)	Combined Creek and Diversions Discharge (ft ³ /s)
Dec. 27	0600	*250	*4.44	*253

Creek only: No flow most of year.

Combined creek and diversions: Minimum daily, 15 ft³/s, Aug. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	18	4.6	1.5	.77					
2		0	0	15	5.8	4.9	.63					
3		0	0	14	4.4	4.0	.67					
4		0	0	12	3.6	3.5	.88					
5		0	0	11	3.3	3.3	1.0					
6		0	0	9.1	2.1	3.1	1.4					
7		0	0	10	1.2	3.2	1.9					
8		.50	0	16	0	2.3	2.3					
9		0	0	11	13	1.1	2.7					
10		0	0	8.8	6.1	.83	2.7					
11		0	.06	8.1	4.4	1.3	2.4					
12		0	0	9.4	3.5	.97	1.8					
13		7.6	0	9.7	2.9	.46	1.1					
14		0	0	7.6	2.6	.57	1.1					
15		0	.48	6.8	2.5	.37	1.2					
16		0	43	6.2	2.3	.26	1.3					
17		0	9.8	5.6	2.7	.21	1.6					
18		0	47	5.0	2.9	.94	1.6					
19		0	105	5.1	3.6	.68	.69					
20		0	72	4.9	4.3	.18	.35					
21		.01	4.2	5.2	4.7	.01	.40					
22		0	0	5.1	4.1	.17	0					
23		0	0	4.8	3.5	.03	0					
24		5.1	0	5.0	2.7	0	0					
25		4.8	0	5.0	2.2	.07	0					
26		0	7.2	4.8	1.9	0	0					
27		0	133	5.0	1.7	4.6	0					
28		0	55	6.9	1.6	5.4	0					
29		0	28	5.9	---	3.5	0					
30		0	24	5.1	---	2.5	0					
31		---	21	5.0	---	1.5	---					
TOTAL	0	18.01	549.74	251.1	98.2	51.45	28.49	0	0	0	0	0
MEAN	0	.60	17.7	8.10	3.51	1.66	.95	0	0	0	0	0
MAX	0	7.6	133	18	13	5.4	2.7	0	0	0	0	0
MIN	0	0	0	4.8	0	0	0	0	0	0	0	0
AC-FT	0	36	1090	498	195	102	57	0	0	0	0	0
CAL YR 1984	TOTAL	3359.92	MEAN	9.21	MAX	133	MIN	0	AC-FT	6660		
WTR YR 1985	TOTAL	996.99	MEAN	2.73	MAX	133	MIN	0	AC-FT	1980		

11062001 LYTLE CREEK NEAR FONTANA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LYTLE CREEK,
SOUTHERN CALIFORNIA EDISON CO.'S LYTLE CREEK CONDUIT, AND FONTANA UNION WATER
CO.'S INFILTRATION LINE, NEAR FONTANA, CA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	20	23	40	30	26	25	19	21	16	17	17
2	22	20	22	38	31	30	25	19	21	16	17	17
3	22	20	22	37	29	28	25	19	21	16	17	18
4	22	20	22	35	28	28	25	20	20	16	17	17
5	22	20	21	35	28	27	25	20	20	16	17	16
6	21	21	22	32	26	27	25	20	18	16	17	16
7	21	20	22	34	26	27	26	20	18	16	17	16
8	21	21	21	40	25	26	24	21	18	17	17	16
9	22	20	21	35	38	25	25	21	19	16	17	16
10	21	23	22	33	31	25	24	21	19	16	18	16
11	20	22	21	32	29	25	24	22	19	16	18	16
12	20	21	22	32	29	25	24	22	18	16	18	16
13	20	28	22	33	28	24	22	21	18	16	18	17
14	20	22	22	31	28	25	22	20	19	16	18	17
15	21	23	21	30	28	24	22	20	18	16	18	16
16	21	23	49	29	27	24	22	20	18	16	17	17
17	22	23	22	27	28	24	23	20	18	16	18	16
18	21	23	62	27	27	25	22	20	18	16	18	16
19	21	23	107	31	29	25	21	20	18	16	18	16
20	21	23	78	31	29	24	20	20	18	16	17	16
21	21	23	23	31	30	24	20	19	17	16	16	16
22	21	23	21	31	29	24	20	19	17	16	16	16
23	21	23	21	29	28	24	20	16	17	16	16	16
24	21	28	22	30	27	24	20	19	17	16	16	16
25	21	24	23	30	25	24	20	19	18	17	16	16
26	21	24	29	29	26	24	20	20	17	17	15	16
27	21	23	135	29	26	29	19	20	17	17	15	17
28	21	24	64	31	26	29	19	20	17	17	16	17
29	21	23	50	31	---	28	20	20	17	17	17	16
30	20	23	46	30	---	27	19	20	17	17	17	16
31	21	---	43	29	---	26	---	20	---	17	17	---
TOTAL	653	674	1121	992	791	797	668	617	548	504	526	490
MEAN	21.1	22.5	36.2	32.0	28.2	25.7	22.3	19.9	18.3	16.3	17.0	16.3
MAX	22	28	135	40	38	30	26	22	21	17	18	18
MIN	20	20	21	27	25	24	19	16	17	16	15	16
AC-FT	1300	1340	2220	1970	1570	1580	1320	1220	1090	1000	1040	972
CAL YR 1984	TOTAL	11748	MEAN	32.2	MAX	135	MIN	18	AC-FT	23300		
WTR YR 1985	TOTAL	8381	MEAN	23.0	MAX	135	MIN	15	AC-FT	16620		

11063500 LONE PINE CREEK NEAR KEENBROOK, CA

LOCATION.--Lat 34°15'59", long 117°27'47", in SE 1/4 SW 1/4 sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 50 ft upstream from the Atchison, Topeka, and Santa Fe Railway Co. bridge, 150 ft upstream from confluence with Cajon Creek, and 1.1 mi north of Keenbrook.

DRAINAGE AREA.--15.1 mi².

PERIOD OF RECORD.--December 1919 to September 1938, June 1949 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,605.92 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 2, 1938, water-stage recorder (destroyed by flood) and Mar. 2 to Sept. 30, 1938, nonrecording gage at same site at datum 0.98 ft higher.

REMARKS.--Estimated daily discharges: July 2 to Aug. 29. Records fair except for estimated daily discharges, which are poor. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--54 years (water years 1921-38, 1950-85) 1.90 ft³/s, 1,380 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,180 ft³/s, Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of peak flow; no flow Aug. 6-8, Sept. 29, 30, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 18	1315	*98	*2.74				
Minimum daily, 0.94 ft ³ /s, Sept. 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	1.9	2.4	2.8	2.1	1.8	1.9	1.6	1.2	1.2	1.1	1.0
2	2.4	1.8	2.3	2.7	2.2	2.0	1.9	1.6	1.2	1.2	1.1	1.0
3	2.4	1.7	2.2	2.7	2.1	1.9	1.9	1.6	1.2	1.2	1.0	1.0
4	2.5	1.6	2.1	2.7	2.1	1.8	1.7	1.6	1.2	1.2	1.0	1.1
5	2.4	1.8	2.1	2.7	2.1	1.8	1.6	1.6	1.2	1.2	1.0	1.0
6	2.5	1.9	2.1	2.6	2.1	1.7	1.6	1.5	1.1	1.2	1.0	1.0
7	2.4	1.9	2.0	2.7	2.1	1.9	1.6	1.5	1.1	1.2	1.0	1.0
8	2.3	2.3	2.3	2.8	2.1	1.9	1.7	1.5	1.2	1.2	1.0	1.0
9	2.3	2.2	2.2	2.5	2.5	1.9	1.6	1.5	1.4	1.2	1.0	1.0
10	1.8	2.2	2.2	2.5	2.1	1.9	1.5	1.5	1.2	1.2	1.0	1.1
11	1.7	2.2	2.2	2.5	2.0	1.9	1.5	1.4	1.2	1.1	1.0	1.0
12	1.7	2.2	2.3	2.4	2.0	1.9	1.5	1.4	1.2	1.1	1.0	1.0
13	1.7	3.6	2.3	2.3	2.0	1.9	1.5	1.4	1.3	1.1	1.0	1.0
14	1.5	3.3	2.3	2.4	2.0	1.9	1.6	1.4	1.3	1.1	1.0	.95
15	1.5	3.2	2.8	2.4	2.1	1.9	1.4	1.4	1.3	1.1	1.0	.95
16	1.6	3.2	5.2	2.2	2.0	1.8	1.5	1.4	1.2	1.3	1.0	.95
17	1.7	3.1	2.9	2.2	2.0	1.8	1.5	1.5	1.2	1.2	1.0	.95
18	1.6	3.1	19	2.2	2.0	1.7	1.5	1.4	1.2	1.2	1.0	1.0
19	1.6	2.9	16	2.4	2.0	1.7	1.5	1.4	1.2	1.2	1.0	.95
20	1.6	2.7	5.1	2.1	2.0	1.7	1.5	1.4	1.2	1.1	1.0	.95
21	1.6	2.7	2.7	2.1	2.0	1.7	1.6	1.3	1.2	1.1	1.1	.95
22	1.7	2.5	2.8	2.1	1.9	1.8	1.6	1.3	1.2	1.1	1.1	.95
23	1.8	2.4	2.9	2.1	2.0	1.8	1.5	1.3	1.3	1.1	1.1	.95
24	1.8	3.0	2.8	2.1	1.9	1.9	1.5	1.3	1.5	1.1	1.1	.95
25	1.9	2.9	2.8	2.1	1.8	1.9	1.6	1.3	1.5	1.1	1.1	.95
26	1.9	2.6	5.4	2.1	1.9	2.0	1.6	1.3	1.4	1.1	1.1	.95
27	2.0	2.6	17	2.0	1.9	2.4	1.6	1.2	1.4	1.1	1.1	.95
28	2.0	2.5	3.8	2.1	1.8	2.0	1.6	1.3	1.3	1.1	1.1	.95
29	2.0	2.3	3.0	2.1	---	2.0	1.6	1.3	1.1	1.1	1.1	.95
30	2.0	2.3	2.6	2.1	---	2.0	1.6	1.2	1.2	1.1	1.1	.94
31	1.9	---	2.6	2.1	---	2.0	---	1.2	---	1.1	1.1	---
TOTAL	60.2	74.6	130.4	72.8	56.8	58.3	47.8	43.6	37.4	35.6	32.3	29.39
MEAN	1.94	2.49	4.21	2.35	2.03	1.88	1.59	1.41	1.25	1.15	1.04	.98
MAX	2.5	3.6	19	2.8	2.5	2.4	1.9	1.6	1.5	1.3	1.1	1.1
MIN	1.5	1.6	2.0	2.0	1.8	1.7	1.4	1.2	1.1	1.1	1.0	.94
AC-FT	119	148	259	144	113	116	95	86	74	71	64	58
CAL YR 1984	TOTAL	1140.80	MEAN	3.13	MAX	19	MIN	1.50	AC-FT	2260		
WTR YR 1985	TOTAL	679.19	MEAN	1.86	MAX	19	MIN	.94	AC-FT	1350		

11063510 CAJON CREEK BELOW LONE PINE CREEK, NEAR KEENBROOK, CA

LOCATION.--Lat 34°16'04", long 117°27'58", in NW 1/4 NW 1/4 sec. 13, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 0.25 mi downstream from Lone Pine Creek, and 0.95 mi north of Keenbrook.

DRAINAGE AREA.--56.5 mi².

PERIOD OF RECORD.--October 1971 to September 1977. October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,600 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1971, to Sept. 30, 1977 at site 0.25 mi upstream at diversion dam at different datum.

REMARKS.--Estimated daily discharges: Oct. 4, 5, Dec. 21-28, Jan. 4-8, Feb. 17 to Mar. 4, Mar. 16 to Apr. 4, July 19, 20, and July 24 to Aug. 5. Records poor. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years (water years 1972-77, 1984-85), 8.20 ft³/s, 5,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s, Feb. 11, 1973, gage height, 13.50 ft, site and datum then in use; minimum daily, 2.2 ft³/s, Dec. 16, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*), from rating curve extended above 43 ft³/s on basis of slope-area measurements of peak flow at gage heights 5.40 ft, and 6.21 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	0215	311	5.42	Dec. 27	0100	302	5.40
Dec. 18	1345	415	*5.63	July 19	Unknown	*702	5.40

Minimum daily, 5.0 ft³/s, Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	6.8	7.3	28	14	9.0	8.8	8.0	6.4	5.5	5.4	5.8
2	6.8	6.9	7.5	22	13	10	8.6	8.1	6.3	5.9	5.4	6.0
3	6.6	6.8	7.5	18	11	9.8	8.4	7.9	6.4	6.5	5.4	7.7
4	6.7	6.5	7.5	17	10	9.7	8.3	7.5	6.3	6.5	5.3	8.5
5	6.7	6.2	7.6	16	10	9.4	8.2	7.5	6.3	6.8	5.3	8.0
6	6.7	6.4	7.7	16	10	9.9	7.6	7.5	6.1	6.7	5.1	8.2
7	6.7	6.6	7.9	15	9.6	10	7.5	7.4	6.0	6.2	5.4	7.2
8	6.7	7.1	8.0	15	9.3	10	7.9	7.4	6.4	5.3	5.4	5.7
9	6.8	6.9	7.6	15	11	10	8.2	7.6	8.2	5.4	5.7	5.0
10	6.9	6.8	7.7	16	8.0	9.3	8.3	7.5	7.5	5.5	5.5	5.8
11	7.2	6.8	7.7	15	8.0	8.9	8.3	7.5	7.6	5.5	5.7	6.3
12	7.1	6.9	7.6	16	8.1	8.1	8.3	7.4	7.7	5.5	6.0	6.1
13	7.1	8.7	8.5	16	8.7	8.2	8.4	7.4	7.9	5.6	6.4	5.8
14	6.9	8.3	9.8	17	8.5	8.3	8.5	7.3	8.0	5.9	6.3	5.8
15	6.7	8.3	13	17	8.7	8.4	8.2	6.9	7.9	6.2	6.9	6.0
16	6.8	8.3	42	17	8.4	8.4	8.4	6.5	6.5	6.2	6.3	6.3
17	7.0	8.3	13	18	8.6	8.2	8.5	6.4	6.3	6.2	6.1	7.1
18	6.9	8.3	78	18	8.6	8.5	8.6	6.3	6.5	6.2	6.1	7.6
19	7.1	8.2	78	17	9.0	8.8	8.7	6.6	6.7	26	6.0	6.8
20	7.1	8.3	36	16	10	8.4	8.6	6.5	6.4	6.6	6.1	6.0
21	7.0	8.9	17	15	9.6	8.4	8.6	6.3	6.7	5.5	5.7	6.1
22	6.8	8.5	15	15	9.6	8.4	8.5	6.4	6.6	5.8	5.6	5.9
23	6.9	8.5	14	14	9.4	8.2	8.4	6.4	6.3	6.2	6.2	5.9
24	7.0	9.5	13	15	9.4	8.3	8.3	6.4	6.4	6.0	6.4	5.8
25	6.7	8.0	12	15	9.4	8.4	8.4	6.5	6.4	6.0	6.0	5.8
26	6.9	7.9	30	15	9.2	8.6	8.5	6.6	6.3	5.8	6.3	6.1
27	6.9	7.9	70	11	9.2	11	8.1	6.5	6.4	5.8	6.9	6.2
28	6.8	8.0	43	15	9.0	10	8.1	6.3	6.6	5.8	6.9	6.5
29	6.7	7.5	40	15	---	9.5	8.4	6.4	6.4	5.6	6.1	6.5
30	6.8	7.2	35	14	---	9.2	8.3	6.5	6.0	5.6	6.3	5.9
31	6.9	---	33	14	---	8.9	---	6.5	---	5.6	6.1	---
TOTAL	212.6	229.3	691.9	503	267.3	280.2	249.9	216.0	201.5	203.9	184.3	192.4
MEAN	6.86	7.64	22.3	16.2	9.55	9.04	8.33	6.97	6.72	6.58	5.95	6.41
MAX	7.2	9.5	78	28	14	11	8.8	8.1	8.2	26	6.9	8.5
MIN	6.6	6.2	7.3	11	8.0	8.1	7.5	6.3	6.0	5.3	5.1	5.0
AC-FT	422	455	1370	998	530	556	496	428	400	404	366	382

CAL YR 1984	TOTAL	3698.5	MEAN	10.1	MAX	78	MIN	5.7	AC-FT	7340
WTR YR 1985	TOTAL	3432.3	MEAN	9.40	MAX	78	MIN	5.0	AC-FT	6810

11063680 DEVIL CANYON CREEK NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°12'30", long 117°19'50", in Muscupiabe Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank 0.6 mi downstream from confluence of East and West Forks, and 7.5 mi northwest of San Bernardino.

DRAINAGE AREA.--5.49 mi².

PERIOD OF RECORD.--November 1911 to September 1912, October 1913 to September 1914, December 1919 to current year. Monthly figures only for January 1914, published in WSP 1315-B.

GAGE.--Water-stage recorder on creek; flowmeter on diversion. Elevation of gage is 2,080 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to December 1919, nonrecording gage at site 0.5 mi downstream at different datum. December 1919 to July 1969, at site 0.4 mi downstream at different datum. July 1969 to September 1972, present gage used as supplementary gage. Oct. 1, 1973, to Feb. 25, 1974, supplementary gage at site 0.5 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1, 2, Oct. 31 to Nov. 8, Jan. 3-7, Aug. 18-30. Records fair. No regulation above station. City of San Bernardino diverts above station for municipal supply. See schematic diagram of Santa Ana River basin. Records given below are for creek only unless otherwise indicated.

COOPERATION.--Records of diversion were provided by city of San Bernardino.

AVERAGE DISCHARGE.--Creek only: 66 years (water years 1914, 1921-85), 2.31 ft³/s, 1,674 acre-ft/yr.
Combined creek and diversion: 52 years (water years 1914, 1935-85), 4.30 ft³/s, 3,115 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1913-14 AND SINCE 1919).--Maximum discharge, 3,720 ft³/s, Jan. 25, 1969, gage height, 5.40 ft, site and datum then in use, on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0200	*52	*5.72				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	2.3	2.2	1.7	.05	.03	0			
2	0	0	0	1.8	3.5	2.9	.03	.01	0			
3	0	0	0	1.7	3.8	3.2	.05	0	0			
4	0	0	0	1.4	3.8	1.9	.04	0	0			
5	0	0	0	1.4	2.5	1.9	.01	0	0			
6	0	0	0	1.4	1.8	1.8	0	.04	0			
7	0	0	0	3.1	2.6	1.9	0	.02	.15			
8	0	4.0	.16	7.0	2.8	1.6	0	0	.48			
9	0	1.6	0	5.3	11	1.4	0	0	0			
10	0	.01	0	5.1	5.9	1.3	0	1.0	0			
11	0	.06	0	4.8	4.1	.99	0	2.1	0			
12	0	.04	0	4.6	3.6	.71	0	1.3	0			
13	0	3.0	.04	4.3	3.6	.61	0	.01	0			
14	0	1.6	.20	3.9	2.7	.68	0	0	0			
15	0	1.8	0	3.3	2.8	.63	0	0	0			
16	.01	.05	1.8	3.1	2.9	.71	0	0	0			
17	0	.01	1.4	3.1	2.8	.60	0	0	0			
18	0	0	15	3.1	2.2	1.2	0	.22	0			
19	0	0	22	3.1	2.2	1.2	1.6	.36	0			
20	0	.81	10	3.1	2.9	.98	2.5	0	0			
21	0	1.9	5.0	2.9	2.7	.91	2.7	.66	0			
22	0	1.2	2.7	2.9	2.5	.78	1.3	.68	0			
23	0	.03	3.1	2.7	2.0	.53	1.4	0	0			
24	0	1.7	2.8	2.6	1.6	.46	.99	0	0			
25	0	2.2	2.6	2.4	1.6	.51	1.2	0	0			
26	0	.04	4.4	2.5	1.8	.47	2.0	0	0			
27	0	.01	19	2.7	1.8	4.2	2.3	0	0			
28	0	1.3	7.8	4.1	1.8	12	2.3	0	0			
29	0	1.6	5.4	3.8	---	4.1	.91	0	0			
30	0	.01	4.3	2.7	---	.23	.05	0	0			
31	0	---	2.6	2.4	---	.14	---	0	---			
TOTAL	0.01	22.97	110.30	98.6	85.5	52.24	19.43	6.43	0.63	0	0	0
MEAN	.000	.77	3.56	3.18	3.05	1.69	.65	.21	.021	0	0	0
MAX	.01	4.0	22	7.0	11	12	2.7	2.1	.48	0	0	0
MIN	0	0	0	1.4	1.6	.14	0	0	0	0	0	0
AC-FT	.02	46	219	196	170	104	39	13	1.2	0	0	0
a	152	172	346	313	247	267	222	218	166	131	114	119

CAL YR 1984 TOTAL 215.32 MEAN 0.59 MAX 22 MIN 0 AC-FT 429 a 2895
WTR YR 1985 TOTAL 396.11 MEAN 1.09 MAX 22 MIN 0 AC-FT 786 a 2463

^aCombined discharge, in acre-feet, of Devil Canyon Creek, and city of San Bernardino diversion.

11065000 LYTLE CREEK AT COLTON, CA

LOCATION.--Lat 34°04'44", long 117°18'17", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank 400 ft downstream from Colton Avenue, 1,930 ft upstream from outlet end of channel, and 1.3 mi northeast of Colton.

DRAINAGE AREA.--186 mi².

REVISED RECORDS.--WDR CA-83-1: Drainage area.

PERIOD OF RECORD.--October 1957 to September 1983, October 1984 to September 1985.

GAGE.--Water-stage recorder. Datum of gage is 974.67 ft above National Geodetic Vertical Datum of 1929, Corps of Engineers datum.

REMARKS.--Estimated daily discharges: Dec. 28 to Jan. 7, Sept. 5-30. Records poor. Flow partly regulated by Lytle Creek spreading grounds 3.2 mi upstream. Diversions above station for irrigation, power development, domestic use, and ground-water replenishment. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s, Mar. 4, 1978, gage height, 14.8 ft, from rating curve extended above 4,200 ft³/s on basis of discharge for design flood at gage height 21.4 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 348 ft³/s, Dec. 19, gage height, 2.14 ft; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	0	0	0	.24	0						0
2	.15	0	0	0	6.0	.35						0
3	.11	0	.11	0	1.0	.11						0
4	.05	0	.04	0	.50	.03						0
5	0	0	0	0	.33	0						0
6	0	0	0	0	.22	0						0
7	0	0	0	4.0	.14	0						0
8	0	1.7	7.3	18	.11	0						0
9	0	0	.07	3.0	46	0						0
10	0	0	0	1.3	.48	0						0
11	0	0	.11	.64	.07	0						.90
12	0	0	.03	.40	0	0						.56
13	0	3.8	0	.23	0	0						.20
14	0	.10	0	.11	0	0						0
15	0	.02	0	.05	0	0						0
16	0	0	7.8	0	0	0						0
17	0	0	.13	0	0	0						.29
18	0	0	78	0	0	6.2						.80
19	0	0	128	0	0	.18						.55
20	0	0	61	0	0	.11						.55
21	0	.18	33	0	0	.04						.53
22	0	.10	23	0	0	0						.50
23	0	0	16	0	0	0						.48
24	0	7.4	12	0	0	0						.45
25	0	.22	8.2	0	0	0						.62
26	0	.02	23	0	0	0						.49
27	0	0	152	0	0	14						.46
28	0	0	38	6.7	0	6.0						.56
29	0	0	0	1.7	---	.20						.57
30	0	0	0	.70	---	.11						.52
31	0	---	0	.39	---	0						---
TOTAL	0.53	13.54	587.79	37.22	55.09	27.33	0	0	0	0	0	9.03
MEAN	.017	.45	19.0	1.20	1.97	.88	0	0	0	0	0	.30
MAX	.22	7.4	152	18	46	14	0	0	0	0	0	.90
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	1.1	27	1170	74	109	54	0	0	0	0	0	18

WTR YR 1985 TOTAL 730.53 MEAN 2.00 MAX 152 MIN 0 AC-FT 1450

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA

LOCATION (REVISED).--Lat 33°58'07", long 117°26'51", in NE 1/4 SW 1/4 sec.30, T.2 S., R.5 W., Riverside County, Hydrologic Unit 18070203, on right bank at MWD pipeline crossing, 0.8 mi downstream from Union Pacific Railroad bridge, 1.1 mi upstream from bridge on Van Buren Boulevard, and 3.3 mi north of Arlington.

DRAINAGE AREA.--852 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 685 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 1984 water-stage recorder at site 300 ft upstream on left bank at different datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Apr. 15, Sept. 26-30. Records poor. Flow partly regulated by Big Bear Lake (station 11049000). Natural streamflow affected by ground-water withdrawals, diversions for irrigation, and return flows from irrigated areas. The records at this station are equivalent to those collected at 11066500 Santa Ana River at Riverside Narrows, near Arlington minus the flow at 11066480 Riverside Water Quality Control Plant at Riverside Narrows, near Arlington. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--15 years (water years 1971-85), 115 ft³/s, 83,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s, Mar. 2, 1983, gage height, 15.38 ft, site and datum then in use, from rating curve extended above 5,100 ft³/s on basis of area-velocity study; maximum gage height, 20.23 ft, Mar. 4, 1978; minimum daily, 15 ft³/s, Sept. 7, 8, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1927, 100,000 ft³/s, Mar. 2, 1938, on basis of slope-area measurement at site 1.1 mi downstream. Flood of Jan. 22, 1862, 320,000 ft³/s, by slope-conveyance study at site 8.2 mi upstream. Stage at that site was 5 ft higher than Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	Unknown	a *5,000	Unknown				

aEstimated

Minimum daily, 56 ft³/s, Aug. 26, 31 and Sept. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	75	98	140	140	125	93	76	84	79	66	56
2	66	71	96	135	270	132	96	76	83	75	59	62
3	67	70	115	132	155	125	92	69	83	75	73	66
4	68	70	106	128	145	120	89	69	83	75	66	76
5	68	70	100	125	142	118	88	73	83	75	62	76
6	69	71	95	133	142	116	90	73	84	74	66	93
7	69	73	91	148	142	115	90	80	84	74	62	84
8	69	84	190	375	141	120	91	80	76	74	62	84
9	69	80	100	155	560	128	92	84	84	74	62	80
10	68	75	98	145	220	122	92	84	88	73	66	84
11	67	72	118	138	170	117	93	80	88	73	59	88
12	67	72	110	133	160	113	93	93	88	73	66	102
13	67	150	91	131	152	112	93	90	84	69	69	88
14	67	77	103	128	140	110	93	88	88	76	69	88
15	66	85	107	125	135	110	93	88	90	76	59	80
16	66	89	240	123	130	109	93	88	93	80	62	69
17	88	97	128	121	128	108	93	88	88	76	62	69
18	82	91	660	120	125	180	97	88	97	76	62	69
19	78	89	1400	120	125	130	97	84	88	80	62	80
20	76	88	470	123	132	100	97	88	93	97	62	88
21	74	95	200	128	140	95	97	97	88	88	59	102
22	71	78	155	135	135	94	97	89	88	84	62	93
23	65	81	125	142	130	93	97	87	97	93	59	88
24	76	170	108	125	125	92	97	86	93	93	59	80
25	70	320	102	120	132	92	102	84	88	84	59	80
26	69	125	97	117	138	91	93	87	93	84	56	80
27	69	100	850	120	128	230	84	86	93	76	62	80
28	70	115	400	275	122	370	93	84	93	62	62	80
29	70	108	190	175	---	185	88	84	84	69	73	81
30	70	102	155	142	---	105	80	83	84	69	66	81
31	72	---	145	132	---	98	---	83	---	69	56	---
TOTAL	2179	2943	7043	4489	4504	3955	2783	2589	2630	2395	1949	2427
MEAN	70.3	98.1	227	145	161	128	92.8	83.5	87.7	77.3	62.9	80.9
MAX	88	320	1400	375	560	370	102	97	97	97	73	102
MIN	65	70	91	117	122	91	80	69	76	62	56	56
AC-FT	4320	5840	13970	8900	8930	7840	5520	5140	5220	4750	3870	4810
CAL YR 1984	TOTAL	35912	MEAN	98.4	MAX	1400	MIN	58	AC-FT	71230		
WTP YR 1985	TOTAL	39886	MEAN	109	MAX	1400	MIN	56	AC-FT	79110		

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

CHEMICAL ANALYSES: Water years 1970 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1969 to September 1978.

INSTRUMENTATION.--Specific-conductance recorder October 1969 to September 1978.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,320 microsiemens, Nov. 4, 1969; minimum recorded, 95 microsiemens, Nov. 27, 1970.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT					
05...	1105	63	1030	20.0	679
16...	0945	70	1060	15.0	674
NOV					
07...	1115	74	1060	19.5	697
20...	1230	78	1040	18.0	681
DEC					
03...	1112	107	1000	14.0	639
JAN					
02...	1205	137	920	14.0	593
16...	1005	133	988	11.5	629
FEB					
05...	1110	135	950	12.5	605
15...	1115	126	952	17.5	601
MAR					
01...	1150	117	996	19.0	648
18...	1115	110	998	15.5	642
APR					
01...	0930	102	990	18.5	644
16...	1230	82	1060	24.0	689
MAY					
06...	1215	--	1030	22.5	667
20...	1445	542	1060	12.0	274
JUN					
06...	1145	71	1040	29.5	653
26...	0955	80	1040	21.5	666
JUL					
12...	1015	60	1050	24.5	673
26...	0945	70	1020	24.5	648
AUG					
16...	1110	54	1040	24.0	657
30...	0900	76	1010	22.0	637

SANTA ANA RIVER BASIN

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA

LOCATION.--Lat 33°44'10", long 116°49'26", in NE 1/4 SE 1/4 sec.13, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on right bank 350 ft upstream from bridge on State Highway 74, 1 mi downstream from North Fork San Jacinto River, 8.3 mi southeast of San Jacinto, and 9 mi downstream from Lake Hemet.

DRAINAGE AREA.--141 mi².

PERIOD OF RECORD.--October 1920 to February 1927, March 1927 to current year. Records for Oct. 1, 1969, to Sept. 30, 1980 equivalent to prior records if lower diversion is deducted from flow past station. For the 1981 water year records are from the auxiliary gage below the lower diversion and are equivalent to records for March 1927 to Sept. 30, 1969. Combined records of river and diversion, October 1948 to current year. Monthly discharge only for October 1920 and July to September 1926, published in WSP 1315-B.

GAGE.--Water-stage recorder on river; water-stage recorder on upper canal. Datum of river gage is 1,982.75 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). See WSP 1735 for history of changes prior to Jan. 23, 1948. Oct. 1, 1969, to Sept. 30, 1980, at site 350 ft upstream at same datum. Canal gage at different datum.

REMARKS.--Estimated daily discharges: June 2 to July 11. Records fair. Flow partly regulated by Lake Hemet (station 11069000). Lake Hemet Municipal Water District's upper canal diverts 4.0 mi upstream from station. One small diversion for domestic use above station. Diversion above station began prior to 1920. Records of lower diversion are available at Lake Hemet Municipal Water District. See schematic diagram of Santa Ana River basin. Combined records are equivalent for period of record. For records of combined daily discharge of San Jacinto River and diversion, see following page.

AVERAGE DISCHARGE.--River only: 53 years (water years 1921-26, 1928-69, 1981-85), 19.3 ft³/s, 13,980 acre-ft/yr; 11 years (water years 1970-80), 29.0 ft³/s, 21,010 acre-ft/yr.
Combined river and diversion: 36 years (water years 1949-80, 1982-85), 26.6 ft³/s, 19,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 45,000 ft³/s, Feb. 16, 1927, on basis of slope-area measurement of peak flow; no flow for several months in some years.
Combined river and diversion: Maximum discharge, 17,300 ft³/s, Feb. 21, 1980; no flow at times in 1951, 1952, 1957, 1976.

EXTREMES FOR CURRENT YEAR.--Combined river and diversion: Peak discharges greater than base discharge of 500 ft³/s and maximum(*), from rating curve extended above 1,220 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Feb. 9	1615	*415	*4.06				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	1.7	3.0	12	15	10	38	19	1.4	.45	0	0
2	.97	1.7	2.7	8.9	21	15	42	14	2.5	.42	0	0
3	.68	1.5	3.0	8.2	22	20	27	13	2.9	.39	0	0
4	.46	6.3	4.1	6.9	20	13	23	11	2.7	.25	0	0
5	.68	12	3.3	6.5	17	11	22	11	2.5	.10	0	0
6	.44	12	3.4	6.0	18	9.9	22	11	2.3	0	0	.02
7	.39	8.3	2.6	16	18	9.4	25	10	2.2	0	0	0
8	1.5	9.6	6.0	99	14	9.0	32	8.9	2.0	0	0	0
9	4.0	5.4	4.8	50	159	9.0	47	7.1	1.9	0	.05	0
10	5.6	2.1	4.5	33	116	9.7	39	7.5	1.8	0	0	0
11	2.1	1.8	31	26	59	10	40	7.4	1.7	0	0	0
12	.53	1.7	17	23	46	11	29	8.0	1.6	0	0	0
13	.44	1.9	12	22	32	10	31	8.0	1.5	0	0	0
14	.42	3.1	8.0	21	26	9.4	34	7.2	1.4	0	0	0
15	.45	2.7	6.6	20	23	9.4	29	6.8	1.3	0	0	0
16	.43	2.3	12	17	21	9.3	28	6.5	1.2	0	0	0
17	2.0	2.1	8.3	15	20	9.0	26	6.2	1.1	0	0	0
18	2.0	2.1	11	13	27	8.4	34	5.8	1.0	.72	0	3.0
19	1.3	2.6	108	12	24	7.7	33	5.6	.98	4.6	0	5.2
20	1.5	2.7	71	13	18	11	32	4.9	.92	.79	0	1.3
21	1.8	2.2	31	11	17	11	40	5.1	.87	.43	0	.52
22	4.8	2.1	19	8.6	17	12	23	5.0	.81	.08	0	.35
23	13	2.1	14	10	15	11	17	4.5	.76	.27	0	.23
24	13	2.9	12	11	13	11	19	6.2	.71	0	0	.17
25	13	11	10	10	10	10	18	9.5	.67	0	0	.14
26	13	6.3	11	10	8.6	10	21	13	.63	0	0	.16
27	8.6	4.3	53	11	10	71	21	10	.59	0	0	.17
28	1.8	2.3	57	17	10	162	20	2.3	.55	0	0	.25
29	2.1	5.9	44	36	---	83	19	1.2	.51	0	1.3	.29
30	1.9	4.3	26	28	---	54	17	1.3	.48	0	7.7	.28
31	1.7	---	16	21	---	50	---	1.4	---	0	.08	---
TOTAL	101.56	127.0	615.3	602.1	816.6	696.2	848	238.4	41.48	8.50	9.13	12.08
MEAN	3.28	4.23	19.8	19.4	29.2	22.5	28.3	7.69	1.38	.27	.29	.40
MAX	13	12	108	99	159	162	47	19	2.9	4.6	7.7	5.2
MIN	.39	1.5	2.6	6.0	8.6	7.7	17	1.2	.48	0	0	0
AC-FT	201	252	1220	1190	1620	1380	1680	473	82	17	18	24
CAL YR 1984	TOTAL	4499.04	MEAN	12.3	MAX	146	MIN	.39	AC-FT	8920		
WTR YR 1985	TOTAL	4116.35	MEAN	11.3	MAX	162	MIN	0	AC-FT	8160		

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SAN JACINTO RIVER AND LAKE HEMET
WATER CO.'S UPPER CANAL, NEAR SAN JACINTO, CA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	12	4.5	15	15	12	41	20	11	5.4	5.6	11
2	7.2	12	4.2	11	21	16	45	14	11	4.8	5.4	6.5
3	7.4	12	3.9	11	22	21	36	14	13	5.3	5.7	7.0
4	7.5	10	5.2	8.8	20	17	31	12	12	8.3	5.5	8.2
5	7.1	12	4.2	9.3	17	14	29	12	10	9.7	5.4	9.0
6	7.5	12	4.2	8.8	18	11	33	12	8.6	9.7	5.3	7.8
7	9.0	12	4.1	18	18	11	36	11	8.1	9.9	5.2	8.3
8	8.1	12	7.5	102	16	9.7	43	11	7.5	9.0	4.0	8.7
9	4.0	9.7	6.3	53	167	9.6	52	9.2	6.5	6.2	5.0	8.4
10	5.6	9.6	6.0	35	124	15	42	10	6.4	6.2	5.3	8.4
11	6.0	9.0	32	28	64	13	43	9.5	5.9	6.2	5.3	8.5
12	7.0	8.5	17	24	49	12	32	9.9	6.8	6.5	5.5	8.2
13	6.6	8.4	12	22	36	11	33	9.1	6.7	6.1	5.2	5.3
14	6.4	9.3	8.0	21	31	10	35	7.7	7.6	5.5	5.1	4.6
15	6.9	8.6	6.6	20	29	10	31	7.4	7.7	5.4	4.7	4.7
16	6.3	8.0	12	17	25	10	29	7.3	7.8	5.5	4.9	5.1
17	7.7	7.5	8.3	15	25	10	27	8.3	6.9	6.2	5.0	5.0
18	8.0	7.3	11	15	30	11	41	8.2	6.3	8.3	4.8	8.6
19	9.3	7.6	108	15	26	12	37	8.3	6.6	15	4.7	11
20	9.5	7.4	71	16	22	14	36	8.8	6.2	12	4.4	5.7
21	9.8	6.7	31	16	21	12	47	8.4	6.3	8.5	6.6	4.4
22	11	6.4	19	14	17	13	29	8.3	5.8	7.0	7.8	4.4
23	13	6.2	14	15	15	12	23	7.3	6.1	7.0	7.8	3.8
24	13	6.9	12	15	13	12	20	8.6	6.7	6.7	11	3.4
25	13	11	10	14	12	11	19	12	6.8	6.2	11	4.4
26	13	8.5	11	13	13	11	22	15	5.8	5.6	11	4.3
27	15	7.1	53	15	13	73	22	15	5.1	5.6	11	4.0
28	13	5.5	57	18	16	162	21	8.3	4.9	5.5	11	4.5
29	13	7.7	44	36	---	85	20	8.9	5.3	6.0	11	4.1
30	13	5.5	27	28	---	57	18	11	5.9	6.3	14	4.0
31	13	---	18	21	---	53	---	11	---	6.0	12	---
TOTAL	284.1	266.4	632.0	669.9	895	750.3	973	323.5	221.3	221.6	216.2	191.5
MEAN	9.16	8.88	20.4	21.6	32.0	24.2	32.4	10.4	7.38	7.15	6.97	6.36
MAX	15	12	108	102	167	162	52	20	13	15	14	11
MIN	4.0	5.5	3.9	8.8	12	9.6	18	7.3	4.9	4.8	4.0	3.4
AC-FT	564	528	1250	1330	1780	1490	1930	642	439	440	429	380
CAL YR 1984	TOTAL	6164.0	MEAN	16.8	MAX	152	MIN	2.6	AC-FT	12230		
WTR YR 1985	TOTAL	5644.8	MEAN	15.5	MAX	167	MIN	3.4	AC-FT	11200		

SANTA ANA RIVER BASIN

11070050 BAUTISTA CREEK AT VALLE VISTA, CA

LOCATION.--Lat 33°44'04", long 116°53'33", in NE 1/4 SE 1/4 sec.17, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on left levee of flood channel, 1.0 mi south of Valle Vista.

DRAINAGE AREA.--47.2 mi².

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

REVISED RECORDS.--WDR CA-83-1: 1980(M).

GAGE.--Water-stage recorder. Elevation of gage is 1,835 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. No major regulation above station but peaks are affected by detention dam. Diversion above station for irrigation of about 15 acres. Some infiltration in detention dam, 1.5 mi upstream.

AVERAGE DISCHARGE.--16 years, 2.53 ft³/s, 1,830 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,320 ft³/s, Feb. 21, 1980, gage height, 6.40 ft, from rating curve extended above 80 ft³/s on basis of slope-conveyence study of peak flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 19	1630	*118	*1.95				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.77	3.6	0	3.5	2.2	3.4	2.3	0	0	0
2		0	.69	1.2	1.5	1.8	3.1	2.5	1.1	0	0	0
3		0	1.5	.59	.13	.29	2.6	1.7	.08	0	0	.62
4		0	2.1	2.7	0	2.1	2.2	2.5	0	0	.85	0
5		0	1.9	3.0	0	3.2	3.5	2.8	.18	0	.42	.08
6		0	1.6	3.0	0	3.0	2.8	1.3	0	0	0	0
7		0	1.6	3.3	0	3.2	2.1	.23	0	0	0	0
8		0	2.0	1.9	0	3.7	2.5	.09	.01	0	0	0
9		0	2.1	2.5	.54	3.4	2.6	.19	0	0	0	0
10		0	2.3	2.4	0	4.3	2.4	.71	.16	0	.30	0
11		0	.67	1.6	0	4.6	1.5	.01	0	0	0	0
12		0	0	.35	0	4.8	.97	.28	0	.02	0	0
13		0	0	0	0	1.1	.46	.24	0	0	0	0
14		0	0	0	0	.22	1.2	0	0	0	0	0
15		0	0	0	0	0	3.2	.09	0	0	0	.03
16		0	1.6	0	0	.34	4.1	.21	0	.25	0	.03
17		0	.05	0	0	1.9	4.3	1.1	0	0	0	0
18		0	1.2	0	0	3.9	4.9	.23	0	1.2	0	1.1
19		0	2.7	0	0	3.4	2.5	.21	0	5.5	0	.55
20		0	2.5	0	.04	4.7	4.2	0	0	0	0	.06
21		0	.99	0	0	4.8	2.0	.13	0	0	0	0
22		0	0	0	0	4.7	1.6	.13	.02	0	0	0
23		0	0	1.4	0	5.0	3.7	0	.44	0	0	0
24		.58	0	2.7	0	5.8	1.5	0	0	.10	0	.06
25		.93	0	.23	0	4.3	2.3	.24	.38	0	0	.85
26		.92	0	0	1.9	2.3	2.9	.30	0	0	0	.89
27		.28	2.5	0	3.9	2.1	1.6	.22	0	.08	0	0
28		1.1	.92	.71	4.0	.58	1.6	.10	0	.40	0	.06
29		2.8	0	1.2	---	.57	2.8	0	0	.60	0	0
30		.74	0	0	---	1.2	2.3	0	0	0	0	0
31		---	1.6	0	---	2.1	---	.03	---	.06	0	---
TOTAL	0	7.35	31.29	32.38	12.01	86.90	75.63	18.94	4.67	8.21	1.57	4.33
MEAN	0	.24	1.01	1.04	.43	2.80	2.52	.61	.16	.26	.051	.14
MAX	0	2.8	2.7	3.6	4.0	5.8	4.9	3.4	2.3	5.5	.85	1.1
MIN	0	0	0	0	0	0	.46	0	0	0	0	0
AC-FT	0	15	62	64	24	172	150	38	9.3	16	3.1	8.6

CAL YR 1984	TOTAL	364.89	MEAN	1.00	MAX	36	MIN	0	AC-FT	724
WTR YR 1985	TOTAL	283.28	MEAN	.78	MAX	5.8	MIN	0	AC-FT	562

11070375 SAN JACINTO RIVER AT RAILROAD CANYON WEIR, NEAR ELSINORE, CA

LOCATION.--Lat 33°44'10", long 117°15'08", in SE 1/4 NW 1/4 sec.13, T.5 S., R.4 W., Riverside County, Hydrologic Unit 18070202, on right bank 4.3 mi northeast of Railroad Canyon Dam, and 5.8 mi northeast of Elsinore.

DRAINAGE AREA.--562 mi².

PERIOD OF RECORD.--October 1951 to September 1971 (monthly discharge only), October 1971 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 28, 1960, at site 0.8 mi upstream at different datum.

REMARKS.--Flow partly regulated by Lake Hemet (station 11069000). Diversions for irrigation and domestic use upstream from station. At times imported Colorado River water is discharged into channel upstream from station by the Temescal Water Co. and the Elsinore Valley Municipal Water District.

COOPERATION.--Records were provided by Riverside County Flood Control and Water Conservation District.

AVERAGE DISCHARGE.--River only: 34 years, 14.1 ft³/s, 10,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,700 ft³/s, Feb. 22, 1980, gage height, 7.27 ft; no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,060 ft³/s, Dec. 28, gage height, 3.77 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	1.2	0							
2			0	.74	0							
3			0	.45	1.4							
4			0	0	1.2							
5			0	0	.59							
6			0	0	.28							
7			0	0	.36							
8			0	0	.18							
9			1.2	12	20							
10			.14	3.0	11							
11			5.5	1.1	1.3							
12			2.7	.84	.81							
13			.27	.26	.45							
14			0	0	.27							
15			0	0	.18							
16			19	0	.04							
17			6.8	0	0							
18			5.1	0	0							
19			203	0	0							
20			130	0	0							
21			9.6	0	0							
22			2.1	0	0							
23			1.1	0	0							
24			.80	0	0							
25			.68	0	0							
26			.54	0	0							
27			216	0	0							
28			378	0	0							
29			20	0	---							
30			6.0	0	---							
31		---	2.2	0	---		---		---			---
TOTAL	0	0	1010.73	19.59	38.06	0	0	0	0	0	0	0
MEAN	0	0	32.6	.63	1.36	0	0	0	0	0	0	0
MAX	0	0	378	12	20	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	2000	39	75	0	0	0	0	0	0	0
CAL YR 1984	TOTAL	1179.59	MEAN	3.22	MAX	378	MIN	0	AC-FT	2340		
WTR YR 1985	TOTAL	1068.38	MEAN	2.93	MAX	378	MIN	0	AC-FT	2120		

SANTA ANA RIVER BASIN

11070465 SALT CREEK AT MURRIETA ROAD, NEAR SUN CITY, CA

LOCATION.--Lat 33°41'37", long 117°12'19", in SW 1/4 NW 1/4 sec.33, T.5 S., R.3 W., Riverside County, Hydrologic Unit 18070202, on right bank 30 ft upstream from Murrieta Road bridge, 2.2 mi upstream from Railroad Canyon Reservoir, and 0.5 mi north of the Newport and Murrieta Road intersection.

DRAINAGE AREA.--116 mi².

PERIOD OF RECORD.--February 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Flow partially regulated by small Paloma Valley Reservoir. Diversions for irrigation and domestic use upstream from station.

COOPERATION.--Records were provided by Riverside County Flood Control and Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,120 ft³/s, Mar. 2, 1983, gage height, 6.88 ft; no flow for long periods most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 162 ft³/s, Dec. 27, gage height, 2.37 ft; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	0							
2		0	0	0	0							
3		0	3.7	0	0							
4		0	.32	0	17							
5		0	0	0	.03							
6		0	0	0	0							
7		0	0	0	0							
		0	14	2.8	0							
		0	0	5.3	9.0							
		0	0	0	0							
		0	.56	0	0							
		0	0	0	0							
		.08	0	0	.05							
		0	0	0	0							
		0	0	0	0							
		0	1.5	0	0							
		0	0	0	0							
		.14	33	0	0							
		.14	60	0	0							
		0	45	0	0							
21		0	8.6	0	0							
22		4.6	.39	0	0							
23		.75	0	0	0							
24		6.7	0	0	0							
25		6.0	0	0	0							
26		0	1.6	0	0							
27		0	74	0	0							
28		0	56	0	0							
29		0	11	0	---							
30		0	.41	.59	---							
31		---	.06	.08	---		---		---			---
TOTAL	0	18.41	310.14	8.77	26.08	0	0	0	0	0	0	0
MEAN	0	.61	10.0	.28	.93	0	0	0	0	0	0	0
MAX	0	6.7	74	5.3	17	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	37	615	17	52	0	0	0	0	0	0	0
CAL YR 1984	TOTAL	386.76	MEAN	1.06	MAX	74	MIN	0	AC-FT	767		
WTR YR 1985	TOTAL	363.40	MEAN	1.00	MAX	74	MIN	0	AC-FT	721		

11070500 SAN JACINTO RIVER NEAR ELSINORE, CA

LOCATION.--Lat 33°39'51", long 117°17'35", in SE 1/4 NE 1/4 sec.9, T.6 S., R.4 W., Riverside County, Hydrologic Unit 18070203, on right bank 2 mi east of Elsinore, 2.1 mi downstream from Railroad Canyon Dam, and 36 mi downstream from Lake Hemet.

DRAINAGE AREA.--723 mi².

PERIOD OF RECORD.--January 1916 to current year. Monthly figures 1927-50, adjusted for diversion, published in WSP 1315-B.

GAGE.--Water-stage recorder. Elevation of gage is 1,270 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 13, 1916, nonrecording gage at site 0.7 mi downstream at different datum. Feb. 13, 1916, to Oct. 27, 1921, nonrecording gage at present site, but at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated by Lake Hemet (station 11069000) and regulated since 1928 by Railroad Canyon Reservoir, capacity, 12,000 acre-ft, 2.1 mi upstream from station. Diversions for irrigation and domestic use upstream from Railroad Canyon Reservoir. Temescal Water Company diverted 236 acre-ft during current year from Railroad Canyon Reservoir for irrigation downstream from station near Corona.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s, Feb. 17, 1927, gage height, 11.8 ft, from rating curve extended above 2,000 ft³/s on basis of slope-area measurement of peak flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58 ft³/s, Dec. 28, gage height, 2.94 ft; minimum daily, no flow June 19 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.77	.79	1.5	1.1	1.2	.87	.35	.18			
2	.26	.72	.79	1.4	1.1	1.2	.79	.33	.19			
3	.29	.72	.83	1.4	1.4	1.2	.79	.33	.20			
4	.34	.72	.89	1.3	1.4	1.2	.79	.30	.20			
5	.35	.72	.81	1.3	1.4	1.2	.79	.30	.20			
6	.34	.72	.79	1.3	1.4	1.2	.79	.30	.20			
7	.29	.73	.79	1.4	1.3	1.2	.79	.30	.17			
8	.27	.72	.85	1.5	1.3	1.2	.72	.30	.13			
9	.29	.72	.87	1.4	1.3	1.2	.71	.30	.10			
10	.39	.72	.87	1.4	1.5	1.2	.65	.30	.09			
11	.47	.72	.98	1.4	1.4	1.2	.60	.30	.07			
12	.49	.70	1.1	1.3	1.4	1.2	.59	.30	.07			
13	.44	.65	.96	1.3	1.4	1.1	.58	.30	.06			
14	.43	.68	.87	1.3	1.3	1.1	.54	.29	.05			
15	.48	.72	.87	1.2	1.3	1.1	.49	.27	.05			
16	.54	.72	1.2	1.2	1.3	1.1	.47	.26	.04			
17	.56	.72	1.5	1.2	1.3	1.1	.44	.24	.03			
18	.59	.67	1.6	1.2	1.3	1.1	.44	.24	.01			
19	.59	.65	21	1.1	1.3	1.1	.44	.24	0			
20	.62	.65	7.0	1.1	1.3	1.1	.44	.24	0			
21	.68	.65	3.8	1.1	1.3	1.1	.41	.24	0			
22	.72	.65	2.1	1.1	1.3	1.1	.42	.24	0			
23	.72	.70	1.4	1.0	1.3	1.1	.44	.22	0			
24	.72	.66	1.2	1.1	1.3	1.1	.41	.21	0			
25	.72	.78	1.2	1.1	1.3	1.1	.40	.20	0			
26	.72	.79	1.1	1.1	1.3	.98	.39	.20	0			
27	.72	.79	6.3	1.1	1.2	.91	.37	.18	0			
28	.76	.79	14	1.1	1.2	.87	.37	.18	0			
29	.79	.79	3.5	1.1	---	.87	.36	.18	0			
30	.79	.79	2.2	1.1	---	.87	.36	.18	0			
31	.79	---	1.7	1.1	---	.87	---	.18	---			---
TOTAL	16.34	21.53	83.86	38.2	36.7	34.07	16.65	8.00	2.04	0	0	0
MEAN	.53	.72	2.71	1.23	1.31	1.10	.56	.26	.068	0	0	0
MAX	.79	.79	21	1.5	1.5	1.2	.87	.35	.20	0	0	0
MIN	.18	.65	.79	1.0	1.1	.87	.36	.18	0	0	0	0
AC-FT	32	43	166	76	73	68	33	16	4.0	0	0	0
CAL YR 1984	TOTAL	296.67	MEAN	.81	MAX	21	MIN	0	AC-FT	588		
WTR YR 1985	TOTAL	257.39	MEAN	.71	MAX	21	MIN	0	AC-FT	511		

11072100 TEMESCAL CREEK ABOVE MAIN STREET, AT CORONA, CA

LOCATION.--Lat 33°53'21", long 117°33'43", in La Sierra Grant, Riverside County, Hydrologic Unit 18070203, on right bank 500 ft upstream of Main Street bridge, in Corona, 1.5 mi upstream from topographic boundary of Prado Flood control basin.

DRAINAGE AREA.--224 mi², excludes 768 mi² above Lake Elsinore.

PERIOD OF RECORD.--December 1967 to September 1974, December 1980 to July 1983, February 1984 to current year.

GAGE.--Water-stage recorder and concrete-lined flood control channel. Elevation of gage is 600 ft above National Geodetic Vertical Datum of 1929, from topographic map. December 1967 to September 1974, water-stage recorder at site 1.2 mi downstream at different datum. December 1980 to July 1983 at site 500 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 26 to Nov. 6, Mar. 14 to Apr. 10, June 26 to July 11, July 20 to Aug. 18. Records poor. Flow regulated by Lake Elsinore and several storage reservoirs. Many diversions upstream for irrigation. Gage removed July 26, 1983 due to channel construction, and reinstalled February 28, 1984.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,850 ft³/s, Feb. 25, 1969, gage height, 8.17 ft, from floodmark, at old site 1.1 mi downstream, on basis of slope-area measurement of peak flow; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 939 ft³/s, Dec. 27, gage height, 4.49 ft; minimum daily, 0.51 ft³/s, Oct. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	3.1	5.6	7.4	6.0	4.7	6.2	14	7.9	9.4	9.4	13
2	5.7	3.1	5.3	6.6	32	6.1	6.2	16	8.2	9.4	11	13
3	5.0	3.2	9.8	7.4	6.1	5.4	6.2	16	9.8	9.4	10	13
4	4.7	3.5	5.4	7.2	6.0	4.7	6.0	21	8.6	9.3	9.6	13
5	4.1	3.9	5.7	8.3	5.7	5.5	6.0	23	8.4	9.2	9.4	13
6	3.8	4.5	6.1	8.0	5.3	4.7	6.2	22	8.5	9.0	9.2	12
7	3.7	5.8	6.4	16	5.0	4.6	6.0	24	8.7	9.2	9.0	12
8	3.2	6.5	29	33	4.9	6.1	6.3	23	10	9.4	8.8	14
9	2.8	5.0	5.6	9.3	62	6.7	7.0	22	12	9.5	8.8	17
10	2.0	5.3	5.4	9.2	4.9	6.1	8.0	26	11	9.5	9.0	17
11	2.1	7.8	9.1	9.4	4.4	6.3	8.6	26	12	9.5	10	16
12	2.0	8.6	7.1	9.0	3.7	6.2	11	27	14	10	10	18
13	1.6	18	6.6	8.8	4.0	5.4	14	26	14	9.8	9.5	15
14	1.3	5.3	5.1	9.7	4.3	5.2	11	27	14	11	9.2	10
15	1.2	5.0	4.8	11	3.7	5.0	12	24	12	12	9.4	9.3
16	1.2	4.7	21	10	4.3	5.0	17	21	13	13	9.6	8.3
17	1.8	4.5	4.6	9.4	3.9	5.0	17	20	12	12	9.6	9.3
18	.81	3.7	84	12	4.1	28	16	19	11	14	9.5	4.9
19	.95	4.2	187	11	4.4	8.0	14	19	17	12	9.8	8.5
20	.92	4.0	46	12	3.6	6.2	12	17	9.5	16	11	7.6
21	.80	5.0	8.2	13	3.4	6.0	13	15	11	16	11	7.6
22	.71	3.6	7.5	16	3.1	5.9	13	14	10	15	11	7.4
23	.61	3.0	7.0	15	3.1	5.8	13	14	10	14	13	6.3
24	.51	31	7.2	16	3.5	5.8	12	11	9.5	13	12	9.5
25	.60	6.0	6.5	15	4.0	5.8	11	11	10	12	13	12
26	2.5	3.9	52	16	4.6	5.7	11	9.8	10	11	14	7.7
27	2.6	4.1	227	17	5.0	17	11	9.6	10	9.0	13	12
28	2.7	5.8	25	70	4.8	42	11	12	10	8.5	14	12
29	2.7	5.7	10	11	---	7.5	10	12	9.8	8.7	13	9.0
30	2.7	5.4	9.0	6.5	---	7.0	12	12	9.4	9.0	15	13
31	2.9	---	8.3	6.5	---	6.4	---	12	---	9.0	14	---
TOTAL	73.31	183.2	827.3	416.7	209.8	249.8	313.7	565.4	321.3	337.8	334.8	340.4
MEAN	2.36	6.11	26.7	13.4	7.49	8.06	10.5	18.2	10.7	10.9	10.8	11.3
MAX	5.7	31	227	70	62	42	17	27	17	16	15	18
MIN	.51	3.0	4.6	6.5	3.1	4.6	6.0	9.6	7.9	8.5	8.8	4.9
AC-FT	145	363	1640	827	416	495	622	1120	637	670	664	675

WTR YR 1985 TOTAL 4173.51 MEAN 11.4 MAX 227 MIN .51 AC-FT 8280

11073360 CHINO CREEK AT SCHAEFER AVENUE, NEAR CHINO, CA

LOCATION.--Lat 34°00'14", long 117°43'34", in Santa Ana del Chino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank 300 ft downstream from Schaefer Avenue, 0.8 mi downstream from San Antonio Creek, and 1.5 mi southwest of Chino.

DRAINAGE AREA.--48.9 mi².

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

GAGE.--Water-stage recorder. Concrete dikes have formed low-water control since October 1975. Elevation of gage is 685 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13 to Dec. 4, and Jan. 17 to Feb. 4. Records good. Flow mostly regulated by San Antonio flood-control reservoir, capacity, 7,620 acre-ft. Natural streamflow affected by extensive ground-water withdrawals, diversions for power, domestic use, irrigation, and return flow from irrigated areas. California Water Project reported no releases during the year to the basin via San Antonio Creek from Rialto Pipeline below San Antonio Dam (station 11073210) at a site 10 mi upstream. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s, Feb. 27, 1983, gage height, 10.32 ft, from rating curve extended above 1,200 ft³/s on basis of slope-conveyance study; no flow May 21, June 30, July 1, Oct. 30, Nov. 3, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 9,200 ft³/s, gage height, 9.23 ft, present datum, by contracted-opening measurement at site 6.1 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 946 ft³/s, Dec. 16, gage height, 6.24 ft; minimum daily, 0.55 ft³/s, Dec. 13, 14, June 4, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.96	1.1	1.9	1.9	1.1	1.3	1.3	.96	.83	.96	.83
2	2.7	1.1	1.1	1.1	20	.96	1.3	1.1	.83	.83	.96	.96
3	1.6	1.1	20	.83	12	.83	1.6	.96	1.6	.72	.96	.96
4	1.3	.96	.96	.72	1.9	.96	1.1	.96	.55	.83	.96	5.4
5	1.6	.96	.83	.72	1.9	1.1	1.3	.83	.83	2.7	.96	7.5
6	1.6	.96	.72	.72	1.6	.83	1.3	.96	.83	1.9	1.1	1.3
7	1.3	.96	.83	34	1.3	2.4	1.1	1.3	.62	1.6	1.6	1.3
8	1.3	20	58	44	10	1.1	1.1	1.3	.83	.96	1.3	1.1
9	1.9	.96	1.1	1.3	183	1.1	.96	3.8	.72	.83	1.3	1.3
10	1.1	.83	26	.83	1.1	1.1	1.3	1.3	.83	1.6	1.9	.76
11	1.3	.83	5.6	.83	.96	1.3	1.3	.83	.83	.96	1.3	3.0
12	1.3	.83	.83	.72	.96	1.3	.96	.83	.72	1.1	1.9	.83
13	1.3	29	.55	.83	.96	1.1	1.3	.72	.72	1.5	1.6	1.1
14	1.3	.83	.55	.96	.96	1.1	1.6	.83	.96	.83	2.3	.96
15	1.3	.90	45	.83	.96	1.3	1.6	.72	.83	1.3	2.7	.72
16	.83	.90	125	.83	.96	1.3	2.3	.96	.72	1.6	1.9	1.1
17	7.2	.90	.96	.83	.96	1.3	2.3	1.3	.83	1.6	1.9	1.1
18	.83	.90	208	.83	.96	32	1.6	.96	.96	.96	1.3	1.6
19	.96	.90	198	.83	1.1	1.3	1.3	1.1	.96	1.6	1.3	.72
20	1.3	.90	33	.83	.83	1.1	1.1	.83	1.3	.83	1.3	.83
21	1.1	4.5	1.3	.83	.83	.96	1.1	.96	1.1	.62	1.3	.83
22	1.6	.96	1.1	.83	.83	2.0	1.9	.96	1.1	.62	1.6	.55
23	.96	.96	1.1	.83	.83	.83	1.9	.83	.96	.83	.72	.72
24	.96	70	.96	.83	.83	.72	1.3	1.1	1.1	.83	.72	.72
25	.83	.96	.96	.83	.83	.96	1.6	1.1	1.1	.72	.62	.83
26	1.1	.96	99	2.5	.96	1.1	1.6	.83	1.1	.83	1.1	.83
27	1.1	.96	260	1.1	.96	47	.83	.72	.96	.96	1.3	.83
28	.96	8.0	6.8	26	.96	38	1.3	.72	1.9	.96	1.1	.83
29	.96	1.1	1.6	1.9	---	1.3	1.3	.96	3.5	1.1	1.1	.83
30	1.6	1.8	1.1	1.9	---	.96	1.3	.96	.83	.96	.96	.83
31	1.1	---	1.6	1.9	---	.96	---	.96	---	.96	.83	---
TOTAL	45.89	155.88	1103.65	133.89	251.34	149.37	41.85	32.99	31.08	34.47	40.85	41.17
MEAN	1.48	5.20	35.6	4.32	8.98	4.82	1.40	1.06	1.04	1.11	1.32	1.37
MAX	7.2	70	260	44	183	47	2.3	3.8	3.5	2.7	2.7	7.5
MIN	.83	.83	.55	.72	.83	.72	.83	.72	.55	.62	.62	.55
AC-FT	91	309	2190	266	499	296	83	65	62	68	81	82
CAL YR 1984	TOTAL	1779.38	MEAN	4.86	MAX	260	MIN	.55	AC-FT	3530		
WTR YR 1985	TOTAL	2062.43	MEAN	5.65	MAX	260	MIN	.55	AC-FT	4090		

SANTA ANA RIVER BASIN

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA

LOCATION.--Lat 33°58'58", long 117°35'55", in SW 1/4 NE 1/4 sec.22, T.2 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 300 ft upstream from Merrill Avenue bridge, 4.6 mi west of Mira Loma.

DRAINAGE AREA.--75.8 mi².

PERIOD OF RECORD.--January 1968 to July 31, 1977, January 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 660 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 1977 at site 100 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Apr. 13 to May 16, May 26 to Sept. 30. Records poor. Station reinstalled after channel construction on Dec. 22, 1979. Channel is now a trapezoidal concrete floodway, and records for low and medium flows prior to July 31, 1977 are not equivalent. Chino Basin Municipal Water District Tertiary Plant No. 1 began discharging effluent 1.5 mi above station on May 8, 1985. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years (water years 1969-76) 2.74 ft³/s, 1,990 acre-ft/yr; 5 years (water years 1980-84) 19.3 ft³/s, 13,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft³/s, Feb. 27, 1983, gage height, 7.85 ft, from floodmark, on basis of slope-conveyance study of peak flow; no flow most of some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,560 ft³/s, Dec. 19, gage height, 4.75 ft, from rating curve extended above 2,300 ft³/s on basis of slope-conveyance study of peak flow; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	0	.75	2.2	.09	.03	0	0	7.2	13	15	15
2	.24	0	.46	1.3	54	1.8	0	0	7.2	12	17	17
3	.24	0	14	.21	15	.02	0	0	4.4	13	15	16
4	.09	0	.30	.01	.16	0	0	0	15	12	17	16
5	.05	0	.09	2.1	.06	0	0	0	23	12	16	36
6	0	0	.13	2.3	.17	0	0	0	6.0	12	14	42
7	0	0	.12	26	.05	0	0	0	12	11	14	16
8	0	128	39	63	.05	0	0	0	11	12	10	17
9	0	.17	.16	.62	225	0	0	.60	10	12	18	17
10	0	.02	1.0	.01	6.2	0	.03	4.5	10	14	18	17
11	0	0	5.3	0	.03	0	.02	3.7	13	16	18	12
12	0	0	.24	.01	.02	0	.02	4.8	14	15	19	16
13	0	15	3.2	0	0	0	.27	4.5	14	16	18	17
14	0	.12	2.3	0	0	0	.14	5.0	11	10	18	18
15	0	.01	16	0	0	0	.03	5.2	11	10	18	17
16	0	0	129	0	0	0	0	6.1	11	11	19	19
17	1.1	0	3.7	0	0	0	0	4.7	11	15	7.0	11
18	0	0	300	0	0	39	0	5.0	11	16	13	17
19	0	0	520	0	0	.52	0	12	13	18	13	14
20	0	0	46	0	0	.01	0	8.9	12	16	13	12
21	0	3.3	8.6	0	0	0	0	8.6	14	18	20	12
22	0	.10	3.3	.07	0	0	0	9.0	13	17	13	15
23	0	.05	.59	.06	0	0	0	9.3	9.0	18	18	12
24	0	70	.16	0	0	0	0	16	13	19	15	12
25	0	4.4	.09	.12	0	0	0	11	12	17	18	18
26	0	4.0	63	2.2	0	.03	0	14	12	18	17	14
27	0	.75	402	.56	0	29	0	6.1	10	15	16	14
28	0	6.3	8.7	41	0	43	0	6.7	8.0	15	15	16
29	0	.79	2.0	3.2	---	1.1	0	7.2	22	16	16	15
30	0	1.2	.57	.12	---	.10	0	7.2	29	15	16	16
31	0	---	.07	.09	---	.02	---	7.2	---	16	16	---
TOTAL	1.96	234.21	1570.83	145.18	300.83	114.63	0.51	167.30	368.8	450	490.0	506
MEAN	.063	7.81	50.7	4.68	10.7	3.70	.017	5.40	12.3	14.5	15.8	16.9
MAX	1.1	128	520	63	225	43	.27	16	29	19	20	42
MIN	0	0	.07	0	0	0	0	0	4.4	10	7.0	11
AC-FT	3.9	465	3120	288	597	227	1.0	332	732	893	972	1000
CAL YR 1984	TOTAL	2191.38	MEAN	6.0	MAX	520	MIN	0	AC-FT	4350		
WTR YR 1985	TOTAL	4350.25	MEAN	11.9	MAX	520	MIN	0	AC-FT	8630		

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°53'00", long 117°38'40", in La Sierra Grant, Riverside County, Hydrologic Unit 18070203, on left bank of outlet channel, 2,500 ft downstream from axis of Prado Dam, and 4.5 mi west of Corona.

DRAINAGE AREA.--1,490 mi², excludes 768 mi² above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1930 to November 1939 (irrigation seasons only), March 1940 to current year. Published as "at Santa Fe Railroad Bridge, near Prado" May 1930 to November 1931, as "at Atchison, Topeka, and Santa Fe Railroad Bridge, near Prado" May 1932 to November 1939, and as "below Prado Dam, near Prado" March 1940 to September 1950.

GAGE.--Water-stage recorder and concrete control since August 1944. Datum of gage is approximately 449 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Mar. 18, 1940, at about same site at various datums.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since 1941 by Prado Reservoir, capacity, 201,200 acre-ft. Natural streamflow affected by extensive ground-water withdrawals, diversion for irrigation, and return flow from irrigated areas. During the year, 8,580 acre-ft of ground water was pumped from the upper basin and released to the Santa Ana River upstream of Prado Dam for delivery to downstream users. No California Water Project releases were made to the basin. See schematic diagram of Santa Ana River basin.

COOPERATION.--Records of ground-water pumpage were provided by San Bernardino Valley Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft³/s, Feb. 21, 1980, gage height, 6.88 ft; minimum daily, 2.4 ft³/s, July 29 to Aug. 3, Sept. 20, 1978 (result of gate closure).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 100,000 ft³/s, by slope-area measurement of peak flow at site 2.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,030 ft³/s, Dec. 20, gage height, 5.20 ft; minimum daily, 98 ft³/s Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	164	218	611	298	253	227	169	193	139	135	113
2	111	151	206	283	318	252	228	172	195	132	133	109
3	112	153	218	274	323	266	231	181	199	131	134	119
4	118	153	241	254	382	253	261	186	193	131	131	134
5	114	154	220	256	412	253	273	190	184	129	131	156
6	126	154	205	256	405	253	270	198	176	133	132	163
7	124	154	203	264	397	243	267	201	154	131	130	145
8	122	193	333	378	375	248	264	197	154	132	130	141
9	127	203	382	409	354	243	259	196	151	134	127	142
10	130	182	255	438	431	240	251	194	155	136	131	139
11	133	177	252	420	341	234	238	200	156	127	129	148
12	130	156	234	310	298	236	225	198	154	127	139	158
13	136	138	221	277	394	234	207	196	150	127	141	151
14	135	212	200	273	440	238	191	192	148	136	137	144
15	135	209	183	265	438	233	182	181	149	138	128	141
16	135	197	347	263	434	229	191	179	152	148	125	145
17	145	182	403	261	428	234	186	180	151	141	130	145
18	162	172	215	251	421	255	184	185	152	137	133	147
19	150	177	905	253	413	361	189	193	156	140	138	157
20	149	161	1930	255	354	262	186	181	142	137	128	152
21	146	174	1410	255	309	244	191	188	156	146	135	143
22	144	208	972	255	385	240	185	193	160	139	131	138
23	139	209	684	258	405	238	189	189	154	137	129	135
24	135	199	278	257	370	226	184	187	152	141	129	136
25	139	250	257	243	297	224	178	190	157	142	126	129
26	137	260	183	250	281	227	166	198	155	147	122	98
27	140	290	551	271	283	261	166	190	151	146	118	152
28	143	284	1090	287	269	276	167	183	145	131	121	149
29	148	347	1070	291	---	228	168	182	144	126	124	142
30	162	288	1040	186	---	228	169	190	142	128	124	141
31	165	---	966	237	---	228	---	189	---	132	120	---
TOTAL	4207	5951	15872	9041	10255	7640	6273	5849	4780	4201	4021	4212
MEAN	136	198	512	292	366	246	209	189	159	136	130	140
MAX	165	347	1930	611	440	361	273	201	199	148	141	163
MIN	111	138	183	186	269	224	166	169	142	126	118	98
AC-FT	8340	11800	31480	17930	20340	15150	12440	11600	9480	8330	7980	8350
CAL YR 1984	TOTAL	76804	MEAN	210	MAX	1930	MIN	85	AC-FT	152300		
WTR YR 1985	TOTAL	82302	MEAN	225	MAX	1930	MIN	98	AC-FT	163200		

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

CHEMICAL ANALYSES: Water years 1967 to current year.

BIOLOGICAL DATA: Water years 1975 to current year.

SPECIFIC CONDUCTANCE: Water years 1970 to current year.

WATER TEMPERATURES: Water years 1970 to current year.

SEDIMENT RECORDS: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--

CHLORIDE: October 1970 to September 1971.

SPECIFIC CONDUCTANCE: October 1969 to current year.

WATER TEMPERATURES: October 1969 to current year.

SEDIMENT RECORDS: October 1973 to June 1982.

INSTRUMENTATION.--Water-quality monitor recording specific conductance and water temperature since October 1969.

REMARKS.--Period of missing conductivity and temperature data due to equipment malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 microsiemens, Apr. 30, 1971; minimum recorded, 220 microsiemens, Feb. 20, 1978.

WATER TEMPERATURES: Maximum recorded, 36.0°C, Sept. 4, 1972, Sept. 8, 1984; minimum recorded, 2.5°C, Dec. 30, 1969.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,870 mg/L, Mar. 5, 1978; minimum daily mean, 3 mg/L, Apr. 2, 1980, and several days during 1982.

SEDIMENT LOAD: Maximum daily, 18,900 tons, Mar. 5, 1978; minimum daily, 0.58 tons, Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,210 microsiemens, Nov. 30; minimum recorded, 453 microsiemens, Dec. 21.

WATER TEMPERATURES: Maximum recorded, 31.5°C, June 20, Sept. 26; minimum recorded, 8.5°C, Dec. 15, Jan. 13.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
05...	1120	117	1180	--	19.0	--	--	--	--	--	--
26...	1125	141	1180	--	14.0	--	--	--	--	--	--
NOV											
08...	0940	150	1160	--	16.5	--	--	--	--	--	--
21...	0900	168	1140	--	13.0	--	--	--	--	--	--
21...	0930	168	1140	7.6	13.0	745	22	10.0	97	590	1900
DEC											
07...	0935	202	1180	--	13.5	--	--	--	--	--	--
JAN											
08...	1025	425	738	--	12.0	--	--	--	--	--	--
25...	0945	260	1070	--	11.0	--	--	--	--	--	--
25...	1145	260	1110	8.0	12.0	750	38	9.6	91	800	480
FEB											
07...	1325	381	995	--	11.5	--	--	--	--	--	--
20...	1215	301	1080	8.0	15.5	735	13	9.1	95	910	330
MAR											
08...	1215	289	1110	--	13.5	--	--	--	--	--	--
26...	1055	234	1090	--	15.5	--	--	--	--	--	--
APR											
05...	1340	271	1070	--	19.0	--	--	--	--	--	--
11...	0930	239	1100	--	18.5	--	--	--	--	--	--
11...	1130	239	1120	8.0	17.5	745	5.0	8.7	93	--	--
MAY											
09...	1200	207	1090	--	18.5	--	--	--	--	--	--
23...	0950	193	1100	--	19.5	--	--	--	--	--	--
23...	1230	193	1100	8.1	23.0	745	36	7.9	95	K6600	730
JUN											
07...	0845	161	1120	--	20.0	--	--	--	--	--	--
25...	1030	169	1100	--	18.0	--	--	--	--	--	--
JUL											
08...	0830	142	1130	--	21.5	--	--	--	--	--	--
30...	0930	132	1110	--	20.0	--	--	--	--	--	--
30...	1030	132	1110	8.1	21.0	745	30	7.9	91	K160	490
AUG											
05...	1230	138	1110	--	21.5	--	--	--	--	--	--
29...	0850	124	1100	--	21.0	--	--	--	--	--	--
SEP											
03...	1030	122	1100	--	21.0	--	--	--	--	--	--
20...	1130	159	1080	8.0	18.0	745	33	8.2	89	K140	690

See footnotes at end of table.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LILITY, CARBON- ATE IT-FLD (MG/L AS CACO3)	ALKA- LILITY FIELD (MG/L AS CACO3)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
MAY											
09...	--	--	--	--	692	--	--	--	--	--	--
23...	--	--	--	--	692	--	--	--	--	--	--
23...	170	110	0.6	26	696	680	7.00	6.90	0.26	0.25	0.74
JUN											
07...	--	--	--	--	698	--	--	--	--	--	--
25...	--	--	--	--	696	--	--	--	--	--	--
JUL											
08...	--	--	--	--	704	--	--	--	--	--	--
30...	--	--	--	--	694	--	--	--	--	--	--
30...	170	120	0.5	26	689	680	7.50	7.50	0.59	0.57	0.91
AUG											
05...	--	--	--	--	701	--	--	--	--	--	--
29...	--	--	--	--	684	--	--	--	--	--	--
SEP											
03...	--	--	--	--	683	--	--	--	--	--	--
20...	150	100	0.6	25	662	620	7.10	7.30	0.96	0.98	1.1
DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
NOV											
08...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	1.7	1.9	2.0	9.3	--	2.50	2.10	2.10	5.5	--	--
DEC											
07...	--	--	--	--	--	--	--	--	--	--	--
JAN											
08...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	0.1	3.0	2.0	10	--	2.60	2.20	2.30	7.1	5.6	2.4
FEB											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	1.4	3.4	3.1	9.7	--	2.40	2.30	2.10	7.0	--	--
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	--	--	--	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--	--	--	--
11...	--	3.4	--	10	--	2.40	0.05	2.50	6.8	5.2	0.9
MAY											
09...	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--
23...	1.2	1.0	1.4	8.0	8.3	2.60	2.50	2.20	5.2	--	--
JUN											
07...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
30...	0.83	1.5	1.4	9.0	8.9	2.40	2.30	2.00	7.0	--	--
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--
20...	0.62	2.1	1.6	9.2	8.9	3.00	2.50	2.40	6.1	4.8	0.5

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)
NOV 21...	0930	--	10	3	--	56	--	<0.5	<1	--	--	3
JAN 25...	1145	4600	--	--	200	--	<10	--	--	<1	20	--
FEB 20...	1215	--	<10	3	--	58	--	0.6	2	--	--	<1
APR 11...	1130	780	<10	2	200	57	<10	<0.5	<1	<1	40	<1
MAY 23...	1230	--	<10	3	--	53	--	<0.5	<1	--	--	<1
JUL 30...	1030	--	--	--	--	--	--	--	--	--	--	--
SEP 20...	1130	--	20	4	<100	52	--	<0.5	<1	2	10	<1

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 21...	--	<3	--	3	--	18	--	<1	--	13	--	100
JAN 25...	<1	--	14	--	4900	--	10	--	10	--	220	--
FEB 20...	--	<3	--	3	--	13	--	<1	--	13	--	110
APR 11...	<1	<3	6	4	890	9	6	<1	<10	20	140	100
MAY 23...	--	<3	--	3	--	7	--	<1	--	20	--	57
JUL 30...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 20...	1	<3	29	3	4900	5	<1	1	--	18	160	53

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 21...	--	<0.1	--	4	--	1	<1	<1	660	<6	--	25
JAN 25...	0.2	--	28	--	1	--	<1	--	--	--	180	--
FEB 20...	--	1.2	--	14	--	<1	2	<1	610	7	--	19
APR 11...	--	<0.1	8	5	4	1	<1	<1	640	6	30	25
MAY 23...	--	<0.1	--	9	--	1	1	<1	610	<6	--	14
JUL 30...	--	--	--	--	--	--	<1	--	--	--	--	--
SEP 20...	--	<0.1	11	8	<1	<1	<1	<1	550	<6	40	19

K Results based on colony count outside the acceptable range (non-ideal colony count).
 < Actual value is known to be less than the value shown.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1120	1100	1110	1120	1100	1110	1190	1150	1170	662	624	648
2	1140	1130	1130	1130	1110	1120	1190	1170	1180	681	661	669
3	1160	1120	1130	1140	1120	1130	1170	1060	1140	689	670	681
4	1150	1130	1140	1140	1120	1130	1180	1070	1130	698	687	691
5	1200	1150	1180	1140	1130	1140	1190	1180	1190	715	695	700
6	1160	1120	1140	1150	1130	1140	1200	1170	1180	723	704	712
7	1150	1120	1130	1160	1140	1150	1190	1150	1170	731	712	722
8	1140	1110	1120	1160	977	1100	1160	828	940	750	653	711
9	1120	1100	1110	1180	1140	1160	1060	837	944	869	664	745
10	1120	1100	1110	1200	1180	1180	1060	1020	1030	1020	880	959
11	1110	1100	1100	1180	1180	1180	1020	892	953	1110	1020	1060
12	1110	1100	1110	1180	1160	1170	971	940	954	1110	1060	1080
13	1120	1090	1100	1170	1050	1130	960	938	947	1100	1040	1060
14	1120	1100	1110	1080	1040	1060	956	936	946	1090	1030	1060
15	1120	1100	1110	1140	1080	1120	946	935	941	1120	1020	1060
16	1120	1100	1120	1160	1120	1150	934	633	738	1090	1050	1070
17	1120	1110	1120	1160	1140	1150	860	692	754	1100	1050	1070
18	1120	1100	1110	1160	1120	1140	860	629	803	1100	1060	1080
19	1130	1110	1120	1140	1120	1130	738	526	644	1100	1060	1080
20	1140	1120	1130	1180	1140	1160	526	464	493	1090	1070	1080
21	1160	1130	1140	1140	1060	1120	473	453	461	1080	1070	1070
22	1160	1140	1150	1120	1060	1090	551	472	505	1090	1060	1070
23	1170	1150	1160	1150	1100	1120	669	561	624	1090	1060	1080
24	1190	1170	1180	1150	1100	1140	687	658	670	1090	1040	1060
25	1190	1170	1180	1190	958	1090	706	677	689	1090	1060	1070
26	1190	1150	1170	964	935	949	705	694	702	1100	1040	1070
27	1160	1150	1160	1130	975	1060	713	681	697	1090	1010	1050
28	1160	1140	1150	1160	1110	1140	671	640	656	1080	862	1020
29	1160	1130	1150	1190	1150	1180	639	608	624	852	706	758
30	1130	1110	1120	1210	1170	1190	608	596	605	829	726	780
31	1150	1110	1120	---	---	---	624	596	613	943	800	878
MONTH	1200	1090	1130	1210	935	1130	1200	453	842	1120	624	930
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	983	894	940	1130	1100	1120	995	963	982	1100	1070	1090
2	1050	927	978	1140	1110	1120	1040	995	1020	1110	1090	1100
3	980	883	919	1120	1090	1100	1070	1040	1050	1110	1080	1100
4	966	844	881	1120	1090	1100	1080	1050	1070	1110	1080	1090
5	950	907	934	1120	1080	1100	1080	1060	108	1120	1090	1100
6	992	940	966	1120	1100	1110	1090	1050	0	1100	1080	1090
7	1000	980	991	1120	1100	1110	1080	1050	1070	1090	1070	1080
8	1050	992	1020	1120	1080	1100	1070	1050	1060	1100	1080	1090
9	1050	849	994	1100	1080	1090	1100	1030	1060	1110	1080	1090
10	820	612	673	1100	1060	1080	1100	1060	1080	1150	1070	1100
11	767	654	712	1090	1060	1080	1140	1060	1100	1110	1080	1090
12	770	689	733	1090	1050	1070	1130	1080	1110	1110	1080	1100
13	905	732	835	1090	1060	1070	1130	1090	1110	1090	1070	1080
14	957	858	905	1080	1060	1070	1130	1090	1100	1100	1070	1090
15	922	810	848	1080	1050	1060	1110	1080	1090	1130	1080	1100
16	996	863	928	1070	1050	1060	1120	1080	1100	1130	1090	1110
17	1010	947	980	1070	1040	1060	1130	1100	1110	1130	1120	1120
18	1040	982	1020	1060	953	1040	1110	1080	1100	1120	1110	1120
19	1070	1020	1050	1000	938	966	1130	1080	1100	1130	1100	1110
20	1080	1060	1070	1060	1000	1030	1110	1070	1080	1140	1120	1130
21	1110	1060	1090	1080	1050	1060	1080	1060	1070	1130	1110	1120
22	1120	1080	1100	1100	1060	1080	1100	1060	1070	1130	1100	1120
23	1150	1110	1130	1110	1070	1090	1110	1070	1080	1120	1080	1110
24	1190	1130	1160	1120	1090	1100	1100	1070	1080	1120	1080	1100
25	1180	1140	1150	1100	1080	1100	1100	1070	1080	1100	1080	1090
26	1150	1110	1130	1100	1080	1090	1110	1070	1090	1110	1080	1090
27	1130	1100	1120	1100	947	1030	1110	1080	1090	1110	1080	1090
28	1140	1100	1120	947	878	900	1100	1070	1080	1100	1070	1090
29	---	---	---	899	860	876	1100	1070	1080	1120	1060	1100
30	---	---	---	912	850	879	1100	1070	1080	1120	1090	1100
31	---	---	---	963	902	930	---	---	---	1100	1080	1090
MONTH	1190	612	978	1140	850	1050	1140	963	1010	1150	1070	1100

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1110	1060	1080	1130	1100	1110	1110	1090	1100	1130	1110	1120
2	1090	1070	1080	1130	1080	1100	1100	1080	1100	1130	1110	1120
3	1080	1060	1070	1110	1090	1100	1090	1070	1080	1120	1080	1100
4	1080	1060	1080	---	---	---	1090	1070	1080	1100	1080	1090
5	1090	1070	1080	---	---	---	1120	1030	1090	1110	1060	1090
6	1110	1080	1090	---	---	---	1120	1100	1110	1080	1050	1060
7	1150	1100	1130	---	---	---	1130	1100	1120	1080	1050	1060
8	1150	1120	1140	1150	1120	1140	1140	1120	1130	1080	1040	1060
9	1150	1130	1140	1160	1120	1140	1160	1120	1140	1080	1060	1070
10	1140	1100	1120	1170	1140	1150	1160	1120	1130	1090	1060	1070
11	1120	1100	1100	1180	1140	1160	1140	1120	1130	1080	1040	1070
12	1130	1100	1120	1180	1140	1160	1140	1120	1130	1070	1040	1060
13	1130	1100	1120	1160	1150	1160	1140	1110	1120	1080	1060	1070
14	1140	1120	1130	1160	1140	1150	1140	1120	1130	1090	1060	1070
15	1130	1110	1130	1160	1140	1150	1140	1120	1130	1080	1050	1060
16	1140	1120	1120	1160	1130	1140	1140	1130	1130	1070	1050	1060
17	1130	1110	1120	1160	1130	1140	1140	1110	1120	1080	1050	1070
18	1130	1100	1120	1150	1130	1140	1120	1100	1110	1080	1060	1070
19	1140	1110	1120	1150	1120	1130	1110	1100	1110	1090	1060	1080
20	1140	1100	1120	1140	1110	1130	1130	1100	1120	1090	1070	1080
21	1140	1120	1120	1120	1100	1110	1120	1100	1120	1090	1060	1080
22	1120	1100	1110	1110	1090	1100	1130	1110	1120	1090	1070	1080
23	1120	1100	1110	1120	1090	1110	1130	1100	1120	1100	1070	1080
24	1120	1100	1110	1130	1100	1110	1130	1110	1120	1100	1070	1090
25	1130	1090	1110	1130	1110	1120	1140	1100	1120	1120	1100	1110
26	1140	1110	1120	1130	1110	1120	1140	1110	1120	1140	1090	1120
27	1140	1110	1130	1130	1110	1120	1140	1110	1120	1120	1070	1100
28	1140	1110	1120	1140	1100	1120	1130	1100	1120	1120	1100	1110
29	1120	1110	1120	1130	1110	1120	1130	1100	1120	1120	1100	1110
30	1140	1100	1120	1130	1100	1120	1130	1100	1120	1170	1120	1140
31	---	---	---	1130	1100	1120	1130	1100	1120	---	---	---
MONTH	1150	1060	1110	1180	1080	1130	1160	1030	1120	1170	1040	1090
YEAR	1210	453	1050									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	22.5	19.0	19.0	15.0	15.5	13.0	14.0	10.5	11.0	10.0	18.5	14.0
2	22.5	18.0	18.5	14.0	15.0	12.0	13.5	10.0	11.5	10.0	16.0	13.0
3	22.5	17.5	18.5	14.0	14.0	12.5	13.5	10.0	11.5	11.0	17.0	10.0
4	22.0	18.0	19.5	16.0	14.5	11.0	14.0	10.0	12.0	11.0	17.5	10.5
5	22.5	18.0	19.0	15.0	15.0	13.0	14.5	10.0	11.0	10.5	15.0	11.0
6	22.0	18.0	19.5	17.0	16.5	14.0	15.0	11.0	10.0	17.5	11.0	12.5
7	23.0	18.0	19.0	16.5	16.0	14.0	14.5	11.5	10.5	16.0	11.0	14.0
8	23.0	18.0	18.5	16.0	15.0	13.5	14.0	12.5	11.5	17.5	11.5	12.0
9	22.5	19.0	17.5	14.0	15.5	12.5	13.5	13.0	12.5	18.0	12.5	13.0
10	22.5	19.5	17.5	13.0	16.0	13.5	13.5	12.5	13.5	12.0	20.0	15.0
11	22.0	20.0	17.5	13.0	16.5	14.5	14.5	11.5	13.0	11.5	20.5	15.0
12	22.5	19.0	17.0	12.5	15.5	13.0	13.0	9.0	13.0	12.0	19.5	13.0
13	22.0	17.0	20.5	13.5	13.5	11.0	13.0	8.5	14.5	12.0	20.0	13.0
14	22.0	17.5	16.5	15.0	12.0	9.0	14.5	9.0	14.5	13.0	19.5	14.5
15	21.0	17.0	16.0	14.5	12.5	8.5	15.0	9.5	14.5	13.5	20.0	15.5
16	20.0	16.0	16.5	15.0	12.5	10.0	15.0	10.0	15.0	14.0	20.0	15.0
17	20.0	17.0	17.0	15.0	12.0	9.5	15.0	10.0	15.5	15.0	20.5	14.0
18	19.0	14.5	16.0	14.5	12.5	10.5	15.0	10.0	15.5	15.0	17.0	13.5
19	19.0	15.0	17.0	14.5	11.5	9.5	14.0	12.5	16.0	15.5	19.0	12.0
20	20.0	16.5	16.0	12.0	11.5	11.0	14.0	12.0	16.0	15.0	21.0	13.5
21	19.5	15.5	15.0	13.0	11.5	10.5	14.5	13.0	15.0	14.0	20.0	14.5
22	19.5	15.0	14.0	11.5	11.0	10.5	15.5	13.0	15.0	13.5	21.0	14.5
23	18.0	15.0	14.5	12.0	14.0	10.0	16.0	11.5	16.0	14.0	22.0	14.5
24	18.5	14.0	14.0	12.0	13.5	9.5	16.0	12.0	18.0	13.5	22.0	14.5
25	18.5	14.0	13.0	12.0	14.0	10.0	15.5	11.0	19.0	13.0	19.5	14.0
26	18.0	13.0	12.5	11.0	12.0	9.5	16.0	12.0	19.5	13.5	20.0	15.0
27	19.5	15.5	11.5	11.0	12.0	11.0	16.0	12.0	19.0	15.0	16.5	15.0
28	19.0	16.0	12.5	11.5	12.0	11.5	13.0	11.5	19.5	14.0	16.0	14.5
29	19.0	15.0	14.0	12.5	12.0	11.0	11.5	11.5	---	---	15.0	13.0
30	19.0	15.0	15.0	12.0	12.0	11.5	12.5	11.5	---	---	16.0	14.0
31	19.0	16.5	---	---	12.0	11.5	12.0	10.5	---	---	16.0	14.5
MONTH	23.0	13.0	20.5	11.0	16.5	8.5	16.0	8.5	19.5	10.0	22.0	10.0

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	15.0	25.0	17.0	24.0	17.5	29.0	21.0	26.0	19.5	27.0	21.0
2	18.0	16.5	24.5	17.5	23.0	16.5	28.5	21.0	26.0	19.5	27.0	21.0
3	19.0	17.5	24.5	18.0	23.0	18.0	28.5	21.0	26.0	19.5	24.5	21.0
4	19.5	18.5	23.5	18.0	24.5	17.0	---	---	26.0	19.0	21.0	19.5
5	19.0	18.0	23.0	18.0	26.0	18.5	---	---	26.0	19.0	21.5	19.5
6	18.5	18.0	22.5	18.0	28.0	19.5	---	---	26.0	19.0	22.5	18.5
7	19.5	18.5	22.0	16.5	27.5	20.0	---	---	26.0	20.0	23.5	19.5
8	20.5	19.0	22.0	17.0	28.0	20.0	28.5	21.5	26.0	20.0	23.0	19.5
9	21.0	19.5	22.0	17.5	27.5	20.0	27.5	22.5	26.5	20.0	23.0	20.0
10	21.0	19.0	22.5	16.0	27.0	20.5	28.0	21.5	26.0	20.5	21.5	18.5
11	21.0	18.0	21.0	16.0	26.5	19.5	29.0	22.0	26.0	21.0	22.0	17.5
12	22.5	17.5	23.0	17.0	26.5	20.0	28.5	21.5	25.0	20.5	22.5	16.5
13	24.5	18.0	25.0	16.0	26.0	20.0	28.5	21.0	24.5	20.0	23.0	17.5
14	24.0	18.5	25.0	17.5	26.5	19.5	28.0	21.5	24.5	18.5	23.0	17.0
15	23.0	18.5	24.5	17.5	27.0	20.0	25.0	21.0	25.5	19.0	23.0	17.5
16	22.0	17.0	24.0	18.0	26.5	20.0	29.0	22.5	25.5	20.0	23.0	18.0
17	21.5	17.0	23.0	17.5	27.0	19.5	28.0	22.0	25.0	20.5	23.0	19.5
18	19.5	16.0	24.0	16.0	26.5	20.0	26.5	22.0	24.5	20.0	20.5	18.0
19	19.5	16.0	22.0	17.5	26.5	20.0	27.5	22.0	25.0	19.0	21.0	16.0
20	19.5	15.5	24.0	18.0	31.5	19.5	28.0	22.0	25.0	18.0	22.5	17.0
21	18.0	15.0	25.0	18.5	25.0	19.5	28.0	22.0	25.5	20.0	23.0	17.5
22	22.5	16.0	25.5	18.0	26.0	19.0	28.0	21.5	26.0	19.5	23.0	17.5
23	24.0	15.5	26.0	19.0	25.5	19.5	27.0	21.5	25.5	18.0	23.0	18.0
24	24.0	16.5	25.5	19.5	24.0	20.0	26.5	21.5	27.0	19.5	23.0	18.5
25	22.0	16.0	23.5	19.5	23.5	18.5	27.0	22.0	29.5	20.5	23.5	19.0
26	21.0	13.5	23.5	19.0	27.0	18.0	27.5	21.0	29.5	21.5	31.5	20.5
27	22.5	14.0	24.5	18.5	27.5	19.5	27.5	21.0	30.0	21.0	22.5	21.0
28	23.5	15.0	24.5	17.0	27.5	20.0	27.0	20.5	30.0	21.0	23.0	20.0
29	23.5	15.5	23.5	17.5	26.5	20.0	27.0	20.5	27.5	21.0	22.0	20.0
30	24.5	16.5	22.0	17.5	28.0	20.0	26.5	20.0	27.5	22.0	23.0	19.5
31	---	---	23.5	17.5	---	---	26.5	20.0	27.5	21.5	---	---
MONTH	24.5	13.5	26.0	16.0	31.5	16.5	29.0	20.0	30.0	18.0	31.5	16.0
YEAR	31.5	8.5										

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
05...	1120	117	19.0	177	56	85
26...	1125	141	14.0	128	49	58
NOV						
08...	0940	150	16.5	126	51	64
21...	0930	168	13.0	101	46	74
JAN						
08...	1025	425	12.0	144	165	--
25...	1145	260	12.0	150	105	94
FEB						
07...	1325	381	11.5	79	81	95
20...	1215	301	15.5	88	72	98
MAR						
08...	1215	289	13.5	165	129	--
26...	1055	234	15.5	167	106	--
APR						
05...	1340	271	19.0	87	64	--
11...	1130	239	17.5	131	85	--
MAY						
09...	1200	207	18.5	271	151	--
23...	1230	193	23.0	170	89	81
JUN						
07...	0845	161	20.0	184	80	--
25...	1030	169	18.0	154	70	--
JUL						
30...	1030	132	21.0	117	42	99
AUG						
05...	1230	138	21.5	117	44	--
29...	0850	124	21.0	149	50	--
SEP						
03...	1030	122	21.0	286	94	--
20...	1130	159	18.0	146	63	96

SANTA ANA RIVER BASIN

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.--Lat 33°51'23", long 117°48'00", in Canon De Santa Ana, Orange County, Hydrologic Unit 18070203, on diversion channel, 100 ft downstream from diversion point, 0.1 mi south of La Palma Avenue, 0.6 mi west of Imperial Highway, and 7.8 mi east of Anaheim.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year. Records prior to Sept. 30, 1976, in files of the Geological Survey.

GAGE.--Water-stage recorder and concrete Parshall flume control. Elevation of gage is 262 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 29, Dec. 1 to Dec. 5, Dec. 14 to Dec. 17, June 26 to Sept. 30. Records fair except for periods of estimated daily record, Dec. 1 to Dec. 5 and Dec. 14 to Dec. 17, which are poor. Water is diverted from Santa Ana River at diversion point 100 ft upstream, for recharging to spreading basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 431 ft³/s, Jan. 14, 1978; no flow for some periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 354 ft³/s, Feb. 15; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	170	86	243	170	181	125	126			0
2		0	150	24	278	166	179	126	126			0
3		0	180	137	243	172	179	127	132			0
4		0	190	184	266	163	185	138	173			0
5		0	175	186	287	163	187	140	169			0
6		0	126	190	285	158	177	151	167			0
7		0	135	194	281	153	175	154	141			0
8		0	227	288	264	161	176	152	139			0
9		0	266	335	137	165	179	150	137			0
10		0	204	336	78	162	176	151	130			0
11		0	188	327	151	160	172	150	137			0
12		0	179	263	271	155	162	149	139			0
13		0	167	228	301	152	149	148	126			0
14		0	155	220	346	153	141	146	111			0
15		0	148	215	354	157	133	137	110			0
16		0	280	208	336	159	139	128	111			1.2
17		0	295	198	330	160	143	126	115			1.6
18		0	190	188	316	183	140	129	116			24
19		0	112	187	312	233	149	130	100			58
20		0	199	188	281	197	143	126	69			62
21		0	155	188	245	173	145	128	37			61
22		0	108	189	283	164	147	127	5.3			61
23		0	85	189	301	162	137	128	3.6			61
24		0	18	191	283	155	138	124	1.4			68
25		0	16	182	229	148	134	128	0			107
26		0	143	185	195	144	127	131	0			104
27		0	128	194	190	183	124	131	0			66
28		0	149	169	188	193	124	125	0			65
29		0	143	156	---	155	136	123	0			64
30		126	135	177	---	170	128	123	0			62
31		---	129	196	---	182	---	126	---			---
TOTAL	0	126	4945	6198	7274	5171	4605	4177	2621.3	0	0	865.8
MEAN	0	4.20	159	199	259	166	153	134	87.3	0	0	28.8
MAX	0	126	295	336	354	233	187	154	173	0	0	107
MIN	0	0	16	24	78	144	124	123	0	0	0	0
AC-FT	0	250	9810	12290	14430	10260	9130	8280	5200	0	0	1720
WTR YR 1985	TOTAL	35983.1	MEAN	98.5	MAX	354	MIN	0				

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1975 to current year.

SPECIFIC CONDUCTANCE: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1974 to July 1982, December 1983 to current year.

INSTRUMENTATION.--Specific conductance recorder from July 1974 to July 1982, and December 1983 to present.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 microsiemens, Sept. 21, 1978; minimum recorded, 143 microsiemens, Mar. 10, 1980.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,280 microsiemens, Feb. 25; minimum recorded, 390 microsiemens, Feb. 10.

EXTREMES FOR 1984 WATER YEAR (NOT PREVIOUSLY PUBLISHED).--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,120 microsiemens, Dec. 16; minimum recorded, 580 microsiemens, Dec. 25.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV					
16...	1030	153	1200	17.0	727
DEC					
07...	1520	315	1040	15.0	611
JAN					
09...	1330	290	1180	16.5	726
26...	0955	265	1200	13.0	749
FEB					
13...	1025	217	1140	14.5	811
MAR					
01...	1030	119	1230	15.5	788
15...	0945	210	1100	16.5	707
APR					
04...	1250	157	1180	17.0	761
MAY					
04...	0940	139	1180	21.0	749
24...	1230	116	1170	25.0	735
JUN					
08...	1240	110	1160	28.5	738

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
DEC					
05...	1425	177	1220	14.0	759
18...	0750	247	990	9.5	669
JAN					
03...	1410	213	1070	12.5	715
FEB					
08...	0920	262	1050	11.0	662
27...	1240	190	1080	18.0	712
MAR					
28...	1015	237	730	15.0	460
MAY					
03...	0940	121	1100	18.5	721
JUN					
04...	0925	156	953	19.5	700

SANTA ANA RIVER BASIN

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), DECEMBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	---	---	---
2							---	---	---	---	---	---
3							---	---	---	---	---	---
4							---	---	---	---	---	---
5							---	---	---	---	---	---
6							---	---	---	---	---	---
7							---	---	---	---	---	---
8							1060	1030	1040	---	---	---
9							1050	990	1020	---	---	---
10							1010	980	1000	1150	1070	1100
11							1010	960	994	1160	1060	1100
12							1040	950	984	1150	1070	1090
13							1000	980	987	1140	1060	1090
14							1020	960	986	1150	1060	1110
15							1070	980	1020	1130	1090	1110
16							1120	1030	1070	1120	910	1070
17							1080	1020	1040	1130	1050	1090
18							1060	1020	1040	1060	1000	1030
19							1050	1010	1030	1090	1040	1050
20							1090	1020	1040	1110	1040	1070
21							1090	980	1000	1100	1040	1080
22							1060	990	1010	1110	1090	1100
23							1070	980	1010	1140	980	1120
24							1040	790	1000	1140	970	1120
25							1190	580	1010	1160	1120	1140
26							1050	1000	1030	1110	1110	1140
27							---	---	---	1170	1120	1140
28							---	---	---	1170	1100	1120
29							---	---	---	1140	1080	1120
30							---	---	---	1160	1090	1130
31							---	---	---	1180	1080	1120
MONTH							---	---	---	---	---	---
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1140	1080	1110							---	---	---
2	1160	1070	1110							---	---	---
3	1140	1060	1090							---	---	---
4	1130	1090	1110							---	---	---
5	1140	1080	1110							1200	1150	1180
6	1140	1050	1080							1220	1140	1180
7	1080	1030	1060							1210	1150	1180
8	---	---	---							1210	1160	1190
9	---	---	---							1220	1180	1200
10	---	---	---							1210	1180	1190
11	---	---	---							1200	1180	1190
12	---	---	---							1190	1170	1180
13	---	---	---							1200	1160	1180
14	1190	1000	1140							1210	1170	1190
15	---	---	---							1180	1150	1170
16	---	---	---							1190	1160	1170
17	---	---	---							1190	1150	1160
18	---	---	---							1180	1160	1170
19	---	---	---							1200	1150	1170
20	---	---	---							1210	1160	1180
21	---	---	---							1200	1160	1170
22	---	---	---							1180	1160	1170
23	---	---	---							1230	1180	1210
24	---	---	---							1220	1170	1190
25	---	---	---							1200	1160	1180
26	---	---	---							1190	1170	1170
27	---	---	---							1200	1170	1180
28	---	---	---							1200	1180	1190
29	---	---	---							1220	1180	1200
30	---	---	---							1220	1170	1190
31	---	---	---							1210	1180	1190
MONTH	---	---	---							1230	1140	1180

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), DECEMBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1200	1170	1190									
2	1200	1160	1180									
3	1190	1140	1160									
4	1180	1140	1160									
5	1180	1120	1160									
6	1170	1130	1150									
7	1170	1050	1140									
8	1170	1140	1160									
9	1190	1150	1170									
10	1190	1170	1180									
11	1190	1160	1170									
12	1170	1140	1160									
13	1170	1120	1150									
14	1180	1130	1150									
15	1170	1110	1140									
16	1140	1120	1130									
17	1160	1130	1140									
18	1170	1140	1150									
19	1170	1140	1150									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									
YEAR	1230	580	1120									

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	1210	1160	1190	1040	960	1000
2				---	---	---	1240	1200	1230	970	920	940
3				---	---	---	1240	1150	1200	1100	930	1020
4				---	---	---	1190	1100	1140	1120	1070	1090
5				---	---	---	1230	1180	1210	1120	1060	1090
6				---	---	---	1230	1170	1200	1110	1080	1100
7				---	---	---	---	---	---	1120	780	1050
8				---	---	---	---	---	---	1130	750	926
9				---	---	---	---	---	---	860	720	775
10				---	---	---	---	---	---	1060	860	982
11				---	---	---	---	---	---	1140	1060	1110
12				---	---	---	---	---	---	1180	1110	1140
13				---	---	---	---	---	---	1170	1090	1120
14				---	---	---	---	---	---	1160	1080	1110
15				---	---	---	---	---	---	1160	1080	1110
16				---	---	---	---	---	---	1200	1100	1140
17				---	---	---	---	---	---	1160	1110	1130
18				---	---	---	---	---	---	1160	1110	1130
19				---	---	---	920	420	722	1170	1130	1140
20				---	---	---	690	640	665	1170	1110	1130
21				---	---	---	700	620	655	1140	1090	1110
22				---	---	---	890	700	810	1120	1080	1100
23				---	---	---	1040	890	990	1120	1080	1100
24				---	---	---	1010	920	950	1130	1060	1090
25				---	---	---	940	890	910	1120	1080	1100
26				---	---	---	1150	820	970	1120	1070	1090
27				---	---	---	930	600	730	1120	1120	1080
28				---	---	---	700	630	657	1130	632	997
29				---	---	---	660	630	640	1020	745	843
30				1240	1190	1220	790	660	726	882	809	848
31				---	---	---	970	800	881	987	882	923
MONTH				---	---	---	---	---	---	1200	632	1050

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

11075720 CARBON CREEK BELOW CARBON CANYON DAM, CA

LOCATION.--Lat 33°54'40", long 117°50'29", in SW1/4 sec.17, T.3 S., R.9 W., Orange County, Hydrologic Unit 18070106, on right wall of outlet channel 250 ft downstream from toe of Carbon Canyon Dam, and 2.4 mi northwest of Yorba Linda.

DRAINAGE AREA.--19.5 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 396.29 ft Corps of Engineers datum. Prior to Dec. 3, 1971, at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Dec. 9, 10, 12-17, 20-26, Dec. 25 to Jan. 3, Jan. 22-27, Jan 29 to Feb. 5, Feb. 11, 12, Mar. 29 to Apr. 2. Records fair. Flow regulated by Carbon Canyon flood-control reservoir, capacity, 6,610 acre-ft. No diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--24 years, 1.14 ft³/s, 826 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 554 ft³/s, Mar. 1, 1983, gage height, 5.11 ft, present datum, from rating curve extended above 110 ft³/s on basis of optical current meter measurement at 241 ft³/s and computation of flow in concrete-lined channel at gage heights 6.18 ft and 4.12 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 148 ft³/s, Mar. 28, gage height, 3.13 ft, from rating curve extended as explained above; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	0	0						
2		0	0	0	.98	0						
3		0	0	0	.35	0						
4		0	0	.01	.20	0						
5		0	0	0	.04	0						
6		0	0	0	0	0						
7		0	0	.02	0	0						
8		0	1.4	.55	0	0						
9		0	.05	.16	6.8	0						
10		0	.08	.06	3.5	0						
11		0	.11	.04	0	0						
12		0	0	.01	0	0						
13		0	0	0	0	0						
14		0	0	0	0	0						
15		0	0	0	0	0						
16		0	1.6	0	0	0						
17		.13	0	0	0	0						
18		.04	7.0	0	0	0						
19		.01	4.3	.02	0	0						
20		0	1.1	.01	0	0						
21		.12	0	.05	0	0						
22		.06	0	0	0	0						
23		0	0	0	0	0						
24		2.3	.20	0	0	0						
25		1.2	0	0	0	0						
26		.12	.25	0	0	0						
27		.02	6.4	0	0	1.5						
28		0	2.0	2.5	0	2.3						
29		0	0	.32	---	0						
30		0	0	0	---	0						
31		---	0	0	---	0	---		---			---
TOTAL	0	4.00	24.49	3.75	11.87	3.8	0	0	0	0	0	0
MEAN	0	.13	.79	.12	.42	.12	0	0	0	0	0	0
MAX	0	2.3	7.0	2.5	6.8	2.3	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	7.9	49	7.4	24	7.5	0	0	0	0	0	0
CAL YR 1984	TOTAL 40.98	MEAN .11	MAX 7.0	MIN 0	AC-FT 81							
WTP YR 1985	TOTAL 47.91	MEAN .13	MAX 7.0	MIN 0	AC-FT 95							

SANTA ANA RIVER BASIN

11075755 SANTA ANA RIVER AT BALL ROAD, AT ANAHEIM, CA

LOCATION.--Lat 33°49'00", long 117°52'17", in SE¼SW¼ sec.24, T.4 S., R.10 W., Orange County, Hydrologic Unit 18070203, 350 ft south of Ball Road, 0.6 mi west of Batavia Street, 1.0 mi east of State College Boulevard in Anaheim, and 16 mi downstream from Prado Dam.

DRAINAGE AREA.--1,587 mi², excludes 768 mi² above Lake Elsinore.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder with concrete cut-off wall. Elevation of gage is 170 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. River flow is regulated by Prado Dam, infiltration ponds and diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft³/s, Mar. 1, 1983, gage height, 6.17 ft, from rating curve extended above 7,000 ft³/s; no flow for many months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,110 ft³/s, Feb. 9, gage height, 4.08 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	793	2.6	0	26	0		0		
2		0	0	183	9.7	0	12	0		10		
3		0	0	81	6.0	1.5	3.0	2.1		30		
4		0	0	26	26	3.7	2.2	4.5		33		
5		0	0	9.0	88	4.6	19	4.5		21		
6		0	0	3.7	109	16	37	4.5		3.4		
7		0	0	12	108	4.5	40	4.5		6.6		
8		0	65	70	150	4.1	43	4.5		8.6		
9		0	164	0	854	7.2	40	4.5		5.0		
10		0	215	0	288	8.6	37	4.1		1.7		
11		0	46	.15	219	21	26	4.1		.59		
12		0	37	.36	62	9.9	12	4.1		0		
13		0	19	0	91	15	6.6	4.1		.40		
14		0	0	0	128	7.9	4.1	3.7		3.0		
15		0	0	.02	135	7.9	2.2	3.7		2.0		
16		0	87	.77	142	6.6	2.7	3.0		0		
17		0	207	.14	135	7.2	4.3	2.7		0		
18		0	556	0	114	14	1.7	2.2		0		
19		0	831	0	114	52	0	2.2		0		
20		0	1950	0	135	73	0	1.9		0		
21		0	1600	0	45	13	0	1.9		0		
22		0	888	0	58	10	0	1.9		0		
23		0	747	0	21	10	0	1.7		0		
24		14	166	0	15	13	0	1.5		0		
25		208	77	0	6.6	7.2	0	1.3		0		
26		39	68	0	.42	6.0	0	.88		0		
27		0	667	.05	0	46	0	.58		0		
28		0	4030	4.5	0	108	0	.18		0		
29		.11	994	43	---	52	18	0		0		
30		15	888	4.5	---	33	4.6	0		0		
31		---	888	5.0	---	35	---	0	---	0		---
TOTAL	0	276.11	15190	1236.19	3062.32	597.9	341.4	74.84	0	125.29	0	0
MEAN	0	9.20	490	39.9	109	19.3	11.4	2.41	0	4.04	0	0
MAX	0	208	4030	793	854	108	43	4.5	0	33	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	548	30130	2450	6070	1190	677	148	0	249	0	0
CAL YR 1984	TOTAL	18902.58	MEAN	51.6	MAX	4030	MIN	0	AC-FT	37490		
WTR YR 1985	TOTAL	20904.05	MEAN	57.3	MAX	4030	MIN	0	AC-FT	41460		

11075800 SANTIAGO CREEK AT MODJESKA, CA

LOCATION.--Lat 33°42'47", long 117°30'40", in NE1/4 sec.30, T.5 S., R.7 W., Orange County, Hydrologic Unit 18070203, on right bank at Santiago Canyon road bridge, 0.9 mi northwest of Modjeska, 1.0 mi downstream from Harding Creek, and 1.5 mi downstream from Modjeska Reservoir. Prior to Feb. 6, 1985 at site 0.6 mi upstream.

DRAINAGE AREA.--13.0 mi². (Drainage area at site used prior to Feb. 6, 1985, 12.5 mi²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,210.00 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 10, 1969, to Feb. 6, 1985 at site 0.6 mi upstream at datum 44.0 ft higher. Prior to Sept. 10, 1969 at datum 48.0 ft higher.

REMARKS.--Estimated daily discharges: Oct. 15-22, Nov. 19 to Dec. 2, Jan. 8 to Feb. 6. Records poor at old site, fair at new site. Slight regulation by Modjeska Reservoir on Harding Creek. No diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--24 years, 8.39 ft³/s, 6,080 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft³/s, Feb. 25, 1969, gage height, 10.50 ft, present datum, at site then in use, from rating curve extended above 840 ft³/s, on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	0200	108	4.20	Dec. 27	1800	323	4.48
Dec. 19	0030	*1,400	5.52	Feb. 9	1200	153	*6.57

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.04	.28	6.8	3.8	2.9	4.4	.52	.01			
2	.01	.04	.26	6.2	3.3	2.9	3.6	.47	.03			
3	.01	.04	.26	5.6	3.1	2.8	3.5	.44	.12			
4	.01	.04	.26	5.4	2.9	2.7	3.3	.41	.16			
5	.01	.04	.21	4.8	2.8	2.6	3.1	.42	.05			
6	.01	.06	.17	6.2	2.1	2.6	2.8	.56	0			
7	.01	.06	.27	8.8	2.1	2.6	2.7	.65	0			
8	0	.08	1.1	11	2.0	2.5	2.3	.63	0			
9	.01	.08	.48	8.8	65	2.3	2.3	.66	0			
10	.02	.08	.42	7.0	34	2.1	2.2	.93	.09			
11	.02	.08	.48	6.0	19	2.2	2.0	.62	.70			
12	.02	.08	.48	5.4	13	2.2	1.8	.66	0			
13	.01	.34	.36	4.9	10	2.2	1.5	.60	0			
14	.01	.08	.26	4.7	8.7	2.2	1.2	.40	0			
15	.02	.06	.26	4.5	7.5	2.2	1.2	.32	0			
16	.01	.06	10	4.4	6.6	2.0	1.1	.28	0			
17	.01	.08	2.6	4.2	6.1	1.9	1.4	.26	0			
18	.01	.11	18	4.0	5.5	2.0	1.6	.27	0			
19	.01	.16	87	3.9	5.1	2.0	1.6	.24	0			
20	.01	.21	39	3.8	5.1	1.8	1.5	.27	0			
21	.01	.53	16	3.7	4.6	1.9	1.6	.24	0			
22	.01	.32	11	3.6	4.1	1.7	1.9	.19	0			
23	.11	.25	8.9	3.5	3.8	1.5	1.7	.09	0			
24	.04	5.4	6.8	3.5	3.5	1.4	1.4	.04	0			
25	.02	4.5	6.2	3.4	3.4	1.4	1.2	0	0			
26	.02	2.1	5.1	3.3	3.2	1.3	1.1	.01	0			
27	.06	.95	52	3.2	2.9	5.3	.96	.06	0			
28	.06	.79	39	3.2	2.9	7.7	.79	.02	0			
29	.06	.59	16	3.1	---	7.9	.76	.01	0			
30	.06	.38	9.7	5.3	---	6.7	.62	0	0			
31	.11	---	6.8	4.7	---	5.3	---	0	---			---
TOTAL	.78	17.63	339.65	156.9	236.1	88.8	57.13	10.27	1.16	0	0	0
MEAN	.025	.59	11.0	5.06	8.43	2.86	1.90	.33	.039	0	0	0
MAX	.11	5.4	87	11	65	7.9	4.4	.93	.70	0	0	0
MIN	0	.04	.17	3.1	2.0	1.3	.62	0	0	0	0	0
AC-FT	1.5	35	674	311	468	176	113	20	2.3	0	0	0

CAL YR 1984 TOTAL 819.48 MEAN 2.24 MAX 87 MIN 0 AC-FT 1630
WTR YR 1985 TOTAL 908.42 MEAN 2.49 MAX 87 MIN 0 AC-FT 1800

SANTA ANA RIVER BASIN

11077500 SANTIAGO CREEK AT SANTA ANA, CA

LOCATION.--Lat 33°46'13", long 117°53'01", in SW1/4 sec.1, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on left bank 127 ft upstream from Bristol Street bridge at Santa Ana, and 1,700 ft upstream from mouth at Santa Ana River.

DRAINAGE AREA.--98.6 mi².

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only October to December 1928, published in WSP 1315-B.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 105.00 ft Orange County Environmental Management Agency datum. Prior to Sept. 8, 1969, at site 0.1 mi upstream at different datum, Sept. 9, 1969, to July 21, 1976, at site 127 ft downstream at datum 2.66 ft lower.

REMARKS.--Estimated daily discharges: Dec. 4-7, 20-27. Records poor. Flow regulated by Santiago Reservoir, capacity, 25,000 acre-ft, since January 1963 by Villa Park flood-control reservoir, capacity, 15,500 acre-ft, and affected by intervening gravel pits. Diversions above station by Irvine Co. and Serrano and Carpenter Irrigation Districts. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--57 years, 5.00 ft³/s, 3,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,600 ft³/s, Feb. 25, 1969, gage height, 9.10 ft, site and datum then in use; maximum gage height, 9.85 ft, Jan. 16, 1952, site and datum then in use; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 850 ft³/s, Feb. 9, gage height, 4.49 ft; no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	0	0						
2		0	0	0	0	0						
3		0	13	0	7.4	0						
4		0	0	0	0	0						
5		0	0	0	0	0						
6		0	0	0	0	0						
7		0	1.3	1.6	0	0						
8		0	24	6.6	.03	0						
9		0	0	0	104	0						
10		0	0	0	0	0						
11		0	0	0	0	0						
12		0	0	0	0	0						
13		.06	0	0	0	0						
14		0	0	0	0	0						
15		0	0	0	0	0						
16		0	20	0	0	0						
17		0	0	0	0	0						
18		0	21	0	0	0						
19		0	32	0	0	0						
20		0	7.9	0	0	0						
21		0	0	0	0	0						
22		0	0	0	0	0						
23		0	0	0	0	0						
24		76	0	0	0	0						
25		0	0	0	0	0						
26		0	0	0	0	0						
27		0	33	0	0	.10						
28		0	.39	37	0	0						
29		0	0	0	---	0						
30		0	0	0	---	0						
31		---	0	0	---	0	---		---			---
TOTAL	0	76.06	152.59	45.2	111.43	.10	0	0	0	0	0	0
MEAN	0	2.54	4.92	1.46	3.98	.003	0	0	0	0	0	0
MAX	0	76	33	37	104	.10	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	151	303	90	221	.2	0	0	0	0	0	0
CAL YR 1984	TOTAL	250.03	MEAN	.68	MAX	76	MIN	0	AC-FT	496		
WTR YR 1985	TOTAL	385.38	MEAN	1.06	MAX	104	MIN	0	AC-FT	764		

11078000 SANTA ANA RIVER AT SANTA ANA, CA

LOCATION.--Lat 33°44'46", long 117°54'30", in SW¼ sec.10, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on right bank 50 ft downstream from Fifth Street Bridge in Santa Ana and 1.8 mi downstream from Santiago Creek.

DRAINAGE AREA.--1,700 mi², excludes 768 mi² above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1923 to current year.

REVISED RECORDS.--WDR CA-74-1: Drainage area. WDR CA-79-1: 1978 (M).

GAGE.--Water-stage recorder. Datum of gage is 61.23 ft Orange County Datum. Jan. 3, 1923, to Jan. 24, 1929, at same site at different datum. Jan. 25, 1929, to June 20, 1948, at site 450 ft upstream at different datum. June 21, 1948, to May 2, 1960, at same site at different datum. Feb. 28, 1961, to Oct. 1, 1961, at same site at datum 27.00 ft higher. Oct. 2, 1961, to Nov. 28, 1979, at same site at datum 25.00 ft higher. Nov. 29, 1979 to present, at same site at datum 20.00 ft higher. Apr. 21, 1980, to Aug. 14, 1981, no gage due to rebuilding of channel.

REMARKS.--Estimated daily discharges: June 6 to Aug. 8, Sept. 22 to Sept. 30. Records fair. Natural flow affected by ground-water withdrawals, diversions, importation by Metropolitan Water District, municipal use, return flow from irrigation. Since 1940, natural flow affected by Prado flood-control reservoir, capacity, 201,200 acre-ft, three small flood-control reservoirs, combined capacity, 31,900 acre-ft, Big Bear Lake (station 11049000), and Santiago Reservoir, capacity, 25,000 acre-ft. Discharge up to 100 ft³/s can be diverted from Carbon Creek to Coyote Creek 1.5 mi upstream from mouth of Carbon Creek. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--17 years (water years 1924-40), 23.4 ft³/s, 16,940 acre-ft/yr; 45 years (unadjusted for storage since 1940) 54.3 ft³/s, 39,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,300 ft³/s, Mar. 3, 1938, gage height, 10.20 ft, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,690 ft³/s, Feb. 9, gage height, 7.55 ft; no flow many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.06	.26	731	25	0	11					0
2	0	.06	.22	265	95	0	2.1					0
3	0	.06	.43	144	40	0	.18					0
4	0	.09	.68	68	32	0	0					.04
5	0	.11	.32	56	61	.02	0					14
6	0	.06	.22	61	95	0	2.7					6.8
7	0	.46	.19	49	104	.01	15					.96
8	0	.70	206	175	106	0	17					.07
9	0	.52	107	15	1110	0	18					.03
10	0	.19	225	7.8	327	0	21					.11
11	0	.15	66	12	255	0	23					0
12	0	.13	49	16	67	0	1.3					0
13	0	2.9	35	9.7	67	0	0					0
14	0	.71	5.6	6.7	85	0	0					0
15	0	.27	.88	6.8	104	0	0					0
16	0	.19	237	17	112	0	0					0
17	.09	.16	185	18	104	0	0					0
18	.17	.14	1140	7.2	108	.32	0					0
19	.07	.15	1000	2.0	105	.05	0					0
20	.04	.15	2180	4.1	103	27	0					0
21	.03	.52	1540	4.4	43	11	0					0
22	.02	.75	756	1.7	24	.59	0					0
23	.02	.28	658	.58	39	0	0					0
24	0	475	225	.38	37	0	0					0
25	0	188	127	.26	25	0	0					0
26	0	47	144	.22	4.7	0	0					0
27	0	5.9	724	.20	.04	25	0					0
28	0	.98	1060	232	0	66	0					0
29	0	.47	895	231	---	69	0					0
30	.02	.29	871	41	---	17	0					0
31	.04	---	835	36	---	17	---		---			---
TOTAL	.50	726.45	13273.80	2219.04	3277.74	232.99	111.28	0	0	0	0	22.01
MEAN	.016	24.2	428	71.6	117	7.52	3.71	0	0	0	0	.73
MAX	.17	475	2180	731	1110	69	23	0	0	0	0	14
MIN	0	.06	.19	.20	0	0	0	0	0	0	0	0
AC-FT	1.0	1440	26330	4400	6500	462	221	0	0	0	0	44
CAL YR 1984	TOTAL	16861.71	MEAN	46.1	MAX	2180	MIN	0	AC-FT	33450		
WTR YR 1985	TOTAL	19863.81	MEAN	54.4	MAX	2180	MIN	0	AC-FT	39400		

SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968-71, 1973 to current year.

WATER TEMPERATURES: Water years 1968-71, 1973 to current year.

SEDIMENT RECORDS: Water years 1968-71, 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to September 1969, October 1970 to September 1971, October 1972 to September 1980, October 1981 to current year.

SUSPENDED SEDIMENT DISCHARGE: October 1967 to September 1971, October 1972 to September 1980, October 1981 to current year.

REMARKS.--Sediment samples were collected on most days where a water temperature is published. Sediment discharge values were estimated from a daily transport curve for those days that have no daily concentration values.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean (water years 1968-71, 1973-80, 1982-84), 78,000 mg/L Feb. 25, 1969; minimum daily mean, no flow for many days each year.

SEDIMENT LOAD: Maximum daily (water years 1968-71, 1973-80, 1982-84), 2,670,000 tons Feb. 25, 1969; minimum daily, 0 tons on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, e2,790 mg/L, Feb. 9; minimum daily mean, no flow for many days.

SEDIMENT LOAD: Maximum daily, e18,600 tons, Feb. 9; minimum daily, 0 ton many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---		---		---					
2		---	---		---		---					
3		---	---		---		---					
4		---	---		14.5		---					
5		---	---		---		---					
6		---	---		---		---					
7		---	---		---		---					
8		---	17.0		---		---					
9		---	---		---		22.0					
10		---	---		---		---					
11		---	---		14.0		---					
12		---	---		---		---					
13		---	---		---		---					
14		---	---		---		---					
15		---	---		---		---					
16		---	---		---		---					
17		---	---		---		---					
18		---	12.5		---		---					
19		---	---		---		---					
20		---	---		---		---					
21		---	13.0		---		---					
22		---	---		---		---					
23		---	---		---		---					
24		---	---		---		---					
25		---	---		---		---					
26		14.0	---		---		---					
27		---	13.0		---		---					
28		---	14.0		---		---					
29		---	---		---		---					
30		---	---		---		---					
31		---	14.0		---		---					
MONTH		---	---		---		---					

e Estimated.

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCEN- TRATION	LOADS	MEAN CONCEN- TRATION	LOADS	MEAN CONCEN- TRATION	LOADS	MEAN CONCEN- TRATION	LOADS	MEAN CONCEN- TRATION	LOADS	MEAN CONCEN- TRATION	LOADS
	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)	(MG/L)	(T/DAY)
OCTOBER												
1	0	.00	---	.00	2	.00	115	231	7	.47	0	.00
2	0	.00	---	.00	2	.00	52	39	106	83	0	.00
3	0	.00	---	.00	2	.00	37	17	26	2.8	0	.00
4	0	.00	---	.00	2	.00	16	2.9	36	3.1	0	.00
5	0	.00	---	.00	2	.00	15	2.3	43	7.6	2	.00
6	0	.00	---	.00	2	.00	14	2.3	31	8.2	0	.00
7	0	.00	---	.01	2	.00	13	1.7	30	8.4	2	.00
8	0	.00	---	.01	335	705	153	135	24	6.9	0	.00
9	0	.00	---	.01	153	108	4	.20	2790	18600	0	.00
10	0	.00	---	.00	131	89	3	.10	260	230	0	.00
11	0	.00	---	.00	45	8.0	4	.10	213	167	0	.00
12	0	.00	---	.00	35	4.6	4	.20	54	10	0	.00
13	0	.00	---	.02	9	.85	3	.10	62	11	0	.00
14	0	.00	---	.01	2	.50	3	.10	69	16	0	.00
15	0	.00	---	.01	1	.00	3	.10	76	21	0	.00
16	0	.00	---	.00	491	703	5	.20	68	21	0	.00
17	---	.00	---	.00	126	74	5	.20	60	17	0	.00
18	---	.00	---	.00	1990	17200	3	.10	49	14	3	.00
19	---	.00	---	.00	966	5220	2	.00	38	11	2	.00
20	---	.00	---	.00	1740	10700	2	.00	23	1.5	10	1.0
21	---	.00	---	.01	1050	4770	2	.00	10	1.5	4	.12
22	---	.00	---	.02	500	1020	2	.00	7	.88	3	.00
23	---	.00	---	.01	450	799	2	.00	10	1.3	0	.00
24	0	.00	1170	8340	108	82	2	.00	10	1.0	0	.00
25	0	.00	541	498	32	11	2	.00	7	.47	0	.00
26	0	.00	69	9.7	132	107	0	.00	4	.05	0	.00
27	0	.00	9	.30	1410	4030	0	.00	2	.00	25	3.4
28	0	.00	2	.00	1120	4410	362	1220	0	.00	18	3.3
29	0	.00	2	.00	360	743	147	147	---	---	18	3.8
30	---	---	2	.00	275	551	11	1.2	---	---	5	.23
31	---	---	---	---	190	364	9	.87	---	---	5	.23
TOTAL	---	0.00	---	8848.11	---	51699.48	---	1801.67	---	19245.17	---	12.08

	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
DAY												
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4	.12	0	.00	0	.00	0	.00	0	.00	0	.00
2	3	.02	0	.00	0	.00	0	.00	0	.00	0	.00
3	2	.00	0	.00	0	.00	0	.00	0	.00	0	.00
4	0	.00	0	.00	0	.00	0	.00	0	.00	---	.00
5	0	.00	0	.00	0	.00	0	.00	0	.00	---	.20
6	2	.01	0	.00	0	.00	0	.00	0	.00	---	.06
7	4	.16	0	.00	0	.00	0	.00	0	.00	---	.01
8	5	.23	0	.00	0	.00	0	.00	0	.00	---	.00
9	5	.24	0	.00	0	.00	0	.00	0	.00	---	.00
10	5	.28	0	.00	0	.00	0	.00	0	.00	---	.00
11	6	.37	0	.00	0	.00	0	.00	0	.00	0	.00
12	2	.01	0	.00	0	.00	0	.00	0	.00	0	.00
13	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
14	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
15	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
16	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
17	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
18	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
19	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
20	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
21	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
22	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
23	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
24	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
25	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
26	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
27	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
28	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
29	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
30	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
31	---	---	0	.00	---	---	0	.00	0	.00	---	---
TOTAL	---	1.44	---	0.00	---	0.00	---	0.00	---	0.00	---	0.27

TOTAL LOAD FOR YEAR: 81608.22 TONS.

SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1984	0.50	0.0	0	0
NOVEMBER ...	726.45	8848.11	1040	9890
DECEMBER ...	13273.80	51699.95	11800	63500
JANUARY 1985	2219.04	1801.67	619	2420
FEBRUARY ...	3277.74	19245.17	2260	21500
MARCH	232.99	12.08	9	21
APRIL	111.28	1.44	2	3
MAY	0.0	0.0	0	0
JUNE	0.0	0.0	0	0
JULY	0.0	0.0	0	0
AUGUST	0.0	0.0	0	0
SEPTEMBER ..	22.01	0.27	0	0
TOTAL	19863.81	81608.69	15730	97334

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMRER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
APR 09...	1235	22.0	8	20	1	3	18	65	94	99	100

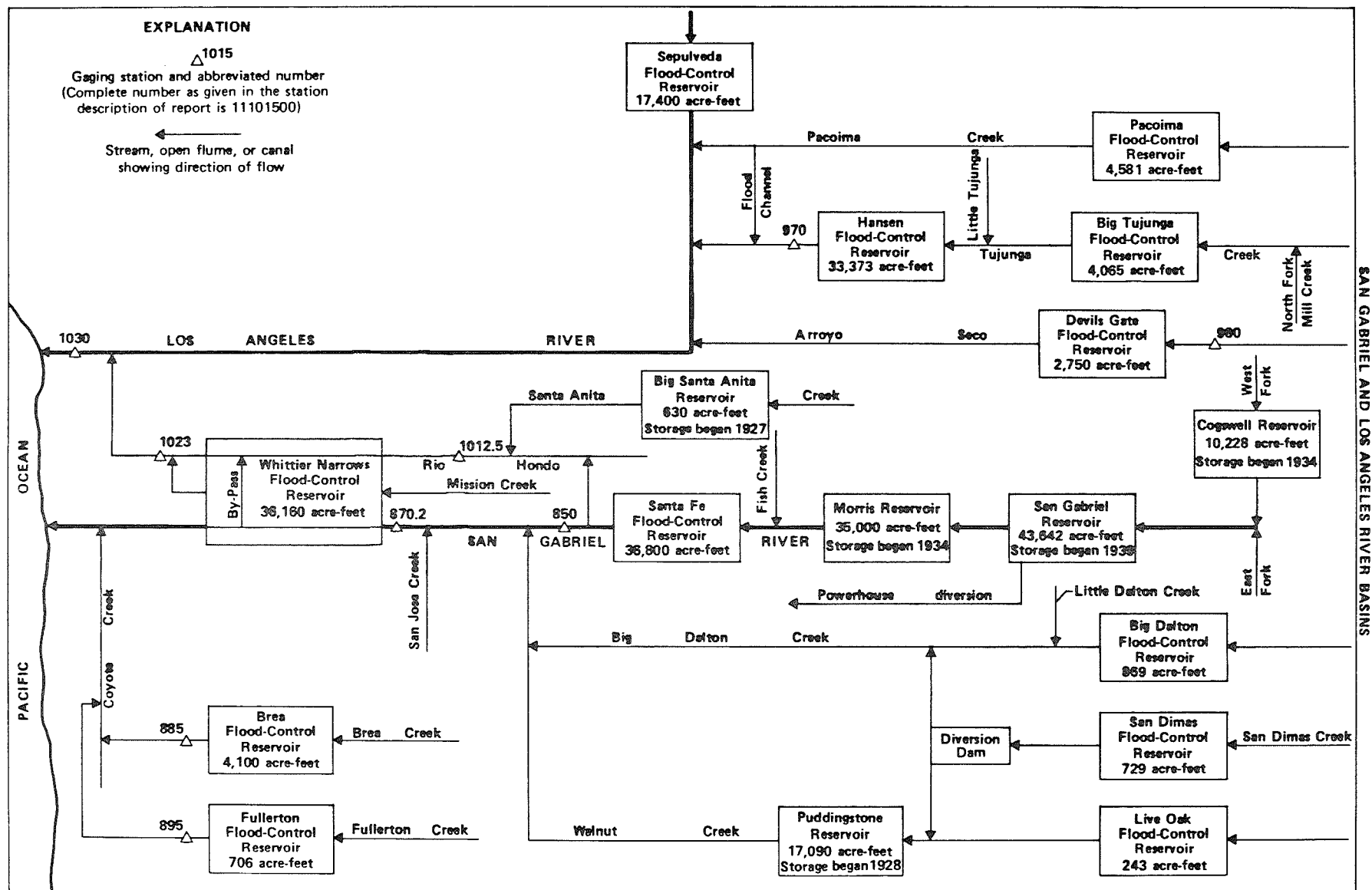


FIGURE 17. - Schematic diagram showing diversions and storage in San Gabriel and Los Angeles River basins.

SAN GABRIEL RIVER BASIN

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, CA

LOCATION.--Lat 34°06'44", long 117°58'07", NE¼SW¼ sec.6, T.1 S., R.10 W., Los Angeles County, Hydrologic Unit 18070106, on left bank at stilling basin of outlet of Santa Fe flood-control dam, 500 ft downstream from axis of dam, and 1.7 mi north of Baldwin Park.

DRAINAGE AREA.--236 mi².

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Estimated daily discharges: Oct. 18 to Jan. 2. Records good. Flow regulated by Cogswell and San Gabriel flood-control reservoirs, combined capacity, 53,870 acre-ft, Morris Reservoir, capacity, 35,000 acre-ft, and Santa Fe flood-control reservoir capacity, 32,640 acre-ft. Diversions above station for irrigation, power development, and ground-water replenishment. At times water is diverted from side of stilling basin to headwaters of Rio Hondo; 278 acre-ft were diverted during the current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion to Rio Hondo were provided by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,900 ft³/s, Jan. 26, 1969, gage height, 22.20 ft; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--No flow for the entire year.

11087020 SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°02'00", long 118°02'14", in La Puente Grant, Los Angeles County, Hydrologic Unit 18070106, on downstream side of bridge near center on Peck Road, 0.8 mi downstream from San Jose flood channel, 1.2 mi upstream from axis of Whittier Narrows Dam, and 1.8 mi south of El Monte.

DRAINAGE AREA.--353 mi².

PERIOD OF RECORD.--October 1955 to September 1957, October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 220 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 5-8, June 5 to July 12. Records fair except those for estimated periods, which are poor. Flow regulated by San Gabriel, Cogswell, and Santa Fe flood-control reservoirs, combined capacity, 90,670 acre-ft, several small flood-control reservoirs, combined capacity, 19,100 acre-ft, and Morris Reservoir, capacity, 35,000 acre-ft. Many diversions above station for irrigation, power development, and ground-water replenishment. Colorado River water released to the San Gabriel River at a site 14.9 mi upstream from gage, at Metropolitan Water District aqueduct crossing on San Dimas Creek for ground-water replenishment. Los Angeles County Flood Control District diverted 278 acre-ft from San Gabriel River below Santa Fe Dam to Rio Hondo, and released 874 acre-ft from Puddingstone Reservoir during the current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion to Rio Hondo and from Puddingstone Reservoir were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft³/s, Jan. 25, 1969, gage height, 10.90 ft; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,060 ft³/s, Dec. 18, gage height, 7.32 ft; minimum daily, 2.4 ft³/s, Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	8.1	124	17	12	85	22	131	83	10	5.6	6.2
2	7.1	9.1	119	17	450	94	20	123	84	9.5	4.0	3.9
3	7.1	7.5	219	14	20	94	18	136	70	9.5	7.4	5.9
4	7.9	10	121	14	18	75	17	135	19	8.5	8.4	149
5	6.5	8.8	30	17	17	17	75	138	19	8.5	9.7	22
6	7.5	11	16	15	16	14	98	139	19	8.0	6.0	6.5
7	8.1	50	109	300	15	30	106	134	18	8.0	5.5	7.4
8	8.2	673	736	450	60	98	105	132	17	8.0	4.4	8.1
9	8.2	81	22	20	2130	97	103	228	17	7.0	4.4	11
10	7.6	73	630	15	34	96	105	153	17	7.0	7.1	6.6
11	8.7	79	67	13	29	77	106	154	17	7.0	7.8	21
12	9.1	64	47	12	31	98	111	141	17	7.0	8.9	5.8
13	8.1	653	109	12	104	98	114	129	17	7.3	5.6	6.0
14	6.9	41	112	15	103	98	114	126	16	7.0	5.3	5.9
15	7.8	116	355	14	109	100	146	120	16	9.3	3.0	7.6
16	7.4	148	1220	13	119	100	137	118	16	11	4.7	8.7
17	28	468	31	14	121	103	104	134	16	5.2	6.4	5.0
18	17	126	1940	13	117	296	110	141	15	4.5	7.0	5.9
19	11	128	1360	13	116	112	110	134	15	8.9	6.3	4.6
20	10	123	348	16	119	99	110	74	14	8.6	5.1	6.7
21	9.5	316	36	15	111	101	113	94	14	11	3.6	5.2
22	8.7	19	72	25	111	104	120	95	14	11	2.5	7.5
23	11	13	156	13	112	100	128	89	14	9.1	5.9	8.1
24	8.3	779	167	16	116	106	121	89	13	5.0	6.2	6.7
25	7.5	38	170	13	128	111	129	89	12	8.4	5.4	2.4
26	8.5	36	555	13	86	109	131	88	12	5.6	6.9	5.5
27	10	85	2000	12	24	404	125	85	12	5.3	3.9	6.4
28	9.3	55	133	700	20	118	126	82	11	6.5	3.3	8.0
29	10	123	27	40	---	25	125	83	10	8.1	3.3	9.7
30	6.1	120	20	15	---	22	139	84	10	6.3	3.5	11
31	7.0	---	18	12	---	23	---	82	---	5.9	5.9	---
TOTAL	287.4	4461.5	11069	1888	4448	3104	3088	3680	644	242.0	173.0	374.3
MEAN	9.27	149	357	60.9	159	100	103	119	21.5	7.81	5.58	12.5
MAX	28	779	2000	700	2130	404	146	228	84	11	9.7	149
MIN	6.1	7.5	16	12	12	14	17	74	10	4.5	2.5	2.4
AC-FT	570	8850	21960	3740	8820	6160	6130	7300	1280	480	343	742
CAL YR 1984	TOTAL	32701.1	MEAN	89.3	MAX	2000	MIN	6.1	AC-FT	64860		
WTR YR 1985	TOTAL	33459.2	MEAN	91.7	MAX	2130	MIN	2.4	AC-FT	66370		

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA

LOCATION.--Lat 33°53'16", long 117°55'32", in NE1/4 sec.28, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank 0.2 mi downstream from Brea Dam, and 1 mi north of Fullerton.

DRAINAGE AREA.--21.6 mi².

PERIOD OF RECORD.--January 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 196.67 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Dec. 4, 1964, at datum 1.03 ft higher.

REMARKS.--Estimated daily discharges: Mar. 8-10, May 3-5, June 6, July 6-11, and Aug. 7. Records fair except those below 10 ft³/s, which are poor. Flow regulated by Brea flood-control reservoir, capacity, 4,100 acre-ft. No diversion above station. Since August 1966 low flow mostly the result of irrigation wastewater from golf course 0.8 mi upstream. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--43 years, 2.99 ft³/s, 2,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s, Jan. 31, 1979, gage height unknown, from release records of Brea Dam as provided by Corps of Engineers; no flow for parts of some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 159 ft³/s, Dec. 27; minimum daily, 0.35 ft³/s, Nov. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	.57	1.3	1.4	2.4	1.1	2.6	1.3	1.3	.71	.45	.88
2	.71	.57	1.7	1.3	30	1.1	2.2	1.3	1.3	.71	.45	.68
3	.71	.65	5.8	1.6	3.4	1.5	2.2	1.3	1.2	.78	.45	.35
4	.71	.71	1.3	5.1	3.0	1.2	2.2	1.3	1.1	1.1	.45	10
5	.71	.46	2.0	4.5	2.6	1.1	1.9	1.6	1.1	.96	.45	1.5
6	.71	.35	1.2	4.1	2.6	1.4	1.9	1.9	.89	.88	.45	.71
7	.61	.35	1.3	16	2.2	1.8	1.9	1.6	.88	.66	.45	.71
8	.42	15	55	45	2.1	1.6	1.6	1.6	.88	.52	.45	.71
9	.57	.90	1.7	7.9	138	1.5	1.6	3.7	.88	.45	.45	.71
10	.57	.68	17	4.5	7.3	1.5	1.6	1.4	.77	.45	.45	.71
11	.57	.57	7.3	1.8	4.1	1.5	1.6	1.7	.71	.45	.45	.71
12	.57	.63	1.2	2.2	2.7	1.1	1.6	2.4	.71	.45	.45	.71
13	.57	2.6	1.3	2.2	2.5	1.1	1.6	2.0	.71	.45	.45	.71
14	.57	.69	1.3	2.2	1.9	1.1	1.6	.97	.71	.45	.45	.71
15	.57	.57	11	1.7	2.4	1.1	1.6	1.1	.71	.45	.45	.71
16	.57	2.4	55	1.6	2.2	1.1	1.6	1.0	.71	.45	.45	.71
17	3.9	25	1.9	1.6	2.1	1.1	1.6	1.2	.71	.45	.45	.71
18	.98	.70	121	1.4	2.1	5.3	1.6	1.4	.71	.45	.45	.71
19	.88	.65	96	1.3	1.1	2.2	1.6	1.3	.71	.45	.45	.71
20	.88	.44	30	1.0	1.5	.71	1.6	1.3	.71	.45	.45	.71
21	.88	13	3.4	.88	1.5	.71	1.6	1.3	.71	.45	.45	.71
22	.88	.81	1.3	.88	1.3	.71	1.4	1.3	.71	.45	.45	.71
23	.88	.71	.89	.88	1.3	.71	1.3	1.3	.71	.45	.45	.71
24	.80	63	.78	1.1	1.3	.97	1.3	1.3	.71	.45	.58	.71
25	.71	8.1	.71	1.3	1.3	1.1	1.3	1.3	.71	.45	.88	.71
26	.71	1.3	30	1.3	1.3	.89	1.3	1.3	.71	.45	.88	.71
27	.61	1.2	159	1.3	1.1	70	1.3	1.3	.71	.45	.88	.97
28	.57	2.0	30	52	1.1	32	1.3	1.3	.71	.45	.88	1.2
29	.57	1.3	3.8	9.3	---	3.6	1.3	1.3	.71	.45	.88	.91
30	.57	1.3	2.5	3.5	---	3.0	1.3	1.3	.71	.45	.88	.88
31	.57	---	1.9	2.8	---	2.7	---	1.3	---	.45	.88	---
TOTAL	24.24	147.21	648.58	183.64	226.4	146.50	49.1	45.67	24.50	16.67	17.09	32.28
MEAN	.78	4.91	20.9	5.92	8.09	4.73	1.64	1.47	.82	.54	.55	1.08
MAX	3.9	63	159	52	138	70	2.6	3.7	1.3	1.1	.88	10
MIN	.42	.35	.71	.88	1.1	.71	1.3	.97	.71	.45	.45	.35
AC-FT	48	292	1290	364	449	291	97	91	49	33	34	64
CAL YR 1984	TOTAL	1335.53	MEAN	3.65	MAX	159	MIN	.35	AC-FT	2650		
WTR YR 1985	TOTAL	1561.88	MEAN	4.28	MAX	159	MIN	.35	AC-FT	3100		

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA

LOCATION.--Lat 33°53'45", long 117°53'07", in NW1SW1 sec.24, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on left bank of outlet channel of Fullerton Dam, 1.6 mi southeast of Brea.

DRAINAGE AREA.--4.94 mi².

PERIOD OF RECORD.--October 1941 to current year.

REVISED RECORDS.--WDR CA-82-1: 1981.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft, from topographic map. V-notch sharp-crested weir used Oct. 25, 1946, to Feb. 2, 1956. Prior to Dec. 3, 1971, at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Fullerton flood-control reservoir, capacity, 706 acre-ft. Small tributary formerly entering below station diverted into reservoir since December 1954. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--13 years (water years 1942-54), 0.19 ft³/s, 135 acre-ft/yr; 31 years (water years 1955-85), 1.13 ft³/s, 819 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392 ft³/s, Mar. 1, 1983, gage height, 8.25 ft, present datum; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 221 ft³/s, Dec. 18, gage height, 6.76 ft; minimum daily, 0.36 ft³/s, Dec. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.1	.70	.51	.51	.43	.65	.78	.54	.58	.53	.43
2	2.5	3.0	.79	.88	10	.47	.66	.76	.60	.61	.53	.56
3	2.7	3.4	4.4	.79	.72	.43	.66	.72	.62	.66	.52	.53
4	3.0	3.2	.93	1.2	.61	.47	.71	.52	.70	.60	.44	4.5
5	2.5	3.4	.84	1.7	.56	.43	.72	.51	.63	.68	.51	1.1
6	2.7	4.1	.54	1.7	.52	.43	.65	.55	.56	.59	.59	.57
7	2.4	3.4	.56	6.5	.51	.58	.59	.61	.60	.66	.60	.49
8	2.4	11	23	4.8	.80	.45	.57	.63	.63	.81	.61	.45
9	2.6	3.9	.87	.58	71	.43	.65	1.5	.64	.77	.58	.48
10	2.5	3.1	5.1	.51	.78	.43	.60	.64	.56	.78	.57	.48
11	2.4	3.2	2.1	.51	1.2	.43	.60	.60	.63	.80	.50	.54
12	2.3	3.2	.70	.37	1.3	.40	.62	.60	.57	.92	.51	.48
13	2.3	4.0	.41	.42	1.3	.45	.73	.62	.57	.60	.54	.49
14	2.3	.73	.36	.48	1.3	.51	.65	.67	.71	.60	.56	.43
15	2.4	.57	5.0	.43	1.2	.49	.63	.73	.56	.67	.59	.43
16	2.4	1.4	18	.48	1.3	.48	.71	.84	.51	.86	.59	.50
17	3.8	5.5	.64	.58	1.0	.44	.72	.67	.60	.75	.60	.57
18	3.0	1.2	51	.51	.57	3.2	.54	.71	.70	.77	.58	.62
19	2.9	.83	32	.56	.60	.74	.55	.67	.78	.60	.60	.54
20	2.8	.70	11	.51	.59	.51	.59	.67	.90	.46	.62	.71
21	2.5	8.0	1.2	.54	.44	.51	.64	.64	.65	.43	.53	.58
22	2.5	.87	1.0	.56	.48	.51	.78	.78	.60	.48	.54	.55
23	2.5	.70	1.2	.51	.48	.56	.69	1.0	.60	.56	.47	.57
24	2.3	28	1.2	.49	.50	.51	.72	.70	.60	.53	.45	.20
25	2.2	8.6	1.4	.51	.43	.55	.59	.69	.81	.61	.42	.55
26	2.6	.84	14	.56	.49	.59	.58	.60	.75	.57	.47	1.1
27	2.7	.75	65	.56	.43	30	.57	.68	.67	.47	.50	.74
28	2.9	.78	19	23	.43	13	.51	.62	.60	.46	.50	.51
29	3.2	.70	.86	6.2	---	.98	.51	.64	.57	.54	.51	.51
30	3.9	.70	.64	.73	---	.78	.52	.78	.60	.52	.57	.53
31	3.8	---	.60	.52	---	.67	---	.63	---	.48	.57	---
TOTAL	83.3	112.87	265.04	58.20	100.05	60.86	18.91	21.76	19.06	19.36	16.74	21.44
MEAN	2.69	3.76	8.55	1.88	3.57	1.96	.63	.70	.64	.62	.54	.71
MAX	3.9	28	65	23	71	30	.78	1.5	.90	.92	.62	4.5
MIN	2.2	.57	.36	.37	.43	.40	.51	.51	.51	.43	.43	.43
AC-FT	165	224	526	115	198	121	38	43	38	38	33	42
CAL YR 1984	TOTAL 681.19		MEAN 1.86	MAX 65	MIN .36	AC-FT 1350						
WTR YR 1985	TOTAL 797.59		MEAN 2.19	MAX 71	MIN .36	AC-FT 1580						

11097000 BIG TUJUNGA CREEK BELOW HANSEN DAM, CA

LOCATION.--Lat 34°15'13", long 118°23'17", in Ex Mission San Fernando Grant, Los Angeles County, Hydrologic Unit 18070105, in city of Los Angeles, on left bank of outlet channel 0.5 mi downstream of Hansen Dam, 0.1 mi upstream from Glen Oaks Boulevard, and 3 mi southeast of San Fernando.

DRAINAGE AREA.--153 mi².

PERIOD OF RECORD.--May 1932 to February 1938, August 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WDR CA-84-1: 1978 (M).

GAGE.--Water-stage recorder. Datum of gage is 943.32 ft Corps of Engineers datum. See WSP 1735 for history of changes prior to Oct. 1, 1953.

REMARKS.--Estimated daily discharges: Mar. 2-5, Apr. 11-25, and July 23 to Aug. 15. Records fair except for estimated periods, which are poor. Flow regulated since July 1931 by Big Tujunga flood-control reservoir, capacity, 5,720 acre-ft in 1979 and since September 1940 by Hansen flood-control reservoir, capacity, 29,700 acre-ft. Several small diversions for domestic use and irrigation. Water reported herein is that which passed Hansen Dam. Los Angeles County Flood Control District diverts water 0.3 mi upstream from gage to spreading grounds, as shown in combined table below. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion were provided by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft³/s, Feb. 10, 1978, Mar. 2, 1983, maximum gage height, 7.64 ft, Mar. 2, 1983; no flow many days in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 54,000 ft³/s, estimated, Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,350 ft³/s, Dec. 20, gage height, 2.62 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	0	.50	15	.81	.10	.53		0	0
2			0	0	.50	5.0	1.5	.11	.70		0	0
3			0	0	.50	1.1	2.4	.13	.15		0	0
4			0	0	.50	1.1	2.6	.11	.05		0	0
5			0	0	.45	1.1	2.2	.14	.07		0	0
6			0	0	.14	1.1	1.1	.13	.05		0	.03
7			0	0	.14	1.1	.89	.01	.06		0	0
8			1.5	0	.14	1.1	.16	0	.04		0	.03
9			1.1	0	13	1.1	.08	0	.05		0	0
10			1.4	0	19	1.1	.03	.01	.07		0	0
11			1.4	0	19	1.1	.03	.10	.08		0	0
12			1.1	0	19	1.1	.03	.07	.06		0	.03
13			.57	0	19	1.1	.03	.05	0		0	0
14			.37	0	19	1.1	.04	.08	0		0	0
15			.17	0	19	1.1	.04	.13	0		0	0
16			30	0	16	1.1	.06	.26	0		0	0
17			5.6	0	15	1.1	1.0	.11	0		0	0
18			6.1	0	15	1.1	.24	.16	0		0	0
19			59	0	17	1.1	.22	.10	0		.02	0
20			337	0	16	1.1	.21	.08	0		.09	0
21			.01	0	11	1.3	.20	.06	0		.25	0
22			0	0	8.2	1.4	.19	.05	0		.27	0
23			0	0	6.4	1.7	.19	.06	0		.11	0
24			0	0	5.3	1.7	.19	.05	0		.06	0
25			0	0	4.6	1.9	.15	.02	0		.02	0
26			.12	0	4.0	1.9	.08	0	0		0	0
27			1.9	0	26	2.9	.02	.06	0		0	0
28			0	13	29	2.1	.05	.33	0		.01	0
29			0	24	---	1.4	.08	.30	0		.02	0
30			0	2.1	---	1.1	.09	.33	0		.03	0
31		---	0	.50	---	.91	---	.14	---	0	0	---
TOTAL	0	0	447.34	39.60	303.37	58.11	14.91	3.28	1.91	0	.88	.09
MEAN	0	0	14.4	1.28	10.8	1.87	.50	.11	.064	0	.028	.003
MAX	0	0	337	24	29	15	2.6	.33	.70	0	.27	.03
MIN	0	0	0	0	.14	.91	.02	0	0	0	0	0
AC-FT	0	0	887	79	602	115	30	6.5	3.8	0	1.7	.2
a	675.0	621.9	3508.5	2131.3	870.7	1558.6	1031.6	1126.2	667.4	433.4	364.5	284.1

CAL YR 1984 TOTAL 1041.99 MEAN 2.85 MAX 337 MIN 0 AC-FT 2070
WTR YR 1985 TOTAL 869.49 MEAN 2.38 MAX 337 MIN 0 AC-FT 1720

a Combined discharge, in acre-feet, of creek and diversion.

11098000 ARROYO SECO NEAR PASADENA, CA

LOCATION.--Lat 34°13'20", long 118°10'36", in NW¼NE¼ sec.31, T.2 N., R.12 W., Los Angeles County, Hydrologic Unit 18070105, on right bank, 0.7 mi east of Angeles Crest Highway, 1.5 mi upstream from Millard Canyon, and 5.5 mi northwest of Pasadena.

DRAINAGE AREA.--16.0 mi².

PERIOD OF RECORD.--December 1910 to current year.

GAGE.--Water-stage recorder. Broad-crested weir since November 1938. Datum of gage is 1,397.88 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1916, nonrecording gage at different datum. Oct. 1, 1916, to Oct. 19, 1945, water-stage recorder at datum 4.00 ft lower.

REMARKS.--Estimated daily discharges: Dec. 26 to Jan. 28. Records good except for period of estimated record, which is fair. Minor regulation by debris dam 1.5 mi upstream. Temporary diversion above station by City of Pasadena. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--71 years (water years 1914-15, 1917-85), 10.0 ft³/s, 7,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,620 ft³/s, Mar. 2, 1938, gage height, 9.42 ft, present datum, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	0315	*139	*2.79				

Minimum daily, 0.12 ft³/s, Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.91	4.3	11	3.7	3.3	4.0	1.6	1.5	.43	.25	.17
2	.67	.89	5.7	10	4.4	3.3	3.6	1.6	1.5	.41	.22	.21
3	.67	.95	5.3	8.7	4.1	3.5	3.4	1.6	1.6	.41	.20	.32
4	.70	.94	5.0	7.3	3.8	3.8	3.2	1.7	1.5	.44	.18	.42
5	.72	.93	5.1	6.5	3.7	3.8	3.2	1.7	1.4	.48	.16	.46
6	.70	.98	4.8	6.0	3.7	3.8	3.0	2.0	1.2	.51	.17	.43
7	.62	1.1	4.7	6.9	3.7	4.2	3.0	2.0	1.0	.47	.19	.34
8	.60	6.4	6.9	8.0	4.1	4.0	2.7	2.1	1.0	.41	.21	.33
9	.65	3.4	6.9	7.2	21	3.7	2.6	2.6	.99	.42	.24	.35
10	.71	3.1	6.8	6.6	9.7	3.6	2.6	2.4	.96	.42	.30	.35
11	.79	2.4	9.6	6.2	6.8	3.8	2.6	2.3	.93	.36	.32	.38
12	.73	2.1	12	5.7	5.7	3.6	2.5	2.2	.91	.30	.33	.27
13	.67	3.7	15	5.4	5.0	3.3	2.3	2.0	.90	.30	.32	.20
14	.68	2.4	14	5.2	4.6	3.2	2.1	1.7	.88	.31	.21	.19
15	.65	2.6	13	5.0	4.4	3.2	2.1	1.7	.83	.37	.27	.21
16	.65	2.5	49	4.8	4.3	3.2	2.3	1.6	.81	.34	.30	.28
17	.83	2.4	18	4.6	4.3	3.0	2.4	1.6	.77	.31	.36	.31
18	.77	2.3	28	4.5	4.2	3.8	2.5	1.7	.75	.34	.33	.35
19	.78	2.2	67	4.4	4.1	4.2	2.5	1.8	.77	.35	.29	.33
20	.79	2.0	41	4.3	4.1	3.3	2.5	1.7	.76	.31	.28	.27
21	.84	4.7	20	4.2	3.7	3.1	2.5	1.6	.76	.27	.25	.21
22	.78	5.2	14	4.2	3.5	3.0	2.6	1.5	.69	.28	.22	.18
23	.71	3.8	11	4.2	3.5	2.7	2.3	1.4	.61	.29	.18	.19
24	.74	4.7	9.2	4.2	3.5	2.6	2.0	1.4	.68	.32	.15	.18
25	.74	5.9	7.8	4.2	3.6	2.7	1.8	1.4	.75	.30	.14	.19
26	.76	4.0	6.9	4.2	3.6	2.7	1.7	1.5	.71	.25	.14	.40
27	.86	2.7	56	4.2	3.5	8.5	1.6	1.4	.54	.20	.17	.44
28	.92	2.5	39	5.1	3.4	9.6	1.6	1.4	.50	.20	.17	.38
29	.90	2.2	26	4.8	---	7.6	1.7	1.4	.49	.24	.13	.41
30	.92	2.1	17	4.2	---	5.3	1.6	1.5	.46	.26	.12	.37
31	.96	---	14	3.9	---	4.5	---	1.5	---	.26	.13	---
TOTAL	23.15	82.00	543.0	175.7	137.7	123.9	74.5	53.6	27.15	10.56	7.03	9.12
MEAN	.75	2.73	17.5	5.67	4.92	4.00	2.48	1.73	.91	.34	.23	.30
MAX	.96	6.4	67	11	21	9.6	4.0	2.6	1.6	.51	.36	.46
MIN	.60	.89	4.3	3.9	3.4	2.6	1.6	1.4	.46	.20	.12	.17
AC-FT	46	163	1080	349	273	246	148	106	54	21	14	18
CAL YR 1984	TOTAL	1435.46	MEAN	3.92	MAX	67	MIN	.45	AC-FT	2850		
WTR YR 1985	TOTAL	1267.41	MEAN	3.47	MAX	67	MIN	.12	AC-FT	2510		

LOS ANGELES RIVER BASIN

11101250 RIO HONDO ABOVE WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°03'32", long 118°04'13", in Potrero Grande Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank 0.3 mi downstream from Garvey Avenue, 0.4 mi downstream from Rubio Wash, 2.8 mi upstream from axis of Whittier Narrows Dam, and 2.2 mi west of El Monte.

DRAINAGE AREA.--91.2 mi².

PERIOD OF RECORD.--February 1956 to current year.

GAGE.--Water-stage recorder. Concrete trapezoidal channel. Datum of gage is 217.8 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 1-23. Records good except for estimated period, which is fair. Flow regulated by Big Santa Anita, Sawpit, and Eaton flood-control reservoirs, combined capacity, 1,700 acre-ft and Sierra Madre, Las Flores, and Rubio debris basins. Many diversions above station for domestic use and irrigation. Los Angeles County Flood Control District diverted 278 acre-ft from San Gabriel River below Santa Fe Dam to Rio Hondo during current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion were provided by the Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--29 years, 42.7 ft³/s, 30,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,200 ft³/s, Feb. 16, 1980, gage height, 7.35 ft; no flow some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,340 ft³/s, Dec. 19, gage height, 4.81 ft; minimum daily, 0.56 ft³/s, Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.7	.67	3.4	.66	1.2	2.2	3.6	1.3	2.0	4.4	1.7
2	2.1	1.5	.71	2.0	.98	1.1	1.7	3.4	1.3	2.5	5.0	2.0
3	1.9	1.8	.28	1.6	.78	.76	2.0	3.1	1.8	3.0	4.0	2.0
4	1.8	1.5	1.0	1.1	2.0	1.3	2.0	2.4	1.4	1.7	.94	.78
5	2.0	1.7	1.4	1.4	1.7	1.4	1.6	1.7	1.9	2.0	1.8	3.8
6	2.0	2.3	1.2	1.2	1.4	3.2	1.6	5.2	2.6	1.7	2.1	1.4
7	2.2	4.8	11	184	.94	12	1.3	2.4	3.2	1.7	1.8	1.4
8	2.2	433	343	25	156	1.2	1.9	11	1.4	2.3	1.8	1.3
9	2.0	2.6	.94	1.3	725	.98	2.8	58	1.2	2.5	2.6	1.8
10	2.2	1.5	309	1.2	1.2	1.2	4.9	10	1.4	2.5	2.7	2.0
11	2.2	.82	49	.93	1.1	9.2	5.0	6.8	1.4	2.0	1.2	1.4
12	2.0	1.0	1.1	.62	1.6	1.5	5.4	1.0	1.7	2.6	1.7	1.5
13	2.0	248	1.9	.75	2.0	1.3	1.8	2.4	1.5	1.5	1.4	1.8
14	2.0	1.7	.59	1.2	1.6	1.3	1.6	1.4	1.5	1.3	1.4	1.7
15	2.2	1.2	364	1.1	1.2	1.5	4.5	3.3	1.7	2.1	1.3	1.7
16	4.0	57	428	.95	1.2	1.2	3.4	2.3	1.1	2.4	1.3	2.4
17	3.0	5.4	1.2	1.1	1.1	1.1	5.2	1.4	1.2	2.4	1.6	3.1
18	2.5	1.0	813	1.0	1.2	57	3.9	1.2	1.7	2.8	1.3	4.7
19	2.4	1.1	846	1.0	1.5	1.4	2.5	1.3	1.8	6.1	1.4	3.6
20	2.2	.74	74	1.3	5.2	1.0	1.8	1.7	1.4	3.7	1.3	3.7
21	2.2	22	2.0	1.2	1.4	1.5	2.3	1.5	2.0	1.3	1.7	3.7
22	2.1	.97	1.2	1.8	1.1	1.6	3.2	1.6	1.4	1.8	1.4	3.7
23	2.1	.73	.67	1.0	1.1	1.2	3.5	1.9	1.2	2.4	2.6	4.1
24	1.7	296	2.0	1.3	1.0	1.2	3.2	2.0	1.7	3.9	1.5	4.0
25	3.2	2.1	.57	1.0	1.3	1.5	3.9	1.6	1.4	2.0	1.4	3.1
26	2.8	.56	254	1.0	1.6	1.4	2.9	1.8	1.5	2.0	1.8	6.0
27	1.5	.59	719	.83	1.2	255	1.8	1.1	2.0	2.4	2.2	1.6
28	1.3	3.0	9.1	162	1.1	35	2.4	1.5	2.3	.96	2.2	1.6
29	2.0	1.1	2.4	2.1	---	.96	3.2	1.1	4.1	1.4	2.7	1.9
30	1.4	.87	2.1	1.2	---	.81	2.2	1.5	4.1	1.7	2.6	2.2
31	1.7	---	2.4	.75	---	1.3	---	1.2	---	1.8	1.8	---
TOTAL	66.9	1098.28	4271.15	406.33	1015.18	402.31	85.7	140.4	54.2	70.46	62.94	152.9
MEAN	2.16	36.6	138	13.1	36.3	13.0	2.86	4.53	1.81	2.27	2.03	5.10
MAX	4.0	433	846	184	725	255	5.4	58	4.1	6.1	5.0	.78
MIN	1.3	.56	.57	.62	.66	.76	1.3	1.0	1.1	.96	.94	1.3
AC-FT	133	2180	8470	806	2010	798	170	278	108	140	125	303
CAL YR 1984	TOTAL	6928.74	MEAN	18.9	MAX	846	MIN	.56	AC-FT	13740		
WTR YR 1985	TOTAL	7826.75	MEAN	21.4	MAX	846	MIN	.56	AC-FT	15520		

11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°01'00", long 118°05'15", in Paso de Bartolo Grant, Los Angeles County, Hydrologic Unit 18070105, on right levee 0.2 mi upstream from Beverly Boulevard, 0.4 mi downstream from axis of Whittier Narrows Dam, and 1.0 mi northeast of Montebello.

DRAINAGE AREA.--124 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 175 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-11, Mar. 1-13, Mar. 27 to May 9, May 23 to June 5, June 19 to July 15. Records fair above 100 ft³/s and poor below, except those that are estimated, which are poor. Flow regulated by Whittier Narrows flood-control reservoir, capacity, 36,160 acre-ft. There are several small flood-control reservoirs, combined capacities, 1,700 acre-ft and several small debris basins above Whittier Narrows Dam. Many diversions for domestic use and irrigation. At times flow is diverted from San Gabriel River to Rio Hondo from sites below Santa Fe Dam and above Whittier Narrows Dam. See schematic diagram of San Gabriel and Los Angeles River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,800 ft³/s, Jan. 25, 1969, gage height, 13.82 ft, from rating curve extended above 15,000 ft³/s, on basis of gate openings at dam on gage heights 12.32 ft and 13.82 ft; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,200 ft³/s, Feb. 9, gage height, 6.27 ft; no flow Apr. 2, 3, and Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	13	122	59	34	158	8.7	42	173	14	16	15
2	4.6	13	118	25	257	209	0	74	168	16	23	15
3	4.5	14	140	26	47	203	0	91	87	4.9	21	16
4	4.5	16	116	26	48	176	8.7	97	2.0	2.7	21	81
5	4.6	22	34	31	46	71	87	110	2.4	2.0	18	17
6	4.6	40	11	27	44	63	134	141	25	1.5	20	14
7	4.7	82	102	167	46	98	128	165	117	.64	25	14
8	4.6	518	547	366	117	215	120	187	118	12	23	14
9	4.6	28	30	27	1670	214	109	244	125	16	21	14
10	4.6	67	174	23	445	168	111	144	155	16	19	15
11	4.7	77	459	26	159	144	111	157	90	19	19	11
12	4.7	55	36	26	48	175	107	158	173	11	14	3.1
13	4.7	439	122	118	146	169	109	174	182	4.7	14	8.0
14	4.7	15	115	91	152	173	101	218	193	3.9	6.9	17
15	4.7	55	206	27	144	170	71	247	205	3.6	1.4	22
16	4.8	52	744	18	143	174	58	239	217	3.8	1.1	21
17	18	236	359	15	144	180	54	250	227	12	1.1	21
18	5.5	55	933	18	145	255	54	248	220	18	1.1	22
19	4.3	75	1930	17	148	160	78	241	219	25	.89	21
20	3.6	92	565	17	159	152	80	114	66	27	0	20
21	3.3	176	314	20	158	158	82	136	48	21	5.8	19
22	2.9	10	144	32	161	186	82	138	47	20	12	19
23	4.0	6.3	91	47	167	201	81	129	42	23	13	11
24	4.2	301	153	52	171	228	75	167	41	26	11	2.7
25	4.1	275	105	50	180	249	76	148	40	23	11	8.4
26	7.3	22	293	53	155	262	49	203	44	19	12	17
27	6.6	77	752	52	56	459	35	205	22	16	13	13
28	5.9	46	509	360	51	158	39	188	7.3	18	13	12
29	6.9	99	250	85	---	26	44	193	9.4	21	11	13
30	10	111	209	33	---	22	44	197	14	20	14	16
31	13	---	145	20	---	20	---	179	---	20	14	---
TOTAL	173.8	3087.3	9828	1954	5241	5296	2136.4	5224	3079.1	440.74	396.29	512.2
MEAN	5.61	103	317	63.0	187	171	71.2	169	103	14.2	12.8	17.1
MAX	18	518	1930	366	1670	459	134	250	227	27	25	81
MIN	2.9	6.3	11	15	34	20	0	42	2.0	.64	0	2.7
AC-FT	345	6120	19490	3880	10400	10500	4240	10360	6110	874	786	1020
CAL YR 1984 TOTAL	29496.10			MEAN 80.6	MAX 1930	MIN 2.9	AC-FT 58510					
WTR YR 1985 TOTAL	37368.83			MEAN 102	MAX 1930	MIN 0	AC-FT 74120					

LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°49'02", long 118°12'20", in Los Cerritos Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank 5,000 ft upstream from Willow Street, 3.4 mi north of Long Beach, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--827 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 11.91 ft National Geodetic Vertical Datum of 1929 (levels by Los Angeles County Flood Control District). See WSP 175 for history of changes prior to Jan. 19, 1956.

REMARKS.--Flow regulated since September 1940 by Hansen flood-control reservoir, since December 1946 by Sepulveda flood-control reservoir, combined capacity, 49,400 acre-ft, and several small flood-control reservoirs. City of Los Angeles stores imported Owens River water in San Fernando and Chatsworth reservoirs and at times discharges imported water into Los Angeles River above station. Many diversions above station for domestic use and irrigation. AVERAGE DISCHARGE represents flow to the ocean, regardless of upstream development. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records provided by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--54 years (water years 1930-83), 215 ft³/s, 155,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 129,000 ft³/s Feb. 16, 1980, gage height, 17.99 ft; no flow at times in 1929-30, 1934.

EXTREMES FOR CURRENT YEAR.--Records of discharge not available at time of publication.

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

CHEMICAL ANALYSES: Water years 1973 to current year.

BIOLOGICAL DATA: Water years 1973-81.

SPECIFIC CONDUCTANCE: Water years 1974 to current year.

WATER TEMPERATURES: Water years 1974 to current year.

SEDIMENT RECORDS: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1973 to September 1975, July 1980 to September 1983.

WATER TEMPERATURES: October 1973 to September 1975, January 1980 to September 1983.

INSTRUMENTATION.--Water-quality monitor from October 1973 to September 1975, January 1980 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,010 microsiemens, June 30, 1975; minimum, 40 microsiemens, Nov. 30, 1982.

WATER TEMPERATURES: Maximum, 38.0°C, June 24, 1981; minimum, 2.0°C, Jan. 31, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
DEC 11...	1300	255	280	7.6	16.5	755	85	9.5	98	K13000
MAR 22...	1300	61	1070	10.1	25.5	760	3.0	>20.0	--	K50
JUN 26...	1100	67	1070	9.2	25.0	760	6.4	>20.0	--	K220
SEP 25...	1000	45	1130	9.0	23.0	760	3.5	19.0	223	4600

DATE	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
DEC 11...	K35000	99	46	29	6.3	19	29	.9	4.0
MAR 22...	K30	350	200	95	28	110	40	3	7.2
JUN 26...	K17	360	180	93	32	110	39	3	8.4
SEP 25...	210	330	120	80	32	110	41	3	8.3

DATE	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L AS CACO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
DEC 11...	64	52	--	271	51	17	.20	6.5	161
MAR 22...	24	158	83	159	250	110	.60	12	630
JUN 26...	146	184	39	184	220	110	.60	20	721
SEP 25...	211	212	24	212	210	120	.60	20	739

DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC 11...	170	.22	111	1.4	.340	2.2	.710	.330	.320
MAR 22...	790	.86	104	1.1	<.010	1.3	.340	.140	.080
JUN 26...	750	.98	130	1.9	.060	2.1	1.50	1.00	.095
SEP 25...	740	1.0	90	1.6	.040	1.9	2.50	2.00	1.50

See footnotes at end of table.

LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)
DEC 11...	1300	--	2	37	<.5	<1	2	<3	8	100	7
MAR 22...	1300	10	2	60	.6	4	3	<3	7	130	1
JUN 26...	1100	10	3	47	<.5	<1	2	<3	9	15	<1
SEP 25...	1000	<10	7	53	<.5	<1	<1	<3	4	11	2

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 11...	7	29	<.1	<10	11	1	<1	180	<6	37
MAR 22...	59	5	<.1	20	7	3	<1	690	<6	16
JUN 26...	45	4	<.1	20	22	2	<1	680	<6	18
SEP 25...	50	8	<.1	20	11	2	<1	630	<6	110

K Results based on colony count outside the acceptable range (non-ideal colony count).

> Actual value is known to be greater than the value shown.

< Actual value is known to be less than the value shown.

CROSS-SECTIONAL DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
MAR 22...	1210	4.0	1070	10.0	25.0	>20.0
22...	1220	9.0	1070	10.1	25.0	>20.0
22...	1230	13	1070	10.1	25.0	>20.0
22...	1240	17	1070	10.0	25.0	>20.0
22...	1250	22	1070	10.1	25.0	>20.0
SEP 25...	1050	5.0	1130	9.0	24.0	19.0
25...	1100	13	1130	9.0	24.0	19.0
25...	1110	21	1130	9.0	24.0	19.0

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM
DEC 14...	1400	81	19.0	6	1.3	28
MAR 29...	1230	63	27.0	48	8.2	62
JUN 20...	1300	59	31.0	19	3.0	44
SEP 13...	0800	68	23.0	19	3.5	56

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 11...	1300	255	16.5	320	220	98
MAR 22...	1300	61	25.5	12	2.0	--
JUN 26...	1100	67	25.0	16	2.9	83
SEP 25...	1000	45	23.0	27	3.3	76

SANTA CLARA RIVER BASIN

11.08500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA
(National stream-quality accounting network station)

LOCATION.--Lat 34°23'59", long 118°42'14", in San Francisco Grant, Ventura County, Hydrologic Unit 18070102, on downstream end of old diversion weir on right bank, on private road 0.2 mi south of Highway 126, 0.8 mi west of Los Angeles-Ventura County line, and 6.4 mi west of intersection of Highway 126 and Interstate 5.

DRAINAGE AREA.--625 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 794.93 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 22-26, Aug. 23 to Sept. 2. Records fair except for periods of estimated daily record, which are poor. Base flow affected by pumping from wells along stream for irrigation. Flow partly regulated since January 1972 by Castaic Reservoir, capacity, 324,000 acre-ft. Imported water from California Water Project stored and released at Castaic Dam.

AVERAGE DISCHARGE.--33 years, 48.9 ft³/s, 35,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,800 ft³/s, Jan. 25, 1969, gage height, 19.01 ft, from rating curve extended above 9,200 ft³/s on basis of field estimate of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft³/s and maximum(*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2000	*2,270	*7.13				

Minimum daily, 17 ft³/s, July 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	32	49	69	47	48	41	30	26	18	21	18
2	27	32	49	64	44	49	40	29	26	18	22	18
3	25	33	55	58	43	49	39	29	25	17	22	18
4	23	34	54	54	46	53	40	29	24	17	22	20
5	23	35	55	52	47	54	40	28	24	17	22	24
6	23	36	57	49	47	53	40	29	23	18	22	24
7	23	39	60	51	48	53	38	29	23	19	22	26
8	23	48	98	50	49	49	37	28	23	19	22	27
9	23	40	65	50	56	48	36	28	22	19	22	31
10	24	43	105	65	46	47	36	28	23	18	22	28
11	24	44	104	59	47	47	35	27	23	19	22	32
12	25	46	52	61	47	45	33	27	23	19	22	32
13	27	97	46	66	46	44	30	27	24	19	22	29
14	28	48	44	57	44	44	29	28	24	19	23	29
15	28	51	48	49	43	43	29	28	24	19	25	29
16	26	58	125	46	43	41	30	28	24	19	25	29
17	26	73	59	45	43	41	28	27	24	19	25	28
18	26	67	216	46	44	46	28	27	24	19	25	27
19	27	67	1040	44	46	44	28	26	23	20	24	27
20	25	64	422	42	45	43	28	27	23	20	24	27
21	26	90	218	42	45	44	29	27	23	19	23	26
22	28	65	100	42	45	44	30	27	22	19	22	26
23	28	60	80	42	45	44	29	26	22	20	22	27
24	28	103	74	41	45	46	30	26	23	20	22	26
25	27	68	70	42	46	49	32	27	23	20	21	25
26	27	50	76	43	48	49	33	27	22	21	21	25
27	28	51	210	43	48	50	33	27	21	20	21	26
28	29	58	134	53	48	45	32	27	20	20	20	26
29	31	50	116	51	---	42	32	27	19	21	20	26
30	31	50	104	46	---	42	30	27	18	21	20	26
31	32	---	82	49	---	42	---	27	---	21	20	---
TOTAL	819	1632	4067	1571	1291	1438	995	854	688	594	688	782
MEAN	26.4	54.4	131	50.7	46.1	46.4	33.2	27.5	22.9	19.2	22.2	26.1
MAX	32	103	1040	69	56	54	41	30	26	21	25	32
MIN	23	32	44	41	43	41	28	26	18	17	20	18
AC-FT	1620	3240	8070	3120	2560	2850	1970	1690	1360	1180	1360	1550
CAL YR 1984	TOTAL	19803	MEAN	54.1	MAX	1040	MIN	18	AC-FT	39280		
WTR YR 1985	TOTAL	15419	MEAN	42.2	MAX	1040	MIN	17	AC-FT	30580		

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

CHEMICAL ANALYSES: Water years 1969, 1972 to current year.

BIOLOGICAL DATA: Water years 1979-80.

WATER TEMPERATURES: Water years 1969-78 (observed), February to September 1980.

SEDIMENT RECORDS: Water years 1969-78, October 1978 to current year (periodic record only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1969 to September 1981.

pH: June to September 1969.

CHLORIDE: June to September 1969.

WATER TEMPERATURES: February 1980 to September 1981.

SEDIMENT RECORDS: October 1968 to September 1978.

INSTRUMENTATION.--Water-quality monitor from June to September 1969. Specific conductance recorder from June 1969 to September 1981. Temperature recorder from February 1980 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,600 microsiemens, Mar. 31, 1971; minimum recorded, 160 microsiemens, Mar. 17, 1979.

WATER TEMPERATURES: Maximum recorded, 32.0°C, Aug. 9, 1980; minimum recorded, 6.0°C, Feb. 10, 1980.

SEDIMENT CONCENTRATION: Maximum daily mean, 48,500 mg/L, Feb. 10, 1978; minimum daily mean, 4 mg/L, Sept. 9, 1976.

SEDIMENT LOAD: Maximum daily, 3,300,000 tons, estimated, Feb. 25, 1969; minimum daily, 0.03 tons, Sept. 9, 1976.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
DEC 13...	1045	42	1360	8.2	12.0	735	28	10.1	98	77	200	510
MAR 13...	1130	40	1320	8.2	18.0	740	19	9.8	107	K13	K28	470
JUN 18...	1020	24	1400	8.0	23.0	740	4.4	8.2	99	40	79	480
SEP 11...	1100	31	1430	8.0	20.5	740	37	9.0	104	--	--	480

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 13...	240	130	44	130	36	3	5.1	332	272	271	360	79
MAR 13...	210	120	41	120	35	2	5.3	318	261	259	330	76
JUN 18...	210	120	43	130	37	3	5.6	330	270	269	360	79
SEP 11...	210	120	43	140	39	3	6.5	330	270	269	350	81

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHOPUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC 13...	.50	23	942	940	1.3	107	4.1	.320	1.1	.900	.750	.740
MAR 13...	.50	22	892	880	1.2	96	5.2	.070	.90	1.60	.880	.870
JUN 18...	.60	23	971	930	1.3	63	4.2	.070	.50	1.10	1.10	.940
SEP 11...	.60	23	1010	930	1.4	85	3.9	.190	1.6	1.20	1.20	1.10

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC, DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM, DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PR)
DEC 13...	1045	30	1	75	<.5	<1	6	<3	2	5	6
MAR 13...	1130	20	1	66	<.5	<1	1	<3	1	10	1
JUN 18...	1020	20	2	58	.9	<1	<1	<3	3	7	4
SEP 11...	1100	<10	2	55	<.5	<1	1	<3	1	10	1

See footnotes at end of table.

SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 13...	26	47	<.1	<10	7	3	1	1000	<6	14
MAR 13...	30	24	--	10	2	3	1	930	<6	13
JUN 18...	28	6	<.1	10	3	3	<1	960	<6	26
SEP 11...	28	80	<.1	<10	<1	2	<1	100	<6	14

K Results based on colony count outside the acceptable range (non-ideal colony count).
 < Actual value is known to be less than the value shown.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 13...	1045	42	12.0	353	40	44
MAR 13...	1130	40	18.0	348	38	40
JUN 18...	1020	24	23.0	66	4.3	35
SEP 11...	1100	31	20.5	247	21	63

11109600 PIRU CREEK ABOVE LAKE PIRU, CA

LOCATION.--Lat 34°31'23", long 118°45'22", in NE 1/4 NW 1/4 sec.15, T.5 N., R.18 W., Ventura County, Hydrologic Unit 18070102, on left bank near Blue Point, 1.3 mi downstream from Agua Blanca Creek, 4.3 mi upstream from Santa Felicia Dam, 8.0 mi northeast of Piru, and 15 mi downstream from Pyramid Dam.

DRAINAGE AREA.--372 mi².

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,058.55 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Forest Service). Prior to Dec. 15, 1972, at site 0.3 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Aug. 4, 5. Records good. Flow regulated beginning December 1971 by Pyramid Dam, capacity, 173,500 acre-ft. Imported water from the California Water Project stored and released at Pyramid Dam.

AVERAGE DISCHARGE.--16 years (water years 1956-71), 55.1 ft³/s, 39,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft³/s, Feb. 25, 1969, gage height, 18.6 ft, site and datum then in use, from floodmark, from rating curve extended above 4,000 ft³/s on basis of slope-area measurement at gage height 12.2 ft and inflow-outflow records for Lake Piru; no flow in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 35,000 ft³/s, is the greatest since that date.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 583 ft³/s, Dec. 19, gage height, 4.18 ft; minimum daily, 7.8 ft³/s, Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	8.4	34	30	17	14	16	9.7	12	11	16
2	11	13	8.4	32	30	17	14	16	10	12	12	15
3	10	11	8.4	32	30	17	14	15	11	12	15	13
4	10	11	8.4	31	30	17	14	14	9.8	12	15	11
5	10	11	8.3	31	30	18	14	14	8.9	12	14	11
6	10	12	8.0	31	30	18	14	14	9.9	11	14	10
7	10	14	7.9	32	30	25	14	14	12	13	13	9.0
8	11	11	13	33	30	29	14	14	13	14	13	8.0
9	12	10	10	33	39	18	14	14	13	12	13	8.0
10	14	9.7	44	36	33	16	15	14	13	12	12	8.1
11	11	9.7	33	34	32	16	14	14	13	13	13	8.5
12	11	9.8	15	33	31	16	14	14	13	13	12	8.7
13	10	43	13	32	31	16	14	13	14	13	13	8.5
14	10	13	14	32	31	16	14	13	13	13	13	10
15	9.7	11	16	32	31	16	14	15	13	13	12	11
16	9.7	11	122	32	31	16	14	12	14	14	11	11
17	9.9	12	28	31	31	16	15	9.4	14	13	11	11
18	10	11	30	31	30	17	20	11	12	13	11	10
19	10	11	221	31	31	17	22	12	13	14	11	9.7
20	10	10	246	31	31	15	20	11	12	11	11	9.7
21	10	10	173	30	31	15	20	9.1	12	12	12	9.4
22	9.7	8.8	76	30	31	15	20	9.7	12	13	14	9.4
23	9.7	7.8	67	30	31	15	19	9.5	12	13	10	11
24	9.7	11	61	30	23	15	17	11	11	14	10	11
25	9.7	15	58	30	18	15	17	11	11	14	11	12
26	14	9.2	57	30	18	15	17	12	11	12	13	13
27	12	8.5	55	30	17	18	17	9.7	12	13	15	11
28	12	8.6	44	31	18	16	17	9.1	12	12	15	11
29	11	8.8	38	33	---	14	18	11	11	12	15	10
30	11	8.5	37	30	---	14	17	10	12	9.6	15	9.2
31	11	---	35	30	---	14	---	9.7	---	10	15	---
TOTAL	332.1	351.4	1563.8	978	809	519	481	381.2	357.3	386.6	395	314.2
MEAN	10.7	11.7	50.4	31.5	28.9	16.7	16.0	12.3	11.9	12.5	12.7	10.5
MAX	14	43	246	36	39	29	22	16	14	14	15	16
MIN	9.7	7.8	7.9	30	17	14	14	9.1	8.9	9.6	10	8.0
AC-FT	659	697	3100	1940	1600	1030	954	756	709	767	783	623
CAL YR 1984	TOTAL	9414.0	MEAN	25.7	MAX	246	MIN	7.8	AC-FT	18670		
WTR YR 1985	TOTAL	6868.6	MEAN	18.8	MAX	246	MIN	7.8	AC-FT	13620		

SANTA CLARA RIVER BASIN

11109700 LAKE PIRU NEAR PIRU, CA

24 27 41
118 45 02

LOCATION.--Lat 34°27'52", long 118°44'57", in Temescal Grant, Ventura County, Hydrologic Unit 18070102, at Santa Felicia Dam on Piru Creek, on left bank 1,000 ft upstream from left end of dam, 0.5 mi downstream from Santa Felicia Canyon, 4.2 mi northeast of Piru, and 20 mi downstream from Pyramid Dam.

DRAINAGE AREA.--425 mi².

PERIOD OF RECORD.--May 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by United Water Conservation District). Prior to Jan. 27, 1956, reference point at intake tower at same datum. Jan. 27, 1956, to Dec. 1, 1980, non-recording gage at same site and datum.

REMARKS.--Lake is formed by earthfill dam. Storage began May 20, 1955. Capacity table is based on a survey made in 1975. Capacity below spillway level at elevation 1,055.0 ft, 91,010 acre-ft. Flow regulated since December 1971 by Pyramid Dam, capacity, 173,500 acre-ft. Imported water from the California Water Project stored behind and released from Pyramid Dam. Water is released from outlet to Piru Creek for ground-water recharge, domestic use, and irrigation on the Oxnard plain.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,400 acre-ft, Feb. 25, 1969, elevation, 1,061.45 ft; lake dry Oct. 25 to Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 38,490 acre-ft, May 23, elevation, 1,003.67 ft; minimum, 20,510 acre-ft, Sept. 30, elevation, 979.10 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	996.88	32,990	--
Oct. 31.....	993.18	30,140	-2,850
Nov. 30.....	993.73	30,550	+410
Dec. 31.....	997.49	33,470	+2,920
CAL YR 1984.....	--	--	-56,730
Jan. 31.....	1,000.10	35,560	+2,090
Feb. 28.....	1,001.99	37,090	+1,530
Mar. 31.....	1,002.94	37,880	+790
Apr. 30.....	1,003.39	38,260	+380
May 31.....	1,003.49	38,340	+80
June 30.....	1,003.31	38,190	-150
July 31.....	1,003.18	38,080	-110
Aug. 31.....	1,002.98	37,920	-160
Sept. 30.....	979.10	20,510	-17,410
WTR YR 1985.....	--	--	-12,480

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA

LOCATION.--Lat 34°27'37", long 118°45'04", in Temescal Grant, Ventura County, Hydrologic Unit 18070102, on right bank 750 ft downstream from Santa Felicia Dam, 1 mi upstream from Lime Canyon, 4 mi northeast of Piru, and 20 mi downstream from Pyramid Dam.

DRAINAGE AREA.--425 mi².

PERIOD OF RECORD.--October 1955 to September 1968, October 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 858.8 ft above National Geodetic Vertical Datum of 1929 (levels by United Water Conservation District).

REMARKS.--No estimated daily discharges. Records good. Since May 1955 flow regulated by Santa Felicia Dam (Lake Piru, station 11109700) and since December 1971 by Pyramid Dam, capacity, 173,500 acre-ft. Imported water from the California Water Project stored by Pyramid Dam. No diversion above station. Spill from Santa Felicia Dam bypasses gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 623 ft³/s, Aug. 2, 1982, gage height, 3.82 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 437 ft³/s, Sept. 21; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	318	11	5.0	6.0	0	4.1	4.8	5.2	4.4	4.8	6.9	6.9
2	312	11	5.0	6.0	0	3.9	4.8	5.2	38	3.7	6.9	6.9
3	321	11	5.0	6.0	0	3.9	4.6	5.2	4.8	4.1	6.9	151
4	328	11	5.0	4.0	0	3.9	4.5	5.2	4.8	4.1	7.2	289
5	112	11	5.0	.04	0	4.0	4.6	5.2	4.8	4.8	7.2	320
6	18	11	5.0	0	0	3.9	4.7	5.2	4.8	4.8	7.2	361
7	21	11	5.0	0	0	4.0	4.6	5.2	4.8	4.8	7.2	358
8	21	10	5.0	0	0	3.9	4.8	5.2	4.8	4.8	7.2	363
9	14	10	5.0	0	0	4.1	4.8	4.0	4.8	4.8	7.2	373
10	8.8	10	5.2	0	0	4.1	4.8	5.0	4.8	4.8	7.2	378
11	9.1	10	5.2	0	0	3.1	4.8	4.8	4.8	4.8	7.2	384
12	9.4	10	5.3	0	2.5	0	4.8	4.8	4.8	4.8	7.2	390
13	9.3	10	5.5	0	7.2	0	4.8	4.8	4.8	5.8	7.5	393
14	9.1	10	5.5	.73	5.5	0	4.8	4.8	4.8	6.9	7.5	390
15	5.5	10	5.5	1.5	4.5	0	4.8	4.8	4.8	6.9	7.5	391
16	7.4	10	5.5	1.5	4.3	8.1	4.8	4.8	4.8	6.9	7.5	391
17	11	10	5.5	1.5	4.3	15	4.8	4.8	4.8	6.9	7.5	389
18	11	10	5.5	1.5	4.3	5.2	4.8	4.8	4.8	6.9	7.5	412
19	11	10	5.6	1.5	4.3	0	4.8	4.8	4.8	6.9	7.5	436
20	11	10	5.7	1.4	4.3	0	4.8	4.8	4.8	6.9	7.5	436
21	11	10	5.7	1.4	4.3	0	4.8	4.8	4.8	6.8	7.5	437
22	11	9.8	5.7	1.4	4.3	0	4.8	4.8	4.8	6.6	7.2	425
23	11	9.8	5.7	1.4	4.1	2.7	4.8	4.8	4.8	6.6	6.9	414
24	11	9.9	5.7	1.4	4.1	4.1	4.8	4.8	4.8	6.6	7.2	236
25	11	9.8	5.7	.82	4.1	4.1	4.8	4.8	4.8	6.6	7.2	10
26	11	6.8	5.7	0	4.1	4.4	4.8	4.8	4.8	6.6	7.2	11
27	11	5.0	5.7	0	4.1	4.5	4.8	4.8	4.8	6.6	7.2	11
28	11	5.0	5.7	0	4.1	4.5	4.8	4.5	4.8	6.6	7.2	11
29	11	5.0	5.8	0	---	4.5	4.8	4.5	4.8	6.6	7.0	11
30	11	5.0	6.0	0	---	4.6	5.0	14	4.8	6.8	6.9	11
31	11	---	6.0	0	---	4.8	---	36	---	6.9	6.9	---
TOTAL	1688.6	283.1	168.4	38.09	74.4	109.4	143.2	191.2	216.4	182.5	223.9	8195.8
MEAN	54.5	9.44	5.43	1.23	2.66	3.53	4.77	6.17	7.21	5.89	7.22	273
MAX	328	11	6.0	6.0	7.2	15	5.0	36	44	6.9	7.5	437
MIN	5.5	5.0	5.0	0	0	0	4.5	4.0	4.8	3.7	6.9	6.9
AC-FT	3350	562	334	76	148	217	284	379	429	362	444	16260

CAL YR 1984 TOTAL 33743.10 MEAN 92.2 MAX 328 MIN 5.0 AC-FT 66930
WTR YR 1985 TOTAL 11514.99 MEAN 31.5 MAX 437 MIN 0 AC-FT 22840

11111500 SESPE CREEK NEAR WHEELER SPRINGS, CA

LOCATION.--Lat 34°34'40", long 119°15'25", in NW 1/4 SW 1/4 sec.30, T.6 N., R.22 W., Ventura County, Hydrologic Unit 18070102, on right bank at Sespe Gorge, 1.6 mi upstream from Tule Creek, and 5 mi northeast of Wheeler Springs.

DRAINAGE AREA.--49.5 mi².

PERIOD OF RECORD.--October 1947 to current year. Daily discharge for period October 1947 to July 1948 estimated on basis of weather records and records for North Fork Matilija Creek.

GAGE.--Water-stage recorder. Datum of gage is 3,500.65 ft above National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--Estimated daily discharges: Nov. 8-12. Records fair.

AVERAGE DISCHARGE.--38 years, 13.8 ft³/s, 10,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft³/s, Mar. 1, 1983, gage height, 15.02 ft, from rating curve extended above 3,000 ft³/s on basis of slope-area measurement of maximum flow; no flow many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1700	*33	*2.60				
Minimum daily, 0.15 ft ³ /s, Aug. 9.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	.85	1.4	4.4	3.1	3.1	2.9	2.0	1.7	.32	.25	.20
2	.57	.86	1.4	4.1	3.2	3.4	2.8	1.9	1.5	.30	.25	.20
3	.59	.87	1.8	3.9	3.0	3.4	2.8	1.9	1.5	.29	.24	.23
4	.59	.90	1.6	3.8	3.0	3.3	2.8	1.8	1.4	.30	.24	.23
5	.59	.91	1.5	3.6	2.9	3.3	2.7	1.8	1.2	.31	.24	.27
6	.59	.92	1.4	3.6	2.9	3.2	2.7	1.8	1.1	.29	.22	.25
7	.59	.94	1.5	5.6	2.9	4.2	2.7	1.9	1.0	.27	.20	.24
8	.58	1.3	2.8	5.6	3.3	3.6	2.6	1.8	.96	.25	.16	.25
9	.58	1.2	1.8	4.8	4.8	3.3	2.5	1.8	.88	.25	.15	.27
10	.58	1.1	8.5	7.3	3.6	3.3	2.5	1.8	.82	.25	.17	.28
11	.60	1.0	4.9	5.9	3.4	3.3	2.4	1.8	.77	.25	.17	.30
12	.64	1.5	2.8	5.3	3.4	3.2	2.4	1.8	.71	.24	.19	.30
13	.60	7.0	2.6	4.9	3.3	3.1	2.4	1.6	.69	.24	.23	.31
14	.59	1.9	2.3	4.7	3.3	3.1	2.3	1.5	.65	.23	.22	.31
15	.58	1.5	4.2	4.5	3.3	3.0	2.4	1.5	.60	.23	.21	.32
16	.60	1.9	8.8	4.3	3.3	3.0	2.5	1.5	.56	.23	.21	.32
17	.66	1.6	3.4	4.1	3.3	2.9	2.9	1.7	.55	.23	.21	.32
18	.68	1.4	5.4	4.0	3.3	3.1	3.0	1.6	.53	.22	.21	.33
19	.72	1.3	14	4.0	3.4	3.1	2.6	1.5	.51	.25	.21	.34
20	.76	1.2	10	3.9	3.4	2.9	2.6	1.5	.50	.24	.21	.33
21	.78	1.6	7.1	3.8	3.5	2.8	2.7	1.4	.48	.24	.21	.34
22	.78	1.5	6.0	3.7	3.4	2.8	2.5	1.4	.46	.24	.20	.34
23	.79	1.3	5.3	3.5	3.4	2.8	2.4	1.4	.42	.23	.20	.34
24	.82	2.7	4.8	3.4	3.3	2.8	2.3	1.4	.42	.22	.21	.34
25	.80	2.2	4.5	3.4	3.3	2.8	2.3	1.4	.41	.21	.21	.34
26	.79	1.6	4.2	3.4	3.3	2.8	2.4	1.5	.39	.22	.21	.35
27	.82	1.5	5.5	3.3	3.2	3.7	2.4	1.7	.38	.23	.21	.36
28	.81	2.3	6.1	3.5	3.2	3.3	2.3	1.7	.37	.23	.21	.35
29	.82	1.6	5.4	3.4	---	3.4	2.2	1.5	.36	.25	.20	.35
30	.82	1.5	5.0	3.2	---	3.2	2.1	1.5	.33	.25	.20	.36
31	.82	---	4.7	3.1	---	3.0	---	1.7	---	.25	.20	---
TOTAL	21.08	47.95	140.7	130.0	92.7	98.2	76.1	51.1	22.15	7.76	6.45	9.07
MEAN	.68	1.60	4.54	4.19	3.31	3.17	2.54	1.65	.74	.25	.21	.30
MAX	.82	7.0	14	7.3	4.8	4.2	3.0	2.0	1.7	.32	.25	.36
MIN	.54	.65	1.4	3.1	2.9	2.8	2.1	1.4	.33	.21	.15	.20
AC-FT	42	95	279	258	184	195	151	101	44	15	13	18
CAL YR 1984	TOTAL	1113.88	MEAN	3.04	MAX	20	MIN	.33	AC-FT	2210		
WTP YR 1985	TOTAL	703.26	MEAN	1.93	MAX	14	MIN	.15	AC-FT	1390		

11113000 SESPE CREEK NEAR FILLMORE, CA

LOCATION.--Lat 34°27'03", long 118°55'30", in NW 1/4 NE 1/4 sec.12, T.4 N., R.20 W., Ventura County, Hydrologic Unit 18070102, on right bank 0.1 mi downstream from Little Sespe Creek, and 3.5 mi north of Fillmore.

DRAINAGE AREA.--251 mi².

PERIOD OF RECORD.--September 1911 to September 1913, October 1927 to September 1985 (discontinued); combined records of creek and canal, October 1927 to September 1985 (discontinued). Prior to 1935, published as "at Sespe."

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on canal. Elevation of creek gage is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map. Canal gage is at different datum. See WSP 1315-B for history of changes prior to Jan. 17, 1946.

REMARKS.--No estimated daily discharges. Records good. No regulation above station. Fillmore Irrigation Co. has diverted water 1 mi upstream since September 1911. For records of combined discharge of Sespe Creek and Fillmore Irrigation Company's canal, see following page.

AVERAGE DISCHARGE.--Creek only: 60 years, 113 ft³/s, 81,870 acre-ft/yr.

Combined creek and canal: 58 years, 119 ft³/s, 86,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 73,000 ft³/s, Feb. 10, 1978, gage height, 22.40 ft, from rating curve extended above 17,000 ft³/s on basis of slope-area measurement at gage height 22.40 ft; maximum gage height, 24.95 ft, Feb. 25, 1969, from debris wave; no flow at times in some years. Combined creek and canal: Maximum discharge, 73,000 ft³/s, Feb. 10, 1978; minimum daily, 1.1 ft³/s, July 31, Aug. 2, 1951.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1745	*1,450	*11.03				

Minimum daily, 0.32 ft³/s, Sept. 24.

Combined creek and canal: Maximum discharge, 1,450 ft³/s, Dec. 19; minimum daily, 2.6 ft³/s, Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	.78	21	50	37	28	24	6.3	3.0	.72	.41	.35
2	.95	.75	19	57	36	26	21	6.4	1.5	1.1	.38	.35
3	1.0	.75	20	55	36	26	20	5.1	1.5	.56	.34	.40
4	1.2	.75	18	53	34	29	18	5.5	2.3	.49	.34	.42
5	1.4	.78	18	51	33	31	19	6.0	1.8	.49	.34	.43
6	1.6	.83	17	50	33	28	19	6.9	1.0	.49	.34	.45
7	1.5	.87	16	53	32	40	19	7.7	1.1	.49	.34	.45
8	1.4	1.6	34	56	37	37	19	8.7	.86	.49	.34	.49
9	1.5	1.0	25	59	52	36	18	7.2	.83	.54	.34	.47
10	1.6	.94	203	61	48	34	16	6.2	.91	.49	.39	.42
11	1.8	.86	126	65	44	29	16	8.0	1.1	.52	.34	.41
12	2.1	3.0	62	58	40	28	16	8.2	1.2	.45	.37	.42
13	1.9	.75	40	55	37	26	16	5.3	.87	.41	.39	.41
14	1.9	.31	32	53	36	22	15	5.3	.99	.44	.38	.38
15	1.7	.22	61	51	37	23	11	5.3	.88	.45	.53	.42
16	1.9	.19	326	50	37	23	9.5	5.8	.78	.50	.40	.53
17	2.8	.18	104	50	38	22	9.5	4.4	.78	.50	.49	.57
18	2.7	.15	74	50	40	22	11	1.7	.73	.55	.62	.47
19	2.7	.13	455	49	39	24	11	1.5	.73	.55	.45	.40
20	2.1	.11	499	50	39	23	10	3.0	.68	.66	.49	.36
21	.85	.13	194	49	37	22	10	4.7	.68	.53	.39	.36
22	.79	.14	116	49	35	21	10	3.7	.71	.66	.38	.33
23	.79	.13	90	46	34	21	9.5	2.4	.70	.47	.37	.34
24	.75	.32	77	44	32	21	9.5	3.4	.72	.42	.36	.32
25	.74	.29	69	43	32	21	8.8	1.6	.78	.48	.35	.36
26	.75	.20	66	42	32	22	7.9	2.1	.78	.41	.34	.38
27	.75	.20	67	41	32	33	7.6	3.7	1.2	.43	.35	.40
28	.75	.23	67	42	31	27	6.6	4.9	1.1	.41	.35	.37
29	.76	.22	63	43	---	32	6.0	4.3	.80	.42	.34	.36
30	.79	.23	61	40	---	26	6.1	1.6	.90	.41	.34	.37
31	.80	---	59	37	---	25	---	2.0	---	.44	.34	---
TOTAL	43.19	425.91	3099	1560	1030	628	400.0	148.9	31.91	15.97	11.93	12.19
MEAN	1.39	14.2	100	50.3	36.8	26.7	13.3	4.80	1.06	.52	.38	.41
MAX	2.8	.75	499	65	52	40	24	8.7	3.0	1.1	.62	.57
MIN	.74	.75	16	37	31	21	6.0	1.5	.68	.41	.34	.32
AC-FT	86	845	6150	3090	2040	1640	793	295	63	32	24	24
CAL YR 1984	TOTAL	9110.43	MEAN	24.9	MAX	499	MIN	.60	AC-FT	18070		
WTR YR 1985	TOTAL	7607.00	MEAN	20.8	MAX	499	MIN	.32	AC-FT	15090		

SANTA CLARA RIVER BASIN

11113001 SESPE CREEK NEAR FILLMORE, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SESPE CREEK AND FILLMORE
IRRIGATION COMPANY CANAL NEAR FILLMORE, WATER YEAR OCTOBER 1984 to SEPTEMBER 1985

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	5.8	21	58	37	30	30	14	10	3.4	3.3	2.8
2	5.1	5.8	19	57	36	31	27	14	8.8	3.6	3.2	2.8
3	5.2	5.8	20	55	36	30	27	13	8.5	3.5	3.1	3.1
4	5.4	5.8	19	53	34	30	27	13	8.7	3.3	3.1	3.3
5	5.6	5.8	19	51	33	31	28	13	8.6	3.3	3.0	3.6
6	5.8	5.9	18	50	33	31	28	13	7.6	3.5	3.1	4.0
7	5.6	5.9	17	53	32	42	27	13	6.9	3.5	3.1	4.0
8	5.4	9.7	35	56	37	37	26	13	6.4	3.5	3.0	4.0
9	5.5	8.0	25	59	52	36	25	14	5.9	3.5	3.0	3.9
10	5.6	6.9	203	61	48	34	23	14	5.4	3.6	3.3	3.8
11	5.8	6.6	126	65	44	33	23	14	5.3	3.5	3.3	3.7
12	6.0	6.8	62	58	40	33	22	15	5.5	3.4	3.3	3.6
13	5.7	77	40	55	37	32	21	13	5.2	3.4	3.4	3.6
14	5.6	32	32	53	36	31	20	13	5.2	3.4	3.4	3.5
15	5.1	23	61	51	37	31	19	13	5.0	3.3	3.4	3.3
16	5.2	19	326	50	37	31	18	12	4.8	3.3	3.4	3.3
17	6.3	18	104	50	38	30	18	12	4.7	3.2	3.4	3.7
18	6.0	15	74	50	40	30	19	11	4.5	3.5	3.6	3.7
19	5.8	14	455	49	39	31	20	10	4.5	3.7	3.5	3.8
20	6.3	13	499	50	39	30	20	11	4.5	3.9	3.4	3.8
21	5.9	14	194	49	37	29	20	12	4.4	3.5	3.2	3.7
22	5.7	15	116	49	35	28	20	11	4.4	3.7	3.3	3.4
23	5.3	14	90	46	34	28	19	9.4	4.4	3.6	2.9	3.4
24	5.5	33	77	44	32	28	17	9.7	4.2	3.4	3.1	3.3
25	4.8	31	69	43	32	28	16	8.6	4.5	3.6	3.0	3.3
26	5.4	21	66	42	32	29	15	8.7	4.3	3.3	2.8	3.5
27	5.4	21	67	41	32	39	15	9.4	4.1	3.3	2.9	3.7
28	5.7	23	67	42	31	32	15	9.8	4.2	3.1	2.9	3.8
29	5.8	22	63	43	---	37	15	9.8	3.8	3.1	2.8	3.8
30	5.9	23	61	40	---	33	14	8.3	3.8	3.1	2.7	3.9
31	5.9	---	59	37	---	31	---	8.6	---	3.2	2.6	---
TOTAL	173.3	506.8	3104	1560	1030	986	634	363.3	168.1	106.2	97.5	107.1
MEAN	5.59	16.9	100	50.3	36.8	31.8	21.1	11.7	5.60	3.43	3.15	3.57
MAX	6.3	77	499	65	52	42	30	15	10	3.9	3.6	4.0
MIN	4.8	5.8	17	37	31	28	14	8.3	3.8	3.1	2.6	2.8
AC-FT	344	1010	6160	3090	2040	1960	1260	721	333	211	193	212
CAL YR 1984	TOTAL	10962.3	MEAN	30.0	MAX	499	MIN	4.3	AC-FT	21740		
WTR YR 1985	TOTAL	8836.3	MEAN	24.2	MAX	499	MIN	2.6	AC-FT	17530		

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA

LOCATION.--Lat 34°24'48", long 119°04'53", in NW 1/4 SE 1/4 sec.21, T.4 N., R.21 W., Ex Mission San Buenaventura Grant, Ventura County, Hydrologic Unit 18070102, on right bank 1.3 mi downstream from Sisar Creek, and 4.8 mi north of Santa Paula.

DRAINAGE AREA.--38.4 mi².

PERIOD OF RECORD.--October 1927 to current year. March 1912 to September 1913, at site 1.2 mi upstream; records not equivalent.

GAGE.--Water-stage recorder. Elevation of gage is 790 ft, above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 22, 1980, at various sites and datums 1.3 mi downstream. See U.S. Geological Survey Water-Data Report CA-79-1 for history of changes prior to Oct. 22, 1980.

REMARKS.--Estimated daily discharges: Oct. 12 to Nov. 7, Apr. 7-24, May 11-15, June 10-13, July 3-4, July 7 to Sept. 12, Sept. 15-17, 20-30. Records poor. Natural flow affected by pumping and return flow from irrigated areas.

AVERAGE DISCHARGE.--58 years, 23.7 ft³/s, 17,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft³/s, Feb. 25, 1969, gage height, 18.18 ft, from floodmark, site and datum then in use, from rating curve extended above 2,300 ft³/s on basis of critical-depth measurement at gage height 15.2 ft; no flow at times in 1949, 1951-52, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1745	*90	*3.20				

Minimum daily, 0.78 ft³/s, Aug. 4-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.6	4.2	10	7.7	8.1	4.0	3.1	2.6	1.7	.94	.82
2	1.6	1.6	4.0	10	8.1	8.4	4.0	3.5	2.5	1.4	.86	.84
3	1.9	1.6	4.7	9.6	7.7	8.4	4.1	3.9	2.6	1.3	.80	.90
4	1.9	1.7	4.8	9.5	7.6	8.1	4.3	4.5	3.9	1.3	.78	.94
5	2.1	1.8	4.8	9.1	7.1	8.1	4.3	4.7	3.7	1.4	.78	1.0
6	2.0	2.0	4.9	9.1	7.1	7.9	4.4	4.9	3.8	1.4	.78	1.0
7	2.2	3.0	5.6	10	7.0	11	4.3	4.6	3.9	1.3	.78	1.1
8	1.8	4.8	12	10	9.4	8.6	4.3	5.0	3.0	1.2	.78	1.1
9	2.0	3.1	8.2	9.1	15	7.9	4.1	3.6	3.0	1.4	.80	1.1
10	2.0	2.9	16	14	9.7	7.4	3.9	4.6	1.9	1.2	.88	1.2
11	2.0	2.6	19	12	8.8	7.4	3.8	5.0	1.2	1.3	.80	1.3
12	1.9	3.6	14	12	8.9	7.2	3.8	4.0	2.4	1.1	.84	1.3
13	1.9	16	14	11	8.9	6.6	3.7	4.0	2.0	1.0	.86	1.4
14	1.8	7.9	14	11	8.6	6.1	3.5	3.0	2.3	1.1	1.0	1.3
15	1.8	6.5	19	11	8.6	6.1	3.3	3.0	2.6	1.2	1.2	1.2
16	1.8	6.2	28	10	8.4	5.9	3.1	1.9	2.6	1.2	.96	1.3
17	1.7	5.6	12	10	9.4	5.5	2.9	2.5	2.6	1.3	1.2	1.1
18	1.7	5.0	9.8	9.6	12	5.6	2.8	3.1	2.3	1.4	1.4	1.3
19	1.6	4.8	28	9.6	11	5.3	2.6	2.9	2.2	1.3	1.0	1.2
20	1.6	4.1	24	9.6	11	4.8	2.5	3.1	2.2	1.2	1.1	1.1
21	1.6	4.0	16	9.6	11	4.2	2.4	2.5	2.3	1.1	.90	1.1
22	1.6	3.9	14	9.4	11	4.2	2.3	2.3	2.4	1.3	.86	1.1
23	1.6	4.0	13	9.1	11	4.0	2.1	2.0	2.4	1.1	.86	1.0
24	1.6	8.2	12	8.9	10	4.0	1.9	2.7	3.2	1.0	.84	1.0
25	1.6	6.7	11	8.5	10	4.2	1.7	3.1	3.7	1.1	.80	1.0
26	1.6	5.5	10	8.1	9.9	3.9	5.0	3.5	3.0	1.0	.80	1.0
27	1.6	4.7	9.6	8.1	9.4	7.6	3.7	3.5	2.0	.96	.80	1.1
28	1.6	7.1	9.6	9.2	8.6	5.7	4.3	2.5	1.6	.95	.80	1.1
29	1.6	5.4	9.6	8.5	---	5.2	4.0	1.4	1.5	.95	.80	1.1
30	1.6	4.5	9.6	8.1	---	4.8	3.0	1.3	1.5	.96	.80	1.1
31	1.6	---	9.9	7.7	---	4.2	---	2.0	---	1.0	.80	---
TOTAL	54.3	140.4	375.3	301.4	262.90	196.4	104.1	101.7	76.9	37.12	27.62	33.10
MEAN	1.75	4.68	12.1	9.72	9.39	6.34	3.47	3.28	2.56	1.20	.89	1.10
MAX	2.2	16	28	14	15	11	5.0	5.0	3.9	1.7	1.4	1.4
MIN	1.4	1.6	4.0	7.7	7.0	3.9	1.7	1.3	1.2	.95	.78	.82
AC-FT	108	276	744	598	521	390	206	202	153	74	55	66

CAL YR 1984	TOTAL	2292.40	MEAN	6.26	MAX	32	MIN	.91	AC-FT	4550
WTR YR 1985	TOTAL	1711.24	MEAN	4.69	MAX	28	MIN	.78	AC-FT	3390

SANTA CLARA RIVER BASIN

11113900 SATICOY DIVERSION NEAR SATICOY, CA

LOCATION.--Lat 34°17'35", long 119°06'00", in Santa Paula Y Saticoy Grant, Ventura County, Hydrologic Unit 18070102, on diversion works at Santa Clara River, 1.9 mi east of Saticoy.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1969 to current year. Daily discharge for October 1981 to September 1982, published in WRD CA-83-1. October 1928 to April 1969 in files of United Water Conservation District.

GAGE.--Water-stage recorder. Elevation of gage is 160 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water is diverted from left bank of Santa Clara River to percolation basin near Los Angeles Avenue (State Highway 118) and for irrigation in Pleasant Valley. Imported water from the California Water Project released to the basin at Castaic Dam and Pyramid Dam since 1972.

COOPERATION.--Records were provided by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 437 ft³/s, Dec. 10, 1978; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	29	93	159	133	132	76	34	26	16	9.7	4.7
2	236	33	89	141	138	134	70	31	28	15	10	6.4
3	234	28	96	143	130	137	64	31	27	14	10	8.0
4	233	36	94	139	127	136	64	34	26	14	10	9.7
5	222	37	90	118	128	136	63	36	23	14	12	11
6	123	33	91	117	124	133	64	36	22	15	13	16
7	101	26	95	141	119	148	68	34	21	16	13	26
8	90	51	98	151	116	146	66	32	22	16	11	39
9	86	44	122	154	98	144	61	34	23	15	9.0	44
10	60	39	34	53	175	150	60	33	23	16	9.0	48
11	42	39	92	166	170	140	58	34	19	13	11	49
12	44	43	168	171	140	102	57	33	18	11	13	52
13	35	2.4	140	172	76	102	56	32	19	12	16	60
14	33	55	126	154	147	96	58	30	18	14	14	70
15	37	79	127	146	148	101	59	30	18	14	10	74
16	40	81	143	147	136	95	52	30	20	14	9.4	78
17	20	82	207	141	133	92	44	28	21	13	10	88
18	24	88	159	141	141	94	41	28	20	12	12	101
19	30	79	90	140	146	101	45	29	18	13	12	117
20	39	74	0	139	152	94	44	30	17	14	12	118
21	46	72	10	146	152	84	48	28	15	14	11	125
22	41	75	195	146	146	77	49	28	16	11	9.4	135
23	39	74	218	148	145	79	47	28	17	8.7	9.4	127
24	35	54	194	138	144	80	44	27	18	9.4	9.4	108
25	29	54	189	132	128	79	42	27	21	10	11	62
26	32	100	195	136	118	76	41	27	21	12	12	39
27	23	90	158	139	116	73	41	26	18	10	12	27
28	22	109	111	148	112	63	39	26	18	9.0	9.4	21
29	23	102	173	146	---	85	36	26	18	11	7.5	20
30	25	94	176	135	---	85	36	26	17	12	3.9	19
31	28	---	163	135	---	77	---	26	---	10	3.2	---
TOTAL	2319	1802.4	3936	4382	3738	3271	1593	934	608	398.1	324.3	1702.8
MEAN	74.8	60.1	127	141	134	106	53.1	30.1	20.3	12.8	10.5	56.8
MAX	247	109	218	172	175	150	76	36	28	16	16	135
MIN	20	2.4	0	53	76	63	36	26	15	8.7	3.2	4.7
AC-FT	4600	3580	7810	8690	7410	6490	3160	1850	1210	790	643	3380
CAL YR 1984	TOTAL	45706.40	MEAN	125	MAX	247	MIN	0	AC-FT	90660		
WTR YR 1985	TOTAL	25008.60	MEAN	68.5	MAX	247	MIN	0	AC-FT	49600		

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1982 to current year.
 SPECIFIC CONDUCTANCE: August 1982 to current year.
 pH: April 1982 to current year.
 WATER TEMPERATURES: August 1982 to current year.

PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: August 1982 to current year.
 pH: April 1982 to current year.
 WATER TEMPERATURES: August 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1982.

EXTREMES FOR PERIOD OF RECORD.--
 SPECIFIC CONDUCTANCE: Maximum recorded, 2,170 microsiemens, Sept. 1, 1985; minimum recorded, 590 microsiemens, Nov. 30, 1982.
 pH: Maximum, 8.9 units, Apr. 16, 1984; minimum, 7.1 units, Aug. 24, 1983.
 WATER TEMPERATURES: Maximum recorded, 34.0°C, July 3, 1985; minimum recorded, 3.5°C, Dec. 5, 1983.

EXTREMES FOR CURRENT YEAR.--
 SPECIFIC CONDUCTANCE: Maximum recorded, 2,170 microsiemens, Sept. 1; minimum recorded, 840 microsiemens, Dec. 16.
 pH: Maximum, 8.6 units, several days in May and September; minimum, 7.5 units, Oct. 17.
 WATER TEMPERATURES: Maximum recorded, 34.0°C, July 3; minimum recorded, 6.5°C, Dec. 21.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1150	1100	1130	1670	1650	1660	1610	1590	1600	1520	1450	1500
2	1130	1100	1120	1680	1490	1620	1610	1590	1610	1530	1450	1500
3	1130	1090	1110	1690	1620	1650	1620	1490	1590	1550	1480	1520
4	1120	1080	1100	1680	1580	1660	1610	1590	1600	1540	1410	1520
5	1120	1090	1120	1670	1570	1640	1630	1600	1610	1550	1520	1540
6	1400	1250	1330	1670	1590	1650	1640	1600	1620	1540	1520	1530
7	1450	1360	1400	1670	1540	1640	1660	1270	1610	1520	1270	1480
8	1470	1400	1430	1740	1020	1520	1590	950	1440	1510	1470	1500
9	1500	1430	1460	1660	1560	1630	1610	1540	1590	1510	1480	1500
10	1500	1440	1470	1660	1480	1630	1630	1130	1490	1490	980	1340
11	1520	1460	1490	1650	1530	1630	1470	970	1140	1510	1450	1490
12	1550	1480	1510	1640	1510	1590	1500	1230	1380	1490	1460	1470
13	1580	1490	1520	---	---	---	1530	1500	1510	1490	1410	1470
14	1580	1500	1540	1690	1570	1630	1550	1520	1530	1520	1460	1490
15	1520	1520	1530	1620	1570	1590	1560	1540	1550	1500	1480	1490
16	1580	1470	1540	1610	1580	1590	1540	840	1130	1500	1480	1490
17	1560	1400	1500	1620	1580	1600	1350	1040	1230	1500	1480	1490
18	1590	1550	1570	1630	1600	1610	1420	1350	1390	1500	1470	1490
19	1580	1540	1570	1650	1600	1620	1420	970	1210	1500	1480	1490
20	1620	1510	1570	1650	1600	1620	---	---	---	1510	1480	1490
21	1620	1590	1600	1640	1580	1610	---	---	---	1510	1490	1500
22	1620	1530	1590	1640	1590	1610	1310	1140	1240	1510	1480	1490
23	1650	1450	1590	1630	1590	1610	1380	1310	1340	1500	1480	1490
24	1630	1460	1590	1610	1010	1470	1440	1380	1400	1510	1480	1500
25	1680	1600	1630	1580	1370	1480	1460	1400	1440	1530	1490	1510
26	1650	1560	1620	1650	1590	1620	1490	1410	1450	1520	1470	1500
27	1650	1430	1610	1610	1590	1610	1490	1430	1480	1520	1470	1490
28	1670	1530	1640	1600	1250	1520	1500	1420	1470	1530	1270	1470
29	1660	1500	1600	1600	1570	1590	1500	1430	1470	1530	1500	1510
30	1660	1530	1620	1610	1590	1600	1510	1340	1470	1530	1510	1520
31	1680	1640	1660	---	---	---	1520	1480	1500	1530	1510	1520
MONTH	1680	1080	1480	1740	1010	1600	1660	840	1450	1550	980	1490

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1530	1510	1520	1540	1500	1520	---	---	---	1740	1730	1730
2	1530	1430	1510				---	---	---	1740	1730	1730
3	1530	1500	1520				---	---	---	1740	1730	1730
4	1530	1510	1520				---	---	---	1740	1730	1730
5	1530	1510	1520				---	---	---	1640	1630	1640
6	1530	1510	1520	---	---	---	1640	1630	1630	1740	1720	1730
7	1520	1510	1520	---	---	---	1640	1630	1630	---	---	---
8	1530	1310	1500	---	---	---	1640	1630	1630	---	---	---
9	1490	1210	1400	---	---	---	1650	1640	1650	---	---	---
10	1530	1480	1510	---	---	---	1660	1650	1660	---	---	---
11	1510	1480	1500	---	---	---	1670	1660	1670	---	---	---
12	1520	1500	1510	---	---	---	1680	1670	1680	---	---	---
13	1530	1500	1520	---	---	---	1690	1670	1680	---	---	---
14	1530	1500	1520	---	---	---	1690	1680	1690	---	---	---
15	1530	1490	1510	---	---	---	1690	1680	1690	---	---	---
16	1510	1490	1500	---	---	---	1700	1690	1700	---	---	---
17	1500	1470	1490	---	---	---	1720	1700	1710	---	---	---
18	1490	1450	1470	---	---	---	1710	1700	1710	---	---	---
19	1470	1440	1460	---	---	---	1720	1710	1720	---	---	---
20	1470	1450	1460	---	---	---	1720	1710	1720	---	---	---
21	1470	1440	1450	---	---	---	1730	1720	1730	---	---	---
22	1480	1450	1460	---	---	---	1730	1720	1730	---	---	---
23	1480	1460	1470	---	---	---	1730	1720	1730	---	---	---
24	1490	1480	1480	---	---	---	1740	1720	1730	---	---	---
25	1500	1460	1490	---	---	---	1740	1720	1730	---	---	---
26	1510	1460	1490	---	---	---	1740	1720	1740	---	---	---
27	1520	1490	1510	---	---	---	1740	1720	1730	---	---	---
28	1520	1490	1500	---	---	---	1740	1730	1730	---	---	---
29	---	---	---	---	---	---	1730	1720	1730	---	---	---
30	---	---	---	---	---	---	1740	1730	1730	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	1530	1210	1490	---	---	---	1740	1630	1700	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1800	1700	1740	---	---	---	2170	2000	2060
2	---	---	---	1840	1720	1780	---	---	---	2100	1980	2030
3	---	---	---	1900	1780	1830	---	---	---	2020	1950	1980
4	---	---	---	1910	1750	1840	---	---	---	1990	1930	1950
5	---	---	---	1860	1770	1810	---	---	---	1960	1280	1570
6	---	---	---	1840	1750	1800	---	---	---	1610	1270	1410
7	---	---	---	1850	1710	1790	---	---	---	1820	1580	1640
8	---	---	---	1850	1680	1780	---	---	---	1790	1540	1650
9	---	---	---	1840	1780	1800	---	---	---	1580	1510	1550
10	---	---	---	1820	1720	1780	1930	1820	1860	1550	1480	1520
11	---	---	---	1830	1760	1780	1880	1790	1820	1490	1390	1450
12	---	---	---	1820	1720	1770	1890	1820	1840	1410	1360	1390
13	---	---	---	1800	1720	1750	1880	1820	1840	1410	1350	1380
14	---	---	---	1770	1710	1730	1890	1810	1840	1390	1340	1360
15	---	---	---	1750	1700	1720	1930	1830	1870	1350	1300	1330
16	---	---	---	1760	1710	1730	1930	1830	1860	1330	1290	1310
17	---	---	---	1740	1670	1710	1900	1830	1860	1320	1280	1300
18	---	---	---	---	---	---	1890	1830	1860	1300	1270	1280
19	---	---	---	---	---	---	1890	1820	1840	1270	1230	1250
20	---	---	---	---	---	---	1890	1820	1840	1240	1200	1220
21	---	---	---	---	---	---	1920	1810	1860	1210	1180	1200
22	---	---	---	---	---	---	1930	1840	1870	1200	1170	1180
23	---	---	---	---	---	---	1960	1810	1880	1190	1170	1180
24	---	---	---	---	---	---	1940	1730	1830	1190	1160	1180
25	---	---	---	---	---	---	1900	1640	1790	1520	1190	1410
26	---	---	---	---	---	---	1900	1760	1840	1560	1500	1520
27	1800	1710	1740	---	---	---	1970	1850	1890	1610	1540	1560
28	1810	1700	1750	---	---	---	1980	1860	1900	1660	1590	1620
29	1780	1690	1730	---	---	---	2010	1850	1920	1640	1620	1630
30	1820	1700	1760	---	---	---	2060	1900	1960	1660	1590	1630
31	---	---	---	---	---	---	2120	1940	2020	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	2170	1160	1490
YEAR	2170	840	1580									

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	8.0	8.1	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.2	8.2
2	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.2	8.2
3	8.2	8.1	8.1	8.2	8.0	8.1	8.3	8.2	8.2	8.3	8.2	8.2
4	8.2	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2	8.2	8.2	8.2
5	8.2	8.1	8.2	8.2	7.9	8.0	8.2	8.2	8.2	8.3	8.2	8.2
6	8.3	8.2	8.2	8.3	7.9	8.1	8.3	8.2	8.2	8.3	8.1	8.2
7	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.0	8.2	8.2	8.0	8.2
8	8.3	8.2	8.2	8.1	7.6	8.0	8.1	7.9	8.0	8.2	8.1	8.1
9	8.2	8.2	8.2	8.2	8.0	8.1	8.2	8.1	8.2	8.2	8.1	8.2
10	8.3	8.1	8.2	8.2	8.1	8.2	8.2	8.0	8.1	8.1	7.9	8.0
11	8.3	8.2	8.2	8.2	8.1	8.2	8.0	7.9	8.0	8.2	8.1	8.2
12	8.3	8.1	8.2	8.2	8.1	8.1	8.1	8.0	8.1	8.2	8.1	8.2
13	8.3	8.1	8.2	8.1	7.8	7.8	8.2	8.1	8.2	8.2	8.1	8.2
14	8.3	8.1	8.2	8.2	7.7	7.9	8.2	8.1	8.2	8.2	8.1	8.2
15	8.3	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.2
16	8.3	8.2	8.3	8.2	8.2	8.2	8.2	7.9	8.0	8.3	8.1	8.2
17	8.3	7.5	8.1	8.3	8.2	8.2	8.1	8.0	8.1	8.2	8.1	8.2
18	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.1	8.2	8.1	8.2
19	8.3	8.1	8.2	8.3	8.2	8.2	8.1	7.9	8.0	8.2	8.1	8.1
20	8.2	8.0	8.1	8.3	8.2	8.2	8.0	7.9	8.0	8.2	8.1	8.2
21	8.2	8.1	8.1	8.3	8.2	8.2	8.1	7.9	8.1	8.2	8.0	8.1
22	8.2	8.0	8.1	8.3	8.2	8.2	8.2	8.1	8.2	8.2	8.1	8.2
23	8.2	8.0	8.1	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.0	8.2
24	8.2	8.0	8.1	8.3	7.9	8.1	8.2	8.2	8.2	8.2	8.0	8.1
25	8.2	8.0	8.1	8.2	7.9	8.1	8.2	8.2	8.2	8.2	8.1	8.2
26	8.2	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.0	8.1
27	8.2	8.0	8.1	8.3	8.2	8.2	8.2	8.1	8.2	8.2	8.0	8.1
28	8.2	8.0	8.1	8.2	8.1	8.2	8.2	8.1	8.2	8.2	7.9	8.1
29	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.0	8.1
30	8.2	8.0	8.1	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.1	8.2
31	8.3	8.0	8.1	---	---	---	8.2	8.2	8.2	8.2	8.1	8.2
MONTH	8.3	7.5	8.2	8.3	7.6	8.1	8.3	7.9	8.2	8.3	7.9	8.2
FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	8.1	8.2	8.2	8.1	8.2	8.3	8.1	8.2	8.1	7.8	8.0
2	8.2	8.1	8.2	8.2	8.0	8.1	8.2	8.1	8.1	8.1	7.9	8.0
3	8.3	8.1	8.2	8.2	8.1	8.2	8.2	8.1	8.2	8.1	7.9	8.0
4	8.2	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2	8.2	8.0	8.1
5	8.2	8.1	8.2	8.2	8.0	8.1	8.2	8.1	8.2	8.2	8.0	8.0
6	8.2	8.1	8.2	8.3	8.0	8.2	8.2	8.1	8.2	8.3	8.1	8.2
7	8.2	8.1	8.2	8.2	8.1	8.2	8.2	8.1	8.2	8.5	8.0	8.3
8	8.2	7.9	8.1	8.3	8.2	8.2	8.2	8.1	8.2	8.6	8.3	8.4
9	8.0	7.8	7.9	8.3	8.2	8.2	8.2	8.1	8.2	8.6	8.4	8.5
10	8.2	8.0	8.1	8.3	8.2	8.2	8.3	8.1	8.2	8.5	8.4	8.4
11	8.2	8.1	8.1	8.3	8.2	8.2	8.3	8.1	8.2	8.5	8.4	8.4
12	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.2	8.5	8.3	8.4
13	8.2	8.1	8.1	8.3	8.2	8.2	8.2	8.0	8.1	8.5	8.4	8.4
14	8.2	8.1	8.2	8.3	8.2	8.2	8.2	8.0	8.1	8.5	8.4	8.4
15	8.2	8.0	8.1	8.2	8.2	8.2	8.2	8.1	8.2	8.5	8.4	8.4
16	8.2	8.1	8.2	8.3	8.2	8.2	8.3	8.2	8.3	8.6	8.3	8.4
17	8.2	8.1	8.2	8.3	8.2	8.2	8.3	8.2	8.3	8.6	8.4	8.4
18	8.2	8.0	8.1	8.2	8.1	8.2	8.3	8.2	8.2	8.6	8.4	8.4
19	8.2	8.0	8.1	8.2	8.1	8.2	8.3	8.2	8.2	8.6	8.4	8.5
20	8.2	8.0	8.1	8.3	8.1	8.2	8.4	8.2	8.3	8.5	8.4	8.5
21	8.2	8.1	8.1	8.3	8.2	8.3	8.4	8.2	8.2	8.6	8.4	8.5
22	8.2	8.0	8.1	8.3	8.2	8.3	8.3	8.2	8.2	8.6	8.4	8.5
23	8.1	8.0	8.1	8.3	8.2	8.3	---	---	---	8.6	8.4	8.5
24	8.2	8.0	8.1	8.3	8.2	8.3	---	---	---	8.6	8.3	8.5
25	8.2	8.1	8.1	8.3	8.2	8.3	---	---	---	8.6	8.4	8.5
26	8.2	8.1	8.2	8.3	8.1	8.2	---	---	---	8.5	8.3	8.4
27	8.2	8.1	8.2	8.1	7.9	8.0	---	---	---	8.5	8.3	8.4
28	8.2	8.1	8.2	8.2	7.9	8.1	---	---	---	8.5	8.3	8.4
29	---	---	---	8.2	8.2	8.2	---	---	---	8.4	8.2	8.3
30	---	---	---	8.2	8.1	8.2	8.1	7.9	8.0	8.4	8.2	8.3
31	---	---	---	8.2	8.1	8.2	---	---	---	8.3	8.0	8.2
MONTH	8.3	7.8	8.1	8.3	7.9	8.2	---	---	---	8.6	7.8	8.3

SANTA CLARA RIVER BASIN

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	8.0	8.1	8.3	7.9	8.1	8.2	7.7	8.0	8.5	8.0	8.2
2	8.1	7.9	8.0	8.3	7.9	8.1	8.2	7.9	8.0	8.5	7.9	8.2
3	8.1	7.9	8.0	8.3	7.9	8.1	8.2	7.9	8.0	8.5	7.9	8.2
4	8.0	7.9	8.0	8.3	7.9	8.1	8.2	7.9	8.0	8.4	8.0	8.1
5	8.3	7.8	8.0	8.3	7.9	8.1	8.2	7.9	8.0	8.4	8.0	8.1
6	8.4	7.9	8.1	8.3	7.9	8.0	8.2	7.8	8.0	8.5	7.9	8.2
7	8.4	7.9	8.1	8.2	7.8	8.0	8.2	7.9	8.0	8.5	7.9	8.1
8	8.4	7.9	8.1	8.3	7.9	8.0	8.2	7.9	8.0	8.3	7.9	8.1
9	8.4	7.9	8.1	8.2	7.9	8.0	8.4	7.9	8.0	8.3	7.9	8.0
10	8.3	7.8	8.1	8.2	7.9	8.0	8.4	8.1	8.2	8.4	7.9	8.1
11	8.3	7.9	8.0	8.2	7.9	8.0	8.5	8.1	8.2	8.4	7.9	8.1
12	8.2	7.9	8.0	8.2	7.9	8.0	8.4	8.0	8.2	8.6	8.0	8.2
13	8.2	7.9	8.0	8.3	7.9	8.0	8.4	8.0	8.2	8.6	8.0	8.2
14	8.2	7.9	8.0	8.3	7.9	8.1	8.4	8.0	8.2	8.6	8.0	8.2
15	8.2	7.9	8.0	8.3	7.9	8.1	8.4	8.1	8.2	8.6	8.0	8.2
16	8.3	7.9	8.0	8.3	8.0	8.1	8.4	8.1	8.3	8.6	8.0	8.2
17	8.3	7.9	8.0	8.3	8.0	8.1	8.4	8.1	8.2	8.6	8.0	8.2
18	8.3	7.9	8.1	8.3	8.0	8.1	8.5	8.1	8.2	8.5	8.0	8.2
19	8.3	7.9	8.1	8.2	7.9	8.0	8.5	8.1	8.2	8.4	8.0	8.2
20	8.3	7.9	8.1	8.3	7.9	8.1	8.5	8.1	8.2	8.4	8.0	8.2
21	8.4	8.0	8.1	8.3	7.9	8.1	8.4	8.0	8.2	8.4	8.1	8.2
22	8.4	8.0	8.1	8.3	7.8	8.0	8.4	8.0	8.2	8.4	8.1	8.2
23	8.4	8.0	8.2	8.3	7.9	8.1	8.4	8.0	8.2	8.4	8.1	8.2
24	8.4	8.0	8.1	8.4	7.9	8.1	8.4	8.0	8.2	8.4	8.2	8.2
25	8.3	7.9	8.1	8.4	8.0	8.1	8.5	8.0	8.2	8.3	8.1	8.2
26	8.3	7.8	8.0	8.4	7.9	8.1	8.5	8.0	8.2	8.3	8.2	8.2
27	8.2	7.9	8.0	8.3	7.9	8.1	8.4	8.0	8.2	8.3	8.2	8.2
28	8.3	7.8	8.0	8.3	7.8	8.0	8.4	8.0	8.2	8.3	8.1	8.2
29	8.3	7.9	8.0	8.3	7.8	8.0	8.4	8.0	8.2	8.2	8.1	8.2
30	8.3	7.9	8.0	8.3	7.8	8.0	8.4	8.0	8.1	8.3	8.1	8.2
31	---	---	---	8.2	7.8	8.0	8.4	8.0	8.1	---	---	---
MONTH	8.4	7.8	8.1	8.4	7.8	8.1	8.5	7.7	8.1	8.6	7.9	8.2
YEAR	8.6	7.5	8.2									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	18.5	22.0	11.5	15.5	11.5	15.0	9.5	14.0	8.5	18.5	11.5
2	23.0	17.5	21.5	11.0	15.0	10.5	13.5	9.0	17.0	10.0	17.5	11.0
3	23.0	17.5	22.0	11.5	15.5	13.0	14.0	9.0	15.5	8.0	18.5	9.0
4	22.5	18.0	21.5	12.0	15.5	10.5	14.5	9.0	15.5	9.0	18.5	9.0
5	22.5	17.5	21.5	15.0	15.5	13.0	15.0	9.5	15.0	8.0	15.0	10.5
6	25.0	16.5	21.5	15.5	17.0	12.5	15.5	12.0	15.0	9.0	18.5	10.5
7	26.5	16.5	21.0	15.5	16.5	11.5	14.0	13.0	16.0	9.0	19.0	12.5
8	25.5	16.0	21.0	14.0	16.0	13.5	16.5	11.5	15.0	11.5	17.5	11.0
9	26.0	16.0	20.0	11.5	16.5	12.0	15.5	10.0	17.5	13.0	19.5	11.0
10	24.0	17.0	20.0	11.0	14.5	12.5	15.0	12.0	17.0	9.0	20.0	13.5
11	23.0	18.5	20.5	11.0	15.0	11.0	15.5	10.0	16.5	9.0	21.5	13.5
12	26.0	15.5	19.5	11.5	15.5	11.5	14.0	8.5	18.5	10.0	21.5	12.0
13	26.0	15.0	18.0	15.0	13.5	10.0	15.0	8.0	19.0	11.5	21.5	11.0
14	25.5	16.0	16.5	13.5	13.0	8.5	15.5	8.5	20.5	12.0	21.0	12.5
15	23.5	12.5	18.0	11.0	13.0	8.0	15.5	8.5	21.0	11.5	20.5	13.5
16	22.0	11.0	18.0	13.5	12.5	9.0	16.0	9.5	20.0	12.0	21.0	13.0
17	23.5	15.0	19.0	13.5	11.0	7.5	16.5	9.5	18.0	12.0	21.5	11.5
18	22.5	11.5	16.5	14.5	11.0	9.0	16.0	10.0	17.5	14.5	20.0	12.0
19	23.0	13.5	17.5	12.0	10.5	9.5	15.5	11.0	19.5	14.0	22.0	10.5
20	23.0	14.0	16.5	11.0	10.5	7.5	15.5	12.0	19.0	14.5	22.5	12.0
21	22.0	12.5	16.5	12.5	12.0	6.5	14.0	13.0	19.5	10.5	23.0	12.5
22	22.5	12.5	14.0	11.0	11.5	8.0	16.5	12.5	19.0	11.0	22.5	11.0
23	22.0	11.5	16.5	10.0	12.0	8.0	16.5	10.5	20.0	12.0	23.5	11.5
24	22.5	11.5	14.0	12.0	11.5	8.5	16.5	10.5	20.0	11.5	23.5	11.5
25	21.5	12.5	14.5	11.0	13.0	9.0	16.0	10.0	20.5	12.0	20.5	13.0
26	22.0	11.5	14.0	9.5	12.5	9.5	16.0	10.5	20.0	12.0	21.5	10.5
27	21.0	13.0	13.5	9.5	13.5	11.5	16.5	9.5	20.0	13.5	21.5	13.5
28	21.5	11.5	16.0	13.0	16.0	11.0	13.0	10.5	20.5	11.5	22.0	12.0
29	22.0	12.0	15.5	11.0	15.5	10.5	15.0	9.0	---	---	21.5	10.5
30	22.0	12.0	15.0	11.0	15.5	10.0	16.0	9.0	---	---	23.0	11.0
31	22.0	14.0	---	---	15.5	9.5	15.5	8.5	---	---	24.0	11.5
MONTH	26.5	11.0	22.0	9.5	17.0	6.5	16.5	8.0	21.0	8.0	24.0	9.0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

[illegible]

SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA

LOCATION.--Lat 34°14'31", long 119°11'21", in San Miguel Grant, Ventura County, Hydrologic Unit 18070102, on downstream end of center pier of southbound bridge on U.S. Highway 101, 0.9 mi southeast of Montalvo, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--1,612 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1932, October 1949 to current year. Monthly discharge only for 1950-67, published in WRD 1968 report. October 1949 to September 1969, published as "at Saticoy."

GAGE.--Water-stage recorder. Datum of gage is 51.88 ft above National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Oct. 1, 1927, to Sept. 30, 1932, and Oct. 1, 1949, to Sept. 30, 1967, at same site at different datums. Oct. 1, 1967, to Feb. 2, 1970, at site 3.9 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 7-10, 12-19, Dec. 23 to Jan. 2, Jan. 6-9, Feb. 9-13. Records poor. Flow partly regulated by Lake Piru (station 11109500) 33 mi upstream since May 1955; by Pyramid Lake, capacity, 173,500 acre-ft, 42 mi upstream since December 1971, and by Castaic Reservoir, capacity 324,000 acre-ft, 43 mi upstream since January 1972. Natural flow affected by ground-water withdrawals, diversions, municipal use, and ground-water replenishment. Imported water from the California Water Project released to the basin at Castaic Dam and Pyramid Dam. Diversion to spreading grounds and for irrigation in Pleasant Valley, at site 6.0 mi upstream (station 11113900). AVERAGE DISCHARGE represents flow to the ocean regardless of upstream development.

COOPERATION.--Two discharge measurements were provided by Ventura County Flood Control District.

AVERAGE DISCHARGE.--41 years, 155 ft³/s, 112,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165,000 ft³/s, Jan. 25, 1969, gage height, 17.41 ft, present datum; no flow for long periods in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 120,000 ft³/s, estimated by Ventura County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,040 ft³/s, Dec. 20, gage height, 4.63 ft; no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.10	0							
2			0	.05	0							
3			0	0	0							
4			0	0	0							
5			0	0	0							
6			0	.10	0							
7			25	.10	0							
8			80	.20	0							
9			30	.20	75							
10			90	205	20							
11			172	16	5.0							
12			2.0	.14	1.0							
13			2.0	.05	.10							
14			1.5	.02	0							
15			3.0	.02	0							
16			6.0	.02	0							
17			2.0	0	0							
18			1.5	0	0							
19			312	0	0							
20			1400	0	0							
21			90	0	0							
22			7.3	0	0							
23			5.0	0	0							
24			4.0	0	0							
25			3.5	0	0							
26			3.0	0	0							
27			2.5	0	0							
28			2.0	0	0							
29			1.0	0	---							
30			.50	0	---							
31			.20	0	---							
TOTAL	0	0	2246.00	222.00	101.10	0	0	0	0	0	0	0
MEAN	0	0	72.5	7.16	3.61	0	0	0	0	0	0	0
MAX	0	0	1400	205	75	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	4450	440	201	0	0	0	0	0	0	0
CAL YR 1984	TOTAL	7404.84	MEAN	20.2	MAX	1400	MIN	0	AC-FT	14690		
WTR YR 1985	TOTAL	2569.10	MEAN	7.04	MAX	1400	MIN	0	AC-FT	5100		

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to September 1985 (discontinued).

WATER TEMPERATURES: Water years 1968, 1969, 1971-81, 1982 to September 1985 (discontinued).

SEDIMENT RECORDS: Water years 1968 to September 1985 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to September 1969, October 1970 to September 1981, October 1982 to September 1985 (discontinued).

SEDIMENT RECORDS: October 1967 to September 1981, October 1982 to September 1985 (discontinued).

REMARKS.--Prior to October 1969, published as "at Saticoy" (station 11113920). Suspended-sediment discharge was estimated from a daily sediment transport curve for those days with no concentration data listed.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 108,000 mg/L, Mar. 4, 1978; minimum daily mean, no flow many days most years.

SEDIMENT LOAD: Maximum daily, 20,400,000 tons, Feb. 25, 1969; minimum daily, 0 tons many days during each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,800 mg/L, Dec. 20; no flow many days.

SEDIMENT LOAD: Maximum daily, 58,400 tons, Dec. 20; minimum daily, 0 tons many days.

SUMMARY OF WATER AND SEDIMENT DISCHARGE, OCTOBER 1983 TO APRIL 1984
(NOT PREVIOUSLY PUBLISHED)

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	1075.38	5770.78	4020	9790
NOVEMBER ...	4226.36	34588.73	18900	53500
DECEMBER ...	10662.00	166353.50	59800	226000
JANUARY 1984	3727.00	10509.70	11400	21900
FEBRUARY ...	723.00	226.34	722	948
MARCH	694.50	1484.81	1410	2890
APRIL	14.34	3.32	2	5
TOTAL	21122.58	218937.18	92654	315031

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	11.0	---							
2			---	---	---							
3			---	---	---							
4			---	---	---							
5			---	---	---							
6			---	---	---							
7			---	13.0	---							
8			---	---	---							
9			---	---	8.0							
10			---	11.0	---							
11			15.0	---	---							
12			10.5	---	---							
13			---	---	---							
14			---	---	---							
15			---	---	---							
16			---	---	---							
17			---	---	---							
18			---	---	---							
19			---	---	---							
20			11.0	---	---							
21			---	---	---							
22			---	---	---							
23			---	---	---							
24			---	---	---							
25			---	---	---							
26			---	---	---							
27			---	---	---							
28			---	---	---							
29			12.0	---	---							
30			13.0	---	---							
31			10.0	---	---							
MONTH			---	---	---							

SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED-SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DAY	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)	MEAN CONCENTRATION (MG/L)	LOADS (T/DAY)
OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		
1	0	.00	0	.00	0	.00	---	.01	0	.00	0	.00
2	0	.00	0	.00	0	.00	---	.00	0	.00	0	.00
3	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
4	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
5	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
6	0	.00	0	.00	0	.00	---	.01	0	.00	0	.00
7	0	.00	0	.00	---	150	---	.01	0	.00	0	.00
8	0	.00	0	.00	---	1200	---	.03	0	.00	0	.00
9	0	.00	0	.00	---	210	---	.03	1050	.00	0	.00
10	0	.00	0	.00	---	1500	---	7000	100	.00	0	.00
11	0	.00	0	.00	2150	4710	---	70	---	9.0	0	.00
12	0	.00	0	.00	---	2.0	---	.02	---	.50	0	.00
13	0	.00	0	.00	---	2.0	---	.00	---	.01	0	.00
14	0	.00	0	.00	---	1.0	---	.00	0	.00	0	.00
15	0	.00	0	.00	---	3.6	---	.00	0	.00	0	.00
16	0	.00	0	.00	---	12	---	.00	0	.00	0	.00
17	0	.00	0	.00	---	2.0	0	.00	0	.00	0	.00
18	0	.00	0	.00	---	1.0	0	.00	0	.00	0	.00
19	0	.00	0	.00	4650	13200	0	.00	0	.00	0	.00
20	0	.00	0	.00	8800	58400	0	.00	0	.00	0	.00
21	0	.00	0	.00	---	1500	0	.00	0	.00	0	.00
22	0	.00	0	.00	---	16	0	.00	0	.00	0	.00
23	0	.00	0	.00	---	9.0	0	.00	0	.00	0	.00
24	0	.00	0	.00	---	6.0	0	.00	0	.00	0	.00
25	0	.00	0	.00	---	5.0	0	.00	0	.00	0	.00
26	0	.00	0	.00	---	3.6	0	.00	0	.00	0	.00
27	0	.00	0	.00	---	2.6	0	.00	0	.00	0	.00
28	0	.00	0	.00	---	2.0	0	.00	0	.00	0	.00
29	0	.00	0	.00	---	.50	0	.00	---	---	0	.00
30	0	.00	0	.00	---	.15	0	.00	---	---	0	.00
31	0	.00	---	---	---	.03	0	.00	---	---	0	.00
TOTAL	---	0.00	---	0.00	---	80938.48	---	7070.11	---	1159.51	---	0.00

DAY	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)	MEAN CONCEN- TRATION	LOADS (T/DAY)
	(MG/L)		(MG/L)		(MG/L)		(MG/L)		(MG/L)		(MG/L)	
APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		
1	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
2	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
3	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
4	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
5	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
6	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
7	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
8	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
9	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
10	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
11	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
12	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
13	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
14	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
15	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
16	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
17	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
18	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
19	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
20	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
21	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
22	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
23	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
24	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
25	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
26	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
27	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
28	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
29	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
30	0	.00	0	.00	0	.00	0	.00	0	.00	0	.00
31	---	---	0	.00	---	---	0	.00	0	.00	---	---
TOTAL	---	0.00	---	0.00	---	0.00	---	0.00	---	0.00	---	0.00

TOTAL LOAD FOR YEAR: 89168.10 TONS.

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM
DEC 1984 12...	1015	10.5	20	2.0	1	2	14

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
DEC 1984 12...	62	88	94	96	98	99	100

VENTURA RIVER BASIN

11115000 MATILIJA RESERVOIR AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'08", long 119°18'25", in NW 1/4 SE 1/4 sec.29, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on left end of dam on Ventura River, 0.2 mi east of Matilija Hot Springs, and 1.8 mi southwest of Wheeler Springs.

DRAINAGE AREA.--54.4 mi².

PERIOD OF RECORD.--March 1948 to September 1965, October 1970 to current year. Prior to October 1953, published as "at Matilija."

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft Ventura County Department of Public Works datum. Prior to Nov. 12, 1970, at site near right end of dam at same datum.

REMARKS.--Reservoir is formed by concrete-arch dam. Dam was completed in 1948. Storage began Mar. 14, 1948. Structural modifications have resulted in lowering the crest of the dam since March 1964. A new capacity table dated August 1983 was provided by Ventura County Flood Control District. Lowest sluice gate silted, elevation, 1,000 ft. Usable capacity, 1,335 acre-ft between elevations 1,064 ft, lowest usable outlet and 1,095 ft, crest of spillway. Dead storage below lowest usable outlet, 145 acre-ft. Capacity below spillway, 1,480 acre-ft. Water is released from reservoir to natural stream for recharge of ground-water basin in Ventura River Valley and since May 1959 is at times diverted at Robles diversion dam downstream to Lake Casitas on Coyote Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 7,399 acre-ft, Apr. 3, 1958, elevation, 1,128.10 ft; minimum, reservoir dry several days in 1979 due to construction.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum contents from October 1965 to September 1970, 3,128 acre-ft, Jan. 25, 1969, elevation, 1,103.6 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,500 acre-ft, Dec. 20, elevation, 1,092.08 ft; minimum, 795 acre-ft, Jan. 30, elevation, 1,079.43 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,084.48	1,060	--
Oct. 31.....	1,084.37	1,050	-10
Nov. 30.....	1,083.51	1,000	-50
Dec. 31.....	1,086.73	1,180	+180
CAL YR 1984.....	--	--	+601
Jan. 31.....	1,079.46	796	-384
Feb. 28.....	1,085.74	1,130	+334
Mar. 31.....	1,086.01	1,140	+10
Apr. 30.....	1,087.05	1,200	+60
May 31.....	1,084.36	1,050	-150
June 30.....	1,085.89	1,130	+80
July 31.....	1,086.26	1,150	+20
Aug. 31.....	1,083.88	1,020	-130
Sept. 30.....	1,082.66	959	-61
WTR YR 1985.....	--	--	-101

11115500 MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°28'58", long 119°18'03", in NW 1/4 SW 1/4 sec.28, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on right bank 0.2 mi east of Matilija Hot Springs, 0.2 mi upstream from North Fork, and 0.4 mi downstream from Matilija Dam.

DRAINAGE AREA.--54.6 mi².

PERIOD OF RECORD.--October 1927 to current year. Combined monthly records for creek and diversion, May 1951 to September 1969. Prior to October 1953, published as "at Matilija."

GAGE.--Water-stage recorder. Concrete control since September 1969. Elevation of gage is 900 ft, above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 11, 1939, at site 0.6 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 30, Apr. 15 to May 14, Sept. 15-30. Records good except those for periods of estimated daily discharges, which are fair. Flow regulated by Matilija Reservoir March 1948 to March 1964, capacity, 7,020 acre-ft. Structural modification of dam and siltation has resulted in only partial regulation since March 1964. Current capacity, 1,480 acre-ft, capacity table dated August, 1983.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s, Jan. 25, 1969, gage height, 16.5 ft, from rating curve extended above 4,200 ft³/s, on basis of computation of maximum flow over dam; minimum daily, 0.10 ft³/s, for several days in some years of regulated flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 240 ft³/s, Jan. 29, gage height, 3.59 ft; minimum daily, 0.54 ft³/s, June 27, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.3	.58	12	11	4.5	7.9	9.0	5.3	.75	4.2	4.0
2	2.3	2.3	.59	12	11	4.2	6.8	8.8	5.3	1.2	4.2	4.0
3	2.3	2.3	.67	12	8.9	3.9	6.8	8.5	5.2	7.4	4.2	4.2
4	2.3	2.3	.73	12	5.8	3.9	6.8	8.5	5.0	9.2	4.2	4.2
5	2.3	2.3	.75	12	5.8	3.8	5.6	8.0	4.9	10	4.1	4.2
6	2.3	2.3	.75	12	5.7	3.8	3.9	8.0	4.8	11	4.2	4.2
7	2.3	2.3	.83	12	5.4	8.5	3.6	8.0	3.5	13	4.2	4.2
8	2.3	2.3	1.0	12	5.7	13	3.5	7.0	.58	14	4.2	4.2
9	2.3	2.3	.83	11	5.5	13	3.5	7.0	.55	17	4.2	4.2
10	2.3	2.3	1.1	12	5.3	13	3.5	7.0	.72	18	4.2	4.2
11	2.3	2.3	.93	11	5.4	13	3.4	7.0	.80	12	4.2	4.2
12	2.3	2.3	.89	11	5.2	12	3.4	6.0	.58	.80	4.3	4.2
13	2.3	5.0	.95	11	4.7	9.3	3.4	6.0	.58	.98	4.3	4.2
14	2.3	25	1.1	11	4.7	9.3	3.3	5.6	.58	1.0	4.2	4.2
15	2.3	24	1.6	8.5	4.9	8.5	3.3	5.6	.58	1.0	4.3	4.1
16	2.3	17	1.2	6.1	5.3	10	3.3	5.7	.58	1.0	4.4	4.1
17	2.3	15	24	6.1	5.5	10	3.3	5.7	.59	3.8	4.4	4.1
18	2.3	8.0	46	6.1	5.5	10	3.3	5.7	.60	4.0	4.4	4.1
19	2.3	9.0	47	6.1	5.5	9.7	3.3	5.6	.65	4.2	4.4	4.1
20	2.3	9.0	131	6.1	5.0	9.8	3.3	5.6	.65	4.1	6.3	4.1
21	2.3	9.0	140	6.1	5.1	8.9	3.3	5.6	.63	4.0	4.3	4.0
22	2.3	9.0	30	5.8	5.1	8.2	3.3	5.6	.60	4.2	4.2	4.0
23	2.3	9.0	29	5.8	5.2	8.2	3.3	5.5	.59	4.2	4.1	4.0
24	2.3	7.0	21	5.8	5.3	6.2	3.3	5.5	.59	4.3	4.0	4.0
25	2.3	.60	13	5.8	5.3	4.4	4.5	5.4	.61	5.1	4.0	4.0
26	2.3	.60	13	5.8	4.9	9.3	9.0	5.3	.59	4.4	4.1	4.0
27	2.3	.60	13	5.7	4.8	9.4	9.0	5.4	.54	4.4	4.4	3.9
28	2.3	.60	13	5.6	4.7	9.1	9.0	5.4	.54	4.8	4.3	3.9
29	2.3	.60	13	83	---	9.0	9.0	5.3	.57	5.3	3.9	3.9
30	2.3	.59	13	190	---	9.0	9.0	5.3	.55	5.0	3.9	3.9
31	2.3	---	12	11	---	8.6	---	5.3	---	4.2	3.9	---
TOTAL	71.3	177.19	572.50	532.4	263.5	263.5	147.9	197.9	47.85	184.33	132.2	122.6
MEAN	2.30	5.91	18.5	17.2	8.50	8.50	4.93	6.38	1.60	5.95	4.26	4.09
MAX	2.3	25	140	190	13	13	9.0	9.0	5.3	18	6.3	4.2
MIN	2.3	.59	.58	5.6	3.8	3.8	3.3	5.3	.54	.75	3.9	3.9
AC-FT	141	351	1140	1060	523	523	293	393	95	366	262	243
CAL YR 1984	TOTAL	3344.90	MEAN	9.14	MAX	218	MIN	.23	AC-FT	6630		
WTR YR 1985	TOTAL	2611.87	MEAN	7.16	MAX	190	MIN	.54	AC-FT	5180		

VENTURA RIVER BASIN

11116550 VENTURA RIVER NEAR MEINERS OAKS, CA

LOCATION.--Lat 34°27'49", long 119°17'22", in NW 1/4 NE 1/4 sec.4, T.4 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on right bank 500 ft downstream from Robles diversion dam, and 1.2 mi northwest of Meiners Oaks.

DRAINAGE AREA.--76.4 mi².

PERIOD OF RECORD.--May 1959 to September 1978, December 1980 to February 1983, January 1984 to current year.

GAGE.--Water-stage recorder and concrete control since December 1980. Datum of gage is 745.85 ft Bureau of Reclamation datum. Prior to Oct. 30, 1969, at datum 1.25 ft lower. Oct. 30, 1969, to Sept. 30, 1978, at site 500 ft upstream at datum 4.15 ft higher.

REMARKS.--Estimated daily discharges: Aug. 13 to Sept. 4. Records fair. Flow regulated by Matilija Reservoir, capacity, 1,480 acre-ft. Flow up to 500 ft³/s diverted since May 1959 at Robles diversion dam to Lake Casitas on Coyote Creek. Flow reported herein is that released downstream from Robles diversion dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s, estimated, Jan. 25, 1969, gage height, unknown; no flow for several months in most years.

EXTREMES FOR PERIOD.--Maximum discharge, 80 ft³/s, Nov. 15, gage height, 3.60 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	16	11	2.5	4.8	3.8	.71			
2		0	0	16	9.8	3.5	3.7	3.0	.97			
3		0	0	15	9.1	4.0	3.4	2.6	1.2			
4		0	0	14	9.8	3.1	2.9	2.3	.26			
5		0	0	13	6.1	2.1	2.4	2.5	.08			
6		0	0	13	5.4	2.1	.99	2.6	.36			
7		0	0	13	5.2	5.4	.70	2.3	.26			
8		0	.66	13	6.8	9.3	.53	1.9	0			
9		0	.01	13	9.9	9.5	.32	1.6	0			
10		0	1.7	14	6.9	9.2	.21	1.3	0			
11		0	5.8	13	6.2	9.2	.04	1.6	0			
12		.04	1.9	12	5.7	8.5	.10	2.3	0			
13		27	.87	12	4.7	5.9	.05	2.0	0			
14		19	.55	11	4.4	5.7	0	1.3	0			
15		17	1.2	9.8	4.4	5.1	0	1.4	0			
16		9.4	7.4	6.7	4.2	6.7	.03	1.7	0			
17		8.7	14	6.4	4.1	6.4	.40	1.8	0			
18		4.9	24	6.3	3.9	6.7	.47	1.9	0			
19		3.2	26	6.1	3.8	6.8	0	2.1	0			
20		2.9	23	6.1	3.7	6.5	.15	2.0	0			
21		3.1	29	6.0	3.8	6.0	.09	1.4	0			
22		3.1	32	5.5	3.3	5.1	0	1.2	0			
23		2.3	32	5.4	3.1	4.9	0	1.2	0			
24		1.4	31	5.3	3.0	4.0	0	1.2	0			
25		1.0	25	5.1	2.9	.46	0	1.2	0			
26		.01	21	5.2	2.7	4.9	3.2	1.5	0			
27		0	19	5.1	2.8	6.8	3.9	1.7	0			
28		.34	18	5.5	2.8	6.2	4.0	1.3	0			
29		0	18	6.3	---	5.6	4.2	1.2	0			
30		0	17	5.7	---	5.4	3.9	1.1	0			
31		---	17	6.9	---	5.1	---	.76	---			
TOTAL	0	103.39	366.09	291.4	149.5	172.66	40.48	55.76	3.84	0	0	0
MEAN	0	3.45	11.8	9.40	5.34	5.57	1.35	1.80	.13	0	0	0
MAX	0	27	32	16	11	9.5	4.8	3.8	1.2	0	0	0
MIN	0	0	0	5.1	2.7	.46	0	.76	0	0	0	0
AC-FT	0	205	726	578	297	342	80	111	7.6	0	0	0

WTR YR 1985 TOTAL 1183.12 MEAN 3.24 MAX 32 MIN 0 AC-FT 2350

11117600 COYOTE CREEK NEAR OAK VIEW, CA

LOCATION.--Lat 34°25'00", long 119°22'11", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on left bank at Los Padres National Forest boundary, 0.8 mi upstream from Poplin Creek, and 4.2 mi northwest of Oak View.

DRAINAGE AREA.--13.2 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 577.37 ft Bureau of Reclamation datum. Prior to Oct. 1, 1980, at site 1,000 ft downstream at datum 16.90 ft lower.

REMARKS.--Estimated daily discharges: July 8-26. Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--27 years, 8.09 ft³/s, 5,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s, Jan. 25, 1969, gage height, 12.00 ft, site and datum then in use, from floodmarks, from rating curve extended above 2,100 ft³/s, on basis of slope-area measurements at gage heights 9.10 ft and 12.00 ft; maximum gage height, 13.72 ft, site and datum then in use, Feb. 16, 1980, from backwater from Casitas Reservoir; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*), from rating curve extended above 82 ft³/s, on basis of slope-area measurements at gage heights 4.57 ft and 7.53 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1645	*166	*3.38				

Minimum daily, 0.07 ft³/s, July 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.33	.69	1.1	.95	.95	.74	.38	.21	.13	.11	.27
2	.37	.27	.65	1.0	1.0	.95	.74	.36	.21	.13	.11	.24
3	.39	.27	.93	.95	.95	.95	.74	.33	.26	.14	.11	.29
4	.36	.27	.92	.95	.95	.95	.74	.33	.24	.11	.11	.31
5	.37	.27	.84	.95	.95	.95	.74	.35	.24	.19	.11	.33
6	.38	.27	.91	.95	.85	.95	.74	.40	.22	.21	.13	.31
7	.28	.23	1.3	1.2	.84	1.0	.70	.40	.18	.25	.16	.25
8	.21	.70	1.7	1.5	1.3	.95	.65	.40	.24	.24	.18	.22
9	.24	.41	1.1	1.5	1.3	.95	.65	.33	.24	.18	.21	.23
10	.21	.33	3.0	2.7	3.5	.95	.62	.27	.22	.14	.23	.23
11	.27	.30	3.2	2.2	2.3	.95	.53	.27	.19	.10	.25	.22
12	.33	.38	1.5	1.7	1.9	.95	.48	.27	.21	.10	.27	.23
13	.31	1.0	1.4	1.5	1.7	.95	.48	.27	.21	.10	.22	.23
14	.27	.41	1.6	1.4	1.5	.95	.54	.26	.24	.10	.18	.22
15	.25	.37	8.6	1.3	1.5	.95	.56	.27	.20	.10	.18	.22
16	.22	.38	19	1.3	1.5	.91	.56	.28	.19	.10	.20	.23
17	.52	.40	2.3	1.3	1.3	.84	.52	.24	.21	.10	.25	.24
18	.46	.34	1.3	1.3	1.3	.84	.48	.21	.19	.10	.27	.24
19	.40	.39	49	1.2	1.3	.84	.48	.27	.23	.10	.25	.29
20	.40	.40	27	1.1	1.3	.79	.48	.21	.25	.11	.24	.26
21	.40	.64	7.7	1.0	1.3	.74	.48	.21	.24	.11	.24	.28
22	.38	.56	4.4	.95	1.2	.74	.48	.21	.24	.12	.23	.26
23	.33	.56	3.0	.95	1.1	.74	.45	.21	.21	.12	.23	.27
24	.29	.98	2.5	.95	1.1	.71	.40	.21	.19	.13	.27	.29
25	.27	.67	2.0	.95	1.1	.65	.37	.21	.21	.13	.28	.27
26	.27	.65	1.8	.95	.99	.65	.39	.21	.20	.12	.28	.32
27	.31	.65	1.6	.95	.95	.99	.40	.21	.17	.10	.27	.33
28	.33	.93	1.5	1.0	.95	.74	.40	.21	.16	.07	.28	.33
29	.33	.74	1.3	.95	---	.74	.40	.19	.13	.07	.27	.33
30	.33	.74	1.2	.95	---	.74	.39	.20	.16	.09	.26	.33
31	.33	---	1.2	.95	---	.74	---	.21	---	.11	.26	---
TOTAL	10.12	14.84	155.14	37.65	48.58	26.70	16.33	8.38	6.29	3.90	6.64	8.09
MEAN	.33	.49	5.00	1.21	1.74	.86	.54	.27	.21	.13	.21	.27
MAX	.52	1.0	.49	2.7	1.3	1.0	.74	.40	.26	.25	.28	.33
MIN	.21	.23	.65	.95	.84	.65	.37	.19	.13	.07	.11	.22
AC-FT	20	29	308	75	96	53	32	17	12	7.7	13	16
CAL YR 1984	TOTAL	453.98	MEAN	1.24	MAX	49	MIN	.03	AC-FT	900		
WTR YR 1985	TOTAL	342.66	MEAN	.94	MAX	49	MIN	.07	AC-FT	680		

11117800 SANTA ANA CREEK NEAR OAK VIEW, CA

LOCATION.--Lat 34°25'25", long 119°20'25", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on upstream end of right abutment of bridge on Santa Ana Road, 400 ft upstream from unnamed tributary, and 3.0 mi northwest of Oak View.

DRAINAGE AREA.--9.11 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 612.43 ft Bureau of Reclamation datum. Prior to Aug. 17, 1970, on downstream end of right abutment at same datum.

REMARKS.--No estimated daily discharges. Records good. Low flow slightly regulated by one small reservoir upstream. Some small diversions above station.

AVERAGE DISCHARGE.--27 years, 6.03 ft³/s, 4,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,330 ft³/s, Mar. 4, 1978, gage height, 10.01 ft, from rating curve extended above 1,000 ft³/s on basis of slope-area measurement at gage height 8.57 ft, maximum gage height, 10.70 ft, Jan. 25, 1969; no flow at times in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 3,780 ft³/s, by slope-area measurement at site 2.0 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1415	*243	*5.46				

No flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.22	1.9	.66	.93	.36	.08	.02			
2		0	.26	1.4	.42	.77	.37	.08	.02			
3		0	.46	1.2	.32	.70	.51	.08	.01			
4		0	.44	1.1	.30	.87	.56	.07	.01			
5		0	.41	1.1	.30	.96	.62	.08	.01			
6		0	.38	1.5	.56	.93	.66	.08	.01			
7		0	.52	2.1	.51	1.6	.61	.08	0			
8		0	2.0	1.9	1.7	.82	.47	.07	0			
9		0	.76	1.6	8.8	.66	.38	.06	0			
10		0	3.8	2.9	3.2	.79	.24	.06	0			
11		0	3.2	1.9	2.5	.99	.23	.06	0			
12		.03	1.4	1.4	2.3	1.1	.18	.05	0			
13		.01	1.2	1.4	2.1	.98	.17	.05	0			
14		0	1.1	1.6	1.9	1.0	.19	.04	0			
15		0	9.5	1.4	1.7	.90	.19	.04	0			
16		0	17	1.4	1.6	.93	.19	.04	0			
17		0	3.5	1.3	1.4	.69	.19	.04	0			
18		0	4.1	1.2	1.0	.79	.18	.03	0			
19		0	72	.94	.78	.49	.18	.04	0			
20		0	31	.91	1.1	.40	.18	.04	0			
21		0	11	.91	1.2	.55	.17	.03	0			
22		0	7.2	.90	1.2	.53	.16	.03	0			
23		0	5.5	1.2	1.2	.68	.15	.02	0			
24		.01	4.3	1.1	.85	.66	.13	.02	0			
25		0	3.6	1.1	.67	.56	.12	.03	0			
26		0	3.3	1.0	.84	.67	.12	.03	0			
27		0	3.1	.93	1.0	2.1	.11	.03	0			
28		.25	2.7	.89	1.0	.78	.11	.02	0			
29		.17	2.6	.81	---	.52	.11	.02	0			
30		.18	2.4	.68	---	.43	.10	.02	0			
31		---	2.2	.70	---	.41	---	.02	---			
TOTAL	0	0.65	201.15	40.37	41.11	25.19	7.94	1.44	0.08	0	0	0
MEAN	0	.022	6.49	1.30	1.47	.81	.26	.046	.003	0	0	0
MAX	0	.25	72	2.9	8.8	2.1	.66	.08	.02	0	0	0
MIN	0	0	.22	.68	.30	.40	.10	.02	0	0	0	0
AC-FT	0	1.3	399	80	82	50	16	2.9	.2	0	0	0
CAL YR 1984	TOTAL	515.03	MEAN	1.41	MAX	72	MIN	0	AC-FT	1020		
WTR YR 1985	TOTAL	317.93	MEAN	.87	MAX	72	MIN	0	AC-FT	631		

11117900 LAKE CASITAS NEAR CASITAS SPRINGS, CA

LOCATION.--Lat 34°22'24", long 119°19'56", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on left end of dam on Coyote Creek, 1.5 mi west of Casitas Springs.

DRAINAGE AREA.--38.6 mi².

PERIOD OF RECORD.--December 1978 to current year. Daily readings prior to December 1978 in files of Casitas Municipal Water District.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation).

REMARKS.--Reservoir is formed by earthfill dam. Storage began January 1959. Capacity table is dated December 1958. Usable capacity, 250,835 acre-ft between bottom of lowest outlet gate at elevation 350.00 ft and crest of spillway at elevation 567.00 ft. Dead storage, 3,167 acre-ft, included in contents. Flow from Ventura River is diverted at Robles Diversion Dam through concrete canal to Lake Casitas and is included in these records.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 260,100 acre-ft, Feb. 21, 1980, elevation, 569.24 ft; minimum, 200,600 acre-ft, Sept. 30, 1985, elevation, 545.96 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 225,000 acre-ft, Oct. 1, elevation, 555.94 ft; minimum, 200,600 acre-ft, Sept. 30, elevation, 545.96 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	555.94	225,000	--
Oct. 31.....	554.65	221,800	-3,200
Nov. 30.....	554.35	221,000	-800
Dec. 31.....	555.15	223,000	+2,000
CAL YR 1984.....	--	--	-26,900
Jan. 31.....	555.13	223,000	0
Feb. 28.....	554.92	222,400	-600
Mar. 31.....	554.42	221,200	-1,200
Apr. 30.....	553.40	218,600	-2,600
May 31.....	552.23	215,700	-2,900
June 30.....	550.86	212,400	-3,300
July 31.....	549.24	208,400	-4,000
Aug. 31.....	547.40	204,000	-4,400
Sept. 30.....	545.96	200,600	-3,400
WTR YR 1985.....	--	--	-24,400

VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA

LOCATION.--Lat 34°21'08", long 119°18'27", in southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 50 ft downstream from bridge on Casitas Pass Road at Foster Memorial Park, 0.2 mi downstream from Coyote Creek, and 5 mi north of Ventura.

DRAINAGE AREA.--188 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1911 to January 1914, October 1929 to current year; combined records of river and diversion, October 1932 to current year.

GAGE.--Water-stage recorder on river; water-stage recorder and Parshall flume on diversion. Datum of gage is 205.23 ft Ventura County Flood Control datum. See WSP 1315-B for history of changes prior to Nov. 2, 1949. Nov. 2, 1949, to June 12, 1969, at site 450 ft downstream at datum 4.00 ft lower.

REMARKS.--Estimated daily discharges: Jan. 13-15, July 10 to Sept. 30. Records fair. Flow partly regulated since March 1948 by Matilija Reservoir, usable capacity, 1,475 acre-ft, and since October 1959 by Casitas Reservoir, capacity, 267,000 acre-ft. Water diverted to Casitas Reservoir on Coyote Creek since January 1959. Diversion by city of Ventura for municipal supply began prior to 1911. AVERAGE DISCHARGE (River only) represents flow to ocean regardless of upstream development. For records of combined discharge of river and Ventura City diversion, see following page.

AVERAGE DISCHARGE.--River only: 58 years (water years 1912-13, 1930-85), 61.2 ft³/s, 44,340 acre-ft/yr. Combined river and diversion: 53 years, 70.8 ft³/s, 51,290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 63,600 ft³/s, Feb. 10, 1978, gage height, 19.14 ft, from rating curve extended above 34,000 ft³/s; maximum gage height, 24.3 ft, Jan. 25, 1969, present datum, from floodmarks; no flow at times in many years. Combined river and diversion: Maximum discharge, 63,600 ft³/s, Feb. 10, 1978; no flow Nov. 28, 29, 1977.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 412 ft³/s, Dec. 19, gage height, 5.04 ft; no flow many days. Combined river and diversion: Maximum discharge, 419 ft³/s, Dec. 19; minimum daily, 3.0 ft³/s, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	2.6	4.2	4.0	6.6	7.1	1.7	2.9	.48	.13	.07
2		0	1.8	5.2	3.7	8.5	8.4	1.3	3.4	.57	.13	.07
3		0	2.1	4.7	4.8	9.3	6.9	1.3	2.4	.43	.13	.07
4		0	2.0	5.1	3.9	6.8	6.7	3.1	1.6	.32	.12	.07
5		0	1.0	5.2	3.3	6.9	6.9	3.9	1.4	.27	.12	.07
6		0	.38	4.9	3.3	9.2	8.5	2.4	.86	.23	.11	.07
7		0	.94	4.6	3.5	6.1	9.2	1.3	1.1	.17	.11	.07
8		0	22	5.0	4.7	4.6	8.6	.77	1.4	.17	.11	.07
9		0	7.9	3.9	27	5.4	6.9	.84	.89	.19	.11	.07
10		0	30	6.9	16	7.1	7.5	.81	.84	.14	.11	.07
11		0	18	5.1	16	6.1	8.4	1.5	.78	.14	.11	.06
12		.06	7.5	4.5	15	7.5	5.6	2.8	.77	.14	.11	.06
13		18	5.5	4.5	12	6.0	7.8	2.4	.95	.14	.11	.06
14		4.2	5.1	9.6	6.3	3.6	9.3	1.3	.99	.14	.11	.06
15		1.1	8.2	9.6	6.2	3.8	7.1	.77	.75	.14	.11	.06
16		.20	46	9.6	6.5	5.8	3.7	.68	1.1	.14	.11	.06
17		.07	11	5.7	7.5	6.2	4.2	.81	1.2	.14	.11	.06
18		0	10	5.4	9.0	5.3	4.7	1.4	.72	.14	.11	.06
19		0	140	5.5	7.6	4.1	4.3	2.6	.66	.15	.10	.06
20		0	52	6.8	5.8	4.1	6.5	2.2	.87	.15	.10	.06
21		.08	18	6.7	6.6	4.3	8.2	1.7	.60	.15	.10	.06
22		.03	13	6.5	6.7	4.4	4.0	1.5	.60	.16	.10	.06
23		0	10	6.1	6.8	4.9	3.0	1.5	.95	.16	.09	.06
24		11	9.0	6.1	7.9	5.9	3.6	2.6	.98	.16	.09	.06
25		9.9	8.1	5.5	7.9	5.8	3.5	3.0	.61	.16	.09	.06
26		6.0	6.8	5.8	7.0	3.8	3.8	3.9	.52	.15	.09	.06
27		7.0	5.9	7.2	7.6	6.8	4.6	3.0	.48	.15	.08	.06
28		8.6	4.7	8.3	8.1	6.4	4.0	2.2	.42	.15	.08	.06
29		5.4	4.5	6.8	---	8.6	2.5	1.9	.37	.14	.08	.06
30		4.0	4.3	7.0	---	7.4	1.7	3.1	.37	.14	.08	.06
31		---	4.2	5.1	---	7.9	---	2.8	---	.14	.07	---
TOTAL	0	75.64	462.52	187.1	224.7	189.2	177.2	61.08	31.48	6.05	3.21	1.90
MEAN	0	2.52	14.9	6.04	8.03	6.10	5.91	1.97	1.05	.20	.10	.063
MAX	0	18	140	9.6	27	9.3	9.3	3.9	3.4	.57	.13	.07
MIN	0	0	.38	3.9	3.3	3.6	1.7	.68	.37	.14	.07	.06
AC-FT	0	150	917	371	446	375	351	121	62	12	6.4	3.8
CAL YR 1984	TOTAL	4148.53	MEAN	11.3	MAX	140	MIN	0	AC-FT	8230		
WTR YR 1985	TOTAL	1420.08	MEAN	3.89	MAX	140	MIN	0	AC-FT	2820		

11118501 VENTURA RIVER NEAR VENTURA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF VENTURA RIVER AND VENTURA CITY DIVERSION NEAR VENTURA, WATER YEAR OCTOBER 1984 to SEPTEMBER 1985

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	5.0	9.3	10	15	21	18	16	9.4	9.0	8.9	7.3
2	7.5	5.0	8.5	12	16	15	18	15	12	13	8.9	7.3
3	7.4	5.0	8.8	12	14	15	17	12	15	12	8.8	7.2
4	7.3	5.0	8.7	12	14	21	15	8.3	14	11	8.7	7.2
5	6.3	4.9	7.7	12	14	19	13	13	13	11	8.6	7.1
6	4.9	5.0	7.1	12	15	19	14	16	13	11	9.0	7.1
7	5.0	5.1	7.4	12	12	18	17	16	12	9.1	9.3	7.0
8	5.0	5.3	29	14	17	14	17	16	12	11	8.8	7.0
9	5.0	5.3	15	12	33	14	16	16	9.4	11	8.3	6.9
10	5.1	5.3	37	16	17	14	15	15	14	11	8.3	6.9
11	5.1	5.3	25	14	17	19	15	9.2	14	11	8.3	6.8
12	4.8	5.4	16	13	16	15	13	10	13	11	8.3	6.7
13	4.5	24	14	13	17	19	14	16	12	11	8.8	6.1
14	4.3	10	13	18	19	15	13	15	13	10	8.6	4.6
15	4.5	7.9	16	18	18	12	18	14	11	8.9	8.1	4.6
16	3.9	6.9	53	18	15	11	18	13	10	10	8.0	4.6
17	4.7	6.8	17	15	15	14	15	11	12	10	8.0	4.6
18	4.7	6.7	16	15	15	17	15	11	14	9.0	8.0	4.6
19	4.8	6.7	147	13	20	16	15	10	11	10	8.0	4.7
20	4.9	6.6	59	14	16	15	13	14	13	10	8.3	4.7
21	4.9	6.7	25	16	16	15	13	12	13	10	8.3	4.7
22	4.9	6.7	20	14	18	14	18	13	12	10	8.2	4.7
23	5.0	6.7	17	15	16	12	17	9.6	10	9.9	8.1	4.7
24	5.0	18	16	16	16	13	14	12	12	10	8.0	4.7
25	5.0	17	15	16	20	18	16	11	13	9.9	7.9	4.7
26	4.9	8.7	14	12	16	13	16	13	13	9.4	7.6	4.7
27	5.0	12	14	14	17	17	11	12	12	9.1	7.5	4.0
28	5.0	16	13	18	17	13	14	16	12	9.1	7.5	3.0
29	4.9	12	13	16	---	17	16	8.6	11	9.0	7.5	3.1
30	5.0	11	13	14	---	15	16	8.3	9.1	9.0	7.4	4.0
31	5.0	---	13	14	---	16	---	15	---	9.0	7.4	---
TOTAL	161.9	252.0	667.5	440	471	486	460	397.0	363.9	314.4	255.4	165.3
MEAN	5.22	8.40	22.2	14.2	16.8	15.7	15.3	12.8	12.1	10.1	8.24	5.51
MAX	7.6	24	147	18	33	21	18	16	15	13	9.3	7.3
MIN	3.9	4.9	7.1	10	12	11	11	8.3	9.1	8.9	7.4	3.0
AC-FT	321	500	1360	873	934	964	912	787	722	624	507	328
CAL YR 1984	TOTAL	7188.8	MEAN	19.6	MAX	147	MIN	.77	AC-FT	14260		
WTR YR 1985	TOTAL	4454.4	MEAN	12.2	MAX	147	MIN	3.0	AC-FT	8840		

VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1907 to December 1908, water years 1967 to current year.

CHEMICAL ANALYSES: December 1907 to December 1908, water years 1967-79.

WATER TEMPERATURES: Water years 1969, 1971-73, 1975-81.

SEDIMENT RECORDS: Water years 1969-73, 1975 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1968 to September 1969, October 1970 to September 1973, October 1974 to September 1981.

SEDIMENT RECORDS: October 1968 to September 1973, October 1974 to September 1981.

REMARKS.--Surface-bed material particle sizes coarser than 16.0 mm were determined by particle count and are available in the files of the Geological Survey.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV							
16...	1100	0.2	18.0	7	0	--	--
DEC							
06...	1230	0.51	14.5	4	0.01	--	--
19...	1310	164	13.0	1430	633	40	67
20...	1135	40	11.5	43	4.6	--	--
JAN							
09...	1125	3.9	14.0	2	0.02	--	--
FEB							
05...	1200	3.2	12.0	5	0.04	--	--
MAR							
07...	1055	3.8	15.5	5	0.05	--	--
APR							
12...	1210	8.2	19.5	6	0.13	--	--
MAY							
16...	1320	0.7	19.5	16	0.03	--	--
JUN							
05...	1400	1.0	--	9	0.02	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
NOV							
16...	--	--	--	--	--	--	--
DEC							
06...	--	--	--	--	--	--	--
19...	81	91	94	95	98	99	100
20...	--	--	--	94	97	100	--
JAN							
09...	--	--	--	--	--	--	--
FEB							
05...	--	--	--	--	--	--	--
MAR							
07...	--	--	--	--	--	--	--
APR							
12...	--	--	--	--	--	--	--
MAY							
16...	--	--	--	--	--	--	--
JUN							
05...	--	--	--	--	--	--	--

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA

LOCATION.--Lat 34°24'05", long 119°29'08", in El Rincon Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank 100 ft upstream of bridge on State Highway 192, 165 ft downstream from Gobernador Creek, and 1.8 mi northeast of Carpinteria.

DRAINAGE AREA.--13.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to September 1977, October 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 130 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 1, 1958, at site 100 ft downstream, at datum 6.00 ft higher. July 2, 1958, to Aug. 27, 1970, at site 65 ft downstream at datum 4.00 ft higher. Aug. 28, 1970, to Sept. 30, 1977, at site 100 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. No regulation above station. Gobernador Land and Water Co. diverts from Gobernador Creek 1.8 mi above station. Small lake 0.8 mi southeast of station and outside the drainage area stores storm runoff and surplus water diverted by Gobernador Land and Water Co. from Gobernador Creek. At times this lake is drained by pumping water back into Gobernador Creek 1,000 ft above station.

AVERAGE DISCHARGE.--43 years (water years 1942-77, 1979-85), 3.11 ft³/s, 2,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,880 ft³/s, Dec. 27, 1971, gage height, 14.10 ft, from floodmark, from rating curve extended above 130 ft³/s on basis of slope-area measurement of maximum flow; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 125 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 16	0300	*73	*4.18				

No flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.18	0	0		0				
2		0	0	.14	.04	0		0				
3		0	0	.11	.03	0		0				
4		0	0	.09	0	0		0				
5		0	0	.06	0	0		0				
6		0	0	.04	0	0		0				
7		0	.64	.23	0	.30		.18				
8		0	2.6	.31	1.9	.03		0				
9		0	.10	.05	6.8	0		0				
10		0	.63	1.4	1.4	0		0				
11		0	.87	.21	.75	0		0				
12		.08	.09	.09	.43	0		0				
13		.15	0	.06	.29	0		0				
14		0	0	.05	.17	0		0				
15		0	1.6	.04	.19	0		0				
16		0	12	.02	.07	0		0				
17		0	1.5	0	.04	0		0				
18		0	3.0	0	.03	0		0				
19		0	18	0	.01	0		0				
20		0	12	0	.01	0		0				
21		0	6.0	0	0	0		0				
22		0	4.5	0	0	0		0				
23		0	2.3	0	0	0		0				
24		.31	1.0	0	0	0		0				
25		.25	.80	0	0	.69		0				
26		0	.67	0	0	1.4		0				
27		0	.55	0	0	.77		0				
28		.18	.40	.06	0	.28		0				
29		.01	.28	.14	---	0		0				
30		0	.22	.02	---	0		0				
31		---	.21	0	---	0		0				
TOTAL	0	0.98	69.96	3.30	12.16	3.47	0	0.18	0	0	0	0
MEAN	0	.033	2.26	.11	.43	.11	0	.006	0	0	0	0
MAX	0	.31	18	1.4	6.8	1.4	0	.18	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	1.9	139	6.5	24	6.9	0	.4	0	0	0	0
CAL YR 1984	TOTAL	168.77	MEAN	.46	MAX	18	MIN	0	AC-FT	335		
WTR YR 1985	TOTAL	90.05	MEAN	.25	MAX	18	MIN	0	AC-FT	179		

CARPINTERIA CREEK BASIN

11119500 CARPINTERIA CREEK NEAR CAPRINTERIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
JAN 09...	1345	0.05	700	8.7	13.0	440
FEB 19...	1130	<0.01	647	8.4	14.0	408
MAR 07...	1500	0.54	670	8.4	18.0	440

< Actual value is known to be less than the value shown.

11119745 MISSION CREEK AT ROCKY NOOK PARK, AT SANTA BARBARA, CA

LOCATION.--Lat 34°26'26", long 119°42'39", Santa Barbara County, Hydrologic Unit 18060013, on right bank, 50 ft southeast of entrance to Rocky Nook Park, and 75 ft upstream of bridge on Los Olivos Street in Santa Barbara.

DRAINAGE AREA.--6.60 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 335 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft³/s, Dec. 25, 1984, gage height, 6.20 ft, from floodmarks, from rating curve extended above 41 ft³/s on basis of culvert computation of maximum flow; no flow for several days in 1984 and 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66 ft³/s, Dec. 15, gage height, 4.00 ft; no flow for several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.15	.43	.55	.36	.11	.03	.02	.25	.01	.01
2	.01	.01	.15	.40	.51	.36	.09	.03	.02	.03	.01	.01
3	.01	.01	.19	.40	.47	.33	.08	.08	.09	.02	.01	.01
4	.01	.01	.21	.36	2.4	.30	.08	.08	.02	.18	.01	.01
5	.01	.01	.17	.36	1.4	.30	.09	.04	.01	.32	.01	.01
6	0	.01	.15	.33	.36	.30	.10	.04	.01	.02	.01	.01
7	0	.01	.54	.36	2.8	1.0	.10	.04	.78	.02	.01	.01
8	0	.01	1.2	.40	10	.47	.10	.04	4.3	.02	.01	.01
9	0	.01	.23	.40	16	.33	.09	.04	3.6	.02	.01	.01
10	0	.01	.55	.51	2.1	.43	.09	.04	.19	.02	.01	.01
11	0	.01	.30	.40	2.4	.36	.09	.03	.80	.03	.01	.01
12	0	.19	.17	.36	7.8	.30	.07	.03	.36	.03	.01	.01
13	0	1.6	.17	.33	6.2	.28	.05	.04	.06	.03	.01	.01
14	0	.10	.98	.33	3.6	.28	.04	.04	.03	.03	.01	.01
15	0	.06	7.2	.30	5.8	.30	.04	.04	.03	.03	.01	.01
16	0	.09	6.1	.30	1.2	.30	.06	.04	.16	.04	.01	.02
17	.01	.11	1.0	.30	.75	.28	.10	.04	.03	.03	.01	.02
18	.01	.09	1.2	.30	.60	.28	.12	.05	.81	.03	.01	.02
19	.01	.09	15	.53	.51	.23	.08	.05	1.8	.03	.01	.01
20	.01	.07	5.9	.30	.47	.21	.42	.05	1.3	.03	.01	.01
21	.01	.07	1.8	.25	.43	.21	.70	.05	1.6	.03	.01	.01
22	.01	.07	1.2	.25	.43	.19	1.3	.05	.19	.03	.01	.01
23	.01	.07	1.0	.25	.40	.15	2.3	.04	.09	.03	.01	.01
24	.01	.41	.93	.23	.40	.12	.36	.03	.14	.01	.01	.01
25	.01	.25	.87	.23	.51	.11	.08	.03	.32	.01	.01	.01
26	.01	.14	1.0	.23	.51	.11	1.5	.03	.25	.01	.01	.02
27	.01	.11	.60	.23	.40	.54	.19	.02	.05	.01	.01	.02
28	.01	.15	.51	.36	.40	.25	.04	.02	.02	.01	.01	.02
29	.01	.21	.47	.36	---	.17	.03	.02	.02	.01	.01	.01
30	.26	.15	.43	.32	---	.14	.03	.02	.02	.01	.01	.02
31	.04	---	.43	2.6	---	.12	---	.02	---	.01	.01	---
TOTAL	0.48	4.14	50.80	12.71	69.40	9.11	8.53	1.20	17.12	1.38	0.31	0.37
MEAN	.015	.14	1.64	.41	2.48	.29	.28	.039	.57	.045	.010	.012
MAX	.26	1.6	.15	2.6	.16	1.0	2.3	.08	4.3	.32	.01	.02
MIN	0	.01	.15	.23	.36	.11	.03	.02	.01	.01	.01	.01
AC-FT	1.0	8.2	101	25	138	18	17	2.4	34	2.7	.6	.7
CAL YR 1984	TOTAL	156.63	MEAN	.43	MAX	15	MIN	0	AC-FT	311		
WTR YR 1985	TOTAL	175.55	MEAN	.48	MAX	16	MIN	0	AC-FT	348		

MISSION CREEK BASIN

11119745 MISSION CREEK AT ROCKY NOOK PARK, AT SANTA BARBARA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1983 to current year.

WATER TEMPERATURES: December 1983 to current year (storm season only).

SEDIMENT RECORDS: December 1983 to current year (storm season only).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1983 to current year (storm season only).

SEDIMENT RECORDS: December 1983 to current year (storm season only).

REMARKS.--Sediment samples after Jan. 13, 1984 were collected through the complete water depth; the listed results are therefore total sediment discharge values. Sediment discharge values were estimated for those days that have no daily concentration values. Zero bedload discharge observed at flows less than 40 ft³/s.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 263 mg/L, Dec. 19, 1984; minimum daily mean 0 mg/L, Dec. 19, 1983.

SEDIMENT LOAD: Maximum daily, 375 tons (estimated) Dec. 25, 1983; minimum daily, 0 ton many days during most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 263 mg/L, Dec. 19; minimum daily mean, 2 mg/L Mar. 11.

SEDIMENT LOAD: Maximum daily, 19 tons, Dec. 19; minimum daily, 0 ton many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	---	10.0	12.0	18.0					
2			---	7.5	---	---	---					
3			11.0	---	---	---	18.0					
4			---	8.0	9.5	10.0	---					
5			11.5	---	---	---	15.0					
6			---	---	10.0	12.0	---					
7			10.5	---	---	10.0	---					
8			12.0	9.5	10.0	10.0	---					
9			---	9.0	10.0	---	---					
10			13.5	10.0	10.0	---	16.0					
11			---	10.5	8.0	15.5	---					
12			---	---	---	12.5	18.5					
13			---	---	13.0	---	---					
14			9.5	10.5	---	---	---					
15			---	---	14.0	12.5	15.0					
16			---	10.5	---	---	---					
17			7.5	---	---	---	15.0					
18			10.0	11.5	---	13.0	---					
19			10.0	---	13.5	---	17.0					
20			10.0	---	---	15.5	---					
21			8.5	12.0	---	---	---					
22			---	---	13.5	14.5	---					
23			---	12.0	---	---	18.0					
24			---	---	---	---	19.0					
25			---	11.5	14.0	16.0	---					
26			10.5	---	---	---	18.5					
27			---	---	14.0	12.0	---					
28			9.5	10.0	---	---	---					
29			---	---	---	14.0	18.0					
30			---	9.0	---	---	18.0					
31			---	---	---	---	---					
MONTH			---	---	---	---	---					

MISSION CREEK BASIN

11119745 MISSION CREEK AT ROCKY NOOK PARK, AT SANTA BARBARA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF TOTAL SEDIMENT, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, TOTAL, (MG/L)	SEDI- MENT, DIS- CHARGE, TOTAL (T/DAY)	SED. TOTAL FALL DIAM. % FINER THAN .002 MM	SED. TOTAL FALL DIAM. % FINER THAN .004 MM	
DEC								
18...	1720	3.7	10.0	2570	26	35	49	
19...	0650	4.1	10.0	147	1.6	--	--	
19...	1500	44	10.5	581	69	51	62	
FEB								
09...	0600	15	10.0	71	2.9	--	--	
DATE	TIME	SED. TOTAL FALL DIAM. % FINER THAN .008 MM	SED. TOTAL FALL DIAM. % FINER THAN .016 MM	SED. TOTAL FALL DIAM. % FINER THAN .031 MM	SED. TOTAL SIEVE DIAM. % FINER THAN .062 MM	SED. TOTAL SIEVE DIAM. % FINER THAN .125 MM	SED. TOTAL SIEVE DIAM. % FINER THAN .250 MM	SED. TOTAL SIEVE DIAM. % FINER THAN .500 MM
DEC								
18...	66	85	95	99	100	--	--	--
19...	--	--	--	96	99	100	--	--
19...	73	82	88	92	96	98	100	100
FEB								
09...	--	--	--	96	97	100	--	--

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, CA

LOCATION.--Lat 34°25'35", long 119°43'20", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank, 200 ft downstream from Los Olivos Street in Santa Barbara.

DRAINAGE AREA.--8.38 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Concrete-lined channel. Elevation of gage is 105 ft above National Geodetic Vertical datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16-18, Nov. 18, Dec. 9, Jan. 9, 11, 29, Apr. 22, 25, 28, 29. Records fair. No regulation or diversion above station. Water at times released to creek for ground-water recharge from Gibraltar tunnel, several miles upstream. Control installed Nov. 26, 1979.

AVERAGE DISCHARGE.--15 years, 3.25 ft³/s, 2,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft³/s, Jan. 18, 1973, gage height, 4.97 ft, from rating curve extended above 41 ft³/s on basis of computation of flow in concrete-lined channel; maximum gage height, 5.45 ft, Feb. 16, 1980; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	2030	*128	*2.49				

No flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	.23	0	0		0			
2	0	0	0	0	.24	0	0		0			
3	0	0	.02	0	0	0	0		0			
4	0	0	0	0	1.6	0	0		0			
5	0	0	0	0	1.6	0	0		0			
6	0	0	0	0	.11	0	0		0			
7	0	0	5.5	0	1.8	2.4	0		0			
8	0	1.6	2.3	0	26	0	0		1.9			
9	0	0	.10	.04	19	0	0		3.0			
10	0	0	2.2	.46	1.6	0	0		.01			
11	0	0	.07	.02	1.8	0	0		0			
12	0	2.4	0	0	7.2	0	0		.12			
13	0	4.5	0	0	4.9	0	0		0			
14	0	0	.33	0	3.3	0	0		0			
15	0	0	14	0	4.6	0	0		0			
16	.08	.02	9.2	0	.87	0	0		0			
17	.04	0	.72	0	.01	0	0		0			
18	.01	.02	1.8	0	0	.03	0		0			
19	0	0	25	0	0	0	0		.77			
20	0	0	7.2	0	0	0	0		.35			
21	0	0	1.6	0	0	0	0		1.2			
22	0	0	.78	0	0	0	.12		.08			
23	0	0	.49	0	0	0	1.4		0			
24	0	1.3	.40	0	0	0	.36		0			
25	0	0	.55	0	0	0	.02		0			
26	0	0	.36	0	0	0	.60		0			
27	0	0	.31	0	0	1.3	.05		0			
28	0	.05	0	.68	0	.57	.02		0			
29	0	0	0	.02	---	0	.01		0			
30	0	0	0	0	---	0	0		0			
31	0	---	0	1.9	---	0	---		---			
TOTAL	0.13	9.89	72.93	3.12	74.86	4.30	2.58	0	7.43	0	0	0
MEAN	.004	.33	2.35	.10	2.67	.14	.086	0	.25	0	0	0
MAX	.08	4.5	25	1.9	26	2.4	1.4	0	3.0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.3	20	145	6.2	148	8.5	5.1	0	15	0	0	0
CAL YR 1984	TOTAL	123.74	MEAN	.34	MAX	25	MIN	0	AC-FT	245		
WTR YR 1985	TOTAL	175.24	MEAN	.48	MAX	26	MIN	0	AC-FT	348		

ARROYO BURRO CREEK BASIN

11119780 ARROYO BURRO CREEK AT SANTA BARBARA, CA

LOCATION.--Lat 34°26'13", long 119°44'44", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on right bank 0.4 mi south of State Street on Hope Avenue in Santa Barbara.

DRAINAGE AREA.--6.65 mi².

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR CA-76-1: 1974, 1975 (M).

GAGE.--Water-stage recorder. Concrete-lined channel with a low-water control. Elevation of gage is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 7-27, Feb. 24 to Mar. 2. Records fair. Small amount of inflow occurs at times from large shopping center that empties water directly into the stream. Partial regulation by Lauro Canyon Reservoir on San Roque Creek.

AVERAGE DISCHARGE.--15 years, 2.59 ft³/s, 1,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s, Mar. 4, 1978, Feb. 16, 1980, from rating curve extended above 50 ft³/s on basis of computation of flow in trapezoidal section; maximum gage height, 5.67 ft, Mar. 4, 1978; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 7	2245	*124	*2.53				
No flow for several days.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	0	.03	.18	.13	.06	.02	.02	.05	.01	.01	.01
2	.05	.01	.33	.03	.40	.40	.01	.06	.03	.02	.01	.03
3	.04	.01	.63	1.4	.06	.08	.01	.07	.05	.01	.11	.01
4	0	.02	.04	.02	.04	.17	.02	.04	.02	.01	0	.02
5	.01	.04	.04	.02	.03	.61	.02	.03	.06	.01	.01	.02
6	.03	.03	.04	.03	.14	.41	.01	.10	.05	.01	.60	.38
7	.03	.17	10	.73	.25	4.2	.01	.07	.03	0	.37	.02
8	.10	3.5	1.7	.06	27	.11	.01	.03	.02	.40	.01	0
9	.06	.06	.04	.34	4.8	.08	.01	.02	.01	.23	.04	.01
10	0	.08	4.1	1.2	.52	.18	0	.01	.06	.19	.03	0
11	.01	.07	.11	.03	.38	.22	.01	.02	.01	.16	.01	.01
12	.01	5.3	.13	.03	.18	.06	0	.01	.02	.12	.26	.02
13	.01	1.7	.34	.04	.07	.09	0	.02	.12	0	.04	.01
14	.03	.01	.26	.05	.03	.09	0	.05	.11	.01	.42	0
15	.07	.02	10	.05	.03	.07	.02	.02	.10	0	.05	0
16	1.0	.51	1.2	.04	.04	.07	.03	.01	.14	0	.03	.01
17	.21	.01	.23	.04	.04	.04	.11	.07	.17	0	.04	.06
18	.03	.03	2.0	.04	.05	.48	.02	.02	.02	.02	.02	.15
19	.05	.03	20	.04	.04	.06	.03	.18	.02	0	.06	.01
20	.09	.02	1.6	.04	.04	.04	.05	1.0	.01	.05	.01	.27
21	.08	.05	.50	.03	.12	.04	.08	.93	.03	0	.02	.13
22	.05	.06	.32	.03	.06	.02	.07	.09	0	.01	.01	.08
23	.02	.03	.14	.03	.04	.03	.05	.13	.01	0	.01	.08
24	.02	3.8	.05	.03	.04	.02	.02	.32	.01	.04	.03	.03
25	.08	.02	.03	.03	.05	.01	.08	.08	.02	.01	0	.02
26	.06	.04	.03	.04	.04	.31	.08	.06	.03	.01	.02	.46
27	.04	.06	.06	.05	.05	3.0	.02	.06	.01	.03	.01	.04
28	.03	.78	.03	2.0	.05	1.3	.01	.30	.04	.01	.03	.02
29	.02	.03	.03	.06	---	.04	.05	.48	0	.07	.03	.01
30	.19	.02	.05	.05	---	.01	.02	.25	0	.01	.02	.03
31	.04	---	.03	.04	---	.01	---	.32	---	.01	.02	---
TOTAL	2.50	16.51	54.09	6.80	34.72	12.31	0.87	4.87	1.25	1.45	2.33	1.94
MEAN	.081	.55	1.74	.22	1.24	.40	.029	.16	.042	.047	.075	.065
MAX	1.0	5.3	20	2.0	.27	4.2	.11	1.0	.17	.40	.60	.46
MIN	0	0	.03	.02	.03	.01	0	.01	0	0	0	0
AC-FT	5.0	33	107	13	69	24	1.7	9.7	2.5	2.9	4.6	3.8
CAL YR 1984	TOTAL	145.80	MEAN	.40	MAX	20	MIN	0	AC-FT	269		
WTR YR 1985	TOTAL	139.64	MEAN	.38	MAX	27	MIN	0	AC-FT	277		

11119940 MARIA YGNACIO CREEK AT UNIVERSITY DRIVE, NEAR GOLETA, CA

LOCATION.--Lat 34°26'42", long 119°48'10", in Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank at University Drive, 0.2 mi east of Patterson Avenue, and 1.5 mi northeast of Goleta.

DRAINAGE AREA.--6.35 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulation above station. Some pumping for irrigation.

AVERAGE DISCHARGE.--15 years, 1.92 ft³/s, 1,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s, Jan. 16, 1978, gage height, 5.87 ft, from rating curve extended above 290 ft³/s on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	2300	100	2.06	Feb. 8	2230	87	2.02
Dec. 19	0700	*273	*2.55				

No flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.06	.02	0	.15					
2	0	0	0	.06	.15		.06					
3	0	0	.04	.10	0	.10	0					
4	0	0	0	.14	0	0	0					
5	0	0	0	.07	0	.05	.08					
6	0	0	0	.06	0	.19	.16					
7	0	0	2.2	.14	0	2.9	.17					
8	0	.27	2.1	.07	.19	.18	.06					
9	0	0	.03	.10	7.7	.12	.05					
10	0	0	1.1	.74	.79	.13	0					
11	0	0	.08	.06	.49	.34	0					
12	0	1.4	0	.06	.37	.10	0					
13	0	1.7	0	.06	.28	.11	0					
14	0	0	0	.05	.21	.09	0					
15	0	0	8.6	.07	.21	.10	0					
16	.04	.02	5.3	.06	.18	.07	0					
17	.02	0	.26	.02	.16	.02	0					
18	0	0	.38	.01	.14	.16	.07					
19	0	0	56	.02	.13	.05	0					
20	0	0	3.7	0	.15	0	0					
21	0	0	.55	0	.18	0	0					
22	0	0	.37	.01	.09	0	0					
23	0	0	.31	.02	.08	0	0					
24	0	.70	.25	0	.05	0	0					
25	0	.06	.19	0	.06	0	0					
26	0	0	.15	0	.01	0	0					
27	0	0	.12	0	0	1.5	0					
28	0	.11	.10	.29	.01	.64	0					
29	0	0	.10	.04	---	.23	0					
30	0	0	.07	0	---	.16	0					
31	0	---	.06	0	---	.20	---					
TOTAL	0.06	4.26	82.06	2.31	30.46	7.54	0.80	0	0	0	0	0
MEAN	.002	.14	2.65	.075	1.09	.24	.027	0	0	0	0	0
MAX	.04	1.7	56	.74	.19	2.9	.17	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	.1	8.4	163	4.6	60	15	1.6	0	0	0	0	0
CAL YR 1984	TOTAL	141.84	MEAN	.39	MAX	56	MIN	0	AC-FT	281		
WTR YR 1985	TOTAL	127.49	MEAN	.35	MAX	56	MIN	0	AC-FT	253		

11120000 ATASCADERO CREEK NEAR GOLETA, CA

LOCATION.--Lat 34°25'29", long 119°48'39", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of center pier of county road bridge 100 ft downstream from Maria Ygnacio Creek, 1.3 mi upstream from mouth, and 1.3 mi southeast of Goleta.

DRAINAGE AREA.--18.9 mi².

PERIOD OF RECORD.--October 1941 to current year. Prior to October 1947, published as Alascadero Creek near Goleta.

GAGE.--Water-stage recorder. Datum of gage is 8.59 ft Santa Barbara County benchmark. Prior to Dec. 14, 1967, at site 275 ft downstream, datum 4.00 ft higher. Dec. 14, 1967, to Sept. 30, 1976, at datum 4.00 ft higher and Oct. 1, 1976, to Sept. 30, 1978, at datum 2.00 ft higher, both at present site.

REMARKS.--Estimated daily discharges: Aug. 7-18. Records fair except those below 1.0 ft³/s, which are poor. No regulation above station. Small diversions for irrigation above station. Some low flow results from return irrigation waste water.

AVERAGE DISCHARGE.--44 years, 4.87 ft³/s, 3,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,380 ft³/s, Jan. 18, 1973, gage height, 13.1 ft datum then in use, from rating curve extended above 2,300 ft³/s; maximum gage height, 13.3 ft, from floodmark, Dec. 3, 1974, datum then in use; no flow some days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 225 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	2330	249	3.59	Dec. 19	0700	*828	*5.02
Dec. 7	2330	255	3.61	Feb. 8	1930	422	4.09
Dec. 15	2045	225	3.51				

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.01	.22	.19	.19	.16	.08	.04	.02	.06	.02	0
2	0	0	.18	.27	.57	.18	.07	.05	0	.04	.03	0
3	0	0	1.5	.20	.15	.22	.08	.05	0	.03	.23	0
4	0	.03	.34	.21	.12	.16	.07	.04	0	.04	.36	0
5	0	.04	.21	.21	.12	.21	.07	.04	.02	.06	.29	0
6	0	.30	.15	.25	.11	.89	.08	.11	.02	.04	.29	0
7	0	.34	.18	2.0	.10	13	.07	1.2	.02	.08	.02	0
8	.01	11	.17	.41	108	.23	.06	1.4	.04	.08	.02	0
9	0	.36	.40	.29	40	.19	.05	.30	.03	.05	.02	0
10	.10	.25	12	8.0	1.2	.20	.04	.21	.02	.14	.02	0
11	.72	.14	.64	.29	.46	.62	.06	.05	.02	.08	.02	0
12	.17	12	.28	.20	.35	.16	.06	.04	.03	.05	.02	0
13	.04	12	.18	.17	.31	.17	.04	.04	.04	.04	.02	0
14	0	.42	.12	.23	.28	.18	.04	.04	.05	.04	.02	0
15	0	.29	26	.19	.24	.18	.04	.09	.07	.06	.03	0
16	.39	1.2	16	.19	.21	.18	.04	.06	.09	.11	.11	0
17	4.3	.35	.70	.17	.19	.16	.04	.03	.07	.15	.10	0
18	.50	.27	2.5	.17	.18	.50	.10	.02	.11	.10	.03	0
19	.23	.84	161	.23	.18	.22	.03	.04	.18	.07	.03	0
20	.06	1.3	18	.20	.41	.20	.03	.08	.11	.28	.03	0
21	.01	1.0	1.8	.18	.31	.18	.04	.04	.07	.11	.03	0
22	0	.27	.84	.18	.19	.19	.05	.03	.19	.05	.03	0
23	.05	.21	1.5	.25	.52	.21	.06	.02	.17	.02	.02	0
24	.03	11	1.4	.32	.63	.21	.05	.02	.22	0	.02	0
25	0	.73	1.4	.68	.63	.20	.01	.02	.62	0	.02	0
26	.01	.31	1.2	.23	.22	.19	0	.02	.18	0	.02	0
27	0	1.4	.29	.17	.18	10	0	.03	.63	.12	.02	0
28	0	3.3	.33	3.3	.16	2.9	.04	.02	.65	.10	.02	0
29	0	1.3	.28	.39	---	.60	.05	.02	1.2	.04	.02	.06
30	0	.29	.19	.18	---	.15	.05	0	.13	.02	.02	.04
31	0	---	.18	.16	---	.10	---	.03	---	.02	0	---
TOTAL	6.62	60.95	284.83	20.11	156.21	32.94	1.50	4.18	5.00	2.08	1.93	0.10
MEAN	.21	2.03	9.19	.65	5.58	1.06	.050	.13	.17	.067	.062	.003
MAX	4.3	12	161	8.0	108	13	.10	1.4	1.2	.28	.36	.06
MIN	0	0	.12	.16	.10	.10	0	0	0	0	0	0
AC-FT	13	121	565	40	310	65	3.0	8.3	9.9	4.1	3.8	.2

CAL YR 1984	TOTAL	469.87	MEAN	1.28	MAX	161	MIN	0	AC-FT	932
WTR YR 1985	TOTAL	576.45	MEAN	1.58	MAX	161	MIN	0	AC-FT	1140

11120500 SAN JOSE CREEK NEAR GOLETA, CA

LOCATION.--Lat 34°27'33", long 119°48'29", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank, 1.1 mi downstream from unnamed tributary, and 1.7 mi northeast of Goleta.

DRAINAGE AREA.--5.51 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 95.61 ft Santa Barbara County Road Department datum. Prior to Dec. 24, 1955, at datum 5.50 ft higher. Dec. 24, 1955, to Jan. 10, 1960, at datum 1.5 ft higher. Prior to Oct. 1, 1971, at site 75 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Jan. 2-14, 27-29, Feb. 2, 6, 7, 11, 12, Mar. 19, May 6-15, June 27, Aug. 31 to Sept. 16. Records fair except for periods of estimated daily discharges, which are poor. No regulation above station. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--44 years, 2.12 ft³/s, 1,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s, Jan. 25, 1969, gage height, 10.10 ft, from rating curve extended above 400 ft³/s on basis of slope-area measurement at gage height 9.32 ft; maximum gage height, 12.74 ft, present datum, Jan. 21, 1943; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 15	2245	136	4.33	Dec. 19	1315	*146	*4.39
No flow Nov. 7.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.10	.37	.11	.53	.97	.97	.20	.05	.14	.05	.03
2	.11	.08	.37	.16	.64	.91	.97	.14	.06	.04	.05	.03
3	.11	.05	.51	.17	.53	.97	.93	.13	.18	.03	.05	.03
4	.11	.03	.49	.15	.53	1.0	.85	.22	.14	.05	.05	.03
5	.11	.18	.48	.14	.53	1.1	.85	.24	.11	.05	.04	.04
6	.20	.02	.46	.13	.50	1.1	.85	.26	.08	.08	.04	.04
7	.22	0	.82	.21	.49	2.8	.85	.27	.07	.07	.05	.04
8	.13	.78	3.3	.25	15	1.7	.81	.25	.05	.03	.05	.04
9	.14	.25	1.2	.37	20	1.6	.62	.22	.05	.03	.05	.04
10	.20	.01	3.3	1.5	2.8	1.4	.44	.20	.05	.04	.03	.04
11	.24	.12	4.2	.50	2.4	1.6	.44	.21	.13	.03	.03	.04
12	.24	.63	2.0	.45	2.2	1.2	.44	.23	.14	.03	.03	.03
13	.19	5.2	.91	.40	2.1	.97	.44	.25	.11	.03	.03	.03
14	.28	.67	.75	.30	1.9	.97	.44	.25	.16	.02	.03	.03
15	.38	.53	15	.67	1.5	.95	.41	.25	.12	.03	.04	.03
16	.15	.52	11	.46	1.5	.85	.30	.24	.15	.03	.04	.03
17	.20	.52	.75	.30	1.5	.61	.31	.20	.28	.04	.05	.03
18	.19	.34	1.2	.35	1.4	.58	.55	.16	.14	.05	.05	.03
19	.14	.26	43	.44	1.4	.81	.50	.15	.14	.05	.05	.03
20	.13	.24	12	.44	1.4	.98	.37	.43	.13	.04	.05	.03
21	.44	.24	3.7	.44	1.1	1.0	.37	.41	.08	.02	.05	.04
22	.65	.34	2.0	.44	1.1	.85	.37	.19	.10	.02	.06	.03
23	.29	.30	1.2	.43	1.1	.88	.37	.19	.19	.02	.05	.04
24	.24	.88	.80	.36	1.1	.85	.31	.15	.19	.02	.04	.04
25	.22	.61	.54	.37	.97	.85	.22	.05	.10	.03	.04	.03
26	.19	.37	.34	.37	.97	.95	.17	.14	.19	.07	.04	.03
27	.19	.30	.35	.70	.97	1.6	.08	.18	.15	.05	.03	.05
28	.22	.58	.20	.54	.97	1.5	.15	.15	.06	.02	.03	.05
29	.27	.48	.18	.50	---	1.3	.24	.03	.08	.02	.03	.05
30	.17	.41	.21	.50	---	1.0	.27	.03	.15	.02	.03	.05
31	.13	---	.17	.53	---	.97	---	.14	---	.05	.03	---
TOTAL	6.59	15.04	111.80	12.68	67.13	34.82	14.89	6.16	3.63	1.25	1.29	1.08
MEAN	.21	.50	3.61	.41	2.40	1.12	.50	.20	.12	.040	.042	.036
MAX	.65	5.2	43	1.5	20	2.8	.97	.43	.28	.14	.06	.05
MIN	.11	0	.17	.11	.49	.58	.08	.03	.05	.02	.03	.03
AC-FT	13	30	222	25	133	69	30	12	7.2	2.5	2.6	2.1

CAL YR 1984 TOTAL 281.63 MEAN .77 MAX 43 MIN 0 AC-FT 559
WTR YR 1985 TOTAL 276.36 MEAN .76 MAX 43 MIN 0 AC-FT 548

SAN JOSE CREEK BASIN

11120500 SAN JOSE CREEK NEAR GOLETA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT									
11...	1340	0.24	2040	8.0	17.5	--	--	--	--
NOV									
16...	1315	0.65	1220	8.2	15.0	--	--	--	--
DEC									
14...	1345	0.66	1140	7.7	10.0	490	240	130	39
JAN									
15...	1410	0.44	1150	8.2	11.5	--	--	--	--
FEB									
13...	1145	2.1	929	7.9	12.0	--	--	--	--
MAR									
21...	1345	0.97	1120	8.4	16.5	--	--	--	--
APR									
25...	0920	0.25	1380	8.0	16.0	--	--	--	--
MAY									
24...	1120	0.23	1410	8.1	18.0	--	--	--	--
JUN									
27...	1145	0.15	1570*	8.0	17.5	--	--	--	--
JUL									
31...	1500	0.05	2150*	7.9	20.0	--	--	--	--
AUG									
20...	1230	0.05	2300	7.8	17.5	--	--	--	--
SEP									
18...	1020	0.04	2350*	7.8	16.0	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT								
11...	--	--	--	--	--	--	--	--
NOV								
16...	--	--	--	--	--	--	--	--
DEC								
14...	67	23	1	1.5	249	300	50	0.3
JAN								
15...	--	--	--	--	--	--	--	--
FEB								
13...	--	--	--	--	--	--	--	--
MAR								
21...	--	--	--	--	--	--	--	--
APR								
25...	--	--	--	--	--	--	--	--
MAY								
24...	--	--	--	--	--	--	--	--
JUN								
27...	--	--	--	--	--	--	--	--
JUL								
31...	--	--	--	--	--	--	--	--
AUG								
20...	--	--	--	--	--	--	--	--
SEP								
18...	--	--	--	--	--	--	--	--

See footnotes at end of table.

11120500 SAN JOSE CREEK NEAR GOLETA, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT								
11...	--	1470	--	--	--	--	--	--
NOV								
16...	--	800	--	--	--	--	--	--
DEC								
14...	18	--	1736	0.27	<0.01	90	14	26
JAN								
15...	--	786	--	--	--	--	--	--
FEB								
13...	--	602	--	--	--	--	--	--
MAR								
21...	--	747	--	--	--	--	--	--
APR								
25...	--	974	--	--	--	--	--	--
MAY								
24...	--	1020	--	--	--	--	--	--
JUN								
27...	--	1150	--	--	--	--	--	--
JUL								
31...	--	1720	--	--	--	--	--	--
AUG								
20...	--	--	--	--	--	--	--	--
SEP								
18...	--	1910	--	--	--	--	--	--

* Lab value.

1 Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

11120510 SAN JOSE CREEK AT GOLETA, CA

LOCATION.--Lat 34°25'49", long 119°49'16", in La Goleta Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank south of Hollister Avenue on Kellogg Avenue, and 0.5 mi southeast of Goleta.

DRAINAGE AREA.--9.42 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

REVISED RECORDS.--WDR CA-73-1; 1973 (M)

GAGE.--Water-stage recorder and concrete channel. Elevation of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 11-15. Records fair. No regulation above station. Diversions for irrigation and domestic use above station.

AVERAGE DISCHARGE.--15 years, 3.37 ft³/s, 2,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,330 ft³/s, Mar. 4, 1978, gage height, 5.65 ft, from rating curve extended above 400 ft³/s on basis of slope-conveyance computation of flow in concrete channel at gage height 8.00 ft; no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1200	*660	*3.27				

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.35	.35	.64	.72	.58	.18	0			0
2	0	0	.40	.31	1.1	.94	.59	.04	0			0
3	0	0	1.0	.28	.71	.83	.57	.01	0			0
4	0	0	.37	.26	.70	.70	.61	.11	0			0
5	0	0	.35	.24	.70	.85	.75	.09	0			0
6	0	.01	.32	.23	.66	1.1	.72	.09	0			0
7	0	0	5.7	.35	.60	8.6	.72	.24	0			0
8	0	1.5	4.6	.42	44	1.3	.68	.34	0			0
9	0	.19	.64	.64	17	.93	.50	.20	0			0
10	0	.05	4.2	2.5	4.7	.89	.68	.12	0			0
11	0	.04	1.8	1.5	2.0	2.3	.70	.10	0			0
12	0	5.7	1.0	1.0	1.4	.79	.68	.15	0			0
13	0	3.7	.64	.80	1.4	.66	.66	.30	0			0
14	0	.45	.43	.70	1.2	.60	.68	.13	0			0
15	.05	.32	9.0	.64	1.0	.60	.78	.10	0			0
16	.55	.80	11	.64	.98	.52	.65	.08	0			0
17	.94	.32	1.9	.47	.98	.49	.93	.17	.02			0
18	0	.29	3.4	.52	.88	.83	1.1	.05	.02			.25
19	0	.25	70	.63	.91	.72	.74	.02	0			0
20	0	.26	11	.63	.83	.64	.51	.21	0			0
21	0	.28	3.3	.64	.84	.59	.52	.16	0			.01
22	0	.32	1.9	.63	.86	.50	.51	.05	0			0
23	0	.30	1.2	.63	.88	.44	.32	.01	0			0
24	0	4.1	.89	.60	.84	.41	.22	0	0			0
25	0	.59	.65	.57	.78	.37	.12	.03	0			0
26	0	.46	.53	.54	.77	.40	.10	.06	0			.04
27	0	.40	.47	.62	.78	4.3	.06	.30	0			.03
28	0	1.2	.42	1.7	.68	2.4	.11	.16	0			0
29	0	.38	.42	.80	---	.89	.27	.05	0			0
30	0	.35	.35	.70	---	.65	.24	.02	0			0
31	0	---	.35	.63	---	.61	---	.01	---			---
TOTAL	1.54	22.26	138.58	21.17	88.82	36.57	16.30	3.58	0.04	0	0	0.33
MEAN	.050	.74	4.47	.68	3.17	1.18	.54	.12	.001	0	0	.011
MAX	.94	5.7	70	2.5	44	8.6	1.1	.34	.02	0	0	.25
MIN	0	0	.32	.23	.60	.37	.06	0	0	0	0	0
AC-FT	3.1	44	275	42	176	73	32	7.1	.08	0	0	.7
CAL YR 1984	TOTAL	406.02	MEAN	1.11	MAX	70	MIN	0	AC-FT	805		
WTR YR 1985	TOTAL	329.19	MEAN	.90	MAX	70	MIN	0	AC-FT	653		

11120510 SAN JOSE CREEK AT GOLETA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982 to April 1985 (discontinued).
 WATER TEMPERATURES: Water years 1982 to April 1985 (discontinued).
 SEDIMENT RECORDS: Water years 1982 to April 1985 (discontinued).

PERIOD OF DAILY RECORD.--
 WATER TEMPERATURES: January 1982 to April 1985 (discontinued).
 SEDIMENT RECORDS: December 1981 to April 1985 (discontinued).

REMARKS.--Sediment samples were collected on most days where a water temperature is published. Sediment discharge values were estimated for those days that have no daily concentration values. Sediment data listed in the daily values table and in the Extremes paragraphs are considered total-load values for the 1985 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 12,900 mg/L, Dec. 19, 1984; minimum daily mean, 1 mg/L, Mar. 6, 9, 1984, Jan. 1, 2, 21, 22, 1985.

SEDIMENT LOAD: Maximum daily, 15,700 tons Jan. 27, 1983; minimum daily, 0 ton many days during each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 12,900 mg/L, Dec. 19; minimum daily mean, 1 mg/L, Jan. 1, 2, 21, 22.

SEDIMENT LOAD: Maximum daily, 6,290 tons, Dec. 19; minimum daily, 0 ton many days.

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1984 TO APRIL 1985
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	---	15.5	14.0	26.0					
2			---	7.5	---	---	---					
3			15.0	---	---	---	24.0					
4			---	13.0	14.0	14.0	---					
5			12.0	---	---	---	17.5					
6			---	---	13.5	18.5	---					
7			11.5	---	---	---	---					
8			12.0	11.0	13.0	15.0	---					
9			---	10.0	10.0	---	---					
10			14.0	11.5	---	---	21.0					
11			---	13.0	10.0	18.5	---					
12			---	---	---	16.0	25.5					
13			---	---	17.0	---	---					
14			11.5	14.0	---	---	---					
15			---	8.0	19.0	16.0	11.0					
16			---	15.0	---	---	---					
17			7.5	---	---	---	25.0					
18			---	14.0	---	15.0	---					
19			9.0	---	15.5	---	25.0					
20			10.0	---	---	21.0	---					
21			9.0	---	---	---	---					
22			---	---	16.0	22.0	---					
23			---	---	---	---	29.0					
24			---	---	---	---	29.5					
25			---	16.5	19.5	24.0	---					
26			10.5	---	---	---	28.0					
27			---	---	19.0	17.0	---					
28			10.0	12.0	---	---	---					
29			---	---	---	20.5	28.0					
30			---	17.0	---	---	30.0					
31			---	---	---	---	---					
MONTH			---	---	---	---	---					

SAN JOSE CREEK BASIN

11120510 SAN JOSE CREEK AT GOLETA, CA--Continued

TOTAL SEDIMENT, OCTOBER 1984 TO APRIL 1985

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---	.01	1	.00	10	.02	5	.01
2					---	.01	1	.00	24	.08	11	.03
3					---	.41	2	.00	14	.03	9	.02
4					8	.01	6	.00	9	.02	8	.02
5					7	.01	8	.01	6	.01	10	.03
6					6	.01	7	.00	4	.01	11	.04
7					---	101	6	.01	2	.00	314	22
8					979	31	2	.00	711	236	69	.25
9					10	.02	6	.07	238	20	23	.06
10					---	21	26	.31	23	.30	12	.03
11					245	1.8	---	.01	12	.06	40	.37
12					30	.08	---	.01	13	.05	25	.05
13					12	.02	---	.01	15	.06	18	.03
14					10	.01	---	.01	15	.05	10	.02
15					---	121	---	.02	15	.04	6	.01
16					---	48	6	.01	14	.04	4	.01
17					16	.08	5	.01	12	.03	3	.00
18					---	14	7	.01	9	.02	19	.05
19					12900	6290	6	.01	7	.02	16	.03
20					565	32	4	.01	7	.02	13	.02
21					20	.18	1	.00	7	.02	12	.02
22					15	.08	1	.00	9	.02	16	.02
23					12	.04	3	.01	10	.02	22	.03
24					9	.02	4	.01	10	.02	25	.03
25					7	.01	4	.01	8	.02	25	.02
26					6	.01	4	.01	11	.02	23	.04
27					5	.01	2	.00	11	.02	86	1.8
28					4	.00	33	.34	7	.01	85	.78
29					3	.00	28	.06	---	---	60	.17
30					3	.00	20	.04	---	---	34	.06
31					2	.00	14	.02	---	---	26	.04
TOTAL					---	432.82	---	1.01	---	257.01	---	26.09

DAY	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)	MEAN CONCEN- TRATION (MG/L)	LOADS (T/DAY)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	18	.03										
2	14	.02										
3	11	.02										
4	10	.02										
5	19	.06										
6	13	.03										
7	9	.02										
8	10	.02										
9	10	.01										
10	9	.02										
11	8	.02										
12	7	.01										
13	7	.01										
14	8	.01										
15	11	.02										
16	10	.02										
17	8	.02										
18	14	.05										
19	13	.02										
20	10	.01										
21	8	.01										
22	7	.01										
23	7	.01										
24	3	.00										
25	4	.00										
26	5	.00										
27	5	.00										
28	6	.00										
29	8	.01										
30	11	.01										
31	---	---										
TOTAL	---	0.49										

TOTAL LOAD FOR YEAR: 6945.42 TONS.

11120510 SAN JOSE CREEK AT GOLETA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, OCTOBER 1984 TO APRIL 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
DEC							
19...	0720	207	9.0	18700	10500	45	53
19...	1350	147	10.0	16000	6350	28	34

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
DEC							
19...	69	73	84	93	97	98	100
19...	38	49	63	75	95	99	100

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, OCTOBER 1984 TO APRIL 1985

DATE	TIME	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM
FEB										
26...	1515	3	0.77	4	8	23	79	97	100	--
26...	1530	3	0.77	--	--	1	31	82	98	100

GAVIOTA CREEK BASIN

11120550 GAVIOTA CREEK NEAR GAVIOTA, CA

LOCATION.--Lat 34°29'16", long 120°13'34", in Nuestra Senora Del Refugio Grant, Santa Barbara County, Hydrologic Unit 18060013, on left bank 1.3 mi northwest of Gaviota, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--18.8 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 9 to Feb. 7, Feb. 19-25. Records fair except for periods of estimated daily discharges, which are poor. No regulation. Small pumping for domestic use.

AVERAGE DISCHARGE.--19 years, 6.47 ft³/s, 4,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,270 ft³/s, Jan. 28, 1983, gage height, 9.44 ft, from rating curve extended above 250 ft³/s on basis of slope-conveyance measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1230	*776	*5.99				

No flow Aug. 31 to Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.32	.43	1.1	.86	.69	.72	.72	.45	.19	.14	0
2	.23	.32	.46	1.1	.86	.70	.72	.67	.44	.15	.14	0
3	.24	.34	.68	1.1	.85	.64	.72	.67	.46	.14	.15	0
4	.24	.34	.46	1.0	.85	.63	.76	.66	.43	.15	.15	.04
5	.25	.35	.43	1.1	.84	.64	.79	.68	.42	.20	.13	.08
6	.25	.35	.42	1.1	.84	.81	.80	.68	.39	.22	.11	.08
7	.24	.35	2.3	1.9	.84	3.7	.79	.70	.36	.24	.11	.09
8	.23	1.6	7.5	1.4	12	.84	.81	.70	.35	.21	.12	.09
9	.26	.44	.69	1.1	12	.73	.80	.68	.35	.16	.14	.07
10	.29	.39	7.7	1.1	2.7	.79	.79	.64	.36	.16	.15	.07
11	.40	.37	.94	1.1	1.9	.74	.76	.64	.39	.16	.15	.08
12	.35	2.0	.63	1.0	1.5	.67	.75	.64	.42	.14	.15	.07
13	.24	3.3	.55	1.0	1.3	.66	.73	.62	.43	.16	.14	.06
14	.22	.51	.50	1.0	1.2	.67	.74	.62	.45	.17	.12	.05
15	.20	.47	8.3	1.0	1.1	.66	.79	.64	.45	.18	.12	.07
16	.23	.48	5.8	.98	1.0	.66	.83	.64	.44	.21	.13	.09
17	.43	.46	1.2	.98	.99	.68	.97	.62	.44	.22	.15	.07
18	.28	.43	7.0	.96	.98	.80	.82	.59	.38	.23	.14	.07
19	.26	.41	99	.96	.94	.69	.76	.56	.35	.25	.12	.08
20	.30	.40	14	.95	.90	.66	.75	.55	.36	.23	.12	.06
21	.29	.39	5.6	.94	.88	.68	.83	.55	.37	.19	.13	.05
22	.29	.42	3.1	.93	.84	.66	.82	.53	.36	.17	.13	.05
23	.29	.42	2.2	.92	.80	.65	.77	.49	.34	.17	.10	.05
24	.28	1.2	1.8	.92	.78	.66	.71	.49	.33	.18	.07	.05
25	.29	.58	1.5	.90	.76	.68	.68	.52	.33	.21	.07	.05
26	.30	.44	1.3	.90	.75	.71	.68	.53	.32	.20	.07	.14
27	.31	.41	1.4	.90	.71	1.7	.68	.52	.30	.19	.07	.07
28	.32	.61	1.3	.88	.70	1.0	.74	.48	.27	.17	.06	.06
29	.32	.46	1.2	.88	---	.79	.78	.46	.26	.15	.04	.07
30	.34	.42	1.1	.88	---	.75	.77	.46	.23	.14	.03	.07
31	.36	---	1.1	.87	---	.73	---	.47	---	.14	0	---
TOTAL	8.74	18.98	180.59	31.85	50.67	26.07	23.06	18.42	11.23	5.68	3.45	1.88
MEAN	.28	.63	5.83	1.03	1.81	.84	.77	.59	.37	.18	.11	.063
MAX	.43	3.3	99	1.9	12	3.7	.97	.72	.46	.25	.15	.14
MIN	.20	.32	.42	.87	.70	.63	.68	.46	.23	.14	0	0
AC-FT	17	38	358	63	101	52	46	37	22	11	6.6	3.7
CAL YR 1984	TOTAL	505.15	MEAN	1.38	MAX	99	MIN	.11	AC-FT	1000		
WTR YR 1985	TOTAL	380.62	MEAN	1.04	MAX	99	MIN	0	AC-FT	755		

11121000 SANTA YNEZ RIVER AT JAMESON LAKE, NEAR MONTECITO, CA

LOCATION.--Lat 34°29'32", long 119°30'25", in NE 1/4 NW 1/4 sec.28, T.5 N., R.25 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Juncal Dam, 6.5 mi north of Carpinteria, and 8 mi northeast of Montecito.

DRAINAGE AREA.--13.9 mi², excludes that of Alder Creek.

PERIOD OF RECORD.--December 1930 to current year. Prior to October 1938, published as "at Juncal Reservoir, near Montecito."

GAGE.--Two water-stage recorders. Datum of lake gage is 2,021.6 ft Bureau of Reclamation datum, or 2,000 ft above National Geodetic Vertical Datum of 1929. Supplementary gage and sharp-crested weir on outlet conduit of lake release, at different datum.

REMARKS.--Records of total inflow represent all water reaching Jameson Lake, including precipitation on the lake. Total inflow computed on basis of records of storage, diversion (draft) to city of Montecito, spill and release to river, evaporation, and seepage. Records of net inflow exclude precipitation on lake surface. Monthly evaporation from lake surface computed on basis of evaporation from U.S. Weather Bureau Class A land pan. Area and capacity tables are based on survey made in 1980. Lake capacity at spillway level, gage height, 223.82 ft, 5,725 acre-ft. Dead storage, 32 acre-ft, below lowest outlet at gage height 139.0 ft included in these records. There is no regulation or diversion above station. At times flow of Alder Creek, which enters Santa Ynez River 2 mi downstream from Juncal Dam, is diverted at elevation 2,250 ft through a tunnel to Jameson Lake and is included in these records.

COOPERATION.--Reservoir-operation records and related data were provided by Montecito Water District.

AVERAGE DISCHARGE.--54 years (water years 1932-85), 7.11 ft³/s, 5,150 acre-ft/yr.

MONTHLY NET DISCHARGE, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Gage height (feet) ^a	Contents (acre-feet)	Change in contents (acre-feet)	Draft (acre-feet)	Spill and release (acre-feet)	Evapo-ration and seepage (acre-feet)	Total inflow (acre-feet)	Rain on reservoir (acre-feet)	Net inflow (acre-feet)
Sept. 30.....	210.76	4,160	--	--	--	--	--	--	--
Oct. 31.....	208.21	3,880	-280	233	0	49	2	2	0
Nov. 30.....	207.43	3,800	-80	102	0	14	36	34	2
Dec. 31.....	209.08	3,970	+170	51	0	6	227	71	156
CAL YR 1984.....			-1,790	2,032	746	543	1,531	121	1,410
Jan. 31.....	209.22	3,990	+20	83	0	12	115	8	107
Feb. 28.....	208.94	3,960	-30	103	0	13	86	10	76
Mar. 31.....	208.97	3,960	0	70	0	16	86	15	71
Apr. 30.....	208.08	3,870	-90	118	0	55	83	1	82
May 31.....	206.76	3,730	-140	130	0	83	73	0	73
June 30.....	204.98	3,540	-190	149	0	85	44	0	44
July 31.....	202.08	3,250	-290	235	0	77	22	0	22
Aug. 31.....	199.52	3,010	-240	192	0	86	38	0	38
Sept. 30.....	197.14	2,790	-220	184	0	53	17	0	17
WTR YR 1985.....			-1370	1,650	0	549	829	141	688

^a Elevation at 0800.

NOTE.--For months when inflow to the lake was small and other quantities were large, preliminary computations may indicate negative net inflow. This arises primarily from the difficulty of computing net inflow as the residual of several large quantities, which are not conducive to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11122000 SANTA YNEZ RIVER ABOVE GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.--Lat 34°31'34", long 119°41'08", in NW 1/4 SW 1/4 sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Gibraltar Dam, 7 mi north of Santa Barbara.

DRAINAGE AREA.--216 mi².

PERIOD OF RECORD.--April 1920 to current year. November 1903 to November 1918 (fragmentary) at river station at damsite; records not equivalent because records since April 1920 are based on operation of Gibraltar Reservoir, and since December 1930, Jameson Lake. Prior to October 1945, published as "Santa Ynez River near Santa Barbara."

GAGE.--Two water-stage recorders. Datum of gage is National Geodetic Vertical Datum of 1929. Supplementary gage and sharp-crested weir on diversion from reservoir at different datum. See WSP 1735 for history of changes on both gages prior to Oct. 1, 1955. Spill and release measured by river gaging station below dam (station 11123000).

REMARKS.--Records of total inflow represent all water reaching Gibraltar Reservoir, including precipitation on reservoir. Total inflow computed on basis of records of storage, diversion (draft) to city of Santa Barbara, spill and release to river, evaporation, and seepage. Records of net inflow exclude precipitation on reservoir surface. Monthly evaporation from reservoir surface computed on basis of evaporation from U.S. Weather Bureau Class A land pan. Area and capacity tables are based on survey made in October 1979. Reservoir capacity at spillway level, elevation, 1,399.82 ft, 8,940 acre-ft. Lowest outlet at elevation 1,333.86 ft. Flow regulated by Jameson Lake (station 11121000) since December 1930.

COOPERATION.--Reservoir-operation records and related data were provided by city of Santa Barbara.

MONTHLY NET INFLOW, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet) ^a	Contents (acre- feet)	Change in contents (acre- feet)	Draft (acre- feet)	Spill and release (acre- feet)	Evapo- ration and seepage (acre- feet)	Total inflow (acre- feet)	Rain on reservoir (acre- feet)	Net inflow (acre- feet)
Sept. 30.....	1,382.07	4,620	--	--	--	--	--	--	--
Oct. 31.....	1,378.66	4,010	-610	546	0	71	7	7	0
Nov. 30.....	1,375.41	3,450	-560	631	0	22	93	50	43
Dec. 31.....	1,380.65	4,360	+910	502	0	11	1,423	109	1,314
CAL YR 1984.....	--	--	-4,070	7,139	4,018	1,001	8,088	203	7,885
Jan. 31.....	1,381.88	4,590	+230	506	0	19	755	14	741
Feb. 28.....	1,384.60	5,100	+510	399	0	31	940	19	921
Mar. 31.....	1,388.12	5,810	+710	43	0	37	790	32	758
Apr. 30.....	1,385.55	5,090	+80	266	0	81	427	2	425
May 31.....	1,387.17	5,610	-280	327	0	90	137	0	137
June 30.....	1,384.55	5,090	-520	407	0	113	0	0	0
July 31.....	1,382.28	4,660	-430	317	0	120	7	0	7
Aug. 31.....	1,379.74	4,190	-470	342	0	128	0	0	0
Sept. 30.....	1,375.99	3,550	-640	586	24	69	39	1	38
WTR YR 1985.....	--	--	-1,070	4,872	24	792	4,618	234	4,384

a Elevation at 0800.

NOTE.--For months when inflow to the reservoir was small and other quantities were large, negative figures of inflow may appear. This arises primarily from the difficulty of computing inflow as the residual of several larger quantities, which are not conducive to precise measurement. When this occurs, evaporation and seepage is adjusted to produce non-negative inflows.

11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.--Lat 34°31'28", long 119°41'11", in SW 1/4 SW 1/4 sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on left bank 700 ft downstream from Gibraltar Dam, and 7 mi north of Santa Barbara.

DRAINAGE AREA.--216 mi².

PERIOD OF RECORD.--April 1920 to current year (monthly discharge only prior to October 1941).

GAGE.--Two water-stage recorders. Datum of gage on main channel is 1,227 ft above National Geodetic Vertical Datum of 1929. Supplementary gage and sharp-crested weir on the release channel from Gibraltar Dam to river at different datum. See WSP 1735 for history of changes on both gages prior to May 20, 1958.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 4,870 acre-ft during current year from Gibraltar Reservoir; Montecito Water District diverted 1,650 acre-ft during current year from Jameson Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,200 ft³/s, Jan. 25, 1969, gage height, 25.8 ft, from rating curve extended above 2,100 ft³/s on basis of computations of flow from gate openings and flow over dam at gage heights 17.5 ft and 25.8 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.7 ft³/s, Sept. 13 (return flow from release weir), gage height, 8.11 ft; no flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1												0
2												0
3												0
4												0
5												0
6												0
7												0
8												0
9												0
10												0
11												0
12												0
13												1.1
14												1.7
15												1.7
16												1.7
17												1.7
18												1.7
19												1.7
20												.57
21												0
22												0
23												0
24												0
25												0
26												0
27												0
28												0
29					---							0
30					---							0
31		---			---		---		---			---
TOTAL	0	0	0	0	0	0	0	0	0	0	0	11.87
MEAN	0	0	0	0	0	0	0	0	0	0	0	.40
MAX	0	0	0	0	0	0	0	0	0	0	0	1.7
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	0	0	0	0	0	0	0	24
CAL YR 1984	TOTAL	2025.65	MEAN	5.53	MAX	125	MIN	0	AC-FT	4020		
WTR YR 1985	TOTAL	11.87	MEAN	.033	MAX	1.7	MIN	0	AC-FT	24		

SANTA YNEZ RIVER BASIN

11123500 SANTA YNEZ RIVER BELOW LOS LAURELES CANYON, NEAR SANTA YNEZ, CA

LOCATION.--Lat 34°32'37", long 119°51'50", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank 0.3 mi downstream from Los Laureles Canyon Creek, 10 mi downstream from Gibraltar Reservoir, and 13.3 mi east of Santa Ynez.

DRAINAGE AREA.--277 mi².

PERIOD OF RECORD.--April 1947 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 787.8 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Jameson Lake and Gibraltar Reservoir (stations 11121000, 11122000). Water diverted out of basin from these reservoirs to cities of Montecito and Santa Barbara for municipal supply. Low flow affected by intermittent pumping for irrigation from infiltration gallery in riverbed at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,500 ft³/s, Jan. 25, 1969, gage height, 18.88 ft, from rating curve extended above 11,600 ft³/s on basis of maximum flow for station below Gibraltar Dam plus tributary inflow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 214 ft³/s, Dec. 19, gage height, 4.89 ft; no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	4.3	1.6	2.1	1.3	.02				
2		0	0	4.3	2.1	2.8	1.1	.01				
3		0	0	4.0	2.1	3.2	.91	.01				
4		0	0	3.7	1.7	2.6	.73	0				
5		0	0	3.6	1.5	2.1	.38	0				
6		0	0	3.3	1.6	2.6	.31	0				
7		0	0	3.7	1.8	8.1	.49	0				
8		0	0	3.9	2.6	5.0	.46	0				
9		0	0	3.5	12	4.3	.21	0				
10		0	0	4.7	7.4	4.1	.11	0				
11		0	0	4.6	6.2	4.0	.10	0				
12		0	0	3.9	5.7	3.1	.09	0				
13		.14	0	3.4	5.1	2.7	.08	0				
14		0	0	3.0	4.2	2.7	.07	0				
15		0	4.0	2.9	3.5	2.6	.07	0				
16		0	6.6	2.8	3.5	2.5	.06	0				
17		0	.56	2.5	3.5	2.4	.06	0				
18		0	.63	2.5	3.5	2.6	.06	0				
19		0	81	2.5	3.5	2.5	.06	0				
20		0	94	2.5	3.5	1.9	.06	0				
21		0	25	2.5	3.0	1.6	.06	0				
22		0	15	2.5	2.7	1.7	.06	0				
23		0	11	2.4	2.5	1.8	.06	0				
24		0	8.4	2.3	2.5	1.7	.05	0				
25		0	7.5	2.0	2.5	1.6	.04	0				
26		0	6.6	1.8	2.5	1.2	.04	0				
27		0	6.2	2.2	2.3	1.3	.04	0				
28		0	5.1	2.3	2.1	1.5	.04	0				
29		0	4.6	2.5	---	1.6	.03	0				
30		0	4.3	2.1	---	1.5	.02	0				
31		---	4.3	1.8	---	1.3	---	0				
TOTAL	0	0.14	284.79	94.0	96.7	80.7	7.15	0.04	0	0	0	0
MEAN	0	.005	9.19	3.03	3.45	2.60	.24	.001	0	0	0	0
MAX	0	.14	94	4.7	12	8.1	1.3	.02	0	0	0	0
MIN	0	0	0	1.8	1.5	1.2	.02	0	0	0	0	0
AC-FT	0	.3	565	186	192	160	14	.08	0	0	0	0
CAL YR 1984	TOTAL	3764.82	MEAN	10.3	MAX	139	MIN	0	AC-FT	7470		
WTR YR 1985	TOTAL	563.52	MEAN	1.54	MAX	94	MIN	0	AC-FT	1120		

11124500 SANTA CRUZ CREEK NEAR SANTA YNEZ, CA

LOCATION.--Lat 34°35'48", long 119°54'28", in San Marcos Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank 0.6 mi downstream from Pine Canyon, and 9.9 mi east of Santa Ynez.

DRAINAGE AREA.--74.0 mi².

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 783.38 ft above National Geodetic Vertical Datum of 1929. See WSP 1735 for history of changes prior to Sept. 27, 1952. Sept. 27, 1952, to June 24, 1969, at datum 3.25 ft higher.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--44 years, 18.0 ft³/s, 13,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s, Feb. 24, 1969, gage height, 14.45 ft, from floodmark, present datum, from rating curve extended above 2,500 ft³/s on basis of slope-area measurement at gage height 14.16 ft; no flow at times since 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*), from rating curve extended above 110 ft³/s on basis of slope-area measurement at gage height 12.10 ft:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2115	109	7.92	Feb. 9	0300	*256	*8.50

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	2.1	5.8	8.0	7.4	9.9	3.6	.74	.04		
2		0	1.7	5.1	9.1	8.1	8.5	3.6	.74	.04		
3		0	2.1	4.9	9.0	8.7	7.8	3.6	.75	.04		
4		0	3.0	4.8	9.3	7.8	7.7	3.5	.65	.03		
5		0	2.3	4.8	9.3	7.6	7.4	3.2	.50	.03		
6		0	1.9	4.8	9.4	7.9	7.2	3.4	.35	.03		
7		0	1.9	7.1	9.6	11	7.2	3.7	.29	.01		
8		0	4.9	21	11	10	6.8	3.9	.26	0		
9		0	4.4	12	115	9.0	6.6	3.9	.19	0		
10		0	4.2	11	32	8.9	6.5	3.6	.18	0		
11		0	5.6	9.3	18	12	6.4	3.5	.15	0		
12		0	5.6	8.3	14	11	6.2	3.5	.14	0		
13		0	4.1	7.8	12	9.5	5.8	3.3	.12	0		
14		0	3.4	7.6	10	9.0	5.3	2.7	.11	0		
15		0	3.7	7.1	9.5	8.6	5.2	2.1	.10	0		
16		0	12	6.4	8.9	8.1	5.2	1.8	.09	0		
17		0	9.6	6.3	8.3	7.7	6.5	2.0	.08	0		
18		0	7.9	6.2	8.0	7.7	6.9	2.2	.08	0		
19		0	35	6.4	7.7	7.3	5.8	2.3	.07	0		
20		0	43	6.4	7.6	6.8	5.4	2.1	.07	0		
21		0	20	6.4	7.3	6.3	5.8	1.9	.07	0		
22		0	14	6.4	7.4	6.1	5.8	1.5	.07	0		
23		0	11	6.4	7.3	5.9	5.2	1.1	.07	0		
24		0	9.5	6.4	7.2	5.8	4.4	.90	.07	0		
25		1.8	8.6	6.4	7.3	5.7	3.6	.83	.05	0		
26		.92	7.9	6.6	7.4	5.6	3.5	.93	.05	0		
27		.40	7.2	7.2	7.3	27	3.9	1.1	.05	0		
28		13	6.8	7.7	7.4	30	3.8	1.0	.05	0		
29		8.7	6.5	8.3	---	18	3.7	1.0	.05	0		
30		3.4	6.3	7.8	---	14	3.7	.97	.04	0		
31		---	6.0	7.9	---	11	---	.86	---	0		
TOTAL	0	28.22	262.2	230.6	384.3	309.5	177.7	73.59	6.23	0.22	0	0
MEAN	0	.94	8.46	7.44	13.7	9.98	5.92	2.37	.21	.007	0	0
MAX	0	13	43	21	115	30	9.9	3.9	.75	.04	0	0
MIN	0	0	1.7	4.8	7.2	5.6	3.5	.83	.04	0	0	0
AC-FT	0	56	520	457	760	614	352	146	12	.4	0	0
CAL YR 1984	TOTAL	1978.25	MEAN	5.41	MAX 43	MIN 0	AC-FT 3920					
WTR YR 1985	TOTAL	1472.56	MEAN	4.03	MAX 115	MIN 0	AC-FT 2920					

11125500 LAKE CACHUMA NEAR SANTA YNEZ, CA

LOCATION.--Lat 34°34'57", long 119°58'47", in Lomas de la Purification Grant, Santa Barbara County, Hydrologic Unit 18060010, at Bradbury Dam on Santa Ynez River, on upstream face near left end of dam, and 6.1 mi east of Santa Ynez.

DRAINAGE AREA.--417 mi².

PERIOD OF RECORD.--November 1952 to current year. Prior to October 1960, published as "Cachuma Reservoir near Santa Ynez".

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft, Bureau of Reclamation datum. Prior to Oct. 1, 1965, nonrecording gage.

REMARKS.--Reservoir is formed by earthfill dam. Storage began November 1952. Capacity table is based on surveys made in January 1953. Dead storage below outlet gage to river, elevation, 600 ft, 3,114 acre-ft, included in contents. Capacity below sill of inlet to Tecolote tunnel, elevation, 660 ft, 32,514 acre-ft, below spillway level, elevation, 720 ft, 125,292 acre-ft, below top of 4 radial gates, elevation, 750 ft, 204,874 acre-ft. Water is released from outlet to Santa Ynez River to satisfy downstream water rights. Water diverted to Tecolote tunnel for use by city of Santa Barbara, nearby communities, Santa Ynez River Water Conservation District, and to Cachuma recreation area.

COOPERATION.--Reservoir elevation, contents, and diversion figures were provided by Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 221,100 acre-ft, Feb. 24, 1969, elevation, 755.11 ft; minimum since initial filling in April 1958, 105,300 acre-ft, Dec. 24, 25, 1977, elevation 710.56 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 171,500 acre-ft, Oct. 1, elevation, 738.52 ft; minimum, 135,700 acre-ft, Sept. 30, elevation, 724.53 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Total diversions (acre-feet)
Sept. 30.....	738.56	171,600	--	--
Oct. 31.....	737.28	168,100	-3,500	2,040
Nov. 30.....	736.90	167,100	-1,000	852
Dec. 31.....	737.47	168,600	+1,500	45
CAL YR 1984.....	--	--	-36,000	29,207
Jan. 31.....	737.46	168,600	0	711
Feb. 28.....	737.67	169,200	+600	794
Mar. 31.....	737.33	168,200	-1,000	1,690
Apr. 30.....	736.39	165,700	-2,500	2,150
May 31.....	734.49	160,700	-5,000	2,860
June 30.....	732.39	155,200	-5,500	3,480
July 31.....	730.03	149,200	-6,000	4,360
Aug. 31.....	727.02	141,700	-7,500	3,830
Sept. 30.....	724.53	135,700	-6,000	2,780
WTR YR 1985.....	--	--	-35,900	25,592

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA

LOCATION.--Lat 34°37'06", long 120°07'11", in NW 1/4 NW 1/4 sec.11, T.6 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank at downstream side of bridge on Alamo Pintado Road, 1.5 mi northeast of Solvang.

DRAINAGE AREA.--29.4 mi².

PERIOD OF RECORD.--October 1970 to September 1985 (discontinued). Records prior to October 1970 in files of Santa Barbara County Flood Control District.

GAGE.--Water-stage recorder. Datum of gage is 540.49 ft Santa Barbara County datum.

REMARKS.--No estimated daily discharges. Records fair. No regulation above station. Pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--15 years, 0.86 ft³/s, 623 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 900 ft³/s, Mar. 1, 1983, gage height, 6.10 ft, from rating curve extended above 70 ft³/s on basis of slope-area measurements at gage heights 4.90 ft and 5.51 ft; maximum gage height, 6.80 ft, Feb. 9, 1978, from floodmark; no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 10.32 ft, from information by Santa Barbara County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1945	*40	*3.55	Feb. 9	0300	26	3.42

Minimum daily, 0.03 ft³/s, June 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.35	.39	1.2	1.0	1.3	.52	.22	.16	.06	.08	.32
2	.49	.36	.41	1.1	1.1	1.4	.53	.23	.17	.06	.08	.28
3	.46	.35	.42	1.1	1.0	1.2	.53	.23	.14	.05	.07	.25
4	.45	.35	.42	1.1	1.0	1.2	.45	.21	.11	.04	.08	.22
5	.45	.33	.41	1.2	1.0	1.2	.39	.21	.11	.04	.08	.20
6	.40	.34	.39	1.2	1.0	1.2	.41	.19	.12	.05	.07	.19
7	.35	.34	.49	1.4	1.0	1.2	.41	.22	.12	.05	.06	.14
8	.41	.46	.56	1.4	1.6	1.0	.40	.21	.11	.05	.07	.14
9	.40	.38	.48	1.4	6.7	1.1	.42	.22	.11	.04	.09	.14
10	.42	.38	.58	1.3	1.5	.94	.37	.22	.11	.04	.10	.14
11	.62	.38	.44	1.3	1.4	.91	.41	.23	.11	.06	.09	.13
12	1.1	.53	.45	1.4	1.5	.88	.35	.20	.12	.08	.08	.15
13	.42	1.3	.48	1.3	1.6	.85	.35	.19	.11	.06	.07	.14
14	.41	.48	.46	1.3	1.5	.91	.29	.18	.09	.05	.09	.19
15	.40	.49	.57	1.2	1.5	.88	.35	.17	.09	.06	.08	.17
16	.52	.52	.54	1.3	1.5	.88	.41	.17	.11	.06	.08	.16
17	.55	.47	.49	1.3	1.3	.79	.40	.17	.28	.06	.08	.16
18	.41	.46	.52	1.3	1.3	.90	.40	.17	.08	.07	.08	.20
19	.43	.43	5.0	1.3	1.3	.83	.39	.17	.09	.07	.07	.18
20	.36	.42	2.8	1.3	1.4	.77	.40	.17	.08	.07	.08	.16
21	.36	.42	1.4	1.2	1.4	.71	.38	.17	.06	.07	.11	.18
22	.35	.44	1.2	1.2	1.3	.72	.35	.17	.06	.08	.06	.18
23	.35	.44	1.2	1.1	1.3	.72	.34	.17	.05	.08	.06	.17
24	.35	.53	1.3	1.1	1.2	.63	.30	.17	.03	.07	.06	.17
25	.34	.45	1.4	1.1	1.2	.61	.32	.19	.03	.08	.08	.13
26	.36	.45	1.2	1.1	1.2	.64	.33	.18	.03	.09	.09	.13
27	.35	.45	1.2	1.1	1.2	.79	.28	.16	.07	.10	.10	.14
28	.39	.49	1.2	1.1	1.3	.67	.22	.17	.07	.09	.16	.15
29	.38	.41	1.1	1.0	---	.72	.25	.17	.06	.09	.26	.15
30	.37	.40	1.1	1.0	---	.62	.23	.18	.07	.09	.51	.12
31	.35	---	1.1	1.0	---	.55	---	.17	---	.08	2.9	---
TOTAL	13.47	13.60	29.70	37.4	41.3	27.72	11.18	5.88	2.95	2.04	5.97	5.18
MEAN	.43	.45	.96	1.21	1.48	.89	.37	.19	.098	.066	.19	.17
MAX	1.1	1.3	5.0	1.4	6.7	1.4	.53	.23	.28	.10	2.9	.32
MIN	.34	.33	.39	1.0	1.0	.55	.22	.16	.03	.04	.06	.12
AC-FT	27	27	59	74	82	55	22	12	5.9	4.0	12	10
CAL YR 1984	TOTAL	246.52	MEAN	.67	MAX	5.0	MIN	.14	AC-FT	489		
WTR YR 1985	TOTAL	196.39	MEAN	.54	MAX	6.7	MIN	.03	AC-FT	390		

SANTA YNEZ RIVER BASIN

11128300 ALISAL RESERVOIR NEAR SOLVANG, CA

LOCATION.--Lat 34°32'56", long 120°07'45", in NE 1/4 NW 1/4 sec.4, T.5 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, in cove, on right bank 0.4 mi upstream from reservoir spillway, and 3 mi south of Solvang.

DRAINAGE AREA.--7.83 mi².

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by earthfill dam. Storage began Dec. 19, 1970. Usable capacity, 2,260 acre-ft between bottom of outlet gate at elevation 555.70 ft and crest of spillway at elevation 599.88 ft. Dead storage, 110 acre-ft. Inflow must total 150 acre-ft during any one month between November and June in order to store flows for that water year.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,770 acre-ft, Mar. 4, 1978, elevation, 604.31 ft; minimum, 748 acre-ft, Nov. 8-10, 1972, elevation, 577.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,340 acre-ft, Mar. 28, elevation, 599.54 ft; minimum, 2,010 acre-ft Nov. 6, elevation, 595.83 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	596.24	2,040	--
Oct. 31.....	599.88	2,010	-30
Nov. 30.....	596.01	2,020	+10
Dec. 31.....	598.19	2,220	+200
CAL YR 1984.....	--	--	-160
Jan. 31.....	598.62	2,260	+40
Feb. 28.....	599.18	2,310	+50
Mar. 31.....	599.53	2,340	+30
Apr. 30.....	599.38	2,320	-20
May 31.....	599.00	2,290	-30
June 30.....	598.43	2,240	-50
July 31.....	597.81	2,180	-60
Aug. 31.....	597.22	2,130	-50
Sept. 30.....	596.77	2,090	-40
WTR YR 1985.....	--	--	+50

11128500 SANTA YNEZ RIVER AT SOLVANG, CA

LOCATION.--Lat 34°35'06", long 120°08'37", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, near left bank on downstream end of pier of Alisal Road bridge, 25 ft downstream from Alisal Creek, 0.8 mi southwest of Solvang, and 10 mi downstream from Lake Cachuma.

DRAINAGE AREA.--579 mi².

PERIOD OF RECORD.--October 1928 to November 1936, June 1937 to November 1940 (irrigation seasons only), October 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 362.43 ft above National Geodetic Vertical Datum of 1929. Various datums used during period of record. July 29 to Sept. 30, 1953, auxiliary water-stage recorder 750 ft upstream at different datum. Oct. 1, 1953, to Sept. 30, 1968, water-stage recorder at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 8-14. Records poor. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952 Lake Cachuma (stations 11121000, 11122000, 11125500). Water diverted out of basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water for irrigation pumped from wells along banks of river in valley upstream.

EXTREMES FOR PERIOD OF RECORD (1928-36 and since 1946).--Maximum discharge, 82,000 ft³/s, estimated, Jan. 25, 1969, gage height, 17.1 ft, from floodmark; no flow for several months in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 93 ft³/s, Aug. 13, gage height, 1.41 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	1.6	3.0	5.1	1.4	.72		0		0	0
2		0	2.1	3.2	5.3	1.4	.17		13		0	0
3		0	2.1	3.4	3.1	1.3	.03		47		0	0
4		0	2.0	3.7	2.1	1.4	0		55		0	0
5		0	1.6	3.4	2.8	1.3	0		17		0	0
6		0	.82	3.4	2.9	1.7	0		.23		0	0
7		0	.41	4.5	2.8	2.6	0		0		0	0
8		.10	2.2	4.2	2.6	2.5	0		0		7.2	0
9		.20	1.9	4.0	6.6	2.7	0		0		45	0
10		.30	3.0	4.0	5.8	2.7	0		0		67	0
11		.40	2.8	4.0	4.8	2.7	0		0		75	0
12		2.0	2.5	3.7	4.5	3.0	0		0		76	0
13		3.0	2.4	3.3	4.4	3.0	0		0		76	0
14		4.0	2.4	3.3	4.1	3.0	0		0		14	0
15		3.1	3.0	3.4	4.0	3.2	0		0		2.0	0
16		3.0	7.6	3.3	3.6	3.1	0		0		.47	0
17		2.2	5.8	3.3	3.7	3.0	0		0		.02	0
18		2.3	5.4	3.3	3.5	3.4	0		0		0	0
19		2.1	41	3.4	3.3	2.6	0		0		.02	0
20		1.9	27	3.6	3.2	2.2	0		0		.02	0
21		1.9	10	4.0	3.0	2.9	0		0		.01	0
22		1.8	7.1	3.8	2.6	3.1	0		0		0	0
23		2.1	5.4	3.5	2.4	3.1	0		0		0	13
24		2.4	4.8	2.5	2.2	2.2	0		0		0	34
25		2.5	4.1	4.1	2.2	1.5	0		0		0	45
26		2.1	3.8	4.9	1.8	1.3	0		0		0	50
27		1.7	3.7	4.9	1.5	1.5	0		0		0	54
28		2.0	3.3	5.7	1.3	2.1	0		0		0	53
29		1.7	3.2	3.8	---	2.3	0		0		0	52
30		1.8	3.0	5.6	---	2.6	0		0		0	52
31		---	3.2	5.1	---	1.6	---		---		0	---
TOTAL	0	44.60	169.23	119.3	95.2	72.4	0.92	0	132.23	0	362.74	353
MEAN	0	1.49	5.46	3.85	3.4	2.34	.031	0	4.41	0	11.7	11.8
MAX	0	4.0	41	5.7	6.6	3.4	.72	0	55	0	76	54
MIN	0	0	.41	2.5	1.3	1.3	0	0	0	0	0	0
AC-FT	0	88	336	237	189	144	1.8	0	262	0	719	700
CAL YR 1984	TOTAL	3966.29	MEAN	10.8	MAX	350	MIN	0	AC-FT	7870		
WTR YR 1985	TOTAL	1349.62	MEAN	3.70	MAX	76	MIN	0	AC-FT	2680		

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA

LOCATION.--Lat 34°35'19", long 120°24'27", in W 1/2 sec.24, T.6 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060010, on right bank at bridge on Jalama Road, 0.4 mi downstream from El Jaro Creek, and 4.4 mi southeast of Lompoc.

DRAINAGE AREA.--47.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Elevation of gage is 220 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulation above station. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--44 years, 10.2 ft³/s, 7,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s Mar. 15, 1952, gage height, 20.8 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	0400	*239	*2.64				

Minimum daily, 0.09 ft³/s, several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.70	1.3	2.0	2.2	2.0	2.2	1.2	.36	.17	.16	.10
2	.23	.64	1.3	2.0	2.3	2.1	2.0	1.2	.41	.17	.15	.11
3	.23	.74	1.4	1.8	1.9	2.1	2.0	1.2	.62	.17	.15	.10
4	.23	1.2	2.2	1.8	1.8	2.0	2.0	1.2	.52	.17	.15	.11
5	.24	1.3	2.3	1.9	1.8	2.1	2.0	1.1	.49	.17	.15	.11
6	.25	1.2	3.0	2.0	1.8	2.5	2.0	1.1	.37	.17	.15	.11
7	.25	.84	3.9	2.7	1.8	3.9	1.9	1.2	.26	.17	.15	.10
8	.25	1.7	8.7	3.1	17	2.7	1.8	1.2	.25	.17	.15	.10
9	.25	1.3	5.2	2.4	21	2.2	1.8	1.1	.25	.17	.14	.10
10	.25	.85	12	2.2	4.6	2.2	1.8	1.2	.24	.17	.14	.10
11	.26	.87	3.6	2.0	3.1	2.6	1.8	1.1	.24	.17	.14	.10
12	.26	1.4	2.3	2.0	2.8	2.4	1.8	1.1	.24	.17	.14	.10
13	.26	5.8	2.0	1.8	2.5	2.3	1.6	1.0	.23	.17	.14	.10
14	.25	1.6	2.0	1.8	2.3	2.2	1.5	.93	.23	.17	.14	.10
15	.25	1.2	4.8	1.8	2.2	2.2	1.4	.88	.22	.17	.13	.09
16	.24	2.0	13	1.8	2.2	2.2	1.4	.90	.22	.16	.13	.10
17	.26	1.7	3.2	1.8	2.2	2.2	1.7	.87	.22	.16	.13	.10
18	.50	1.7	7.6	1.8	2.2	2.6	2.0	.84	.22	.16	.13	.10
19	.46	2.3	67	1.9	2.2	2.5	1.9	.84	.22	.16	.13	.10
20	.44	2.2	12	2.0	2.2	2.2	1.9	.83	.22	.16	.13	.10
21	.48	2.5	4.7	2.0	2.2	2.2	1.8	.79	.21	.16	.13	.10
22	.51	2.0	3.5	2.1	2.0	2.1	1.9	.69	.21	.16	.12	.09
23	.48	2.0	2.9	2.0	2.0	2.0	1.8	.52	.21	.16	.12	.09
24	.41	3.4	2.7	2.0	2.0	2.0	1.7	.52	.20	.16	.12	.09
25	.38	4.0	2.5	2.0	2.0	2.0	1.5	.68	.20	.16	.12	.09
26	.39	2.2	2.5	2.0	2.0	2.1	1.4	.71	.19	.16	.12	.10
27	.45	1.6	2.6	2.0	2.0	3.4	1.4	.75	.19	.16	.11	.10
28	.52	2.2	2.5	2.2	2.0	3.2	1.2	.64	.19	.16	.11	.09
29	.59	2.2	2.3	2.3	---	2.5	1.2	.51	.18	.16	.11	.10
30	.55	1.6	2.0	2.2	---	2.2	1.2	.45	.18	.16	.11	.10
31	.61	---	2.0	2.2	---	2.2	---	.45	---	.16	.10	---
TOTAL	10.96	54.94	189.0	63.6	96.3	73.1	51.6	27.70	7.99	5.11	4.10	2.98
MEAN	.35	1.83	6.10	2.05	3.44	2.36	1.72	.89	.27	.16	.13	.099
MAX	.61	5.8	67	3.1	21	3.9	2.2	1.2	.62	.17	.16	.11
MIN	.23	.64	1.3	1.8	1.8	2.0	1.2	.45	.18	.16	.10	.09
AC-FT	22	109	375	126	191	145	102	55	16	10	8.1	5.9
CAL YR 1984	TOTAL	961.70	MEAN	2.63	MAX	67	MIN	.22	AC-FT	1910		
WTR YR 1985	TOTAL	587.38	MEAN	1.61	MAX	67	MIN	.09	AC-FT	1170		

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

pH: Water year 1982 to September 1983.

WATER TEMPERATURES: Water year 1982 to September 1983.

PERIOD OF DAILY RECORD.--

pH: October 1981 to September 1983.

WATER TEMPERATURES: October 1981 to September 1983.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

pH: Maximum, 8.8 units, July 30, Sept. 16, 1983; minimum, 7.2 units, June 6, 16, 1983.

WATER TEMPERATURES: Maximum recorded, 26.0°C, July 13, 14, 1983; minimum recorded, 3.5°C, Jan. 8, 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT									
02...	1450	0.24	1550	7.9	22.0	--	--	--	--
NOV									
01...	1345	0.69	1420	8.0	13.5	570	190	130	60
DEC									
03...	1450	1.4	1420	8.0	13.0	--	--	--	--
JAN									
02...	1700	2.0	1530	8.2	9.0	--	--	--	--
FEB									
05...	1000	1.8	1410	7.8	5.5	--	--	--	--
MAR									
05...	1000	2.1	1400	8.3	9.0	--	--	--	--
APR									
02...	1000	2.1	1390	8.2	15.5	--	--	--	--
MAY									
01...	1305	1.2	1410	8.1	20.5	--	--	--	--
JUN									
04...	0955	0.58	1500	7.9	17.0	--	--	--	--
JUL									
01...	1220	0.17	1620	7.9	24.5	--	--	--	--
AUG									
01...	1220	0.16	1560	7.8	23.0	--	--	--	--
SEP									
04...	1215	0.11	1660	7.6	18.5	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT								
02...	--	--	--	--	--	--	--	--
NOV								
01...	110	29	2	2.4	385	250	130	0.5
DEC								
03...	--	--	--	--	--	--	--	--
JAN								
02...	--	--	--	--	--	--	--	--
FEB								
05...	--	--	--	--	--	--	--	--
MAR								
05...	--	--	--	--	--	--	--	--
APR								
02...	--	--	--	--	--	--	--	--
MAY								
01...	--	--	--	--	--	--	--	--
JUN								
04...	--	--	--	--	--	--	--	--
JUL								
01...	--	--	--	--	--	--	--	--
AUG								
01...	--	--	--	--	--	--	--	--
SEP								
04...	--	--	--	--	--	--	--	--

SANTA YNEZ RIVER BASIN

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 02...	--	1060	--	--	--	--	--	--
NOV 01...	28	--	1940	<0.10	0.10	740	16	62
DEC 03...	--	914	--	--	--	--	--	--
JAN 02...	--	1010	--	--	--	--	--	--
FEB 05...	--	954	--	--	--	--	--	--
MAR 05...	--	913	--	--	--	--	--	--
APR 02...	--	897	--	--	--	--	--	--
MAY 01...	--	908	--	--	--	--	--	--
JUN 04...	--	952	--	--	--	--	--	--
JUL 01...	--	1100	--	--	--	--	--	--
AUG 01...	--	1070	--	--	--	--	--	--
SEP 04...	--	1100	--	--	--	--	--	--

¹ Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA

LOCATION.--Lat 34°38'14", long 120°25'28", in Canada de Salsipuedes Grant, Santa Barbara County, on left bank 0.6 mi upstream from State Highway 246, 1.9 mi east of Lompoc, 1.8 mi downstream from Salsipuedes Creek, and 12.4 mi downstream from Lake Cachuma.

DRAINAGE AREA.--789 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1947 to November 1951 (irrigation seasons only). May 1952 to September 1963, October 1964 to September 1978, October 1980 to current year. Records equivalent, except for low-flow periods, to those published as "near Lompoc" (station 11133500), November to December 1906, October 1907 to September 1918, May 1925 to September 1960, October 1978 to September 1980.

GAGE.--Two water-stage recorders. Elevation of main gage is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1715 for history of changes prior to Oct. 1, 1961. Since Oct. 1, 1961, at various sites and datums within 0.1 mi of present site. Supplementary gage, used for high-water periods, at site 0.6 mi downstream at datum 79.25 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Dec. 26 to Jan. 2. Records fair. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952 by Lake Cachuma (stations 11121000, 11122000, 11125500). Water diverted out of Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water pumped from wells along banks of river for irrigation in valley upstream.

EXTREMES FOR PERIOD OF RECORD (1952-63 and since 1964).--Maximum discharge, 80,000 ft³/s, Jan. 25, 1969, gage height, 24.20 ft, from supplementary gage; no flow at times in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 9, 1907, 120,000 ft³/s, gage height, 22.0 ft site and datum then in use, from mean-depth study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 211 ft³/s, Dec. 19, gage height, 1.79 ft; no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	9.2	6.0	8.0	5.8	.74				
2			0	9.0	8.4	8.8	5.1	.58				
3			0	8.9	8.9	8.9	4.4	.52				
4			0	9.5	8.5	8.5	4.1	.49				
5			0	9.8	8.0	7.8	3.0	.33				
6			0	10	8.0	9.4	3.0	.34				
7			0	14	8.0	12	3.0	.37				
8			4.1	16	11	14	3.0	.33				
9			4.7	15	63	12	3.2	.30				
10			18	14	21	11	3.2	.20				
11			7.7	13	16	12	3.2	.17				
12			2.6	13	14	12	3.2	.15				
13			1.5	13	13	11	3.0	.14				
14			1.1	13	12	11	2.8	.11				
15			1.7	13	12	11	2.5	.09				
16			20	12	12	11	2.2	.07				
17			4.0	12	12	11	1.8	.07				
18			5.7	12	11	11	1.8	.07				
19			94	12	11	12	1.8	.07				
20			126	11	12	10	1.9	.07				
21			54	11	11	9.6	2.0	.07				
22			30	11	9.3	8.7	2.4	.07				
23			22	11	8.9	7.8	1.8	.07				
24			17	10	9.3	7.2	1.0	.07				
25			13	9.8	8.9	6.9	.53	.07				
26			12	9.5	8.9	6.4	.73	.08				
27			12	8.9	8.1	7.1	.68	.05				
28			11	9.1	8.0	10	.58	.03				
29			10	9.8	---	9.9	.58	.02				
30			9.8	8.6	---	7.3	.77	.01				
31			9.4	7.6	---	6.1	---	0				
TOTAL	0	0	491.3	345.7	348.2	299.4	73.07	5.75	0	0	0	0
MEAN	0	0	15.8	11.2	12.4	9.66	2.44	.19	0	0	0	0
MAX	0	0	126	16	63	14	5.8	.74	0	0	0	0
MIN	0	0	0	7.6	6.0	6.1	.53	0	0	0	0	0
AC-FT	0	0	974	686	691	594	145	11	0	0	0	0
CAL YR 1984	TOTAL	7030.71	MEAN	19.2	MAX	400	MIN	0	AC-FT	13950		
WTR YR 1985	TOTAL	1563.42	MEAN	4.28	MAX	126	MIN	0	AC-FT	3100		

SANTA YNEZ RIVER BASIN

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
JAN 02...	1100	8.9	1560	8.3	10.0	700	370	150	80
FEB 05...	1425	8.4	1570	8.4	14.5	--	--	--	--
MAR 05...	1230	8.1	1640	8.4	16.0	--	--	--	--
APR 02...	1430	4.5	1620	8.3	28.5	--	--	--	--
MAY 02...	1545	0.52	1740	7.9	22.0	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LILITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JAN 02...	95	23	2	3.0	333	440	110	0.4
FEB 05...	--	--	--	--	--	--	--	--
MAR 05...	--	--	--	--	--	--	--	--
APR 02...	--	--	--	--	--	--	--	--
MAY 02...	--	--	--	--	--	--	--	--

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 02...	21	--	¹ 1100	<0.10	0.09	510	14	86
FEB 05...	--	1170	--	--	--	--	--	--
MAR 05...	--	1150	--	--	--	--	--	--
APR 02...	--	1160	--	--	--	--	--	--
MAY 02...	--	1230	--	--	--	--	--	--

¹ Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

11134800 MIGUELITO CREEK AT LOMPOC, CA

LOCATION.--Lat 34°37'57", long 120°27'51", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank at upstream end of debris dam, and 1,500 ft south of Lompoc Union High School.

DRAINAGE AREA.--11.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 97.94 ft Santa Barbara County Flood Control District datum.

REMARKS.--Estimated daily discharges: Nov. 14, Nov. 29 to Dec. 2, Dec. 16, 18, 20, May 18-26, July 2-5, 12-16, Aug. 21 to Sept. 3, Sept. 6-8, 14, 15. Records poor. No regulation or diversion above station; some pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--15 years, 1.89 ft³/s, 1,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft³/s, Jan. 26, 1983, gage height, 7.63 ft, from rating curve extended above 380 ft³/s on basis of slope-area measurements at gage heights 4.34 ft and 7.63 ft; no flow many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 5.83 ft, from floodmark, discharge, 680 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 10	0645	*311	*4.12	Dec. 18	1530	188	3.42

Minimum daily, 0.20 ft³/s, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.39	.62	1.1	.84	.61	.92	.65	.46	.28	.30	.22
2	.38	.37	.62	1.2	1.1	.72	.81	.63	.51	.30	.27	.22
3	.32	.47	.66	1.1	1.0	.74	.72	.65	.58	.26	.26	.22
4	.26	.49	.62	1.1	1.0	.78	.72	.62	.50	.26	.29	.23
5	.24	.51	.62	1.2	.95	.78	.72	.68	.46	.25	.25	.21
6	.25	.53	.62	1.3	.97	.55	.72	.69	.42	.26	.24	.22
7	.24	.57	3.5	1.6	1.1	.93	.72	.67	.37	.28	.23	.22
8	.27	4.2	1.1	1.5	13	.43	.73	.67	.36	.31	.22	.22
9	.31	.43	.60	1.3	4.5	.43	.72	.70	.38	.29	.22	.22
10	.32	.43	26	1.3	1.8	.55	.69	.72	.41	.27	.22	.22
11	.35	.43	3.6	1.1	1.5	.60	.66	.63	.37	.30	.25	.22
12	.31	6.3	3.0	1.1	1.3	.52	.64	.72	.38	.28	.25	.22
13	.29	1.4	2.8	1.1	1.2	.52	.62	.77	.31	.28	.24	.22
14	.29	.50	2.8	1.2	1.1	.52	.64	.72	.32	.28	.23	.22
15	.33	.51	16	1.2	1.1	.51	.61	.77	.38	.28	.25	.22
16	.43	.75	6.0	1.1	.99	.50	.62	.71	.38	.28	.23	.22
17	.50	.51	4.0	1.0	.87	.52	.66	.72	.39	.29	.22	.22
18	.40	.52	8.3	1.0	.84	.80	.58	.72	.35	.26	.23	.22
19	.43	.49	33	1.1	.84	.63	.53	.72	.35	.26	.22	.22
20	.39	.45	2.7	1.2	.84	.62	.60	.84	.35	.27	.20	.22
21	.38	.43	1.6	1.2	.86	.61	.72	.72	.35	.29	.22	.22
22	.40	.46	1.4	1.0	.89	.62	.69	.72	.35	.31	.22	.22
23	.44	.43	1.2	.96	.92	.62	.69	.72	.35	.27	.22	.22
24	.35	5.2	1.2	.96	.95	.69	.69	.62	.35	.27	.22	.22
25	.36	.92	1.2	.96	.91	.77	.71	.72	.28	.26	.22	.22
26	.39	.68	1.2	.97	.84	.72	.77	.62	.35	.26	.22	.22
27	.40	.64	1.1	.99	.74	1.1	.77	.55	.35	.26	.22	.22
28	.45	.79	.96	1.1	.52	.97	.72	.56	.28	.27	.22	.22
29	.51	.64	.96	.92	---	.84	.72	.63	.27	.28	.22	.22
30	.51	.62	.93	.83	---	.87	.72	.58	.28	.26	.22	.22
31	.45	---	1.0	.79	---	.94	---	.46	---	.25	.22	---
TOTAL	11.30	31.06	129.91	34.48	43.47	21.01	20.83	20.90	11.24	8.52	7.24	6.60
MEAN	.36	1.04	4.19	1.11	1.55	.66	.69	.67	.37	.27	.23	.22
MAX	.51	6.3	33	1.6	13	1.1	.92	.84	.58	.31	.30	.23
MIN	.24	.37	.60	.79	.52	.43	.53	.46	.27	.25	.20	.21
AC-FT	22	62	258	68	86	42	41	41	22	17	14	13

CAL YR 1984	TOTAL	439.42	MEAN	1.20	MAX	33	MIN	.24	AC-FT	872
WTR YR 1985	TOTAL	346.56	MEAN	.95	MAX	33	MIN	.20	AC-FT	687

SANTA YNEZ RIVER BASIN

11134800 MIGUELITO CREEK AT LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: June 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT									
02...	1220	0.47	1450	8.4	20.0	--	--	--	--
NOV									
01...	1100	0.44	1480	8.4	15.5	640	260	140	70
DEC									
03...	1140	0.60	1370	7.8	14.0	--	--	--	--
JAN									
02...	1410	1.20	1510	8.2	10.0	--	--	--	--
FEB									
05...	1200	0.93	1570	8.2	11.0	--	--	--	--
MAR									
05...	1435	0.78	1630	8.3	13.0	--	--	--	--
APR									
02...	1115	0.85	1720	8.4	23.0	--	--	--	--
MAY									
01...	1035	0.64	1700	8.4	16.0	--	--	--	--
JUN									
04...	1205	0.49	1690	8.5	23.5	--	--	--	--
JUL									
01...	1040	0.31	1700	8.4	20.5	--	--	--	--
AUG									
01...	1015	0.33	1800	8.4	18.0	--	--	--	--
SEP									
04...	0955	0.24	1580	8.3	16.5	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT								
02...	--	--	--	--	--	--	--	--
NOV								
01...	91	24	2	2.4	373	310	130	0.5
DEC								
03...	--	--	--	--	--	--	--	--
JAN								
02...	--	--	--	--	--	--	--	--
FEB								
05...	--	--	--	--	--	--	--	--
MAR								
05...	--	--	--	--	--	--	--	--
APR								
02...	--	--	--	--	--	--	--	--
MAY								
01...	--	--	--	--	--	--	--	--
JUN								
04...	--	--	--	--	--	--	--	--
JUL								
01...	--	--	--	--	--	--	--	--
AUG								
01...	--	--	--	--	--	--	--	--
SEP								
04...	--	--	--	--	--	--	--	--

11134800 MIGUELITO CREEK AT LOMPOC, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 02...	--	1020	--	--	--	--	--	--
NOV 01...	43	--	¹ 1000	0.31	0.37	170	10	11
DEC 03...	--	915	--	--	--	--	--	--
JAN 02...	--	1090	--	--	--	--	--	--
FEB 05...	--	1120	--	--	--	--	--	--
MAR 05...	--	1090	--	--	--	--	--	--
APR 02...	--	1200	--	--	--	--	--	--
MAY 01...	--	1180	--	--	--	--	--	--
JUN 04...	--	1190	--	--	--	--	--	--
JUL 01...	--	1240	--	--	--	--	--	--
AUG 01...	--	1320	--	--	--	--	--	--
SEP 04...	--	1110	--	--	--	--	--	--

¹ Results based on Laboratory Alkalinity value.

SAN ANTONIO CREEK BASIN

11135800 SAN ANTONIO CREEK AT LOS ALAMOS, CA

LOCATION.--Lat 34°44'36", long 120°16'12", in Los Alamos Grant, Santa Barbara County, Hydrologic Unit 18060009, on left bank 100 ft upstream from bridge on northbound lane of Highway 101 at Los Alamos.

DRAINAGE AREA.--34.9 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 5-10. Records fair. No regulation above station. Pumping for irrigation of about 1,000 acres above station.

AVERAGE DISCHARGE.--15 years, 2.12 ft³/s, 1,540 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,230 ft³/s, Mar. 1, 1983, gage height, 11.6 ft, from floodmarks, from rating curve extended above 150 ft³/s on basis of flow-through-culverts measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1515	*17	*1.71				

No flow for most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	0							
2		0	0	0	0							
3		0	0	0	0							
4		0	0	0	0							
5		0	0	0	0							
6		0	0	0	0							
7		0	0	.01	0							
8		0	0	.07	.13							
9		0	0	.03	.34							
10		0	0	.02	.06							
11		0	0	0	0							
12		.02	0	0	0							
13		0	0	0	0							
14		0	0	0	0							
15		0	0	0	0							
16		0	0	0	0							
17		0	0	0	0							
18		0	.25	0	0							
19		0	4.3	0	0							
20		0	.86	0	0							
21		0	.22	0	0							
22		0	.05	0	0							
23		0	.01	0	0							
24		0	0	0	0							
25		0	0	0	0							
26		0	0	0	0							
27		0	0	0	0							
28		0	0	0	0							
29		0	0	0	---							
30		0	0	0	---							
31		---	0	0	---							
TOTAL	0	0.02	5.69	0.13	0.53	0	0	0	0	0	0	0
MEAN	0	.000	.18	.004	.019	0	0	0	0	0	0	0
MAX	0	.02	4.3	.07	.34	0	0	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	.04	11	.3	1.1	0	0	0	0	0	0	0
CAL YR 1984	TOTAL	27.80	MEAN	.076	MAX	4.3	MIN	0	AC-FT	55		
WTR YR 1985	TOTAL	6.37	MEAN	.018	MAX	4.3	MIN	0	AC-FT	13		

11136050 SAN ANTONIO CREEK ABOVE BARKA SLOUGH, NEAR ORCUTT, CA

LOCATION.--Lat 34°46'03", long 120°26'00", unsurveyed, Santa Barbara County, Hydrologic Unit 18060009, on left bank 150 ft downstream from Harris Canyon tributary, 200 ft downstream from bridge on San Antonio Road, 0.4 mi west of State Highway 1, 7.0 mi south of Orcutt, and 8.7 mi west of Los Alamos.

DRAINAGE AREA.--114 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 1985 (irrigation season only).

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 10-12, 15, 21. Records fair. No regulation above station. Flow affected by pumping from wells and irrigation runoff above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.3 ft³/s, July 6, gage height, 4.49 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							0	1.7	1.7	.39	0	0
2							0	1.2	0	0	.17	.01
3							.02	1.2	0	0	.07	0
4							.33	.39	.09	0	0	0
5							.38	0	0	0	.14	0
6							.19	0	.14	.69	.11	0
7							.20	0	.43	.01	.78	0
8							.23	0	.97	0	.27	0
9							.36	0	0	.32	.12	0
10							0	.20	.52	.65	0	0
11							0	.45	.19	.26	.71	0
12							0	.50	0	.15	.63	0
13							0	0	.18	.47	.02	0
14							0	0	.45	.01	0	0
15							0	.28	.80	.35	.59	0
16							.18	0	.12	.84	0	0
17							.25	0	0	.13	0	0
18							0	0	0	.64	0	0
19							0	.05	0	.31	0	0
20							0	.10	0	.01	.28	0
21							.12	.70	.07	.16	.44	0
22							.32	.01	0	0	1.0	0
23							.69	.21	.23	.21	0	0
24							.12	.90	.58	.16	0	0
25							.28	1.0	0	.41	0	0
26							.72	.63	0	.03	0	0
27							.79	.22	0	0	0	0
28							.79	0	.23	0	0	0
29							.63	.15	.63	0	0	0
30							.51	.98	.22	0	.28	0
31							---	1.2	---	0	.04	---
TOTAL							7.11	12.07	7.55	6.20	5.65	0.01
MEAN							.24	.39	.25	.20	.18	.0003
MAX							.79	1.7	1.7	.84	1.0	.01
MIN							0	0	0	0	0	0
AC-FT							14	24	15	12	11	.02

11136050 SAN ANTONIO CREEK ABOVE BARKA SLOUGH, NEAR ORCUTT, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
JUN 08...	1310	0.05	952*	7.6	23.0	--	--	--	--	--	--	--
JUL 12...	1815	--	--	--	32.0	--	--	--	--	--	--	--
13...	1310	0.08	1040	7.6	27.5	200	49	51	18	130	58	4
AUG 08...	1140	3.1	850	8.0	22.0	230	50	61	20	87	44	3
SEP 06...	1340	0.34	1100	8.2	28.0	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)
JUN 08...	--	--	--	--	--	--	574	--	--	--	--
JUL 12...	--	--	--	--	--	--	--	--	--	--	--
13...	4.2	152	120	160	0.7	44	--	1620	1.10	0.61	220
AUG 08...	5.9	185	100	110	0.3	35	--	1530	2.50	0.13	210
SEP 06...	--	--	--	--	--	--	804	--	--	--	--

[illegible][illegible]

11136050 SAN ANTONIO CREEK ABOVE BARKA SLOUGH, NEAR ORCUTT, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
(NOT PREVIOUSLY PUBLISHED)

DATE	ENDO-SULFAN, TOTAL (UG/L)	ENDO-SULFAN, IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, IN BOT-TOM MA-TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR, IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, EPOXIDE TOTAL (UG/L)	HEPTA-CHLOR, EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE IN BOT-TOM MA-TERIAL (UG/KG)
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	<0.01	--	<0.01	--	<0.01	<0.01	--	<0.01	--	<0.01	--
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--
SEP 06...	--	--	--	--	--	--	--	--	--	--	--

DATE	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	MIREX, IN BOT-TOM MA-TERIAL (UG/KG)	PARA-THION, TOTAL (UG/L)	PER-THANE, TOTAL (UG/L)	PER-THANE IN BOTTOM MATERIAL (UG/KG)	PROME-TONE TOTAL (UG/L)
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.1	--	<0.1
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--
SEP 06...	--	--	--	--	--	--	--	--	--	--	--

DATE	PROME-TRYNE TOTAL (UG/L)	PRO-PAZINE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA-ZINE TOTAL (UG/L)	SIME-TRYNE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOXA-PHENE, TOTAL (UG/KG)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
JUN 08...	--	--	--	--	--	--	--	--	--	--	--
JUL 12...	0.1	<0.1	<0.01	0.1	<0.1	<1	--	<0.01	0.03	<0.01	<0.01
JUL 13...	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--
SEP 06...	--	--	--	--	--	--	--	--	--	--	--

* Lab value.

1 Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CaCO3)	HARD-NESS, NONCAR-BONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO
APR 16...	1500	0.32	925	8.1	21.0	280	85	70	25	93	42	3
MAY 21...	1000	0.98	--	--	16.0	--	--	--	--	--	--	--
JUL 18...	1000	0.97	935*	7.8	18.0	220	52	57	19	99	49	3

See footnotes at end of table.

11136050 SAN ANTONIO CREEK ABOVE BARKA SLOUGH, NEAR ORCUTT, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)
APR 16...	5.4	193	110	120	0.3	37	--	1580	0.33	0.52	180
MAY 21...	--	--	--	--	--	--	--	--	--	--	--
JUL 18...	5.5	169	85	140	0.4	45	--	560	1.80	0.89	190
DATE	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	PCB, TOTAL (UG/L)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ALDRIN, TOTAL (UG/L)	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	AME- TRYNE TOTAL	ATRA- ZINE, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)
APR 16...	49	13	--	--	--	--	--	--	--	--	--
MAY 21...	--	--	<0.1	<1.0	<0.1	<1.0	<0.01	<0.1	--	--	<0.1
JUL 18...	22	8	<0.1	--	<0.1	--	<0.01	--	<0.1	<0.1	<0.1
DATE	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CYAN- AZINE TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL (UG/L)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL (UG/L)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
APR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	<1.0	--	<0.01	65	<0.01	26	0.02	120	<0.01	<0.01	2.3
JUL 18...	--	<0.1	<0.01	--	<0.01	--	<0.01	--	<0.01	<0.01	--
DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDO- SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL (UG/L)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	HEPTA- CHLOR, TOTAL EPOXIDE TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL (UG/L)	LINDANE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
APR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	0.04	14	<0.01	19	<0.01	<0.01	<0.1	<0.01	<0.1	<0.01	0.2
JUL 18...	<0.01	--	<0.01	--	<0.01	<0.01	--	<0.01	--	<0.01	--
DATE	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METH- OXY- CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	PER- THANE IN BOTTOM MATERIL (UG/KG)	PROME- TONE TOTAL (UG/L)
APR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.1	<0.01	<0.1	<1.00	--
JUL 18...	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.1	--	<0.1

See footnotes at end of table.

11136050 SAN ANTONIO CREEK ABOVE BARKA SLOUGH, NEAR ORCUTT, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	PROME- TRYNE TOTAL (UG/L)	PRO- PAZINE TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	SIMA- ZINE TOTAL (UG/L)	SIME- TRYNE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOXA- PHENE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)
APR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 21...	--	--	<0.01	--	--	<1	<10	<0.01	<0.01	<0.01	<0.01
JUL 18...	<0.1	<0.1	--	2.4	<0.1	<1	--	<0.01	--	--	--

* Lab value.

¹ Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

SAN ANTONIO CREEK BASIN

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA

LOCATION.--Lat 34°46'56", long 120°31'47", in Jesus Maria Grant, Santa Barbara County, Hydrologic Unit 18060009, on Vandenberg Military Reservation on downstream side of San Antonio Road bridge, 0.7 mi east of junction of San Antonio Road and Lompoc-Casmalia Road, and 3.8 mi south of Casmalia.

DRAINAGE AREA.--135 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Concrete control August 1970 to March 1983 and since December 1984. Elevation of gage is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 27, 1958, at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 5 to Dec. 11. Records fair except for period of estimated daily discharges, which are poor. No regulation above station. Flow affected by pumping from wells along stream for irrigation above station. At times water released to creek from Vandenberg Air Force Base water-treatment plant.

AVERAGE DISCHARGE.--30 years, 6.37 ft³/s, 4,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,680 ft³/s, Mar. 1, 1983, gage height, 14.32 ft, from rating curve extended above 1,100 ft³/s, on basis of slope-area measurement at gage height 12.93 ft; minimum gage, 0.10 ft³/s, June 19, 20, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2230	*42	*2.18				
Minimum daily, 0.36 ft ³ /s, July 16, 30.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.80	.99	.77	1.3	1.1	1.0	.79	1.1	.68	.52	.68
2	.73	.70	.90	.85	1.4	1.2	1.0	1.7	2.1	.62	.71	.81
3	.84	.54	.70	.83	1.4	1.2	.80	1.3	1.2	.58	.73	.84
4	.82	.66	.52	.76	1.3	1.1	.86	1.5	.90	.64	.75	.91
5	.91	.76	1.5	.80	1.2	1.2	.90	1.0	.86	.63	.80	1.0
6	.90	.64	3.7	.84	1.3	1.4	.92	.70	.82	.60	.80	.99
7	.96	.78	1.7	1.4	1.4	1.7	.88	.70	.75	.66	.76	.87
8	.97	.98	1.6	1.6	2.4	1.6	.92	.71	.77	.56	.71	.91
9	.94	1.1	2.7	1.4	14	1.5	.90	.70	.78	.51	.72	.86
10	.84	.90	5.4	1.3	2.5	1.5	.89	.70	.77	.53	.71	.87
11	.98	.70	3.0	1.2	1.7	1.4	.92	.75	.68	.49	.78	.80
12	1.1	.64	.79	1.1	1.6	1.3	.94	.77	.65	.44	.65	.88
13	.94	2.7	.56	1.0	1.4	1.2	.91	.79	.78	.52	.61	.87
14	.86	.90	.66	1.1	1.3	1.1	.87	.69	.80	.46	.46	.82
15	.86	.78	.98	1.2	1.3	1.2	.76	.67	.80	.50	.42	.69
16	1.0	.74	6.2	1.0	1.1	1.1	.83	.66	.80	.36	.42	.66
17	1.2	1.1	1.9	1.0	1.2	1.1	.98	.62	.65	.41	.47	.71
18	1.1	1.3	1.8	1.0	1.1	1.3	.97	.64	.53	.44	.51	.63
19	.94	1.1	23	1.0	1.1	1.1	.95	.66	.58	.54	.63	.66
20	.90	1.3	18	1.1	1.1	1.1	.89	.64	.56	.57	.76	.54
21	.98	1.3	3.2	1.3	1.1	1.1	.94	.65	.65	.55	.83	.57
22	.90	1.5	2.0	1.3	1.1	1.1	1.0	.65	.71	.57	.86	.62
23	.80	.90	1.6	1.2	1.0	1.0	.94	.66	.71	.65	.92	.52
24	.64	2.2	1.2	1.2	1.0	1.0	.97	.72	.77	.62	.91	.59
25	.54	.90	1.1	1.2	1.0	1.0	.94	.74	.72	.60	.77	.67
26	.85	.64	1.1	1.3	1.1	.98	.94	.96	.64	.54	.77	.69
27	.84	.60	1.0	1.4	1.1	1.3	1.0	.96	.64	.52	.82	.72
28	.90	.90	1.0	1.5	1.1	1.1	.89	1.0	.74	.47	.80	.66
29	.86	1.1	.94	1.4	---	1.0	1.3	.84	.76	.43	.77	.67
30	.85	.97	.96	1.4	---	.95	1.1	.83	.71	.36	.70	.73
31	.83	---	.76	1.3	---	.98	---	.82	---	.56	.65	---
TOTAL	27.25	30.13	91.46	35.75	49.6	36.91	28.11	25.52	23.93	16.61	21.72	22.49
MEAN	.88	1.00	2.95	1.15	1.77	1.19	.94	.82	.80	.54	.70	.75
MAX	1.2	2.7	23	1.6	14	1.7	1.3	1.7	2.1	.68	.92	1.0
MIN	.47	.54	.52	.76	1.0	.95	.76	.62	.53	.36	.42	.52
AC-FT	54	60	181	71	98	73	56	51	47	33	43	45
CAL YR 1984	TOTAL	466.66	MEAN	1.28	MAX	23	MIN	.47	AC-FT	926		
WTR YR 1985	TOTAL	409.48	MEAN	1.12	MAX	23	MIN	.36	AC-FT	812		

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

pH: December 1981 to September 1983.

WATER TEMPERATURES: December 1981 to September 1983.

PERIOD OF DAILY RECORD.--

pH: December 1981 to September 1983.

WATER TEMPERATURES: December 1981 to September 1983.

INSTRUMENTATION.--Water-quality monitor from December 1981 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

pH: Maximum, 8.8 units, Feb. 5, 1983; minimum, 7.2 units, Jan. 27, Feb. 25, 26, 1983.

WATER TEMPERATURES: Maximum recorded, 31.0°C, Aug. 7, 1983; minimum recorded, 4.0°C, Jan. 8, 9, 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 10...	1630	0.89	2530	8.2	18.5	530	160	140	43
NOV 08...	1245	1.0	2510	7.9	16.0	--	--	--	--
DEC 05...	1115	1.2	2450	8.0	12.0	--	--	--	--
JAN 10...	1140	1.3	2420	7.9	10.5	700	380	190	54
FEB 14...	1150	1.4	2630	7.9	13.0	--	--	--	--
MAR 20...	1130	1.2	2710	8.0	15.5	--	--	--	--
APR 16...	1255	0.86	2680	8.0	16.5	860	510	220	75
MAY 17...	1255	0.60	2480	7.9	16.0	--	--	--	--
JUN 17...	1100	0.59	2420	7.8	18.5	--	--	--	--
JUL 18...	1215	0.45	2280	7.9	18.5	570	160	150	47
AUG 16...	1030	0.53	2400	7.9	17.5	--	--	--	--
SEP 20...	1115	0.50	2500*	7.9	16.0	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 10...	320	56	6	17	371	270	440	0.3
NOV 08...	--	--	--	--	--	--	--	--
DEC 05...	--	--	--	--	--	--	--	--
JAN 10...	290	47	5	15	314	470	370	0.4
FEB 14...	--	--	--	--	--	--	--	--
MAR 20...	--	--	--	--	--	--	--	--
APR 16...	330	45	5	14	353	530	400	0.4
MAY 17...	--	--	--	--	--	--	--	--
JUN 17...	--	--	--	--	--	--	--	--
JUL 18...	320	54	6	17	412	260	430	0.3
AUG 16...	--	--	--	--	--	--	--	--
SEP 20...	--	--	--	--	--	--	--	--

See footnotes at end of table.

SAN ANTONIO CREEK BASIN

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 10...	56	--	¹ 1500	4.90	0.87	2000	40	60
NOV 08...	--	1550	--	--	--	--	--	--
DEC 05...	--	1590	--	--	--	--	--	--
JAN 10...	50	--	1600	7.70	0.64	1600	30	420
FEB 14...	--	1880	--	--	--	--	--	--
MAR 20...	--	1900	--	--	--	--	--	--
APR 16...	31	--	1800	3.30	0.64	1800	70	70
MAY 17...	--	1600	--	--	--	--	--	--
JUN 17...	--	1540	--	--	--	--	--	--
JUL 18...	41	--	1500	1.30	1.10	1900	30	20
AUG 16...	--	1500	--	--	--	--	--	--
SEP 20...	--	1500	--	--	--	--	--	--

* Lab value.

¹ Results based on Laboratory Alkalinity value.

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA

LOCATION.--Lat 35°01'19", long 120°13'39", in SW 1/4 sec.14, T.11 N., R.32 W., San Luis Obispo-Santa Barbara County line, Hydrologic Unit 18060007, on downstream side of bridge on State Highway 166, 0.7 mi downstream from Buckhorn Canyon, and 13 mi northeast of Santa Maria.

DRAINAGE AREA.--886 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to December 1905 (published as Santa Maria River near Santa Maria), October 1959 to current year. Monthly discharge only for October 1903 and July 1904 and yearly estimate for water year 1941 (incomplete), published in WSP 1315-B.

GAGE.--Water-stage recorder. Elevation of gage is 760 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REVISED RECORDS.--WDR-CA-77-1: 1976.

REMARKS.--Estimated daily discharges: Oct. 1-9, Nov. 30 to Dec. 6, Jan. 8, Feb. 8-12. Records fair. No regulation above station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

AVERAGE DISCHARGE.--28 years (water years 1904, 1905, 1960-85) 24.0 ft³/s, 17,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft³/s, Feb. 25, 1969, gage height, 13.70 ft, from rating curve extended above 4,900 ft³/s on basis of slope-area measurement at gage height 10.85 ft; maximum gage height, 14.74 ft, Mar. 4, 1978; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1930	*112	*6.73				
Minimum daily, 0.17 ft ³ /s, Oct. 8, 9, 14.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.22	3.6	4.5	4.4	2.5	2.0	.44	.47	.43	.35	.34
2	.22	.23	3.4	4.5	7.9	2.9	1.7	.43	.48	.42	.34	.35
3	.21	.22	3.4	4.3	6.2	4.3	1.4	.44	.46	.41	.35	.38
4	.20	.22	3.2	4.5	5.9	3.5	1.4	.42	.45	.40	.36	.39
5	.19	.23	4.0	4.1	5.4	3.3	1.2	.43	.42	.41	.36	.36
6	.18	.23	3.3	4.8	4.9	6.5	1.2	.42	.42	.43	.36	.36
7	.18	.23	2.5	8.9	4.6	17	1.0	.47	.44	.42	.36	.36
8	.17	.92	4.3	18	12	5.3	.83	.49	.42	.39	.38	.38
9	.17	.71	3.8	8.2	19	3.7	.84	.46	.42	.38	.40	.37
10	.18	.46	4.3	8.6	7.8	4.4	.68	.42	.42	.36	.42	.38
11	.22	.46	5.0	6.5	5.8	4.9	.62	.44	.43	.37	.45	.37
12	.19	.72	8.7	6.2	4.9	3.8	.55	.46	.44	.38	.43	.36
13	.18	5.5	4.8	6.4	4.3	3.0	.43	.46	.46	.39	.41	.34
14	.17	7.6	3.3	6.2	3.9	2.9	.38	.44	.47	.39	.43	.33
15	.18	5.2	7.4	5.7	3.7	3.1	.43	.45	.49	.39	.44	.33
16	.22	3.8	15	5.6	3.2	2.9	.60	.45	.50	.39	.45	.34
17	.23	4.8	7.3	5.4	3.3	2.4	1.1	.46	.51	.39	.48	.34
18	.21	3.3	17	5.1	3.4	3.3	1.7	.47	.51	.41	.45	.34
19	.21	3.8	49	4.9	3.2	4.1	1.3	.48	.52	.43	.43	.33
20	.20	3.1	61	4.9	3.1	2.8	1.2	.51	.53	.39	.42	.33
21	.20	3.8	14	4.9	3.0	2.3	1.2	.50	.54	.39	.41	.32
22	.20	4.5	9.3	4.9	2.8	1.8	1.1	.48	.53	.39	.41	.30
23	.20	4.4	7.9	4.8	2.9	1.6	.83	.46	.54	.39	.40	.30
24	.20	5.3	6.9	4.6	2.7	1.6	.54	.47	.54	.39	.39	.28
25	.20	4.9	6.2	4.4	2.6	1.5	.50	.48	.53	.37	.39	.28
26	.20	4.0	6.9	4.3	2.6	1.5	.48	.50	.49	.35	.39	.31
27	.20	4.0	6.0	4.3	2.7	6.9	.45	.48	.45	.35	.38	.31
28	.20	7.5	5.9	4.4	2.5	8.1	.42	.49	.45	.35	.35	.30
29	.20	5.7	6.4	5.4	---	4.5	.45	.50	.48	.36	.35	.32
30	.20	4.3	6.1	4.9	---	3.1	.46	.48	.45	.36	.34	.32
31	.21	---	5.3	4.6	---	2.4	---	.48	---	.36	.33	---
TOTAL	6.15	90.35	295.2	178.8	138.7	121.9	26.99	14.36	14.26	12.04	12.21	10.12
MEAN	.20	3.01	9.52	5.77	4.95	3.93	.90	.46	.48	.39	.39	.34
MAX	.23	7.6	61	18	19	17	2.0	.51	.54	.43	.48	.39
MIN	.17	.22	2.5	4.1	2.5	1.5	.38	.42	.42	.35	.33	.28
AC-FT	12	179	586	355	275	242	54	28	28	24	24	20
CAL YR 1984	TOTAL	1385.73	MEAN	3.79	MAX	61	MIN	.13	AC-FT	2750		
WTR YR 1985	TOTAL	921.08	MEAN	2.52	MAX	61	MIN	.17	AC-FT	1830		

SANTA MARIA RIVER BASIN

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT									
09...	1600	0.17	1510	8.3	26.0	510	320	97	65
NOV									
07...	1445	0.23	1480	8.1	18.5	--	--	--	--
DEC									
06...	1145	3.4	3160	8.3	16.0	--	--	--	--
JAN									
08*...	1615	16	2900	8.3	12.5	1100	690	260	110
FEB									
12...	1620	4.8	2740	8.2	18.0	--	--	--	--
MAR									
18...	1520	2.8	2630	8.2	16.5	--	--	--	--
APR									
17...	1550	0.78	1910	8.2	23.5	--	--	--	--
MAY									
15...	1600	0.41	1810	8.2	28.5	--	--	--	--
JUN									
19...	1445	0.46	1840	8.2	30.5	--	--	--	--
JUL									
16...	1445	0.36	1710	8.3	32.0	--	--	--	--
AUG									
15...	0950	0.47	1780	8.2	19.0	--	--	--	--
SEP									
17...	1430	0.36	1620	8.2	27.5	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT								
09...	120	34	2	4.6	185	520	68	0.6
NOV								
07...	--	--	--	--	--	--	--	--
DEC								
06...	--	--	--	--	--	--	--	--
JAN								
08...	280	35	4	7.5	451	1210	200	0.7
FEB								
12...	--	--	--	--	--	--	--	--
MAR								
18...	--	--	--	--	--	--	--	--
APR								
17...	--	--	--	--	--	--	--	--
MAY								
15...	--	--	--	--	--	--	--	--
JUN								
19...	--	--	--	--	--	--	--	--
JUL								
16...	--	--	--	--	--	--	--	--
AUG								
15...	--	--	--	--	--	--	--	--
SEP								
17...	--	--	--	--	--	--	--	--

See footnotes at end of table.

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 09...	15	--	¹ 1000	<0.10	0.01	440	8	7
NOV 07...	--	1090	--	--	--	--	--	--
DEC 06...	--	2530	--	--	--	--	--	--
JAN 08...	11	--	¹ 2300	0.24	0.02	560	40	60
FEB 12...	--	2220	--	--	--	--	--	--
MAR 18...	--	2130	--	--	--	--	--	--
APR 17...	--	1480	--	--	--	--	--	--
MAY 15...	--	1420	--	--	--	--	--	--
JUN 19...	--	1400	--	--	--	--	--	--
JUL 16...	--	1410	--	--	--	--	--	--
AUG 15...	--	1360	--	--	--	--	--	--
SEP 17...	--	1240	--	--	--	--	--	--

* Preservation delayed.

¹ Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

SANTA MARIA RIVER BASIN

11137900 HUASNA RIVER NEAR ARROYO GRANDE, CA

LOCATION.--Lat 35°04'40", long 120°22'15", in Huasna Grant, San Luis Obispo County, Hydrologic Unit 18060007, on right bank 300 ft downstream from Huasna Creek, and 12 mi southeast of Arroyo Grande.

DRAINAGE AREA.--103 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 640 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. No regulation upstream from station. Extensive diversions upstream from station into cattle ponds for three ranches and for irrigation.

AVERAGE DISCHARGE.--26 years, 20.0 ft³/s, 14,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft³/s, Jan. 25, 1969, gage height, 15.90 ft, from rating curve extended above 1,300 ft³/s on basis of slope-area measurement of peak flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 40 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	1600	41	3.30	Mar. 28	1800	111	4.01
Feb. 9	0230	*529	*4.66				

Minimum daily, 0.09 ft³/s, Sept. 19, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.47	.89	.15	.83	2.6	5.4	4.9	.30	1.6	1.0	.13
2	.21	.47	.83	.17	1.2	4.5	1.9	3.7	.28	.66	1.1	.10
3	.51	.54	.82	.16	1.2	5.3	1.2	3.5	.36	.24	.82	.11
4	.37	.46	.67	.16	1.1	4.1	.45	1.9	.36	.19	1.1	.11
5	.16	.40	.66	.18	1.1	1.3	.52	1.8	1.5	.16	1.3	.11
6	.26	.47	.62	.16	1.0	1.5	.45	.78	.75	.16	.15	.10
7	.16	.61	.59	.19	1.0	4.6	.50	.62	.37	.21	.15	.10
8	.14	.77	.59	4.1	.45	2.0	.40	.35	.26	.25	.15	.10
9	.14	.70	.53	.32	1.79	2.4	.28	.29	.40	.16	.14	.10
10	.14	.74	.59	.42	.21	2.8	.27	.22	.92	.16	.14	.10
11	.15	.81	.47	.41	6.3	2.9	.26	.21	1.5	.16	.14	.10
12	.16	.94	.47	.35	1.5	3.4	.42	.21	1.6	.46	.36	.12
13	.15	1.2	.47	.40	.81	3.8	.53	.19	.74	.34	.13	.36
14	.15	.92	.52	.36	.60	4.9	.82	.15	.65	.79	.12	.24
15	.16	1.1	1.2	.40	.47	5.6	.30	.15	.58	.17	.25	.17
16	.25	1.1	.51	.53	.43	5.2	.47	.15	.62	.18	.12	.11
17	.28	1.1	.33	.81	.47	6.2	.42	.51	1.4	2.0	.11	.11
18	.26	1.1	.50	.32	.41	6.5	.38	.34	2.1	.36	.11	.10
19	.28	1.1	6.3	.27	.39	5.3	.47	.19	1.3	.28	.11	.09
20	.26	1.1	.75	.23	.47	5.6	.59	.24	.98	.35	.11	.10
21	.24	1.1	.28	.23	.50	4.2	.65	.22	.73	.61	.12	.10
22	.22	1.1	.23	.25	.53	3.3	.99	.15	.76	.49	.12	.89
23	.23	1.2	.19	.26	.84	3.0	.89	.24	.55	.43	.28	.57
24	.28	1.6	.17	.26	.90	3.0	1.1	.16	.48	.47	.12	.09
25	.31	1.1	.18	.32	1.2	2.9	1.4	.21	.45	.50	.12	.09
26	.30	1.1	.16	.61	2.0	3.4	1.6	.19	1.1	.52	.11	.10
27	.34	1.2	.18	.77	1.3	4.9	1.8	.19	1.2	.66	.11	.10
28	.37	1.6	.18	1.1	1.9	33	2.1	.21	1.0	.68	.12	.10
29	.40	1.0	.16	1.0	---	30	2.8	.26	.49	.72	.18	.11
30	.43	.94	.16	.84	---	16	3.3	.24	.31	.65	1.5	.12
31	.43	---	.16	.92	---	9.5	---	.31	---	.62	.44	---
TOTAL	7.92	28.04	20.36	16.65	273.45	193.7	32.66	22.78	24.04	15.23	10.83	4.83
MEAN	.26	.93	.66	.54	9.77	6.25	1.09	.73	.80	.49	.35	.16
MAX	.51	1.6	6.3	4.1	1.79	33	5.4	4.9	2.1	2.0	1.5	.89
MIN	.14	.40	.16	.15	.39	1.3	.26	.15	.26	.16	.11	.09
AC-FT	16	56	40	33	542	384	65	45	48	30	21	9.6
CAL YR 1984	TOTAL	884.79	MEAN	2.42	MAX	33	MIN	.14	AC-FT	1750		
WTR YR 1985	TOTAL	650.49	MEAN	1.78	MAX	179	MIN	.09	AC-FT	1290		

11137900 HUASNA RIVER NR ARROYO GRANDE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUC- TANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
OCT 03...	1505	.43	915	8.4	19.0	--	--	--	--	--	--	--
NOV 06...	1205	.53	856	8.7	17.5	--	--	--	--	--	--	--
DEC 10...	1210	.63	895	8.2	14.5	--	--	--	--	--	--	--
JAN 08...	1140	3.8	683	8.2	11.0	--	--	--	--	--	--	--
FEB 04...	1120	.88	941	8.0	12.0	--	--	--	--	--	--	--
MAR 05...	1300	1.4	880	7.9	14.0	--	--	--	--	--	--	--
APR 01...	1125	6.8	810	8.2	18.0	--	--	--	--	--	--	--
MAY 06...	1410	.57	843	7.7	17.5	--	--	--	--	--	--	--
JUN 03...	1325	.42	866	8.1	20.5	--	--	--	--	--	--	--
JUL 10...	1045	.18	958	7.8	21.5	--	--	--	--	--	--	--
AUG 07...	1005	.16	915	7.9	17.0	--	--	--	--	--	--	--
SEP 03...	1345	.12	905	8.0	18.0	380	100	98	33	46	21	1

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 03...	--	--	--	--	--	--	586	--	.80	.68	--	--
NOV 06...	--	--	--	--	--	--	654	--	.89	.94	--	--
DEC 10...	--	--	--	--	--	--	602	--	.82	1.0	--	--
JAN 08...	--	--	--	--	--	--	477	--	.65	4.9	--	--
FEB 04...	--	--	--	--	--	--	611	--	.83	1.5	--	--
MAR 05...	--	--	--	--	--	--	582	--	.79	2.2	--	--
APR 01...	--	--	--	--	--	--	534	--	.73	9.8	--	--
MAY 06...	--	--	--	--	--	--	559	--	.76	.86	--	--
JUN 03...	--	--	--	--	--	--	587	--	.80	.67	--	--
JUL 10...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	--	--	--	--	--	--	609	--	.83	.26	--	--
SEP 03...	2.1	279	140	48	.50	42	--	580	.79	.19	.18	1.00

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
SEP 03...	1345	140	18

SANTA MARIA RIVER BASIN

11138500 SISQUOC RIVER NEAR SISQUOC, CA

LOCATION.--Lat 34°50'23", long 120°10'02", in Sisquoc Grant, Santa Barbara County, Hydrologic Unit 18060008, on left bank 2.6 mi upstream from La Brea Creek, and 7 mi east of Sisquoc.

DRAINAGE AREA.--281 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. October 1929 to September 1933, at site 0.2 mi downstream; low-flow records not equivalent owing to diversion immediately upstream. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 624.30 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). See WSP 1735 for history of changes prior to Aug. 24, 1951.

REMARKS.--Estimated daily discharges: Oct. 1-9, 12-16, 31, Nov. 1-6, Aug. 27-31, Sept. 1-4, 11-15. Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--42 years, 46.1 ft³/s, 33,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,200 ft³/s, Dec. 6, 1966, gage height, 15.75 ft, from rating curve extended above 1,700 ft³/s on basis of slope-area measurements at gage heights 10.08 ft and 15.75 ft; no flow Nov. 11-18, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 11,000 ft³/s, gage height, 8.1 ft, from high-water mark in gage well, at site in use 1929-33, from rating curve extended above 2,800 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 19	2215	*222	*2.60				

Minimum daily, 0.50 ft³/s, Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.70	1.2	16	14	18	33	7.3	3.1	1.4	1.1	.84
2	.55	.69	1.2	16	15	20	29	7.6	3.0	1.3	1.0	.86
3	.54	.72	1.4	16	15	20	27	7.5	2.9	1.4	1.0	.87
4	.54	.71	1.3	15	14	19	26	7.1	2.8	1.4	1.0	.88
5	.62	.71	1.4	15	13	18	24	6.9	2.6	1.4	1.0	.90
6	.62	.72	1.3	15	13	20	23	6.9	2.5	1.4	.97	.92
7	.54	.76	1.4	18	13	27	22	6.8	2.4	1.4	.95	.92
8	.52	.95	1.4	35	15	30	20	6.6	2.1	1.3	.91	.92
9	.56	.75	1.4	41	78	25	19	6.5	2.1	1.3	.86	.93
10	.50	.72	1.5	32	78	23	17	6.6	1.9	1.4	.87	.92
11	.71	.73	1.4	26	50	23	16	6.4	1.8	1.3	.90	.89
12	.58	1.1	1.4	23	39	32	15	6.4	1.7	1.4	.90	.88
13	.54	1.6	1.4	21	32	29	14	6.2	1.6	1.4	.89	.87
14	.53	1.2	1.4	19	28	27	14	5.8	1.6	1.4	.88	.88
15	.52	1.2	1.9	18	26	27	14	5.5	1.6	1.3	.91	.88
16	.60	1.6	1.8	17	25	25	14	5.1	1.6	1.3	.93	.89
17	.82	1.3	1.4	16	24	23	13	4.9	1.5	1.3	.97	.91
18	.63	1.2	2.4	16	23	25	16	4.8	1.5	1.3	.93	.91
19	.66	1.2	38	16	23	25	14	4.6	1.5	1.3	.92	.91
20	.70	1.2	128	15	23	23	14	4.5	1.6	1.2	.92	.88
21	.72	1.2	63	15	22	21	15	4.4	1.6	1.2	.91	.84
22	.73	1.2	44	15	22	20	13	4.0	1.6	1.2	.88	.83
23	.69	1.2	34	15	20	20	12	3.7	1.6	1.2	.85	.89
24	.68	1.4	28	15	20	19	11	3.5	1.7	1.1	.88	.91
25	.71	1.3	24	15	20	19	9.9	3.6	1.6	1.1	.88	.85
26	.71	1.2	21	14	19	19	9.3	3.7	1.6	1.1	.87	.96
27	.75	1.2	20	14	19	23	8.8	3.6	1.5	1.1	.85	1.1
28	.74	1.3	18	14	18	50	8.2	3.4	1.5	1.1	.84	1.1
29	.74	1.3	17	15	---	55	7.7	3.4	1.5	1.1	.83	1.1
30	.80	1.2	17	14	---	43	7.4	3.1	1.4	1.1	.83	1.1
31	.73	---	17	14	---	37	---	3.2	---	1.1	.83	---
TOTAL	19.84	32.26	495.6	566	721	805	486.3	163.6	57.0	39.3	28.26	27.54
MEAN	.64	1.08	16.0	18.3	25.8	26.0	16.2	5.28	1.90	1.27	.91	.92
MAX	.82	1.6	128	41	78	55	33	7.6	3.1	1.4	1.1	1.1
MIN	.50	.69	1.2	14	13	18	7.4	3.1	1.4	1.1	.83	.63
AC-FT	39	64	983	1120	1430	1600	965	325	113	78	56	55
CAL YR 1984	TOTAL	3767.37	MEAN	10.3	MAX	128	MIN	.31	AC-FT	7470		
WTR YR 1985	TOTAL	3441.70	MEAN	9.43	MAX	128	MIN	.50	AC-FT	6830		

11138500 SISQUOC RIVER NEAR SISQUOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 09...	1200	0.63	1130*	8.4	24.0	500	320	92	65
NOV 07...	1000	0.74	1200	7.8	16.0	--	--	--	--
DEC 11...	1030	1.4	1200	8.4	12.0	--	--	--	--
JAN 08...	1115	24	1120	8.5	12.5	510	300	100	64
FEB 12...	1100	43	1090	8.3	13.5	--	--	--	--
MAR 18...	1050	24	1110	8.5	14.5	--	--	--	--
APR 17...	1030	14	1100	8.6	21.0	--	--	--	--
MAY 15...	1000	5.5	1130	8.4	20.5	--	--	--	--
JUN 19...	1015	1.6	1100	8.3	19.0	--	--	--	--
JUL 16...	1030	1.5	1130	7.9	22.0	--	--	--	--
AUG 15...	1315	0.93	1180	8.0	23.5	--	--	--	--
SEP 17...	1030	0.94	1170	7.7	18.5	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT 09...	58	20	1	2.3	178	430	24	0.5
NOV 07...	--	--	--	--	--	--	--	--
DEC 11...	--	--	--	--	--	--	--	--
JAN 08...	53	18	1	2.1	209	420	22	0.4
FEB 12...	--	--	--	--	--	--	--	--
MAR 18...	--	--	--	--	--	--	--	--
APR 17...	--	--	--	--	--	--	--	--
MAY 15...	--	--	--	--	--	--	--	--
JUN 19...	--	--	--	--	--	--	--	--
JUL 16...	--	--	--	--	--	--	--	--
AUG 15...	--	--	--	--	--	--	--	--
SEP 17...	--	--	--	--	--	--	--	--

See footnotes at end of table.

SANTA MARIA RIVER BASIN

11138500 SISQUOC RIVER NEAR SISQUOC, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 09...	21	--	1800	<0.10	0.10	180	6	<1
NOV 07...	--	904	--	--	--	--	--	--
DEC 11...	--	887	--	--	--	--	--	--
JAN 08...	15	--	1800	<0.10	0.02	140	<3	6
FEB 12...	--	768	--	--	--	--	--	--
MAR 18...	--	808	--	--	--	--	--	--
APR 17...	--	829	--	--	--	--	--	--
MAY 15...	--	840	--	--	--	--	--	--
JUN 19...	--	852	--	--	--	--	--	--
JUL 16...	--	873	--	--	--	--	--	--
AUG 15...	--	873	--	--	--	--	--	--
SEP 17...	--	881	--	--	--	--	--	--

* Lab value.

1 Results based on Laboratory Alkalinity value.

< Actual value is known to be less than the value shown.

11139500 TEPUSQUET CREEK NEAR SISQUOC, CA

LOCATION.--Lat 34°52'21", long 120°14'37", unsurveyed, Santa Barbara County, Hydrologic Unit 18060008, on downstream wingwall of right bridge abutment on Tepusquet Road, 1.1 mi upstream from mouth, and 3 mi east of Sisquoc.

DRAINAGE AREA.--28.7 mi².

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 9, 1948, at datum 0.9 ft higher.

REMARKS.--Estimated daily discharges: Feb. 10-12. Records fair. No regulation above station. Some diversion by pumping from wells along stream to irrigate about 100 acres above gage.

AVERAGE DISCHARGE.--42 years, 1.76 ft³/s, 1,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 788 ft³/s, Dec. 6, 1966, gage height, 5.48 ft, from rating curve extended above 220 ft³/s on basis of computation of maximum flow at contracted opening; maximum gage height, 6.33 ft, Mar. 1, 1983; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 9	0300	*97	*4.35				
Minimum daily, 0.02 ft ³ /s, Sept. 25.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.18	.37	.46	1.2	1.2	.83	.89	.85	.34	.19	.07
2	.12	.19	.37	.47	1.5	1.3	.84	.97	.88	.22	.16	.12
3	.13	.18	.37	.47	1.2	1.2	.89	.95	.87	.22	.13	.15
4	.14	.18	.37	.47	1.3	1.2	1.1	.95	.85	.19	.10	.13
5	.17	.17	.37	.51	1.3	1.3	.99	1.0	.78	.26	.14	.15
6	.15	.19	.37	.47	1.2	1.2	1.0	1.1	.78	.25	.10	.14
7	.15	.21	.37	.55	1.2	1.3	1.1	1.1	.79	.22	.09	.16
8	.17	.28	.37	.66	5.2	1.2	1.2	1.0	.77	.25	.09	.14
9	.18	.21	.37	.58	16	1.2	1.3	1.0	.76	.29	.14	.11
10	.21	.21	.38	.57	3.1	1.3	1.1	.93	.63	.23	.18	.11
11	.24	.21	.37	.58	2.1	1.3	1.2	.90	.59	.16	.17	.10
12	.21	.35	.37	.58	1.4	1.3	1.3	.93	.61	.16	.19	.11
13	.15	.31	.37	.58	1.2	1.3	1.4	.95	.60	.18	.19	.09
14	.15	.21	.37	.58	1.2	1.3	1.3	.85	.56	.23	.18	.10
15	.15	.21	1.5	.58	1.2	1.2	1.2	.89	.55	.19	.18	.11
16	.21	.38	1.0	.59	1.2	1.2	1.2	.94	.56	.22	.11	.09
17	.28	.21	.59	.61	1.1	1.2	1.2	.88	.55	.22	.14	.13
18	.24	.41	1.9	.61	1.1	1.3	1.2	.86	.53	.29	.20	.11
19	.23	.23	4.4	.63	1.1	1.2	1.0	.91	.47	.34	.20	.11
20	.27	.29	1.2	.78	1.1	1.2	1.0	.92	.50	.29	.16	.15
21	.26	.37	.61	1.0	1.1	1.0	1.1	.94	.51	.17	.09	.16
22	.24	.36	.65	1.0	1.2	.99	.93	.94	.44	.14	.14	.15
23	.23	.30	.47	1.1	1.2	.99	.94	.78	.46	.18	.16	.11
24	.16	.58	.44	1.1	1.2	.99	.94	.79	.46	.14	.14	.03
25	.15	.37	.40	1.1	1.1	.99	.95	.78	.45	.14	.09	.02
26	.15	.37	.37	1.2	1.1	1.0	.94	.80	.38	.15	.09	.04
27	.16	.37	.47	.95	1.1	.86	.93	.85	.28	.16	.10	.09
28	.18	.47	.44	1.2	1.1	.82	.94	.90	.37	.22	.10	.09
29	.19	.37	.43	1.2	---	.82	.94	.75	.39	.25	.08	.14
30	.20	.37	.46	1.2	---	.89	.85	.82	.34	.24	.07	.13
31	.19	---	.47	1.2	---	.84	---	.84	---	.22	.07	---
TOTAL	5.76	8.74	20.99	23.58	55.0	35.09	31.81	28.11	17.56	6.76	4.17	3.34
MEAN	.19	.29	.68	.76	1.96	1.13	1.06	.91	.59	.22	.13	.11
MAX	.28	.58	4.4	1.2	16	1.3	1.4	1.1	.88	.34	.20	.16
MIN	.10	.17	.37	1.1	1.1	.82	.83	.75	.28	.14	.07	.02
AC-FT	11	17	42	47	109	70	63	56	35	13	8.3	6.6

CAL YR 1984	TOTAL	275.39	MEAN	.75	MAX	4.4	MIN	.05	AC-FT	546
WTR YR 1985	TOTAL	240.91	MEAN	.66	MAX	16	MIN	.02	AC-FT	478

SANTA MARIA RIVER BASIN

11140000 SISQUOC RIVER NEAR GAREY, CA

LOCATION.--Lat 34°53'38", long 120°18'20", in SW 1/4 sec.36, T.10 N., R.33 W., Santa Barbara County, Hydrologic Unit 18060008, on downstream side of Santa Maria Mesa Road bridge near left bank, 0.6 mi northeast of Garey, and 3.7 mi downstream from Tepusquet Creek.

DRAINAGE AREA.--471 mi².

PERIOD OF RECORD.--October 1940 to current year. Records for water year 1941 incomplete, yearly estimate and monthly discharge only for October 1940 and January 1941, published in WSP 1315-B.

GAGE.--Two water-stage recorders. Datum of main gage is 354.8 ft Santa Barbara County datum. See WSP 1735 for history of changes of main gage prior to Oct. 1, 1959. Oct. 1, 1959, to Dec. 30, 1965, at datum 6.00 ft higher. Since Oct. 1, 1959, supplementary gage on downstream side of bridge near right bank at same datum.

REMARKS.--No estimated daily discharges. Records good. No regulation above station. Pumping from wells along stream for irrigation of about 7,000 acres above station.

AVERAGE DISCHARGE.--45 years, 45.6 ft³/s, 33,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft³/s, Mar. 1, 1963, gage height, 11.16 ft, from rating curve extended above 22,000 ft³/s; maximum gage height, 13.50 ft, Dec. 6, 1966; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--No flow during year.

11140600 BRADLEY DITCH NEAR DONOVAN ROAD, AT SANTA MARIA, CA

LOCATION.--Lat 34°58'00", long 120°25'00", in NE 1/4 NE 1/4 sec.11, T.10 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060008, on left bank 250 ft upstream from bridge on Donovan Road, and 0.2 mi east of U.S. Highway 101 in Santa Maria.

DRAINAGE AREA.--5.47 mi².

PERIOD OF RECORD.--October 1970 to September 1978, October 1979 to current year.

GAGE.--Water-stage recorder on concrete-lined channel. Elevation of gage is 225 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1978, at site 50 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 1-10, 26-31, Nov. 1-7, 25-30, Dec. 1-6, Aug. 13, 14, Sept. 13-18. Records fair except for periods of estimated record, which are poor. Extensive channel modification in 1979 water year widened the concrete-lined channel.

AVERAGE DISCHARGE.--14 years, 1.45 ft³/s, 1,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 539 ft³/s, Mar. 1, 1983, gage height, 4.59 ft, from rating curve extended above 69 ft³/s on basis of computation of flow in concrete-lined channel; maximum gage height, 5.85 ft, Mar. 4, 1978; no flow for several days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 12	2130	108	2.58	Dec. 19	1330	107	2.57
Dec. 15	1900	*145	*2.83				

No flow Dec. 25, Feb. 11, Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.28	.36	.17	.46	2.2	.44	2.1	.33	.65	.80	1.4
2	.78	.22	1.1	.44	.93	2.0	1.3	2.1	.52	1.2	1.0	1.2
3	.46	.38	.72	.68	.89	1.0	2.1	1.6	1.0	1.0	.88	.77
4	.18	.60	.46	.98	.46	.58	2.8	1.0	1.4	.85	.27	1.3
5	.09	1.1	.20	.97	1.4	.32	1.5	.92	1.8	1.0	.31	.95
6	.24	.50	1.3	.78	.66	.77	1.9	1.3	1.5	1.3	.45	.98
7	.90	2.7	2.0	3.2	.64	4.2	.94	1.5	1.3	1.4	1.2	.67
8	.35	1.7	1.3	3.4	12	.34	1.1	.18	.89	.52	1.3	1.2
9	.30	.29	.84	.69	1.6	.06	1.1	1.2	1.3	1.0	1.1	.77
10	2.1	.25	5.7	.21	.04	.29	.55	2.1	.96	1.7	1.6	1.3
11	3.3	.45	.31	.09	0	.63	1.1	1.4	1.6	2.0	.63	.80
12	.87	5.4	.20	.30	.09	.02	1.9	.19	1.7	1.3	.71	.24
13	.78	3.9	.81	.01	.78	.01	1.9	.05	.89	1.2	1.1	.50
14	.40	.60	2.0	.20	1.8	0	1.7	.08	.72	1.2	1.7	.78
15	.18	.47	12	.41	2.3	.11	1.2	.29	.92	.92	.99	1.1
16	1.3	1.7	3.1	.53	1.7	.20	.61	.98	.91	.84	.94	.45
17	1.2	.54	.09	.44	1.7	.09	.29	1.3	.48	.99	.86	.80
18	.13	.65	5.5	1.4	1.2	1.1	.87	1.1	1.1	1.0	1.2	1.2
19	1.1	.56	26	1.1	1.7	1.1	.95	2.0	.91	1.5	2.8	1.3
20	.44	1.4	2.8	.41	.84	1.8	1.9	1.2	1.3	1.1	1.8	1.9
21	.11	1.1	.04	.96	2.0	1.1	1.8	.85	.47	.35	2.2	1.1
22	.04	1.0	.19	.81	1.6	1.5	1.7	.15	1.5	.21	1.4	.44
23	.19	1.1	.03	1.1	2.3	1.8	.63	.82	1.0	1.0	1.8	.25
24	.58	4.3	.04	1.7	1.3	1.8	.61	1.1	.42	1.1	2.1	1.0
25	1.1	.76	0	2.0	1.5	1.7	1.5	1.5	.71	1.9	2.0	1.0
26	1.8	.20	.12	2.0	.40	1.7	1.7	2.1	1.1	.97	1.0	.71
27	.56	.30	.36	1.1	1.3	1.3	1.7	.44	1.4	.73	1.7	1.1
28	.48	.66	.90	2.5	1.2	.90	2.1	.62	1.2	.30	2.1	1.7
29	1.1	.36	.63	1.3	---	1.1	1.9	.71	.95	.43	2.0	.89
30	2.5	.11	.04	.81	---	1.1	2.2	1.4	.68	.63	1.7	.17
31	1.9	---	.67	.73	---	.60	---	.32	---	.49	1.4	---
TOTAL	27.16	33.58	69.81	31.42	42.79	30.62	41.99	32.60	30.96	30.78	41.04	27.97
MEAN	.88	1.12	2.25	1.01	1.53	.99	1.40	1.05	1.03	.99	1.32	.93
MAX	3.3	5.4	26	3.4	12	4.2	2.8	2.1	1.8	2.0	2.8	1.9
MIN	.04	.11	0	.01	0	0	.29	.05	.33	.21	.27	.17
AC-FT	54	67	138	62	85	61	83	65	61	61	81	55
CAL YR 1984	TOTAL	495.67	MEAN	1.37	MAX	26	MIN	0	AC-FT	991		
WTR YR 1985	TOTAL	440.72	MEAN	1.21	MAX	26	MIN	0	AC-FT	874		

SANTA MARIA RIVER BASIN

11141000 SANTA MARIA RIVER AT GUADALUPE, CA

LOCATION.--Lat 34°58'35", long 120°34'15", in Guadalupe Grant, Santa Barbara County, Hydrologic Unit 18060008, on downstream side of bridge on State Highway 1, 0.5 mi north of Guadalupe, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--1,741 mi².

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only October 1940 to January 1941, published in WSP 1315-B.

GAGE.--Three water-stage recorders. Datum of main gage (left channel) is 64.92 ft above National Geodetic Vertical Datum of 1929. Two supplementary gages started in 1956 at various datums and locations. Prior to Aug. 11, 1955, main gage at site 100 ft upstream at same datum above NGVD.

REMARKS.--No estimated daily discharges. Records good. Cuyama River regulated since February 1959 by Twitchell Reservoir, capacity, 240,000 acre-ft. Several small surface diversions and extensive pumping from wells for irrigation along stream above station. AVERAGE DISCHARGE represents flow to ocean, regardless of upstream development.

AVERAGE DISCHARGE.--45 years, 31.1 ft³/s, 22,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,800 ft³/s, Jan. 16, 1952, gage height, 8.18 ft; maximum gage height, 10.00 ft, Feb. 26, 1969; no flow for all or part of each year.

EXTREMES FOR CURRENT YEAR.--No flow during year.

11141050 ORCUTT CREEK NEAR ORCUTT, CA

LOCATION.--Lat 34°53'01", long 120°29'38", in SW 1/4 SE 1/4 sec.6, T.9 N., R.34 W., Santa Barbara County, Hydrologic Unit 18060008, on right bank, 10 ft upstream from Black Road bridge, 0.2 mi northeast of State Highway 1, and 3.0 mi northwest of Orcutt.

DRAINAGE AREA.--18.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion above station. Natural flow affected by pumping and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,830 ft³/s, Mar. 1, 1983, gage height, 7.53 ft, from floodmarks, from rating curve extended above 10 ft³/s on basis of slope-area measurements at gage heights 4.83 ft and 7.53 ft; no flow for several days during October and November 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47 ft³/s, Dec. 19, gage height, 2.70 ft³/s; minimum daily, 0.01 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.01	.01	.06	.16	.01	.03	.28	.10	.22	.11
2	.01	.01	.01	.01	.08	.22	.01	.06	.02	.39	.30	.07
3	.03	.01	.01	.01	.07	.04	.01	.19	.18	.31	.25	.17
4	.04	.01	.01	.01	.06	.01	.05	.26	.20	.37	.29	.21
5	.05	.01	.01	.01	.10	.17	.31	.15	.14	.20	.01	.30
6	.05	.02	.01	.01	.12	.14	.37	.13	.13	.27	.37	.42
7	.05	.01	.01	.02	.12	3.7	.16	.12	.21	.12	.53	.29
8	.01	.06	.01	.46	5.8	.10	.32	.19	.21	.03	.51	.18
9	.05	.01	.01	.05	3.0	.04	.57	.28	.12	.23	.61	.05
10	.05	.01	.05	.01	.06	.06	.31	.23	.54	.12	.46	.29
11	.01	.01	.03	.01	.04	.34	.03	.33	.40	.15	.40	.35
12	.01	.03	.01	.03	.03	.07	.01	.51	.46	.17	.03	.30
13	.01	.03	.01	.01	.12	.02	.04	.23	.33	.22	.04	.23
14	.01	.01	.01	.01	.24	.01	.07	.50	.29	.15	.21	.23
15	.02	.01	2.1	.01	.14	.02	.12	.50	.27	.01	.15	.39
16	.01	.02	2.8	.01	.33	.03	.24	.60	.33	.15	.14	.10
17	.04	.02	.02	.01	.02	.02	.62	.66	.34	.18	.15	.30
18	.01	.02	8.0	.01	.10	.08	.68	.31	.45	.16	.20	.28
19	.01	.01	22	.01	.21	.05	.55	.01	.40	.15	.01	.15
20	.02	.01	6.0	.01	.26	.02	.45	.01	.52	.17	.18	.02
21	.01	.01	.23	.01	.31	.01	.21	.28	.50	.12	.24	.01
22	.01	.02	.01	.01	.11	.02	.31	.34	.45	.01	.32	.01
23	.02	.01	.01	.01	.37	.01	.38	.38	.32	.14	.33	.01
24	.01	.04	.01	.01	.14	.01	.26	.45	.15	.17	.26	.01
25	.02	.01	.01	.01	.14	.01	.27	.47	.25	.26	.02	.01
26	.01	.01	.01	.07	.19	.01	.27	.25	.23	.26	.03	.01
27	.01	.01	.01	.04	.16	.02	.21	.17	.25	.27	.01	.01
28	.01	.02	.01	.03	.05	.08	.14	.41	.36	.15	.01	.01
29	.01	.01	.01	.18	---	.02	.18	.34	.38	.04	.01	.01
30	.01	.01	.01	.07	---	.01	.28	.16	.12	.19	.12	.01
31	.02	---	.01	.09	---	.01	---	.24	---	.27	.22	---
TOTAL	0.64	0.48	41.45	1.25	12.43	5.51	7.44	8.79	8.83	5.53	6.63	4.54
MEAN	.021	.016	1.34	.040	.44	.18	.25	.26	.29	.18	.21	.15
MAX	.05	.06	22	.46	5.8	3.7	.68	.66	.54	.39	.61	.42
MIN	.01	.01	.01	.01	.02	.01	.01	.01	.02	.01	.01	.01
AC-FT	1.3	1.0	82	2.5	25	11	15	17	18	11	13	9.0

CAL YR 1984 TOTAL 60.10 MEAN .16 MAX 22 MIN .01 AC-FT 119
WTR YR 1985 TOTAL 103.52 MEAN .28 MAX 22 MIN .01 AC-FT 205

SANTA MARIA RIVER BASIN

11141050 ORCUTT CREEK NEAR ORCUTT, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD---

CHEMICAL ANALYSES: November 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT									
10...	1400	0.03	2100	8.5	24.0	350	110	74	40
NOV									
08...	1030	0.09	1720	8.0	21.0	--	--	--	--
DEC									
05...	1245	0.01	2280	8.7	13.0	--	--	--	--
JAN									
09...	1300	0.03	1660	8.2	16.5	270	110	58	30
FEB									
13...	1330	0.29	2050	7.7	19.0	--	--	--	--
MAR									
19...	1245	0.04	3100	7.9	20.0	--	--	--	--
APR									
18...	1300	0.79	2060	7.7	19.0	--	--	--	--
MAY									
16...	1245	0.55	2090	7.6	18.5	--	--	--	--
JUN									
17...	1215	0.23	2690	7.5	23.5	--	--	--	--
JUL									
17...	1125	0.09	2320	7.5	19.5	--	--	--	--
AUG									
14...	1100	0.08	2390	7.5	15.5	--	--	--	--
SEP									
18...	1220	0.31	2390	7.8	19.0	--	--	--	--

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LILITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
OCT								
10...	300	64	7	10	235	260	380	0.6
NOV								
08...	--	--	--	--	--	--	--	--
DEC								
05...	--	--	--	--	--	--	--	--
JAN								
09...	230	64	6	7.3	163	190	300	0.4
FEB								
13...	--	--	--	--	--	--	--	--
MAR								
19...	--	--	--	--	--	--	--	--
APR								
18...	--	--	--	--	282	--	--	--
MAY								
16...	--	--	--	--	--	--	--	--
JUN								
17...	--	--	--	--	--	--	--	--
JUL								
17...	--	--	--	--	--	--	--	--
AUG								
14...	--	--	--	--	--	--	--	--
SEP								
18...	--	--	--	--	--	--	--	--

11141050 ORCUTT CREEK NEAR ORCUTT, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 10...	41	--	¹ 1300	1.90	3.00	510	60	20
NOV 08...	--	1000	--	--	--	--	--	--
DEC 05...	--	1330	--	--	--	--	--	--
JAN 09...	25	--	¹ 940	2.00	1.50	470	71	66
FEB 13...	--	1210	--	--	--	--	--	--
MAR 19...	--	1930	--	--	--	--	--	--
APR 18...	--	1270	--	--	--	--	--	--
MAY 16...	--	1310	--	--	--	--	--	--
JUN 17...	--	1570	--	--	--	--	--	--
JUL 17...	--	1470	--	--	--	--	--	--
AUG 14...	--	1430	--	--	--	--	--	--
SEP 18...	--	1430	--	--	--	--	--	--

¹ Results based on Laboratory Alkalinity value.

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 floodflow 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 crest-stage partial-record stations are presented in the following table. Discharge measurements made at miscellaneous sites are given in separate tables.

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage station 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 year 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 1985

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (ft ³ /s)
Bristol Lake basin							
10253000	Gourd Creek near Ludlow, CA	Lat 34°40'35", long 116°02'20" in SW¼ sec.23, T.7 N., R.9 E., San Bernardino County, Hydrologic Unit 18090208, at culvert on U.S. Highway 66, 8.5 mi southeast of Ludlow.	0.30	1959-74 1976-85	--	--	0
Mojave River basin							
10261800	Beacon Creek at Helendale, CA	Lat 34°45'00", long 117°18'53", in SE¼ sec.29 T.8 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, at culvert on county road (formerly U.S. Highway 66 and 91), 0.6 mi northeast of Helendale.	0.72	1959-60 1961-67* 1968-69 1976-85	--	--	0
10262600	Boom Creek near Barstow, CA	Lat 34°54'20", long 116°56'57", NW¼NE¼ sec.2 T.9 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, at culvert on U.S. Highway I-15, 4.3 mi east of Barstow.	0.24	1956-66 1967-73* 1976-85	12-28-84	9.07	12
Antelope Valley							
10263900	Buckhorn Creek near Valyermo, CA	Lat 34°20'35", long 117°55'13", in SW¼ sec.15, T.3 N., R.10 W., Los Angeles County, Hydrologic Unit 18090206, at culvert on State Highway 2, Angeles National Forest, 8.1 mi southwest of Valyermo.	0.48	1961-66* 1967-69 1971-73 1977-85	12-27-84	1.60	4.6
10264530	Pine Creek near Palmdale, CA	Lat 34°36'09", long 118°14'48", in SW¼ sec.15, T.6 N., R.13 W., Los Angeles County, Hydrologic Unit 18090206, at culvert on Pine Canyon Road, 7.5 mi northwest of Palmdale.	1.37	1959-73 1977-85	12-27-84	10.09	0.06
10264560	Spencer Canyon Creek near Fairmont, CA	Lat 34°46'33", long 118°34'08", in SW¼SW¼ sec.15, T.8 N., R.16 W., Los Angeles County, Hydrologic Unit 18090206, at culvert on county road, 8.5 mi northwest of Fairmont.	3.60	1959-64 1965-73* 1974 1978-85	--	--	0

Annual maximum discharge at crest-stage partial-record stations during water year 1985--Continued

Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Annual maximum Gage height (feet)	Discharge (ft ³ /s)
Franklin Creek basin							
11119530	Franklin Creek at Carpinteria, CA	Lat 34°24'17", long 119°31'05", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on right bank 20 ft downstream from Malibu Drive bridge, 0.5 mi north of Carpinteria, and 0.9 mi upstream from mouth.	1.81	1970-78* 1981-85	-83	a	<109
Santa Ynez River basin							
11131700	Santa Rita Creek near Lompoc, CA	Lat 34°38'41", long 120°22'09", in Santa Rita Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank 2.4 mi upstream from mouth and 6.5 mi east of Lompoc.	14.1	1976-79 1981-85	12-19-85	5.92	43
11133700	Purisima Creek near Lompoc, CA	Lat 34°41'34", long 120°25'51", in Purisima Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank 1.1 mi northeast of junction of Buener Road and Lompoc-Casmalia Road, and 4.0 mi northeast of Lompoc.	4.75	1972-75* 1976-85	12-18-84	1.71	26
11135200	Rodeo-San Pasqual Creek near Lompoc, CA	Lat 34°38'42", long 120°30'57", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on left bank 0.1 mi east of Dewolf Avenue at Highway 246 3.3 mi west of Lompoc.	7.80	1971-72* 1973-78 1980-85	2-8-85	1.60	43

*Operated as a continuous-record gaging station.

a Peak stage did not reach bottom of gage.

< Actual value is known to be less than the value shown.

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
		Atascadero Creek basin				
Maria Ygnacio Creek	Atascadero Creek	Lat 34°27'34", long 119°47'24", in SE¼NE¼ sec.3, T.4 N., R.28 W., Santa Barbara County, Hydrologic Unit 18060013, Santa Barbara County, 0.1 mi upstream from Old San Marcos Pass Road bridge, 300 ft up- stream from confluence with East Fork, and 2.5 mi northeast of Goleta.	--	1983-84	10/05/84	0.20
					10/12/84	0.11
					10/19/84	0.15
					10/29/84	0.21
					11/02/84	0.15
					11/09/84	0.21
					11/20/84	0.27
					11/30/84	0.26
					12/07/84	0.26
					12/14/84	0.28
					12/21/84	0.88
					12/28/84	0.48
					1/04/85	0.46
					1/11/85	0.38
					1/18/85	0.39
					1/25/85	0.31
					2/01/85	0.30
					2/15/85	0.46
					2/22/85	0.37
					3/01/85	0.38
					3/05/85	0.38
					3/12/85	0.37
					3/22/85	0.30
					3/29/85	0.33
					4/05/85	0.34
					4/10/85	0.33
					4/19/85	0.27
					4/24/85	0.22
					5/01/85	0.28
					5/06/85	0.17
					5/17/85	0.23
					5/30/85	0.10
					6/06/85	0.10
					6/10/85	0.14
					6/20/85	0.11
					6/28/85	0.08
					7/01/85	0.06
					7/10/85	0.00
					7/19/85	0.22
					7/26/85	0.01
					8/02/85	0.00
					8/09/85	0.04
					8/16/85	0.07
					8/20/85	0.01
					8/30/85	0.00
					9/06/85	0.00
					9/09/85	0.00
					9/18/85	0.00
					9/30/85	0.08

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Date	Discharge (ft ³ /s)
Atascadero Creek basin--Continued						
East Fork, Maria Ygnacio Creek	Maria Ygnacio Creek	Lat 34°27'36", long 119°47'26", in SE¼ sec.3, T.4 N., R.28 W., Santa Barbara County, Hydrologic Unit 18060013, 0.1 mi upstream from Old San Marcos Pass Road Bridge, 75 ft upstream from confluence with Maria Ygnacio Creek, and 2.5 mi northeast of Goleta.	--	1983-84	10/05/84 10/12/84 10/19/84 10/29/84 11/02/84 11/09/84 11/20/84 11/30/84 12/07/84 12/14/84 12/21/84 12/28/84 1/04/85 1/11/85 1/18/85 1/25/85 2/01/85 2/15/85 2/22/85 3/01/85 3/05/85 3/12/85 3/22/85 3/29/85 4/05/85 4/10/85 4/19/85 4/24/85 5/01/85 5/06/85 5/17/85 5/30/85 6/06/85 6/10/85 6/20/85 6/28/85 7/01/85 7/10/85 7/19/85 7/26/85 8/02/85 8/09/85 8/16/85 8/20/85 8/30/85 9/06/85 9/09/85 9/18/85 9/30/85	0.03 0.02 0.02 0.02 0.01 0.05 0.02 0.03 0.04 0.04 0.19 0.05 0.04 0.06 0.06 0.07 0.06 0.10 0.07 0.08 0.09 0.10 0.05 0.15 0.12 0.10 0.06 0.05 0.04 0.03 0.02 0.03 0.06 0.03 0.02 0.03 0.01 0.03 0.01 0.02 0.01 0.02 0.02 0.01 0.02
Santa Maria River basin						
Green Canyon Creek	Santa Maria River	Lat 34°57'27", long 120°37'54", Santa Barbara County, Hydrologic Unit 18060008, at culvert on west Main Street, 3.6 mi southwest of Guadalupe.	--	1982-84	10/10/84 11/08/84 12/05/84 1/09/85 2/13/85 3/19/85 4/18/85 5/16/85 6/20/85 7/17/85 8/14/85 9/18/85	14.5 17.9 4.10 5.24 5.87 4.41 12.4 16.4 17.2 15.6 9.59 12.0

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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