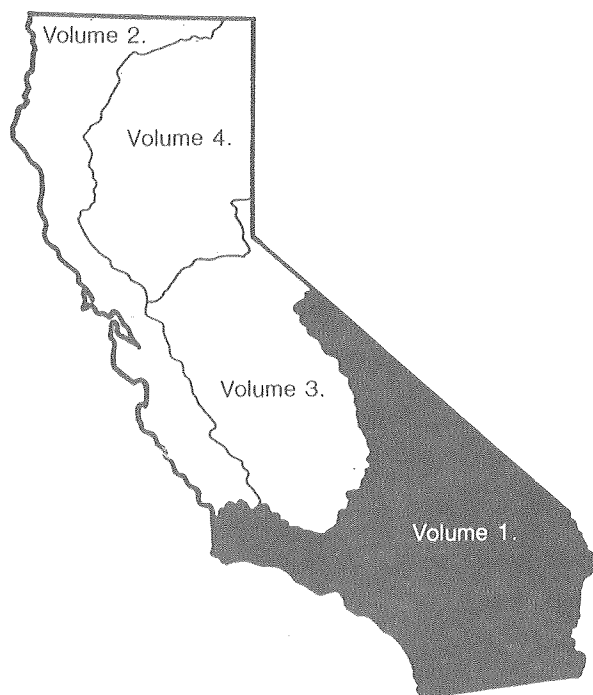


# Water Resources Data California

## Water Year 1983

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-83-1

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

# CALENDAR FOR WATER YEAR 1983

1982

## OCTOBER

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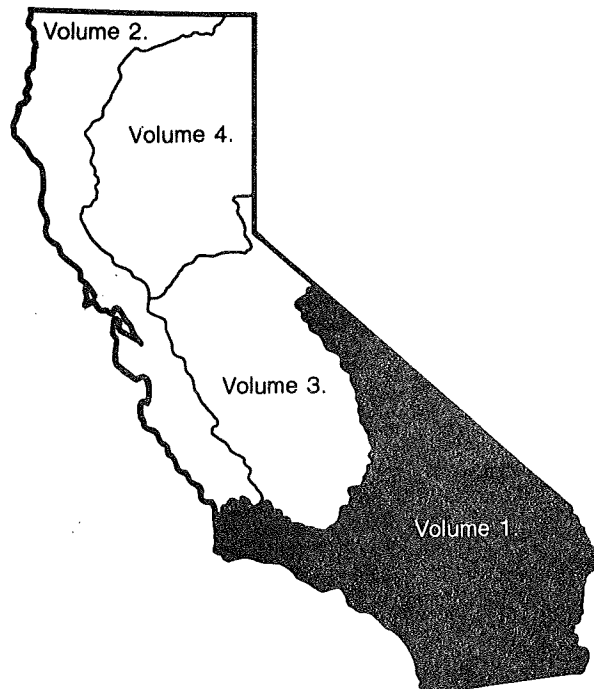
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# Water Resources Data California Water Year 1983

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

by J.C. Bowers, M.T. Butcher, C.E. Lamb, J.A. Singer, and G.B. Smith



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-83-1  
Prepared in cooperation with the California Department of  
Water Resources and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

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GEOLOGICAL SURVEY

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## 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 4 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

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 Timothy J. Durbin, District Chief, California.

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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; (b), biological;  
(sc), specific conductance; (t), water temperature; and (s), sediment]

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# WATER RESOURCES DATA FOR CALIFORNIA, 1983

## Volume 1

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### INTRODUCTION

Water-resources data for the 1983 water year for California consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and records of water levels in selected observation wells. Records for a few pertinent streamflow and water-quality stations in bordering States are also included. These data, a contribution to the National Water Data System, were collected by the Geological Survey and cooperating local, State, and Federal agencies in California.

Records of discharge or stage of streams and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled, "Surface-Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia, 22304.

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published together as an official Survey report on a State-boundary basis. These official Survey reports carry 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 report is identified as "U.S. Geological Survey Water-Data Report CA-83-1." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. Water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (916) 484-4606.

## COOPERATION

The U.S. Geological Survey and organizations of the State of California have had cooperative agreements for the systematic collection of 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 Waterways, 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 Walter, 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

Average precipitation from February 2-8 resulted in a significant increase in runoff throughout the south coastal and southeast desert basins. The most intense storm of the year, February 24 to March 7, significantly increased runoff, which resulted in some local flooding throughout the entire area. Seventy-five gaging stations had peak discharges for the year, and nine stations had the peak discharge for the period of record. In addition, high waves coupled with high tides destroyed several ocean piers along the southern coast. During six storms in August and September, unusually heavy rains in much of the area resulted in a peak discharge for the year at a few gaging stations in the area of Death Valley and Mojave Desert. Major storms scattered throughout the entire area resulted in significant runoff during the 1983 water year. Although there were a few new peaks of record, and in some areas the peak for the year was not unusually large when compared to the peak of record, the large quantities of runoff for all streams were exceptional.

Surface Water

Runoff was greater than normal during the 1983 water year for the area included in this volume and averaged 812 percent of the median runoff for water years 1951-80. Runoff at three representative gaging stations for which long-term records are available ranged from 517 percent of the median in the Santa Ana River basin and coastal basins to the south to 957 percent in the Los Angeles River basin, and 962 percent in the Santa Clara River basin (fig. 1). A comparison of monthly and annual discharge for the 1983 water year and the median discharge for the 1951-80 water years is shown in figure 2.

Large variations in precipitation and streamflow are common throughout the area but did not vary as much this year as in previous years. Precipitation ranged from 196 percent at Death Valley to 181 percent at Blythe. Precipitation was 339 percent at Brawley and was about twice the normal in most of the coastal area which ranged from 239 percent at Santa Barbara to 217 percent at Los Angeles, and 188 percent at San Diego. In San Bernardino, precipitation was 191 percent of normal.

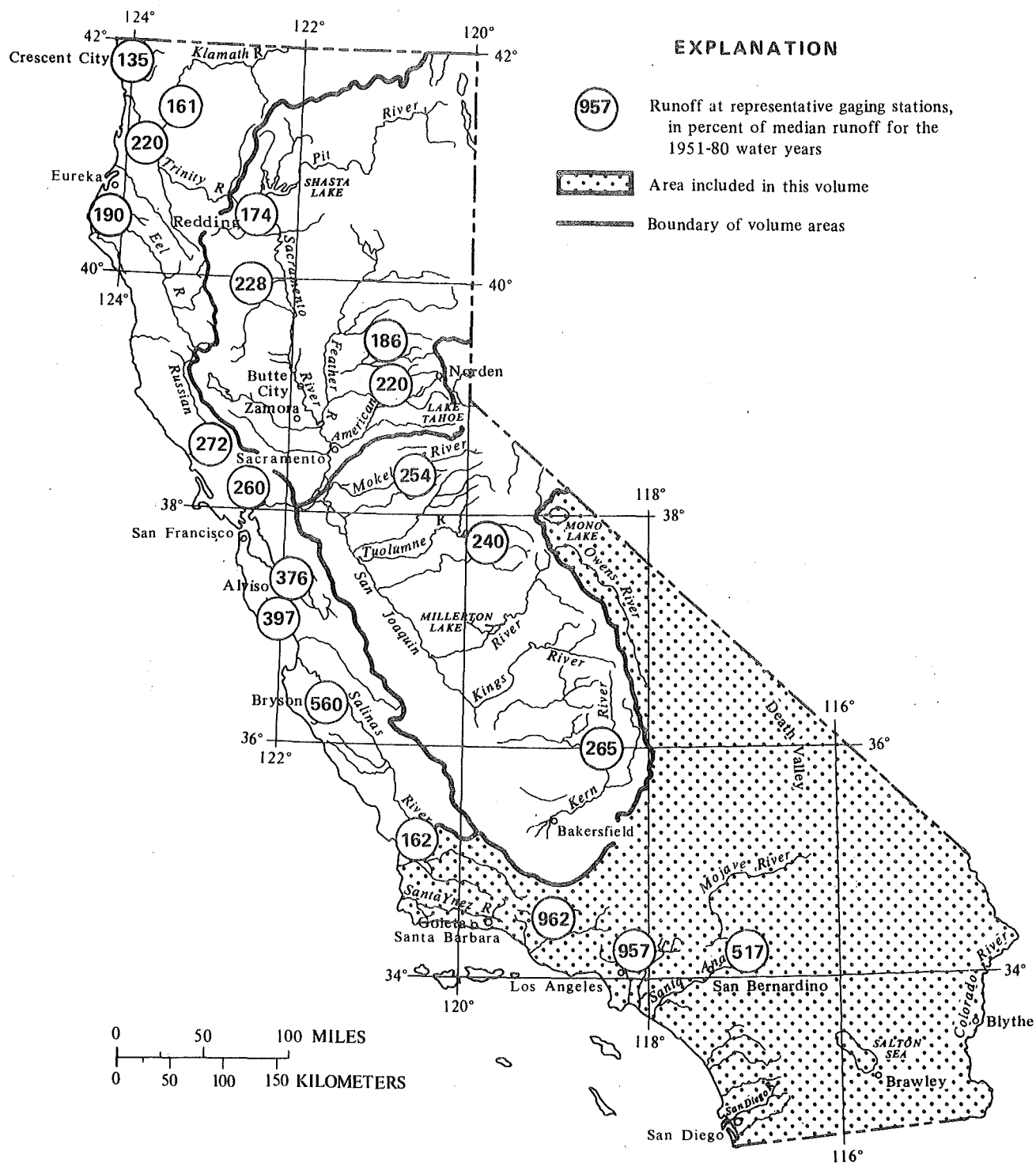
Early storms had greater than average precipitation on October 26-27, 30-31, November 9-10, 19, November 29 to December 1, December 8-10, 22-23, 23-30, and January 19 and storm runoff was large. A storm from January 22-30 was intense, especially in the Santa Barbara-Goleta area where 10 gaging stations had the peak discharge for the year, and 2 stations had the peak discharge for the period of record.

Ground Water

The geography and geology of California are sufficiently complex that a summary of ground-water conditions in the State is difficult. Descriptions of conditions in specific basins and valleys apply only to those areas and cannot be transferred to other areas.

Ground-water levels fluctuate in response to a variety of stresses and changes in stress. Short- and long-term climatic conditions can lead to changes in natural recharge and discharge. Ground-water pumping also can cause changes in ground-water levels.

In the San Gabriel Valley of Los Angeles County, the net increase of water level in the index well was more than 39 ft in 1983. In the observation well in the Coastal Plain of Los Angeles, a net increase of 0.7 ft was measured. Water levels in three observation wells in the Coastal Plain of Orange County had net increases of 2.7, 3.8, and 4.2 ft in 1983.



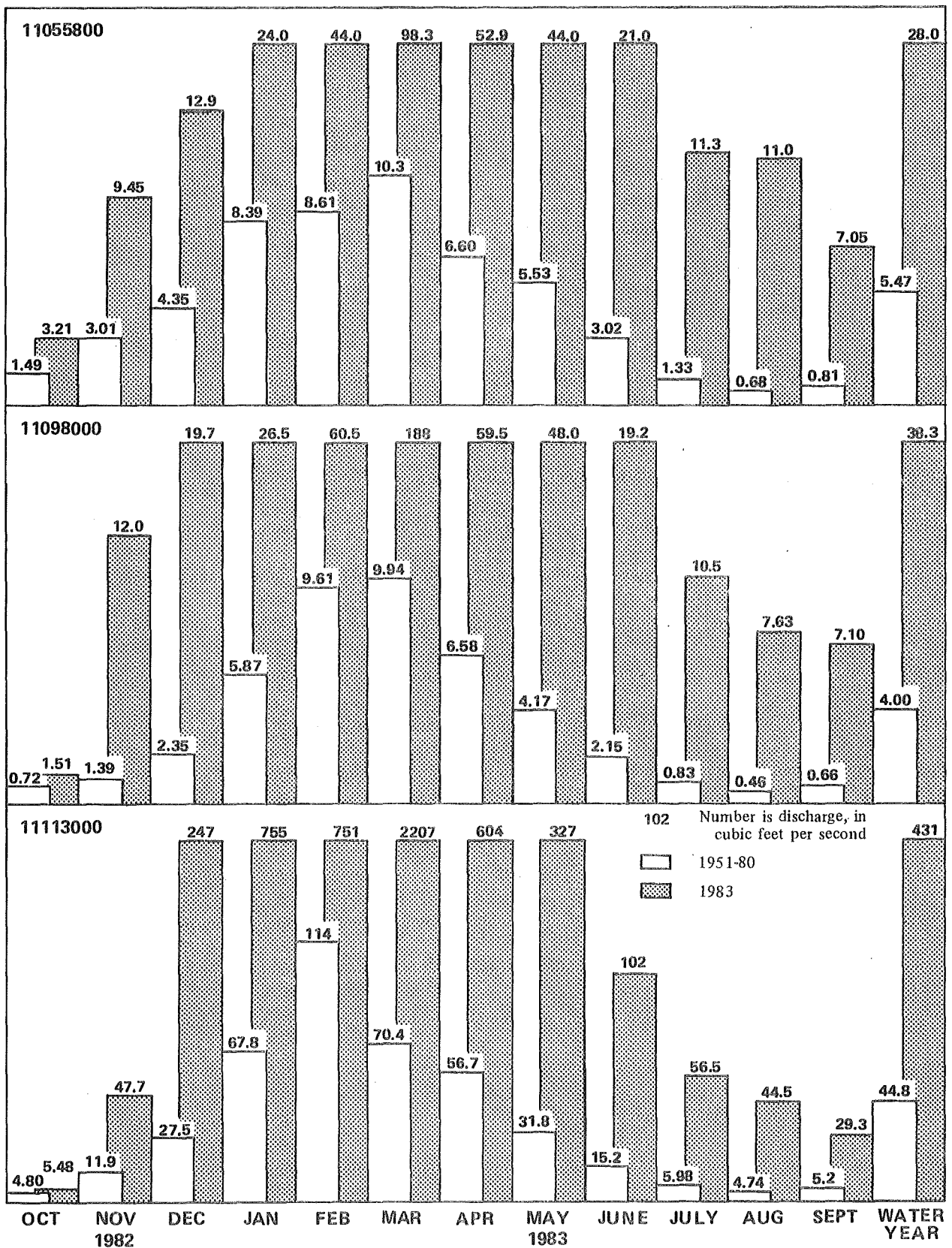


FIGURE 2. — Comparison of discharge during the 1983 water year with median discharge for the 1951-80 water years at three long-term representative gaging stations.

### Water Quality

Water samples collected at the seven NASQAN stations reported in this volume were analyzed for water-quality constituents during the 1983 water year. Median dissolved-solids concentrations of samples collected from these stations indicated a slight decrease from the 1982 water year.

The largest density of fecal-coliform and fecal-streptococci bacteria was in water sampled from New River at International boundary, at Calexico and ranged from 260,000 to 800,000 col/100 mL and 96,000 to 330,000 col/100 mL. These density ranges are smaller than the 1982 water year ranges of 58,000 to 4.7 million col/100 mL and 23,000 to 580,000 col/100 mL. Dissolved-oxygen concentrations at New River were small (1.1 to 6.2 mg/L) and on several occasions concentrations were less than recommended by the U.S. Environmental Protection Agency (EPA) to maintain good fish population (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. As in the 1982 water year, Alamo River at Drop 3, near Calipatria had the largest median sulfate concentration (960 mg/L). Manganese concentrations in excess of EPA domestic water-supply criterion (50 µg/L) also were detected at five of the seven NASQAN stations. New River had the largest median concentration of 110 µg/L.

### Sediment

Suspended-sediment discharge and concentrations were monitored daily at six stations and periodically at 17 stations in the area included in this volume. The large variation in precipitation, drainage-basin characteristics, stream regulation, and basin size for the sampled streams results in significant differences in sediment-discharge rates and concentrations.

Sediment discharge was above normal during the 1983 water year, as indicated by comparison with the 1973-82 mean sediment discharge at three of the daily stations. Annual sediment discharge was 129 percent of the mean for San Juan Creek at San Juan Capistrano, 210 percent for Santa Ana River at Santa Ana, and 381 percent for Santa Clara River at Montalvo.

During the 1983 water year, sediment discharge at the six stations monitored daily ranged from 83,500 ton/yr for San Jose Creek at Goleta to 17.9 million ton/yr for Santa Clara River at Montalvo. Annual sediment discharge per square mile of drainage area ranged from a minimum of 711 ton/mi<sup>2</sup> for Santa Ana River at Santa Ana to a maximum of 11,100 ton/mi<sup>2</sup> for Santa Clara River at Montalvo.

Runoff resulting from major storms during late January and early March transported the largest percentage of the sediment during the year. Maximum sediment discharge ranged from 15,700 ton/d (19 percent of annual total) for San Jose Creek at Goleta to 7.08 million ton/d (40 percent of annual total) for Santa Clara River at Montalvo. Maximum daily concentrations ranged from 9,050 mg/L for San Jose Creek at Goleta to 44,100 mg/L for Santa Clara River at Montalvo.

Monthly and annual bedload discharge totals were published for three of the stations monitored daily. The percentage of annual bedload discharge to total sediment discharge (suspended plus bedload) ranged from 13 percent for Santa Clara River at Montalvo to 17 percent for Santa Ana River at Santa Ana.

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



## DEFINITION OF TERMS

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

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

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  $\pm$  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  $\pm$  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  $\pm$  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 microorganisms, 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 ( $\text{g/m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g/m}^2$ ).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for 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.

Bottom material: See Bed material.

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).

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, or about 646,000 gallons or 2,445 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile or 0.3468 millimeter from 1 square kilometer.

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 salt water.

Cubic foot per second (ft<sup>3</sup>/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.

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 is that material in a representative water sample which passes through a 0.45-micrometer 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-micrometer membrane filter will be identified and announced at a later date.

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

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

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 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 ( $\text{CaCO}_3$ ).

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,  $\lambda$  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 element as the mass (micrograms) of the element sorbed per unit mass (gram) of sediment.

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,  $\text{mg/L}$ ) 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  $\text{mg/L}$  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.

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 ( $\text{m}^2$ ), 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.

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in chemically dispersed distilled water.

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:

Classification	Size (mm)	Method of analysis
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.

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 are microorganisms attached to and growing upon 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 plants and animals. 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 ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  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.

Plankton (continued)

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/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/mL of sample.

Zooplankton compose 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 [mg C/(m<sup>2</sup>.time) for periphyton and macrophytes and mg C/(m<sup>3</sup>.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 [mg O<sub>2</sub>/(m<sup>2</sup>.time) for periphyton and macrophytes and mg O<sub>2</sub>/(m<sup>3</sup>.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.

Sediment is solid material that is derived mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemicals and biochemical precipitates and decomposed organic material such as humas. 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.

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

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 0.09 m above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

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 weight, or volume, that passes a section in a given time. It is computed by multiplying discharge times milligrams per liter times 0.0027.

Suspended-sediment load (tons per day) is the quantity of suspended sediment passing a section in a specified period.

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 weight, that passes a section in a given time.

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 derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of water to conduct an electrical current and is expressed in micromhos 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 concentration in water. Commonly, dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may even 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 emersed 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."

Suspended, total (continued)

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.....Insects  
Order.....Ephemeroptera  
Family.....Ephemeridae  
Genus..... Hexagenia  
Species..... limbata

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.

Tons per acre-foot indicates the dry weight 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 day.

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 mg/L 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 (see also p. 27).

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.

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

#### DOWNSTREAM ORDER AND STATION NUMBER

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 a first-rank, second-rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indentation in a list of stations in the front of the report. Each indentation represents one rank. This downstream order and system of indentation shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each surface-water station, water-quality station, and partial-record station has been assigned a station number. These are in the same downstream order as used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging or partial-record stations have the same number as the gaging or partial-record station. Gaps are left between the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 11105850, which appears just to the left of the station name, includes the 2-digit number "11" plus the 6-digit downstream order number "105850". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records for California are in Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

#### NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream-order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well- and miscellaneous-site number system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) identify the wells or other sites within a 1-second grid. See figure 3.

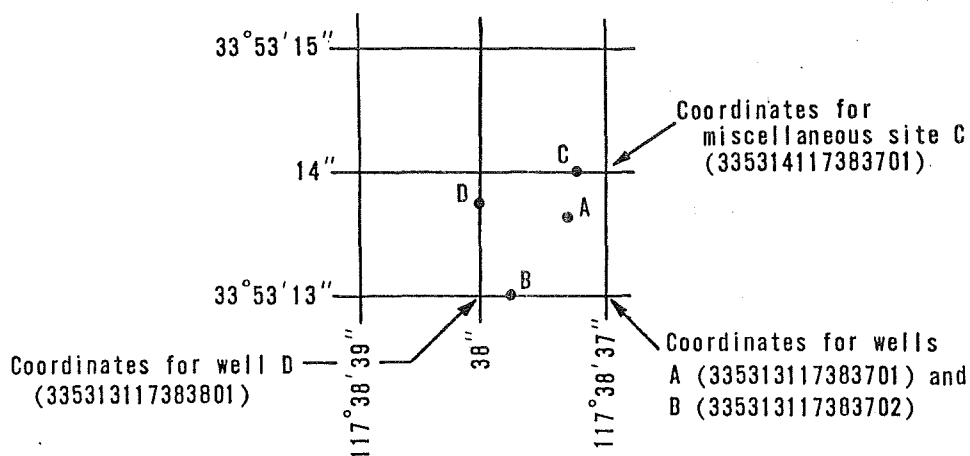


FIGURE 3.--System for numbering wells and miscellaneous sites (latitude and longitude)

#### Local well numbers

Wells and springs in California are assigned numbers according to their location on the rectangular system for the subdivision of public land. For example, in the number 005S/010E-22G01 M, the part of the number preceding the slash indicates the township (T.5 S.) and the number between the slash and hyphen indicates the range (R.10 E.); the digits following the hyphen indicate the section (sec.22); the letter following the section number indicates the 40-acre subdivision of the section. Within each 40-acre tract, the wells are numbered serially, as indicated by the final digit. The final letter, separated from the rest of the number by a space, indicates the base line and meridian. Base-line and meridian designations are as follows: H, Humboldt, M, Mount Diablo; S, San Bernardino. See figure 4.

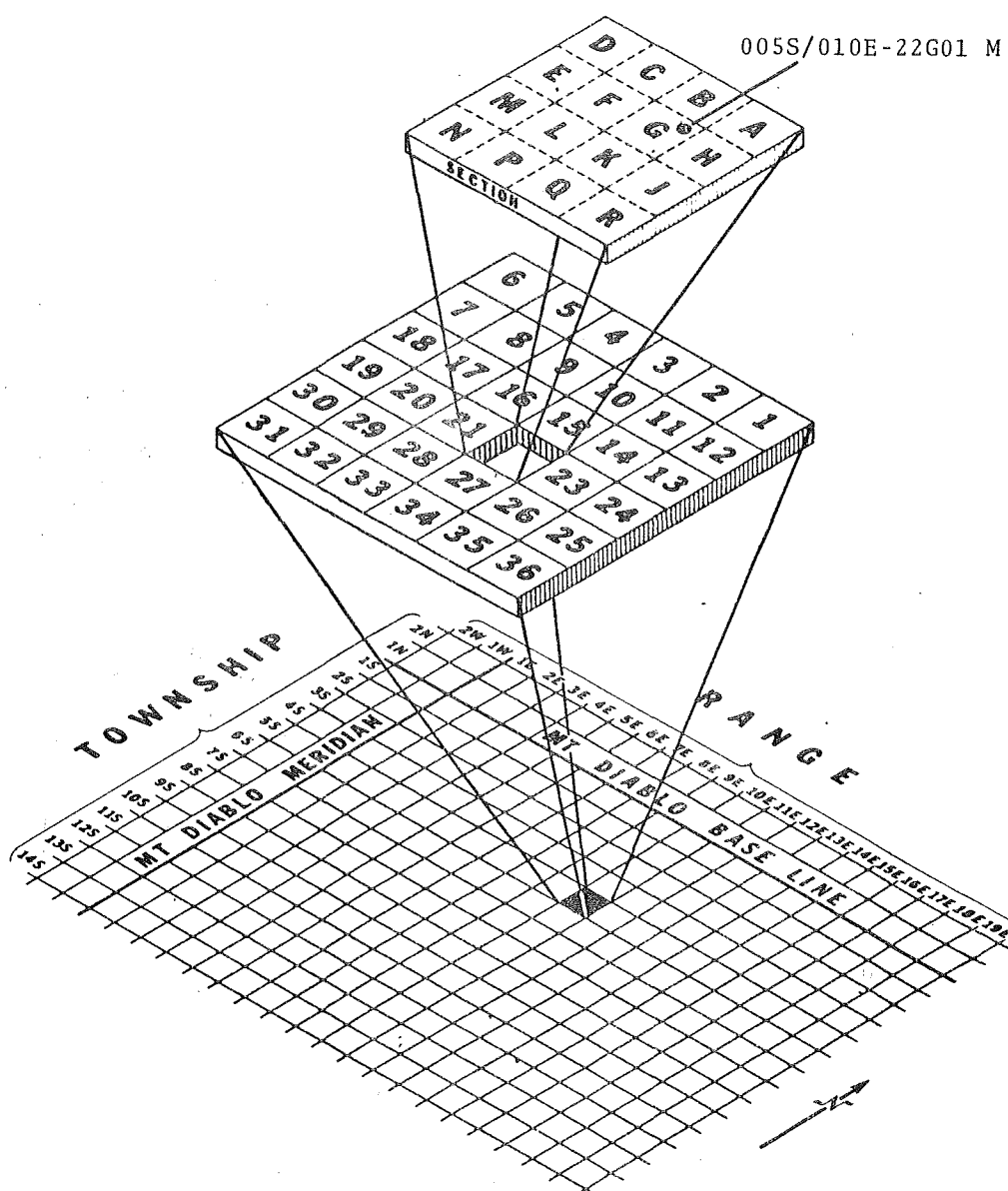


FIGURE 4.--California well-numbering system.

## SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

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

Volume 2:

11475560 Elder Creek near Branscomb, CA

Volume 3:

11264500 Merced River at Happy Isles Bridge, near Yosemite, CA

National stream-quality accounting network is an accounting network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on the river-basin accounting units designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality. Stations in this network are listed below:

Volume 1:

10254670 Alamo River at Drop No. 3, near Calipatria, CA  
10254970 New River at International Boundary, at Calexico, CA  
10261500 Mojave River at lower narrows, near Victorville, CA  
10277400 Owens River below Tinemaha Reservoir, near Big Pine, CA  
11042000 San Luis River at Oceanside, CA  
11074000 Santa Ana River below Prado Dam, CA  
11103010 Los Angeles River at Willow Street Bridge, at Long Beach, CA  
11108500 Santa Clara River at Los Angeles-Ventura County Line, CA

Volume 2:

11152300 Salinas River near Chualar, CA  
11159000 Pajaro River at Chittenden, CA  
11458000 Napa River near Napa, CA  
11467000 Russian River near Guerneville, CA  
11477000 Eel River at Scotia, CA  
11530500 Klamath River near Klamath, CA  
11532500 Smith River near Crescent City, CA

Volume 3:

11187000 Kern River at Kernville, CA  
11218500 Kings River below North Fork, near Trimmer, CA  
11303500 San Joaquin River near Vernalis, CA  
11325500 Mokelumne River at Woodbridge, CA

Volume 4:

10356500 Susan River at Susanville, CA  
11370500 Sacramento River at Keswick, CA  
11447650 Sacramento River at Freeport, CA

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in areas where contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity.

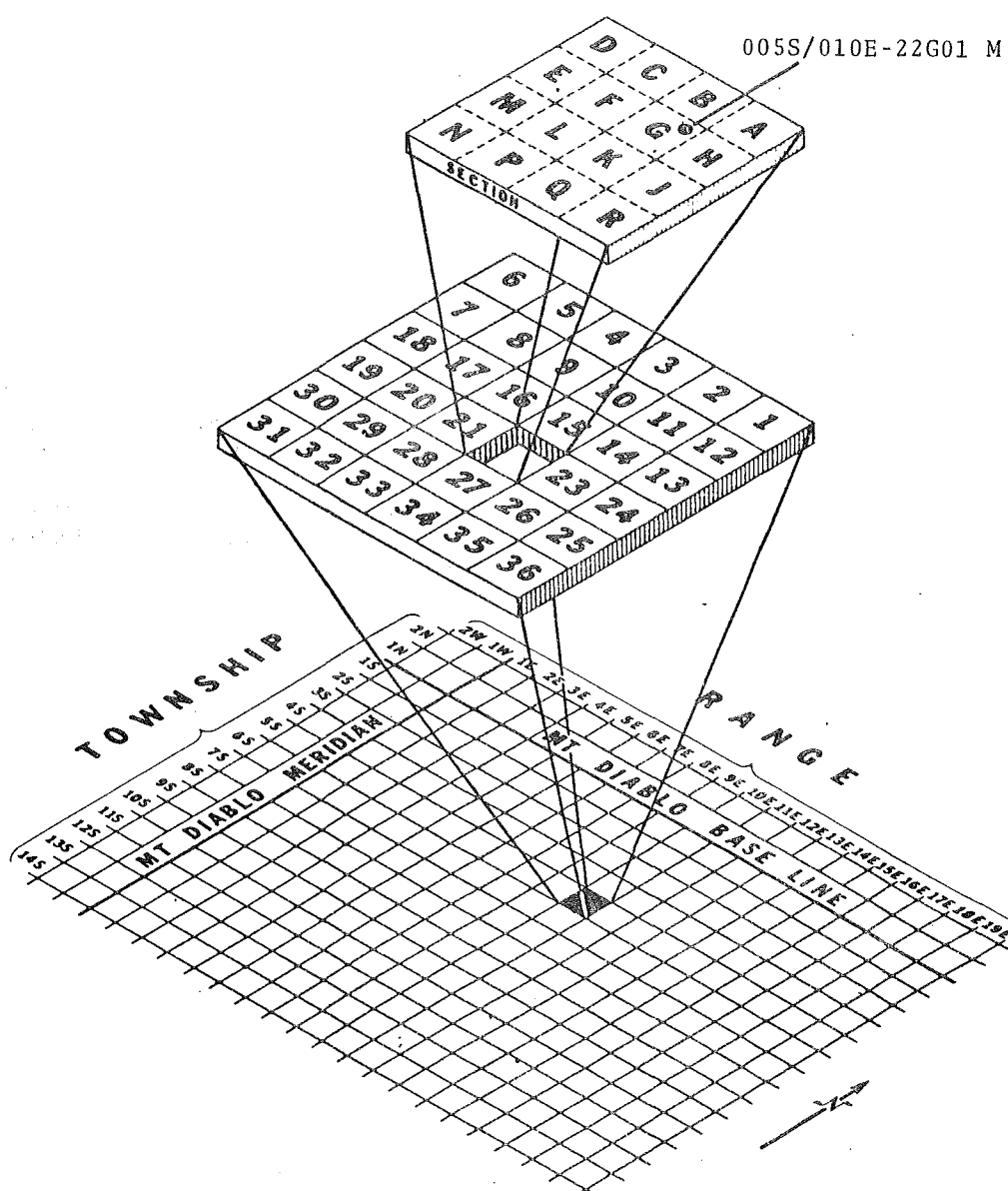


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Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radiosotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

## EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

### Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams and canals, and stage and contents of lakes and reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily readings on a nonrecording gage or from a water-stage recorder that gives a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in the U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

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

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in 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.

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

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

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

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

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

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATIONS" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published, along with the current records, in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are affected by the revision, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only the peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum of 1929, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 11.

Information pertaining to the accuracy of the discharge records, and to conditions that affect the natural flow at the gaging station, is given under "REMARKS"; for reservoir stations information on the dam forming in the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is also given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

Under "EXTREMES" are given": First, the extremes for the period of record; second, information available outside the period of record; and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest-stage gage, obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR CURRENT YEAR; if they are, all independent peaks (including the maximum for the year) above the selected base, with the time of occurrence and corresponding gage heights, are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

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

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

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

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 discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage 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. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

#### Accuracy of field data and computed results

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

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

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

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

#### Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is on file in the District Office. Also, most gaging-station records are available in computer-usable form and many statistical analyses have been made. Information on the availability of unpublished data or statistical analyses may be obtained from the District Office.

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

Records of discharge collected by agencies other than  
the Geological Survey

Records of discharge not published by the Geological Survey have been collected at numerous sites by many other Federal, State, County, City, and local agencies and by private organizations. A listing of stream-gaging stations and the agencies operating them is published in California Department of Water Resources Bulletin 230-81, "Index to Sources of Hydrologic Data." The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, VA 22092, maintains an index of such sites. Information on records at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The water-quality records are given immediately following discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); instrumentation; general remarks; extremes for the period of daily record; and extremes for the current year.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations, listed on a following page.

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.

Chemical-quality data published in this report are considered to be the most representative values 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 the 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 time of 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, minimum, and mean 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 District Office.

Ground-water quality normally does not change significantly during short periods of time; infrequent sampling and analysis of ground water adequately defines ground-water quality at a given site.

#### pH

At some stations, pH is measured on a continual basis. The results are reported as maximum, minimum, and mean values for each day and month. The mean pH values reported were computed from the pH values recorded by the monitor and is equal to the negative logarithm of the geometric mean of the hydrogen-ion activity.

#### Water temperature

Water temperatures are measured at most of 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 daily 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 continuously recording thermographs are present, the records consist of maximum and minimum temperatures for each day and month. Water temperatures taken at the time of discharge measurements are on file in the district office. They will be used, with all other temperature data for reports such as the open-file reports by subregion, "Water Temperature of California Streams, 1970."

#### Sediment

Suspended-sediment concentration and particle-size distribution data are determined from samples collected with depth-integrating samplers at one or more verticals across a measuring cross-section. The concentration data are then combined with water discharge data to compute suspended-sediment discharge. Samples of surface bed material are also collected and the particle-size distribution of these samples are published along with the suspended-sediment data. The sampling and computational methods used are in accordance with those described in the U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapters C1 and C3.

Sediment samples are generally taken on a daily or every other day basis at stations where a daily sediment record is published. 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 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 was computed by the subdivided-day method. For periods when no samples were collected, daily loads 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 sediment and streamflow and in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of suspended-sediment discharge, estimates of bedload and total-sediment discharge are included for some stations. Computations of monthly bedload discharges are based on the relation between instantaneous water discharge and corresponding bedload discharge for the station. Values of bedload discharge used in defining this relation are based on samples obtained by use of the Helley-Smith bedload sampler or by modified-Einstein or Meyer-Peter Muller computation procedures. Application of the bedload-transport relation at a station was made on a daily basis or subdivided-day basis. The Helley-Smith sampler is designed to collect a time-weighted sample for the sediment moving within 0.25 ft (0.076 m) of the stream-bed. Sediment moving in this portion of the flow cannot be sampled with standard suspended-sediment samplers. Calibration of the Helley-Smith sampler has not been completed, and a trap efficiency of 1.0 has been assumed applicable to this device. Error sources in the theoretical methods, based on analysis of bed-material characteristics, channel geometry, and associated hydraulic factors, are also undefined. In consequence, figures of bedload discharge must be used with caution. They are estimates, at best, and are subject to revision.

#### Turbidity

At some stations samples for the determination of turbidity were collected at the same frequency as samples collected for determination of suspended sediment. Turbidity, measured in Nephelometric turbidity units (NTU), is shown in relation to the concentration of sediment in the simultaneously collected sample.

### EXPLANATION OF GROUND-WATER LEVEL RECORDS

#### Collection of the data

Only ground-water-level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on the grid system of latitude and longitude as shown in figure 3, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs (fig. 4).

Measurements are made in many types of wells under various conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at a well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum of 1929 (NGVD) or land-surface datum (lsd). National Geodetic Vertical Datum is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum referred to National Geodetic Vertical Datum is given in the well description. The height of the measuring point (MP above or below land-surface datum), if known, is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

In this report basin names and numbers, for example West Salton Sea basin (7-22), are from "California's Ground Water," California Department of Water Resources Bulletin No. 118, 1975, 135 p.



Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing 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) is on 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, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering 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 the 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-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-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 programed 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. Greason, T. A. Ehke, 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-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. Schaffranek, 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-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.



10250800 DARWIN CREEK NEAR DARWIN, CA

LOCATION.--Lat 36°19'14", long 117°31'23", in NW 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,640 ft, from topographic map. Prior to Aug. 6, 1970, at site 190 ft downstream at same datum.

REMARKS.--Records fair except those for period of no gage-height record, Aug. 17-23, and those for period of indefinite stage-discharge relation, Aug. 30 to Sept. 30, which are poor. No regulation above station. Town of Darwin pumps water above station for municipal supply.

AVERAGE DISCHARGE.--21 years, 0.41 ft<sup>3</sup>/s, 297 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 8.40 ft, at site then in use, from floodmarks, on basis of slope-conveyance study of maximum flow; minimum daily, 0.05 ft<sup>3</sup>/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 above base of 10 ft<sup>3</sup>/s from rating curve extended above 0.40 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 6.45 ft and maximum (\*),

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 1	1145	260	6.45
Aug. 17	Unknown	*3,620	Unknown

Minimum daily discharge, 0.09 ft<sup>3</sup>/s May 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.25	.33	.33	.25	18	.21	.21	.21	.18	.13	.37
2	.25	.25	.33	.33	.25	.43	.18	.25	.18	.25	.13	.37
3	.25	.25	.29	.33	.21	.37	.18	.18	.25	.25	.11	.37
4	.25	.25	.25	.33	.21	.37	.18	.15	.25	.21	.11	.37
5	.25	.29	.25	.33	.21	.37	.18	.18	.25	.18	.11	.37
6	.25	.29	.25	.29	.21	.37	.15	.18	.21	.15	.13	.37
7	.29	.33	.21	.29	.25	.37	.15	.18	.21	.18	.15	.37
8	.29	.29	.21	.33	.25	.37	.13	.21	.21	.18	.18	.37
9	.33	.29	.21	.33	.21	.43	.13	.18	.25	.18	.21	.37
10	.37	.37	.21	.29	.21	.43	.13	.18	.21	.18	.21	.40
11	.43	.37	.18	.29	.21	.37	.18	.25	.18	.21	.15	.40
12	.37	.37	.18	.29	.29	.33	.18	.25	.18	.18	.13	.40
13	.37	.33	.21	.29	.33	.33	.21	.21	.18	.21	.13	.40
14	.33	.33	.21	.25	.33	.33	.18	.21	.15	.18	.13	.40
15	.33	.33	.25	.25	.29	.33	.18	.21	.15	.13	.15	.40
16	.33	.33	.25	.18	.29	.32	.18	.21	.15	.13	.18	.40
17	.29	.33	.25	.18	.29	.30	.18	.21	.15	.11	160	.40
18	.29	.29	.25	.18	.29	.30	.25	.21	.15	.11	.74	.40
19	.29	.25	.25	.21	.29	.30	.25	.21	.15	.13	.60	.60
20	.25	.25	.25	.21	.29	.30	.25	.18	.15	.15	.50	.60
21	.25	.25	.25	.21	.29	.45	.25	.15	.18	.15	.48	.50
22	.25	.25	.29	.18	.29	.33	.21	.11	.21	.15	.47	.46
23	.25	.25	.25	.18	.25	.31	.21	.11	.25	.15	.45	.45
24	.25	.25	.25	.21	.29	.29	.25	.09	.21	.13	.43	.45
25	.21	.23	.21	.25	.33	.29	.25	.13	.21	.13	.37	.44
26	.25	.20	.21	.25	.37	.25	.21	.11	.18	.15	.37	.44
27	.25	.20	.21	.25	.37	.33	.18	.11	.15	.15	.37	.44
28	.25	.20	.21	.21	.37	.33	.18	.13	.18	.15	.43	.43
29	.21	.20	.25	.37	---	.33	.18	.15	.15	.13	.37	.43
30	.21	.35	.29	.25	---	.29	.21	.18	.15	.13	.37	.43
31	.25	---	.33	.25	---	.25	---	.21	---	.13	.37	---
TOTAL	8.62	8.42	7.57	8.12	7.72	28.17	5.79	5.46	5.76	4.96	168.66	12.60
MEAN	.28	.28	.24	.26	.28	.91	.19	.18	.19	.16	5.44	.42
MAX	.43	.37	.33	.37	.37	.18	.25	.25	.25	.25	160	.60
MIN	.18	.20	.18	.18	.21	.25	.13	.09	.15	.11	.11	.37
AC-FT	17	17	15	16	15	56	11	11	11	9.8	335	25
CAL YR 1982	TOTAL	92.09	MEAN	.25	MAX	.50	MIN	.11	AC-FT	183		
WTR YR 1983	TOTAL	271.85	MEAN	.74	MAX	160	MIN	.09	AC-FT	539		

## 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.

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is -180 ft, from topographic map.

AVERAGE DISCHARGE.--9 years (water years 1975-83), 0.328 ft<sup>3</sup>/s, 238 acre-ft/yr.

REMARKS.--Records fair. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 363 ft<sup>3</sup>/s Feb. 9, 1976, gage height, 4.81 ft based on slope-conveyance study of maximum flow; minimum daily, 0.05 ft<sup>3</sup>/s July 14, 19, Aug. 4-6, 8, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5.0 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 6.0 ft<sup>3</sup>/s on basis of slope-conveyance study:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 29	0830	5.8	2.93	Mar. 6	0530	7.2	3.05
Mar. 1	1730	5.7	2.90	Aug. 19	1615	*298	4.70
Mar. 3	0500	30	3.57				

Minimum daily discharge, 0.08 ft<sup>3</sup>/s several days during July and August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.16	.26	.40	.60	2.1	.52	.40	.18	.10	.08	.16
2	.14	.16	.26	.41	.59	2.0	.58	.41	.20	.10	.08	.14
3	.14	.16	.27	.42	.62	11	.50	.40	.21	.11	.08	.15
4	.14	.17	.28	.42	.60	3.1	.49	.39	.21	.10	.08	.15
5	.14	.17	.29	.43	.60	1.4	.50	.37	.20	.09	.08	.15
6	.14	.18	.30	.44	.66	3.7	.50	.37	.19	.08	.09	.15
7	.14	.18	.29	.44	.64	1.4	.49	.38	.20	.08	.09	.15
8	.14	.18	.29	.45	.64	1.0	.50	.38	.19	.08	.08	.14
9	.14	.19	.32	.45	.59	.95	.49	.35	.18	.09	.12	.15
10	.14	.19	.37	.45	.60	.91	.47	.36	.16	.10	.11	.14
11	.14	.19	.33	.45	.59	.83	.51	.33	.16	.10	.10	.15
12	.14	.19	.33	.45	.59	.81	.53	.34	.16	.10	.10	.15
13	.14	.19	.34	.45	.58	.81	.51	.34	.16	.10	.10	.15
14	.14	.19	.33	.46	.53	.75	.50	.33	.16	.09	.10	.15
15	.14	.19	.33	.47	.56	.65	.50	.32	.16	.09	.11	.15
16	.14	.19	.33	.50	.57	.66	.50	.30	.15	.09	.13	.15
17	.14	.19	.34	.48	.57	.67	.49	.30	.14	.09	.12	.15
18	.14	.19	.34	.48	.56	1.1	.50	.31	.12	.09	.23	.15
19	.14	.19	.35	.50	.52	1.0	.49	.30	.12	.09	31	.15
20	.14	.19	.35	.48	.53	.78	.54	.30	.12	.10	2.0	.15
21	.15	.20	.36	.47	.55	.86	.50	.30	.12	.10	.50	.16
22	.16	.22	.38	.50	.57	.77	.48	.29	.12	.09	.33	.16
23	.15	.23	.39	.52	.58	.70	.43	.28	.12	.09	.32	.13
24	.17	.22	.33	.58	.63	.68	.39	.27	.12	.09	.31	.15
25	.16	.23	.35	.53	.68	.66	.40	.26	.13	.09	.28	.16
26	.14	.23	.37	.54	.62	.63	.41	.25	.12	.09	.24	.20
27	.15	.24	.38	.59	.59	.64	.40	.24	.11	.10	.22	.19
28	.16	.25	.38	.56	.58	.65	.38	.23	.11	.10	.20	.18
29	.17	.26	.39	1.9	---	.62	.38	.21	.11	.09	.18	.17
30	.17	.29	.40	.75	---	.62	.38	.20	.11	.10	.18	.18
31	.17	---	.40	.63	---	.59	---	.19	---	.09	.17	---
TOTAL	4.55	6.01	10.43	16.60	16.54	43.04	14.26	9.70	4.54	2.90	37.81	4.66
MEAN	.15	.20	.34	.54	.59	1.39	.48	.31	.15	.094	1.22	.16
MAX	.17	.29	.40	1.9	.68	11	.58	.41	.21	.11	31	.20
MIN	.14	.16	.26	.40	.52	.59	.38	.19	.11	.08	.08	.13
AC-FT	9.0	12	21	33	33	85	28	19	9.0	5.8	75	9.2
CAL YR 1982	TOTAL	90.62	MEAN	.25	MAX	1.5	MIN	.06	AC-FT	180		
WTR YR 1983	TOTAL	171.04	MEAN	.47	MAX	31	MIN	.08	AC-FT	339		

## 10251300 AMARGOSA RIVER AT TECOPA, CA

LOCATION.--Lat 35°50'53", long 116°13'43", in NW 1/4 NW 1/4 SE 1/4 sec.9, T.20 N., R.7 E., Inyo County, Hydrologic Unit 18090202, on right bank 20 ft upstream from county road, and 0.2 mi west of Tecopa.

DRAINAGE AREA.--3,090 mi<sup>2</sup>, approximately, much of which is noncontributing.

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

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 1,310 ft, from topographic map.

REMARKS.--Records fair, except those for period of no gage-height record Aug. 19 to Sept. 30, which are poor. No regulation above station. City of Tecopa pumps water for municipal use upstream. Culverts, road, and gage destroyed by flood of Aug. 19, 1983.

AVERAGE DISCHARGE.--22 years, 3.68 ft<sup>3</sup>/s, 2,670 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft<sup>3</sup>/s Aug. 19, 1983, gage height, 16.00 ft, on basis of culvert and flow-over-road measurement of maximum flow; maximum gage height, 18.34 ft from floodmark, Feb. 26, 1969; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 75 ft<sup>3</sup>/s on basis of culvert and flow-over-road measurements at gage height 16.0 ft.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1630	88	4.94	Mar. 24	0615	80	4.86
Dec. 23	0100	86	4.92	Aug. 7	0400	65	4.42
Mar. 3	0430	1,370	11.90	Aug. 19	0015	*10,600	16.00

Minimum, no flow many days during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	19	.18	3.1	18	1.6	.25	.02		0	2.2
2		0	6.5	.29	1.9	63	.62	.31	.03		0	1.9
3		0	1.9	.56	18	448	1.1	.29	.04		0	1.7
4		0	1.6	.95	9.4	430	.47	.28	.03		0	1.6
5		0	1.9	1.3	6.3	245	.24	.17	.04		0	1.4
6		0	1.9	1.5	15	156	.21	.17	.03		0	1.3
7		.01	3.9	1.5	12	88	.19	.22	.02		18	1.2
8		.01	3.1	1.4	18	58	.11	.19	.02		.15	1.1
9		.03	2.2	2.4	12	39	.16	.37	.02		.02	1.0
10		1.2	5.5	1.4	7.8	25	.07	.18	.02		.01	.96
11		.43	3.9	.73	5.8	14	.16	.19	0		0	.90
12		.14	3.1	.51	4.4	9.6	.25	.17	0		0	.85
13		.11	3.3	.50	3.3	4.1	.62	.20	0		0	.80
14		.11	2.1	.61	2.1	2.5	.37	.23	0		0	.75
15		.09	2.1	.91	.98	4.1	.37	.19	0		0	.70
16		.12	1.5	2.3	1.2	.58	.34	.19	0		2.2	.67
17		.13	1.7	2.7	1.1	.44	.27	.16	0		7.5	.64
18		.13	1.6	1.8	1.1	2.0	.23	.19	0		1280	.60
19		.11	1.6	4.3	1.2	8.8	.31	.22	0		1000	.57
20		.16	1.8	1.8	.43	2.6	.56	.16	0		500	.54
21		.14	1.9	1.3	.34	7.2	2.2	.17	0		200	.52
22		.22	3.9	2.7	.47	4.2	1.1	.14	0		100	.50
23		.43	50	15	.47	2.0	.51	.12	0		50	.48
24		.43	14	9.1	4.2	27	.14	.11	0		11	.46
25		.31	4.3	9.1	16	6.4	.10	.08	0		10	.44
26		.35	.52	6.1	5.8	3.8	.14	.07	0		7.0	.43
27		.22	.66	11	13	2.7	.13	.05	0		5.4	.42
28		.26	1.3	16	17	2.3	.17	.04	0		4.3	.40
29		.42	.81	19	---	2.4	.19	.04	0		3.5	.39
30		37	1.1	12	---	2.1	.28	.03	0		3.0	.38
31		---	.34	7.6	---	2.4	---	.02	---		2.5	---
TOTAL	0	42.56	149.03	136.54	182.39	1681.22	13.21	5.20	0.27	0	3204.58	25.80
MEAN	0	1.42	4.81	4.40	6.51	54.2	.44	.17	.009	0	103	.86
MAX	0	37	50	19	18	448	2.2	.37	.04	0	1280	2.2
MIN	0	0	.34	.18	.34	.44	.07	.02	0	0	0	.38
AC-FT	0	84	296	271	362	3330	26	10	.5	0	6360	51
CAL YR 1982	TOTAL	507.60	MEAN	1.39	MAX	83	MIN	0	AC-FT	1010		
WTR YR 1983	TOTAL	5440.80	MEAN	14.9	MAX	1280	MIN	0	AC-FT	10790		

Note.--No gage-height record Aug. 19 to Sept. 30.

## BRISTOL LAKE BASIN

10252550 CARUTHERS CREEK NEAR IVANPAH, CA

LOCATION.--Lat 35°14'33", long 115°17'58", in NW 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,640 ft from topographic map.

REMARKS.--Records poor except those for Aug. 6, 17 and 18, which are good. No regulation or diversion above station.

AVERAGE DISCHARGE.--19 years, (water years 1964-81, 1983) 0.112 ft<sup>3</sup>/s, 81 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 814 ft<sup>3</sup>/s Aug. 12, 1979, gage height, 5.75 ft, from rating curve extended above 2.0 ft<sup>3</sup>/s, on basis of slope-conveyance study; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 2.0 ft<sup>3</sup>/s on basis of slope-conveyance study:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 2	Unknown	*77	2.67	Aug. 17	2115	36	2.14
Aug. 6	2245	20	1.84				

Minimum, no flow most of year.

CORRECTIONS.--The monthly totals for October through April published in the 1982 report should be disregarded as this station was not operated for that period. The 1981 calendar year and 1982 water year totals should also be disregarded.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.10	.03	.06	2.0	.03	.07			0	0
2		0	.06	.03	.47	20	.03	.07			0	0
3		0	.06	.02	.70	1.0	.03	.05			0	0
4		0	.04	.02	.12	.70	.03	.05			0	0
5		0	.04	.02	.08	.47	.05	.03			0	0
6		0	.03	.02	.05	.36	.05	.02			1.2	0
7		0	.02	.02	.66	.30	.05	.02			.74	.02
8		0	.77	.02	.16	.25	.03	.01			.32	0
9		0	3.5	.02	.12	.22	.03	0			.40	0
10		0	1.2	.01	.10	.20	.03	0			.60	0
11		0	.20	.01	.09	.16	.03	0			.50	0
12		0	.07	.01	.08	.14	.03	0			.46	0
13		0	.06	.01	.08	.20	.03	0			.27	0
14		0	.05	0	.08	.14	.02	0			.10	0
15		0	.05	0	.08	.12	.02	0			.25	0
16		0	.04	0	.07	.10	.02	0			.16	0
17		0	.04	0	.07	.20	.01	0			5.1	0
18		0	.03	0	.07	.50	.01	0			12	0
19		0	.03	0	.06	.30	0	0			1.4	0
20		0	.02	0	.06	.70	.02	0			.55	0
21		0	.02	0	.06	.34	.05	0			.35	0
22		0	.03	.01	0	.23	.02	0			.22	0
23		0	.85	0	0	.09	.02	0			.14	0
24		0	.03	.04	0	.28	.01	0			.08	0
25		0	.02	.02	0	.19	.01	0			.04	0
26		0	.02	0	0	.11	0	0			.03	0
27		0	.01	.07	.68	.09	0	0			.01	0
28		0	.01	.10	.20	.07	0	0			0	0
29		0	.42	.23	---	.05	.05	0			0	0
30		.14	.05	.10	---	.05	.14	0			0	0
31		---	.04	.07	---	.03	---	0			0	---
TOTAL	0	0.14	7.91	0.88	4.20	29.59	0.85	0.32	0	0	24.92	0.02
MEAN	0	.005	.26	.028	.15	.95	.028	.010	0	0	.80	.000
MAX	0	.14	3.5	.23	.70	20	.14	.07	0	0	12	.02
MIN	0	0	.01	0	0	.03	0	0	0	0	0	0
AC-FT	0	.3	16	1.7	8.3	59	1.7	.6	0	0	49	.04

WTR YR 1983 TOTAL 68.83 MEAN .19 MAX 20 MIN 0 AC-FT 137

## 10254005 SALTON SEA NEAR WESTMORLAND, CA

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

DRAINAGE AREA.--8,360 mi<sup>2</sup>, 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 250.00 ft below National Geodetic Vertical Datum of 1929; gage readings have been converted 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, 227.1 ft below NGVD, Mar. 12-16, Mar. 28 to June 8; minimum, 228.7 ft below NGVD Oct. 31 to Dec. 6.

## MEAN DAILY MONTHEND ELEVATIONS, IN FEET, BELOW NGVD, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Date	Elevation (feet)
Sept. 30.....	228.5	Apr. 30.....	227.1
Oct. 31.....	228.7	May 31.....	227.1
Nov. 30.....	228.7	June 30.....	227.4
Dec. 31.....	228.4	July 31.....	227.6
Jan. 31.....	228.1	Aug. 31.....	227.3
Feb. 28.....	227.7	Sept. 30.....	227.4
Mar. 31.....	227.1		

## INFLOW TO SALTON SEA

Salton Sea, located near the northeast corner of Imperial County, is a closed basin consisting of approximately 8,360 mi<sup>2</sup>.

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 1982 to September 1983 and the annual inflow for the calendar year January to December 1982. 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	95300	76100	97120	82050	74180	117490	122870	110400	89720	92720	111900	104400
Coachella Valley	19970	18460	20410	19430	19490	33030	23980	25470	18540	16600	27700	19950
Total cal yr 1982		1,321,000 ac-ft										
Total wtr yr 1983		1,425,000 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

	120	131	176	169	176	197	184	163	151	154	164	140
Alamo River												
New River	10470	9250	17360	15490	18300	20370	19160	17580	15240	18630	26730	23770
Cal yr 1982:	Alamo River		2,090 ac-ft					1,930 ac-ft				
Cal yr 1982:	New River		163,900 ac-ft					212,350 ac-ft				

## SALTON SEA BASIN

10254050 SALT CREEK NEAR MECCA, CA

LOCATION.--Lat 33°26'49", long 115°50'33", in NE 1/4 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 mi<sup>2</sup>.

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

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

REMARKS.--Records poor. No regulation or diversion above station. Flow sustained by irrigation seepage.

AVERAGE DISCHARGE.--22 years, 7.91 ft<sup>3</sup>/s, 5,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,900 ft<sup>3</sup>/s Sept. 24, 1976, gage height, 14.3 ft, from floodmarks, rating curve extended above 20 ft<sup>3</sup>/s on basis of contracted-opening measurement of maximum flow; maximum gage height, 16.9 ft Mar. 2, 1983; minimum daily, 0.06 ft<sup>3</sup>/s Nov. 1, 4, 5, 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,120 ft<sup>3</sup>/s Mar. 2, gage height, 16.9 ft, from floodmarks, on basis of contracted-opening measurement of maximum flow; minimum daily, 2.3 ft<sup>3</sup>/s July 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	5.5	10	8.2	15	11	13	8.4	5.2	3.3	3.2	3.8
2	5.9	4.3	13	69	123	2830	13	8.3	5.1	3.3	3.5	4.2
3	5.9	3.8	12	45	122	700	13	8.1	5.1	3.2	4.2	4.2
4	7.0	4.0	7.0	12	49	110	12	8.0	5.0	3.2	4.2	3.8
5	8.2	5.2	8.6	11	22	40	12	7.9	4.9	3.1	3.8	3.8
6	6.2	4.6	9.0	11	14	36	17	7.8	4.8	3.1	3.5	4.2
7	6.2	4.9	9.0	10	12	34	19	7.7	4.8	3.0	3.2	5.0
8	5.9	5.2	9.5	10	12	32	18	7.5	4.7	3.0	3.8	5.0
9	5.2	5.2	9.1	10	9.6	30	12	7.4	4.6	2.9	4.2	4.6
10	4.6	5.5	5.6	9.0	8.6	28	11	7.3	4.5	2.9	4.6	4.6
11	4.6	5.5	23	7.8	8.6	27	11	7.2	4.5	2.8	4.2	4.6
12	5.5	5.2	13	8.2	9.1	26	11	7.1	4.4	2.8	4.6	5.0
13	4.9	5.5	12	8.6	8.2	24	11	7.0	4.3	2.8	5.0	5.3
14	5.9	5.9	10	8.6	7.8	23	11	6.9	4.3	2.7	3.8	5.3
15	6.6	5.2	9.0	9.0	7.4	22	11	6.8	4.2	2.7	4.2	5.3
16	5.9	5.9	9.0	9.0	7.8	21	11	6.7	4.2	2.7	6.5	5.6
17	5.2	6.2	9.5	9.5	7.8	21	10	6.6	4.1	2.6	923	5.3
18	5.5	6.6	9.5	8.6	7.0	20	10	6.5	4.0	2.6	275	5.3
19	5.9	5.9	9.0	9.0	6.6	19	10	6.4	4.0	2.5	311	5.3
20	5.9	5.9	9.0	9.0	5.6	18	10	6.3	3.9	2.5	30	8.2
21	5.5	4.9	9.5	7.8	5.3	18	9.8	6.2	3.9	2.4	11	11
22	5.2	5.5	10	7.8	6.2	17	9.6	6.1	3.8	2.4	7.4	8.2
23	6.6	7.0	13	8.6	7.0	17	9.5	6.0	3.7	2.4	6.6	7.0
24	5.9	6.6	13	9.5	7.8	16	9.4	5.9	3.7	2.3	5.3	6.6
25	5.2	6.2	7.4	9.0	8.6	15	9.2	5.8	3.6	2.3	5.0	7.0
26	5.9	5.5	7.0	9.5	8.2	15	9.0	5.7	3.6	2.3	5.0	8.2
27	6.2	5.2	7.8	12	9.6	15	8.9	5.6	3.5	2.4	4.6	8.3
28	4.9	7.0	8.6	11	11	14	8.8	5.5	3.5	2.7	3.8	8.2
29	4.0	7.8	9.0	33	---	14	8.6	5.4	3.4	2.7	3.8	7.4
30	4.9	9.0	9.0	26	---	14	8.5	5.4	3.4	2.9	4.2	7.4
31	5.9	---	9.0	8.2	---	13	---	5.3	---	3.2	3.8	---
TOTAL	176.7	170.7	441.4	424.9	526.8	4240	337.3	208.8	126.7	85.7	1724.5	177.7
MEAN	5.70	5.69	14.2	13.7	18.8	137	11.2	6.74	4.22	2.76	55.6	5.92
MAX	8.2	9.0	91	69	123	2830	19	8.4	5.2	3.3	923	11
MIN	4.0	3.8	7.0	7.8	5.3	11	8.5	5.3	3.4	2.3	3.2	3.8
AC-FT	350	339	876	843	1040	8410	669	414	251	170	3420	352
CAL YR 1982	TOTAL	2721.9	MEAN	7.46	MAX	100	MIN	1.0	AC-FT	5400		
WTR YR 1983	TOTAL	8641.2	MEAN	23.7	MAX	2830	MIN	2.3	AC-FT	17140		



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. Altitude of gage is -185 ft, from topographic map.

REMARKS.--Records good. Flow is mainly return from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,940 ft<sup>3</sup>/s Mar. 3, 1983, gage height, 5.95 ft, from rating  
curve extended above 1,000 ft<sup>3</sup>/s; minimum daily, 305 ft<sup>3</sup>/s Feb. 24, 27, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,940 ft<sup>3</sup>/s Mar. 3, gage height 5.95 ft, from rating curve extended  
above 1,000 ft<sup>3</sup>/s; minimum daily, 337 ft<sup>3</sup>/s Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	722	699	560	499	528	707	917	866	705	653	720	686
2	741	712	522	467	634	903	958	848	706	654	690	675
3	778	714	514	459	1130	3430	995	908	725	683	663	719
4	776	714	520	494	802	1100	928	883	752	668	697	731
5	735	704	529	551	496	650	924	870	740	658	706	703
6	710	726	541	616	442	515	1030	826	724	616	759	736
7	734	729	580	652	412	466	1070	819	694	619	753	729
8	726	678	576	692	403	472	1130	811	662	633	761	714
9	718	646	1590	671	361	496	1120	765	658	644	894	731
10	733	686	2060	641	351	509	1060	758	693	652	948	703
11	731	676	1040	615	337	534	969	761	693	663	722	704
12	731	623	690	635	341	581	994	768	702	696	729	646
13	750	604	620	685	353	588	1030	786	685	696	741	654
14	771	589	569	731	353	574	1010	827	633	683	717	707
15	765	576	506	755	364	629	1040	830	636	671	683	696
16	774	611	472	746	379	686	1040	824	621	638	710	705
17	806	642	426	695	387	766	1020	884	659	632	763	707
18	803	658	406	677	422	870	886	870	682	603	753	746
19	779	652	403	672	441	971	908	849	652	601	645	721
20	773	644	410	669	458	1020	953	789	679	665	568	735
21	780	618	411	664	494	1130	912	796	646	682	545	716
22	806	560	400	654	533	1050	946	818	630	672	530	714
23	802	558	389	694	601	1000	948	756	675	688	563	737
24	801	587	372	662	621	972	887	741	693	688	558	898
25	760	556	342	683	667	928	849	757	693	651	587	811
26	750	517	338	643	720	890	873	790	654	641	650	898
27	727	511	352	648	761	832	832	773	609	637	692	791
28	708	520	417	597	730	831	873	766	599	638	733	687
29	722	512	459	541	---	815	825	790	614	659	731	680
30	710	522	517	525	---	839	899	780	630	666	703	704
31	715	---	560	514	---	874	---	736	---	713	682	---
TOTAL	23337	18744	18091	19447	14521	26628	28826	25045	20144	20363	21596	21784
MEAN	753	625	584	627	519	859	961	808	671	657	697	726
MAX	806	729	2060	755	1130	3430	1130	908	752	713	948	898
MIN	708	511	338	459	337	466	825	736	599	601	530	646
AC-FT	46290	37180	35880	38570	28800	52820	57180	49680	39960	40390	42840	43210
CAL YR 1982	TOTAL	237129	MEAN	650	MAX	2060	MIN	338	AC-FT	470400		
WTR YR 1983	TOTAL	258526	MEAN	708	MAX	3430	MIN	337	AC-FT	512800		

## 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, 1980 to current year.

WATER TEMPERATURES: Water years 1969-70, 1975-77, 1980 to current year.

SEDIMENT RECORDS: Water years 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1981 to current year.

WATER TEMPERATURES: March 1981 to current year.

INSTRUMENTATION.--Water-quality monitor recording specific conductance and water temperature since March 1981.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 6,590 micromhos Feb. 11, 1983; minimum recorded, 2,890 micromhos June 26, 27, 1982.

WATER TEMPERATURES: Maximum recorded, 32.0°C Aug. 20, 23, 24, 27, 29, 1981, Aug. 5, 6, 1983; minimum recorded, 7.5°C Jan. 1, 2, 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 6,590 micromhos Feb. 11; minimum recorded, 2,970 micromhos Dec. 10.

WATER TEMPERATURES: Maximum recorded, 32.0°C Aug. 5, 6; minimum recorded, 7.5°C Jan. 1, 2.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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, (PER- CENT UN-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 08...	1200	515	4240	8.1	13.5	760	--	9.7	95	6800	21000
MAR 16...	1100	649	4280	7.8	17.0	765	170	8.9	93	9000	41000
JUN 16...	1000	595	3490	7.9	27.0	760	170	6.7	85	K3200	8500
SEP 29...	1300	678	4540	8.1	23.0	760	--	8.4	100	5000	3900

DATE	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)	ALKA- LINITY FIELD (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 08...	1000	820	220	120	560	54	8	11	--	980	740
MAR 16...	1100	860	230	120	530	52	7	13	218	940	780
JUN 16...	860	640	180	98	440	52	7	14	218	820	570
SEP 29...	1100	840	210	130	610	55	8	12	--	1100	800

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)	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 08...	.60	8.4	2970	2800	4.0	8.0	1.3	5.0	.55	.26	.22
MAR 16...	.60	10	2970	2800	4.0	6.7	1.5	2.9	.92	.61	.50
JUN 16...	.60	12	2400	2300	3.3	4.2	.28	2.2	1.1	.54	.45
SEP 29...	.60	13	3160	3000	4.3	6.5	.22	2.6	1.0	.78	.76

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.

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 08...	1200	10	4	100	<10	1	<1	<1	3	60	1
MAR 16...	1100	10	5	100	<10	<1	<1	<1	3	20	<1
JUN 16...	1000	10	6	<100	<10	<1	<1	1	4	50	1
SEP 29...	1300	10	5	<100	<10	<1	<1	<1	3	70	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 08...	210	30	<.1	18	5	11	<1	3600	11	20
MAR 16...	210	60	<.1	17	<1	10	<1	3600	17	20
JUN 16...	180	20	<.1	15	4	8	<1	3000	13	20
SEP 29...	230	20	<.1	17	3	9	<1	3700	14	10

&lt; Actual value is known to be less than the value shown.

## SALTON SEA BASIN

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

## SPECIFIC CONDUCTANCE (MICRONHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3950	3390	3590	4180	4010	4070	4590	4400	4450	---	---	---
2	3900	3340	3530	4150	3590	3960	4580	4410	4500	---	---	---
3	3810	3400	3510	4050	3650	3950	4550	4040	4350	4540	4010	4260
4	4200	3840	3970	3740	3560	3670	4520	4030	4250	4500	3960	4270
5	4170	4000	4070	4140	3640	3850	4540	4000	4240	4150	3880	4020
6	4190	4000	4070	4180	3780	3980	4570	4010	4270	4090	3460	3660
7	4110	3880	3990	3960	3840	3880	4490	3900	4090	3690	3510	3610
8	4080	3830	3960	4380	4000	4130	4490	4000	4200	3790	3600	3710
9	4120	3830	4010	4570	4440	4500	4590	3970	4230	3890	3710	3800
10	4090	3460	3800	4500	4130	4360	3560	2970	3100	3980	3860	3940
11	4080	3710	3950	4260	4120	4190	4590	3030	3920	4170	3570	3990
12	4250	3800	4090	4540	4250	4410	5330	4570	5030	4190	4000	4100
13	4150	3980	4060	4560	4140	4450	5580	5050	5390	4090	3880	4000
14	4150	3880	4000	4590	4170	4460	5950	5450	5630	4060	3460	3800
15	4190	3940	4070	4590	4400	4510	6110	5560	5950	3880	3420	3610
16	4180	4000	4090	4580	4400	4490	6150	5460	5900	3970	3490	3670
17	4110	3900	4000	4590	4140	4410	6450	6050	6140	4170	3930	4030
18	4190	3970	4080	4540	4120	4390	6520	6090	6300	4180	3990	4070
19	4190	4000	4100	4560	4050	4360	6560	5940	6190	4190	4010	4090
20	4180	4020	4110	4590	4140	4400	6190	5530	6070	4190	4010	4100
21	4450	4000	4130	4550	4070	4380	5590	5130	5460	4180	3820	4060
22	4180	4000	4090	4840	4400	4530	5800	5120	5470	4170	3910	4040
23	4180	4000	4120	4850	4400	4550	5870	5410	5560	4130	3840	3950
24	4190	4010	4110	4850	4410	4510	5590	5420	5520	4190	3800	3960
25	4430	4050	4180	4590	4400	4510	5580	5400	5470	4190	3970	4090
26	4150	4010	4090	4590	4440	4520	5870	5050	5480	4190	4040	4120
27	4570	4000	4260	5190	4830	5020	6000	5480	5790	4430	4000	4140
28	4540	4010	4260	4870	4400	4520	5800	4810	5250	4560	4070	4200
29	4480	4000	4110	4590	4400	4490	4990	4400	4640	4520	4130	4360
30	4450	4030	4170	4820	4400	4480	4830	4040	4390	4760	4300	4600
31	4540	4040	4180	---	---	---	4500	4000	4160	4970	4560	4810
MONTH	4570	3340	4020	5190	3560	4330	6560	2970	5010	4970	3420	4040

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5090	4410	4700	4080	3580	3910	3910	3460	3610	3750	3580	3670
2	4960	4260	4700	4210	3660	3970	3820	3460	3550	3770	3590	3690
3	5140	3390	4270	3990	3020	3320	3830	3470	3570	3790	3370	3650
4	4310	3930	4190	4410	3250	3940	3890	3430	3570	3810	3620	3690
5	5390	4520	4960	5360	4700	5010	3950	3590	3870	3840	3470	3670
6	5930	5790	5850	5940	5370	5650	3930	3410	3630	3990	3470	3800
7	6540	6170	6410	6260	5920	6040	3590	3400	3500	3930	3520	3660
8	6430	6040	6150	6090	5910	6040	3590	3170	3420	3930	3510	3670
9	6470	6080	6240	6510	5810	6080	3580	3440	3510	4150	3540	3760
10	6460	5900	6190	6160	5130	5710	3630	3480	3570	4090	3670	3890
11	6590	6400	6500	5800	5410	5510	3900	3480	3640	4010	3560	3760
12	6580	5570	6160	5510	4560	5140	3920	3510	3640	4000	3600	3730
13	5980	5420	5730	4900	4490	4720	3690	3290	3600	4020	3560	3690
14	6060	5440	5710	4950	4430	4660	3720	3540	3640	3770	3590	3720
15	5540	5070	5260	4950	4000	4500	3680	3550	3620	3750	3610	3680
16	5480	5020	5210	4470	4000	4150	3750	3570	3660	3810	3670	3750
17	5190	5000	5120	4160	3910	4040	3780	3630	3700	3830	3670	3760
18	5190	4520	5070	3970	3560	3840	4170	3620	3970	3790	3380	3640
19	4960	4400	4560	3590	3400	3500	4200	3520	3880	3880	3700	3790
20	4590	4400	4490	3580	3400	3500	3810	3420	3530	3890	3710	3830
21	4530	4030	4330	3550	3100	3390	3620	3430	3520	3920	3730	3800
22	4190	4000	4110	3590	3180	3440	3880	3470	3620	3940	3760	3840
23	4190	4010	4110	3570	3400	3490	3650	3460	3540	4180	3780	3880
24	4190	3960	4060	3590	3400	3490	4100	3500	3770	4190	3820	3940
25	4180	3810	4050	3890	3450	3610	4030	3570	3810	4000	3810	3880
26	3930	3480	3720	3590	3400	3480	4070	3640	3900	4020	3590	3910
27	3820	3420	3530	3590	3440	3510	4040	3540	3750	3960	3580	3840
28	3810	3460	3560	3590	3400	3510	3950	3540	3720	3960	3590	3770
29	---	---	---	3590	3400	3490	4020	3550	3730	3970	3500	3610
30	---	---	---	3590	3400	3500	3740	3560	3670	3660	3520	3590
31	---	---	---	3890	3500	3680	---	---	---	3630	3500	3580
MONTH	6590	3390	4960	6510	3020	4250	4200	3170	3660	4190	3370	3750

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

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3620	3500	3580	4040	3630	3730	3870	3680	3770	4000	3810	3880
2	3540	3380	3460	3840	3650	3760	3930	3730	3810	4330	3820	4100
3	3530	3170	3380	3850	3440	3700	4020	3840	3940	4330	3780	4020
4	3510	3200	3450	3800	3690	3730	4090	3900	3980	3960	3780	3870
5	3570	3200	3420	3890	3490	3770	4160	3980	4100	3930	3750	3840
6	3570	3230	3500	3870	3480	3780	5200	4010	4250	3920	3740	3830
7	3710	3250	3570	3850	3370	3630	4590	4010	4120	3900	3710	3810
8	3790	3610	3720	3520	3350	3440	4190	3730	4070	4210	3750	3960
9	3840	3620	3710	3550	3360	3450	4140	3380	3810	4100	3720	3820
10	3860	3310	3640	3560	3410	3480	4380	3370	3670	4180	3640	3890
11	3660	3250	3390	3470	3450	3460	3960	3540	3870	4140	3670	3920
12	3740	3310	3420	3510	3470	3490	3960	3510	3840	4130	3630	3960
13	3500	3310	3410	4110	3490	3690	3710	3520	3620	4330	3910	4070
14	3900	3340	3520	4120	3590	3920	3770	3590	3700	4120	3730	4000
15	3860	3470	3610	4030	3610	3910	3840	3650	3760	4230	3770	3990
16	3970	3440	3660	4150	3940	4050	4210	3730	3870	4230	3870	4050
17	4200	3830	3980	4160	3980	4030	5290	3790	4090	4360	3930	4200
18	3890	3430	3600	4140	3920	4030	4780	3940	4150	3980	3800	3910
19	4040	3450	3730	4260	4020	4140	4800	3990	4340	3990	3840	3910
20	3640	3470	3530	4170	3580	4000	5030	4500	4830	4310	3860	3950
21	3670	3480	3590	4110	3530	3810	5110	4810	4990	4090	3870	3950
22	3970	3590	3810	4080	3680	3930	4930	4510	4790	3940	3770	3870
23	3970	3510	3640	4170	3740	4000	4820	4350	4520	4490	3820	4070
24	3710	3520	3590	4110	3730	4000	4520	4330	4420	6470	4020	5000
25	4020	3540	3700	4070	3680	3920	4500	4040	4310	4550	4020	4260
26	4140	3640	3780	4130	3740	3990	4400	3920	4120	4590	4010	4220
27	4070	3650	3850	4100	3620	3870	4070	3880	3960	4190	3840	4020
28	4150	3770	4040	4060	3700	3770	4050	3840	3920	4360	3910	4150
29	4200	3620	4050	3820	3660	3730	3990	3800	3880	4380	4190	4260
30	4060	3670	3830	3820	3650	3750	4310	3840	3970	4380	3870	4160
31	---	---	---	3860	3680	3740	4360	3830	4010	---	---	---
MONTH	4200	3170	3640	4260	3350	3800	5290	3370	4080	6470	3630	4030
YEAR	6590	2970	4130									

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.0	19.5	17.5	15.0	12.5	9.5	7.5	14.0	12.0	18.0	17.0
2	21.0	20.0	18.0	17.0	13.0	12.0	9.5	7.5	13.0	12.0	17.0	15.0
3	22.0	20.0	17.5	15.0	13.0	12.0	10.5	9.0	12.0	10.0	16.0	15.0
4	22.5	20.5	16.0	15.0	13.0	12.0	10.5	9.5	13.0	10.5	16.0	15.0
5	22.5	20.0	16.0	15.0	13.0	12.0	11.0	10.0	15.0	12.0	17.5	15.5
6	22.5	20.0	17.0	15.0	14.0	12.0	11.0	10.0	15.5	14.5	18.0	17.0
7	22.5	20.0	16.0	15.0	14.5	12.5	12.5	10.5	15.5	15.0	20.0	17.5
8	21.0	20.0	17.0	15.0	13.0	12.5	13.0	12.0	16.0	15.0	20.5	18.0
9	20.5	19.0	17.0	15.5	14.0	12.5	13.0	12.0	16.0	15.0	21.0	19.0
10	19.0	17.0	16.0	15.0	14.5	13.0	13.0	12.0	16.0	15.0	21.0	20.0
11	19.0	17.0	15.5	15.0	15.5	14.5	13.0	12.0	17.0	15.0	21.0	20.5
12	19.5	17.0	15.0	14.5	16.0	15.0	13.0	12.0	17.5	15.0	21.0	20.0
13	20.0	17.5	15.0	14.0	16.0	15.0	14.0	12.0	17.5	15.5	21.0	20.0
14	20.5	18.0	15.5	14.0	15.5	15.0	14.0	12.5	17.0	15.0	20.5	19.5
15	21.0	19.5	15.5	15.0	14.5	14.0	14.5	12.5	16.0	15.0	19.5	17.0
16	21.0	20.0	16.0	15.0	14.0	12.5	15.5	14.5	16.0	15.0	18.0	16.0
17	21.0	20.0	16.0	14.5	13.0	12.0	15.5	15.0	16.0	15.0	18.0	17.0
18	21.0	20.0	15.5	15.0	13.0	12.0	15.0	14.5	17.0	15.0	17.5	15.0
19	21.0	20.0	16.0	15.0	13.0	12.0	15.0	14.0	16.0	15.0	16.0	15.0
20	21.0	20.0	16.0	15.0	13.0	12.0	14.5	12.0	16.0	15.0	16.0	15.5
21	21.0	20.0	15.5	15.0	13.0	12.0	13.0	12.0	16.0	14.5	16.0	15.0
22	21.0	20.0	15.5	15.0	15.0	12.5	12.5	11.0	16.0	15.0	16.0	15.0
23	21.0	20.0	15.0	14.5	15.0	14.0	13.0	12.0	16.0	15.0	17.0	15.0
24	20.5	20.0	15.5	14.5	13.0	10.5	15.0	13.0	16.0	15.0	17.5	15.5
25	21.0	20.0	15.5	14.5	11.0	10.0	15.0	14.5	16.0	15.0	16.0	15.0
26	21.0	20.0	15.5	14.5	10.5	9.5	15.0	14.5	16.0	15.0	17.0	15.0
27	20.0	17.5	15.0	14.0	11.0	9.5	15.0	14.0	17.0	15.0	18.0	16.0
28	18.0	17.0	15.0	13.0	11.0	10.0	15.0	13.0	18.0	15.5	19.0	17.0
29	18.0	17.0	16.0	14.5	11.0	10.0	15.0	14.0	---	---	19.5	17.0
30	18.0	17.0	16.0	15.0	11.0	10.0	15.0	14.0	---	---	20.5	17.5
31	19.5	17.0	---	---	10.0	9.5	15.0	14.0	---	---	20.5	20.0
MONTH	22.5	17.0	19.5	13.0	16.0	9.5	15.5	7.5	18.0	10.0	21.0	15.0

## SALTON SEA BASIN

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

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	20.0	19.5	17.0	25.0	22.0	27.5	25.5	31.0	30.0	31.0	29.5
2	20.5	19.5	20.0	17.0	22.5	20.0	28.0	25.5	31.0	30.0	31.0	30.0
3	20.0	18.0	22.0	20.0	23.0	20.5	28.0	25.5	31.0	30.0	31.0	30.0
4	18.0	17.0	23.0	21.0	24.5	22.0	29.5	27.0	31.0	30.0	30.5	28.0
5	18.0	16.0	21.0	20.0	25.5	24.5	30.5	29.0	32.0	30.0	30.5	28.0
6	17.5	16.0	20.0	17.5	27.5	25.0	30.5	29.0	32.0	30.0	31.0	30.0
7	18.0	15.5	22.0	20.0	28.0	25.5	30.5	29.0	31.0	30.0	31.0	30.0
8	18.0	16.0	23.5	22.0	27.5	25.5	30.5	29.0	31.0	29.5	31.0	30.0
9	19.0	17.0	23.0	22.0	27.0	25.0	31.0	29.5	29.5	27.5	31.0	30.0
10	19.5	17.5	23.0	20.5	28.0	25.0	30.5	29.5	30.5	27.5	31.0	30.0
11	18.0	17.0	21.0	20.0	28.0	25.0	29.5	27.0	31.0	30.0	31.0	30.0
12	17.0	15.0	21.0	19.5	26.0	24.5	30.0	27.5	31.0	30.0	31.0	30.0
13	15.5	15.0	22.0	20.0	27.0	24.5	31.0	29.0	31.0	29.5	31.0	30.0
14	18.0	15.5	22.5	20.0	27.5	25.0	31.0	29.5	30.5	30.0	31.0	30.0
15	19.5	17.0	23.0	20.5	28.0	25.0	30.5	27.0	31.0	29.5	31.0	30.0
16	20.0	17.5	23.0	22.0	28.0	25.5	28.0	25.0	29.5	27.5	31.0	30.0
17	20.5	19.5	23.0	22.0	28.0	26.0	25.5	24.5	29.5	27.0	31.0	29.5
18	21.0	20.0	23.0	20.5	27.5	27.0	28.0	25.0	28.0	27.5	31.0	30.0
19	20.5	19.0	24.5	22.0	27.5	25.5	28.0	26.0	28.0	27.0	30.5	29.5
20	20.5	19.5	25.0	22.5	27.0	25.0	29.5	27.0	29.5	27.0	29.5	27.5
21	20.0	17.5	26.0	23.0	27.5	25.0	30.5	28.0	28.0	27.0	28.0	27.0
22	20.5	17.5	26.0	24.5	28.0	25.5	31.0	30.0	28.0	27.0	29.0	27.0
23	21.0	20.0	27.5	25.0	28.0	27.0	31.0	30.0	28.0	27.0	30.0	27.5
24	21.0	20.0	28.0	25.5	28.0	25.5	31.0	30.0	28.0	27.0	29.0	27.0
25	20.5	19.0	28.0	25.5	27.5	25.0	30.5	28.0	29.0	27.0	29.5	27.0
26	20.0	17.5	28.0	25.5	27.5	25.0	28.0	27.0	29.5	27.0	29.0	27.0
27	21.0	19.5	27.5	25.0	27.0	25.0	28.0	27.0	30.0	27.5	27.5	26.0
28	22.0	20.0	28.0	26.0	27.0	25.0	28.0	27.0	30.5	29.5	26.0	24.5
29	21.0	20.0	28.0	25.0	27.0	25.0	29.0	27.0	31.0	30.0	24.5	22.0
30	20.5	19.0	28.0	25.5	27.5	25.5	30.0	27.5	31.0	30.0	23.0	22.0
31	---	---	26.0	25.0	---	---	31.0	29.5	30.5	30.0	---	---
MONTH	22.0	15.0	28.0	17.0	28.0	20.0	31.0	24.5	32.0	27.0	31.0	22.0

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
DEC 08...	1200	515	13.5	324	451	--	--
MAR 16...	1100	649	17.0	313	548	56	68
JUN 16...	1000	595	27.0	430	691	--	--
SEP 29...	1300	678	23.0	419	767	46	55

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 .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
DEC 08...	--	--	--	--	90	--	--
MAR 16...	91	--	96	98	98	100	--
JUN 16...	--	--	--	--	93	--	--
SEP 29...	64	73	81	88	88	98	100

10254730 ALAMO RIVER NEAR NILAND, CA

LOCATION.--Lat 33°12'03", long 115°36'07", in NE 1/4 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 current year. Monthly discharge only for January 1943 to September 1960 published in WSP 1743.

GAGE.--Water-stage recorder. Altitude of gage is -235 ft, from topographic map.

REMARKS.--Records fair. Discharge mainly represents seepage and return flow from irrigated areas.

COOPERATION.--Records furnished by Imperial Irrigation District and reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,500 ft<sup>3</sup>/s Aug. 17, 1977, estimated by Imperial Irrigation District, minimum daily, 288 ft<sup>3</sup>/s Jan. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,000 ft<sup>3</sup>/s Mar. 3; minimum daily, 400 ft<sup>3</sup>/s Dec. 26, Feb. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860	810	704	590	640	802	1050	1080	933	760	850	860
2	880	810	680	560	750	1220	1100	1080	880	790	840	860
3	920	820	680	540	1300	4000	1150	1100	890	810	800	880
4	900	830	680	560	900	1390	1080	1050	920	820	830	900
5	880	840	690	620	620	802	1120	1100	920	800	850	880
6	840	840	700	660	540	586	1150	1000	890	760	870	920
7	860	840	740	700	490	512	1200	1000	850	750	890	910
8	840	800	760	760	470	470	1250	980	830	760	910	900
9	840	790	1600	750	430	470	1250	960	820	780	970	900
10	850	800	2100	720	410	490	1200	980	830	790	1150	880
11	860	790	1190	680	400	520	1150	960	850	800	900	850
12	860	740	760	710	400	550	1150	950	840	820	860	820
13	860	710	680	750	410	600	1200	970	820	830	870	820
14	880	700	640	800	420	660	1150	990	790	840	850	870
15	890	700	580	830	430	740	1200	1000	780	850	830	900
16	900	730	530	810	440	820	1200	1050	780	820	840	880
17	920	750	480	790	450	900	1200	1080	800	780	900	900
18	920	780	460	760	480	980	1150	1050	830	760	890	940
19	880	790	460	750	510	1100	1150	1000	820	740	800	920
20	860	770	470	740	530	1200	1200	980	810	750	720	900
21	880	730	480	740	560	1250	1200	960	800	790	670	900
22	920	599	480	740	600	1150	1200	1000	780	810	640	900
23	920	620	460	760	660	1100	1150	950	810	820	660	970
24	900	668	440	780	720	1100	1080	920	840	820	680	1100
25	870	647	420	760	780	1050	1040	930	820	810	700	1000
26	850	660	400	750	830	1000	1050	950	780	790	740	1100
27	840	650	410	740	880	980	1050	940	750	780	780	970
28	820	650	470	720	830	950	1020	940	740	780	860	880
29	820	650	520	660	---	940	1050	960	740	780	890	880
30	820	680	580	610	---	960	1080	940	750	790	880	880
31	820	---	620	600	---	1000	---	920	---	810	870	---
TOTAL	26960	22194	20864	21940	16880	30292	34220	30770	24693	24590	25790	27270
MEAN	870	740	673	708	603	977	1141	993	823	793	832	909
MAX	920	840	2100	830	1300	4000	1250	1100	933	850	1150	1100
MIN	820	599	400	540	400	470	1020	920	740	740	640	820
AC-FT	53480	44020	41380	43520	33480	60080	67880	61030	48980	48770	51150	54090
CAL YR 1982	TOTAL	282325	MEAN	773	MAX	2100	MIN	400	AC-FT	560000		
WTR YR 1983	TOTAL	306463	MEAN	840	MAX	4000	MIN	400	AC-FT	607900		

## SALTON SEA BASIN

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 NE 1/4 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, and 0.2 mi downstream from international boundary in Calexico.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1 ft, from topographic map.

REMARKS.--Records excellent. Discharge represents seepage and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 735 ft<sup>3</sup>/s Dec. 9, 1982, Feb. 5, 1983; minimum daily, 130 ft<sup>3</sup>/s Nov. 29, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 735 ft<sup>3</sup>/s Dec. 9, Feb. 5; minimum daily, 130 ft<sup>3</sup>/s Nov. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	174	148	227	348	255	313	299	296	235	325	296
2	163	175	149	232	509	567	310	326	299	249	331	293
3	170	174	148	230	651	710	303	359	289	267	340	300
4	164	157	149	218	667	674	295	362	269	286	336	326
5	154	154	146	212	735	540	310	323	264	293	318	352
6	154	163	146	210	558	436	302	309	259	332	321	358
7	161	137	158	216	380	363	286	318	256	335	311	387
8	169	140	160	219	313	325	291	306	249	312	325	414
9	173	147	735	230	304	300	286	292	227	275	384	411
10	188	159	688	221	345	258	289	291	217	271	406	413
11	173	162	654	213	292	253	304	297	219	266	403	432
12	158	152	533	210	268	246	342	294	219	266	386	419
13	161	158	336	211	262	241	329	287	239	273	375	404
14	156	163	288	215	259	243	341	291	278	283	410	419
15	169	170	254	219	259	249	344	288	306	285	449	430
16	187	175	254	225	252	255	336	271	291	275	511	429
17	163	180	258	246	247	259	335	257	332	269	658	413
18	167	177	249	247	241	262	358	246	332	289	649	409
19	169	169	247	248	230	270	357	260	270	297	626	423
20	173	163	313	260	237	268	346	282	247	303	615	444
21	159	157	322	276	238	280	332	285	245	326	600	464
22	160	149	297	286	238	307	330	267	238	333	559	457
23	167	149	301	290	238	308	328	266	228	336	524	424
24	169	140	277	303	234	312	314	265	221	332	491	355
25	169	141	251	311	233	294	307	273	210	354	462	369
26	175	142	244	306	229	284	321	275	211	364	459	412
27	184	138	223	299	228	292	357	257	232	381	440	435
28	191	137	205	290	229	293	361	249	251	351	402	446
29	197	130	207	307	---	293	329	233	251	322	379	437
30	188	132	203	308	---	312	303	251	239	311	356	411
31	179	---	208	323	---	320	---	283	---	321	327	---
TOTAL	5281	4664	8751	7808	9224	10269	9659	8862	7684	9392	13478	11982
MEAN	170	155	282	252	329	331	322	286	256	303	435	399
MAX	197	180	735	323	735	710	361	362	332	381	658	464
MIN	154	130	146	210	228	241	286	233	210	235	311	293
AC-FT	10470	9250	17360	15490	18300	20370	19160	17580	15240	18630	26730	23770
CAL YR 1982	TOTAL	82640	MEAN 226	MAX 735	MIN 130	AC-FT 163900						
WTR YR 1983	TOTAL	107054	MEAN 293	MAX 735	MIN 130	AC-FT 212300						



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

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to 1971, 1973 to current year.  
 CHEMICAL ANALYSES: Water years 1969 to 1971, 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.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DATE	TIME										
NOV											
16...	1500	172	8320	7.5	16.5	760	17	4.4	46	260000	230000
JAN											
18...	1430	249	6440	--	16.5	760	10	5.7	60	K120000	96000
MAR											
15...	1430	250	7030	7.7	21.0	760	21	6.2	71	360000	230000
MAY											
04...	1400	340	6030	7.9	25.0	755	14	5.6	70	550000	320000
JUL											
14...	0700	284	5160	7.7	31.0	755	14	1.1	15	380000	330000
SEP											
28...	1100	452	4780	7.9	28.0	755	--	4.0	52	K800000	240000
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)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV											
16...	1100	880	250	120	1200	67	16	--	--	740	2100
JAN											
18...	1000	780	230	110	990	67	14	14	--	750	1700
MAR											
15...	1200	1000	280	130	1000	62	13	74	238	830	1700
MAY											
04...	920	660	200	100	910	66	13	78	251	640	1500
JUL											
14...	940	720	210	100	800	63	12	53	220	700	1300
SEP											
28...	--	--	170	--	680	--	--	62	216	590	1100
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)	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)
NOV											
16...	.60	30	4730	--	6.4	.91	6.0	14	1.7	.23	.14
JAN											
18...	.70	23	4150	4000	5.6	1.1	5.1	9.4	1.3	.31	.26
MAR											
15...	.70	24	4560	4200	6.2	1.2	3.4	11	1.4	.61	.44
MAY											
04...	.60	22	3770	3600	5.1	1.1	1.6	4.1	.84	.40	.32
JUL											
14...	.60	24	3340	3300	4.5	--	1.5	4.6	.89	.34	.32
SEP											
28...	.60	27	2910	--	4.0	1.0	1.6	3.0	.28	.28	.26

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

## SALTON SEA BASIN

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 16...	1500	20	34	100	<10	<1	<1	<1	2	70	<1
MAR 15...	1430	10	26	200	<10	1	<1	<1	2	30	<1
MAY 04...	1400	30	31	100	<10	<1	<1	<1	2	40	<1
SEP 28...	1100	10	18	200	<10	<1	<1	1	2	--	1

DATE	TIME	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 16...	1500		160	<.1	7	5	2	1	3500	19	30
MAR 15...	920		190	<.1	10	2	3	<1	4100	86	20
MAY 04...	880		60	<.1	9	2	3	<1	3400	29	10
SEP 28...	730		40	<.1	9	5	2	<1	2700	21	10

&lt; Actual value is known to be less than the value shown.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
NOV 16...	1500	172	16.5	40	19	77	--	--	--
JAN 18...	1430	249	16.5	61	41	62	--	--	--
MAR 15...	1430	250	21.0	137	92	67	81	96	100
MAY 04...	1400	340	25.0	164	151	56	81	97	100
JUL 14...	0700	284	31.0	123	94	26	--	--	--
SEP 28...	1100	452	28.0	191	233	43	--	--	--

10255550 NEW RIVER NEAR WESTHORLAND, CA

LOCATION.--Lat 33°06'17", long 115°39'49", in SW 1/4 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 current year. Monthly discharge only for January 1943 to September 1960, published in WSP 1734.

GAGE.--Water-stage recorder. Altitude of gage is -220 ft, from topographic map.

REMARKS.--Records good. Discharge mainly represents seepage and return flow from irrigated areas.

COOPERATION.--Records were furnished by Imperial Irrigation District and reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,000 ft<sup>3</sup>/s, estimated, Aug. 17-18, 1977; minimum daily, 293 ft<sup>3</sup>/s Jan. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,000 ft<sup>3</sup>/s, estimated, Dec. 10; minimum daily, 387 ft<sup>3</sup>/s Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	536	463	434	429	551	551	804	715	625	540	617	681
2	563	483	398	421	635	983	800	704	645	553	643	648
3	597	456	389	438	991	1580	778	732	648	547	635	633
4	567	507	416	466	1140	1250	738	748	645	551	641	633
5	538	528	423	475	1060	1190	717	755	645	595	637	637
6	511	507	436	459	964	887	725	751	611	605	748	654
7	521	485	432	483	846	729	755	725	623	603	702	650
8	485	466	502	489	721	619	759	757	621	629	681	706
9	485	474	952	498	607	627	778	717	607	615	727	719
10	515	474	2000	474	575	633	804	692	601	601	813	744
11	530	492	1950	494	540	528	782	654	585	573	700	736
12	567	459	1900	498	528	506	763	650	571	555	692	732
13	525	450	1500	528	494	513	763	679	534	555	740	755
14	492	452	1100	528	477	490	780	700	571	569	671	742
15	456	427	700	557	483	489	824	694	591	581	664	751
16	445	447	581	555	474	534	795	671	615	613	776	725
17	485	448	546	528	485	585	771	675	619	605	1110	736
18	515	436	540	536	483	623	780	643	603	587	1060	748
19	509	411	530	523	492	650	800	633	621	639	964	729
20	504	394	520	530	500	687	806	615	593	631	935	837
21	545	403	660	573	519	677	813	656	575	660	837	819
22	523	402	619	639	515	713	808	687	573	677	784	748
23	509	429	521	523	509	706	755	643	555	702	765	717
24	492	429	525	603	498	696	763	664	547	669	746	742
25	487	403	504	591	481	685	738	656	571	639	751	700
26	504	387	468	581	509	677	706	671	538	619	740	671
27	485	423	465	605	545	656	702	662	500	615	744	721
28	492	423	472	623	534	683	740	635	492	641	757	721
29	487	423	457	623	---	711	780	617	538	635	729	723
30	515	472	463	569	---	732	786	593	557	613	717	736
31	504	---	448	553	---	776	---	603	---	623	673	---
TOTAL	15889	13453	21851	16392	17156	22366	23113	20997	17620	18840	23399	21494
MEAN	513	448	705	529	613	721	770	677	587	608	755	716
MAX	597	528	2000	639	1140	1580	824	757	648	702	1110	837
MIN	445	387	389	421	474	489	702	593	492	540	617	633
AC-FT	31520	26680	43340	32510	34030	44360	45840	41650	34950	37370	46410	42630
CAL YR 1982	TOTAL	207595	MEAN	569	MAX	2000	MIN	387	AC-FT	411800		
WTR YR 1983	TOTAL	232570	MEAN	637	MAX	2000	MIN	387	AC-FT	461300		

## SALTON SEA BASIN

10255700 SAN FELIPE CREEK NEAR JULIAN, CA

LOCATION.--Lat 33°07'07", long 116°26'04", in NW 1/4 NE 1/4 sec.23, T.12 S., R.5 E., San Diego County, Hydrologic Unit 18100200, in Anza-Borrego Desert State Park, on left bank under bridge on State Highway 78 in Sentenac Canyon, 1.0 mi upstream from Grapevine Canyon, and 10 mi northeast of Julian.

DRAINAGE AREA.--89.2 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1958 to September 1983 (discontinued).

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 1,872.69 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--25 years, 0.98 ft<sup>3</sup>/s, 710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,150 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 7.85 ft, on basis of slope-area measurement of maximum flow; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 10	0600	84	2.19	Mar. 18	2045	221	2.72
Dec. 23	1100	73	2.13	Mar. 21	1530	148	2.48
Jan. 29	1115	123	2.38	Mar. 24	1200	275	2.87
Feb. 8	1245	201	2.66	Apr. 21	1230	71	2.08
Mar. 1	2315	*283	2.89	Apr. 30	1315	108	2.28

Minimum daily discharge, 0.22 ft<sup>3</sup>/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.67	3.9	2.0	2.9	51	36	43	1.8	.86	.39	.87
2	.25	.68	1.2	1.7	7.6	182	33	33	1.9	.88	.50	.88
3	.27	.64	1.1	1.6	11	148	32	24	1.6	.89	.45	.81
4	.24	.69	1.0	1.6	11	102	30	21	1.4	.78	.31	.80
5	.22	.73	1.2	1.5	6.8	71	28	19	1.3	.62	.33	.81
6	.24	.74	1.5	1.5	7.6	55	28	18	1.2	.49	.48	.90
7	.25	.78	1.5	1.5	79	43	25	16	1.1	.53	1.3	.98
8	.27	.82	4.4	1.5	85	36	23	14	1.1	.56	1.1	.97
9	.28	1.3	27	1.5	28	32	21	13	1.1	.49	1.9	.80
10	.28	2.6	44	1.4	7.0	27	21	11	1.1	.51	1.1	.80
11	.33	1.1	4.0	1.5	4.4	23	26	11	1.0	.53	.81	.81
12	.37	.87	1.9	1.5	3.9	20	29	11	1.2	.48	.79	.84
13	.39	.86	1.5	1.5	3.6	18	30	10	1.3	.43	.72	.77
14	.34	.85	1.3	1.5	3.5	18	23	10	1.2	.39	.64	.73
15	.34	.85	1.2	1.5	3.5	17	21	9.0	1.1	.32	6.8	.71
16	.35	.90	1.2	1.6	3.4	14	19	7.7	1.0	.35	1.5	.71
17	.33	.91	1.2	1.6	3.2	15	18	7.7	.97	.38	2.8	.73
18	.32	.98	1.1	1.6	3.2	117	23	6.8	.91	.37	7.7	.74
19	.34	.98	1.2	1.6	3.2	119	22	6.2	.77	.37	1.9	.82
20	.37	.95	1.2	1.5	3.2	64	19	4.4	.79	.36	.79	2.2
21	.40	.91	1.1	1.5	3.3	93	50	4.0	.84	.76	.70	1.4
22	.44	.93	1.2	1.6	3.3	81	38	3.4	.89	.65	.68	1.1
23	.45	.98	21	1.7	3.5	77	27	3.2	.86	.49	.71	.90
24	.45	.96	3.6	1.7	4.1	126	22	2.5	.83	.44	.74	.87
25	.48	.98	1.8	1.7	4.9	116	22	2.2	.79	.33	.82	.92
26	.65	.98	1.6	1.6	4.0	86	20	2.5	.85	.27	.88	.85
27	.62	.96	1.6	4.1	8.2	70	17	2.2	.89	.27	.86	.77
28	.51	.98	1.7	22	92	59	16	2.0	.88	.28	.79	.79
29	.60	.98	1.6	36	---	51	18	1.7	.87	.29	.77	.85
30	.65	6.2	2.0	6.5	---	46	61	1.7	.83	.30	.77	.93
31	.67	---	2.2	3.1	---	40	---	1.7	---	.37	.72	---
TOTAL	11.94	33.76	142.0	112.7	404.3	2017	798	322.9	32.37	15.04	40.75	27.06
MEAN	.39	1.13	4.58	3.64	14.4	65.1	26.6	10.4	1.08	.49	1.31	.90
MAX	.67	6.2	44	36	92	182	61	43	1.9	.89	7.7	2.2
MIN	.22	.64	1.0	1.4	2.9	14	16	1.7	.77	.27	.31	.71
AC-FT	24	67	282	224	802	4000	1580	640	64	30	81	54
CAL YR 1982	TOTAL	435.16	MEAN	1.19	MAX	44	MIN	.08	AC-FT	863		
WTR YR 1983	TOTAL	3957.82	MEAN	10.8	MAX	182	MIN	.22	AC-FT	7850		

## 10255800 COYOTE CREEK NEAR BORREGO SPRINGS, CA

LOCATION (REVISED).--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 mi<sup>2</sup>.

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. Altitude of gage is 1,120 ft, 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.--Records poor. No regulation or diversion. No stage-discharge relationship for entire year. Record estimated based on discharge measurements, weather records, and hydrographic comparison with nearby gages.

AVERAGE DISCHARGE.--33 years, 2.51 ft<sup>3</sup>/s, 1,820 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 400 ft<sup>3</sup>/s, estimated, Mar. 1, gage height, 2.91 ft, from floodmarks; minimum daily, 2.8 ft<sup>3</sup>/s Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	3.6	5.5	4.3	5.2	12	4.6	4.3	4.1	3.9	3.7	4.8
2	2.8	3.6	4.7	4.3	5.2	25	4.6	4.3	4.1	3.9	3.7	4.7
3	2.8	3.6	4.6	4.3	15	10	4.6	4.3	4.1	3.9	3.7	4.7
4	2.9	3.6	4.6	4.3	6.5	6.0	4.6	4.3	4.1	3.9	3.7	4.7
5	2.9	3.6	4.6	4.3	5.8	5.0	4.6	4.3	4.1	3.9	3.7	4.7
6	2.9	3.7	4.6	4.3	7.2	4.5	4.6	4.3	4.1	3.9	3.7	4.7
7	2.9	3.7	4.6	4.3	5.7	4.1	4.6	4.2	4.1	3.9	3.7	4.7
8	3.0	3.7	4.6	4.2	4.8	4.1	4.5	4.2	4.1	3.9	3.7	4.6
9	3.0	3.7	4.6	4.2	4.5	4.1	4.5	4.2	4.0	3.9	6.0	4.6
10	3.0	3.7	4.6	4.2	4.3	4.1	4.5	4.2	4.0	3.9	4.3	4.6
11	3.0	3.7	4.5	4.2	4.2	4.1	4.5	4.2	4.0	3.9	5.2	4.6
12	3.1	3.7	4.5	4.2	4.2	4.1	4.5	4.2	4.0	3.8	3.7	4.6
13	3.1	3.8	4.5	4.2	4.2	4.0	4.5	4.2	4.0	3.8	3.7	4.6
14	3.1	3.8	4.5	4.2	4.1	4.0	4.5	4.2	4.0	3.8	6.0	4.6
15	3.2	3.8	4.5	4.2	4.1	4.0	4.5	4.2	4.0	3.8	5.0	4.6
16	3.2	3.8	4.5	4.2	4.1	4.0	4.5	4.2	4.0	3.8	5.5	4.5
17	3.2	3.8	4.5	4.2	4.1	4.0	4.5	4.2	4.0	3.8	20	4.5
18	3.2	3.9	4.5	4.2	4.1	4.8	4.5	4.2	4.0	3.8	11	4.5
19	3.3	3.9	4.5	4.1	4.0	6.0	4.4	4.2	4.0	3.8	5.0	4.5
20	3.3	3.9	4.4	4.1	4.0	4.8	4.4	4.2	4.0	3.8	4.9	10
21	3.3	3.9	4.4	4.1	4.0	5.5	4.4	4.2	4.0	3.8	4.9	9.0
22	3.3	4.0	4.4	4.1	4.0	4.8	4.4	4.2	4.0	3.8	4.9	4.5
23	3.4	4.0	4.4	4.1	4.0	4.7	4.4	4.2	4.0	3.8	4.9	4.5
24	3.4	4.0	4.4	4.1	4.0	8.5	4.4	4.2	4.0	3.8	4.8	4.5
25	3.5	4.0	4.4	4.1	7.0	6.8	4.4	4.1	4.0	3.8	4.8	4.5
26	3.5	4.0	4.4	4.1	5.0	5.2	4.4	4.1	3.9	3.8	4.8	4.5
27	3.5	4.1	4.4	4.1	4.8	4.7	4.4	4.1	3.9	3.8	4.8	4.5
28	3.5	4.1	4.4	4.1	11	4.7	4.4	4.1	3.9	3.8	4.8	4.5
29	3.5	4.1	4.3	8.0	---	4.7	4.4	4.1	3.9	3.7	4.8	4.5
30	3.6	6.8	4.3	5.2	---	4.7	4.3	4.1	3.9	3.7	4.8	4.5
31	3.6	---	4.3	5.2	---	4.6	---	4.1	---	3.7	4.8	---
TOTAL	98.8	117.6	140.0	135.7	149.1	181.6	134.4	130.1	120.3	118.6	163.0	147.3
MEAN	3.19	3.92	4.52	4.38	5.32	5.86	4.48	4.20	4.01	3.83	5.26	4.91
MAX	3.6	6.8	5.5	8.0	15	25	4.6	4.3	4.1	3.9	20	10
MIN	2.8	3.6	4.3	4.1	4.0	4.0	4.3	4.1	3.9	3.7	3.7	4.5
AC-FT	196	233	278	269	296	360	267	258	239	235	323	292
CAL YR 1982	TOTAL	1489.7	MEAN	4.08	MAX	15	MIN	1.9	AC-FT	2950		
WTR YR 1983	TOTAL	1636.5	MEAN	4.48	MAX	25	MIN	2.8	AC-FT	3250		

## 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 mi<sup>2</sup>.

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. Altitude of gage is 1,200 ft, from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--33 years, 0.93 ft<sup>3</sup>/s, 674 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft<sup>3</sup>/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 above base of 15 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1415	69	4.23	Mar. 18	1930	36	3.72
Dec. 9	1315	157	4.93	Mar. 24	0800	125	4.62
Jan. 29	0300	40	3.88	Apr. 21	Unknown	Unknown	Unknown
Feb. 8	0900	151	4.86	Aug. 17	1745	28	3.49
Mar. 2	0915	222	5.30	Sept. 20	1330	*432	6.17

Minimum daily discharge, 0.05 ft<sup>3</sup>/s, Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.59	7.1	1.4	3.6	43	12	12	4.5	.81	2.1	.85
2	.06	.57	2.0	1.3	2.8	160	11	11	4.7	.87	2.4	.81
3	.05	.55	2.4	1.3	8.5	103	11	9.8	4.5	.79	2.0	.78
4	.05	.55	2.0	1.2	7.8	65	10	9.1	4.4	.70	1.8	.72
5	.06	.57	1.7	1.2	8.9	36	9.5	8.6	4.2	.65	1.8	.68
6	.06	.60	1.5	1.1	22	28	9.0	8.3	4.0	.60	1.9	.64
7	.07	.63	1.4	1.1	61	23	8.7	7.9	3.8	.56	2.3	.61
8	.08	.71	2.4	1.0	83	20	8.3	7.6	3.8	.51	2.7	.58
9	.10	2.3	50	.98	21	16	7.5	7.2	3.7	.47	3.9	.55
10	.10	5.1	25	.94	15	13	7.8	7.3	3.6	.44	3.6	.54
11	.11	2.1	5.2	.92	12	12	8.8	7.2	3.6	.40	3.1	.52
12	.13	1.3	1.2	.90	10	10	9.4	7.0	3.7	.37	2.8	.50
13	.15	1.1	1.1	.92	8.6	9.3	8.7	6.9	3.4	.34	2.6	.49
14	.15	1.0	1.0	.95	7.8	9.6	8.0	6.7	2.9	.32	2.4	.48
15	.17	1.0	1.0	.98	7.2	8.2	7.3	6.3	2.6	.30	4.2	.47
16	.19	1.0	.94	.96	6.5	7.4	6.6	6.1	2.5	.30	4.0	.46
17	.19	1.1	.92	.96	6.1	8.7	8.0	5.9	2.2	.29	11	.45
18	.21	1.1	.92	.96	5.6	24	12	5.8	1.9	.28	9.0	.44
19	.22	2.6	.90	.98	5.3	23	9.0	5.6	1.6	.27	5.0	.43
20	.26	1.6	.86	.98	5.0	20	12	5.5	1.4	.25	3.9	73
21	.30	1.3	1.0	.98	4.8	24	34	5.3	1.4	.24	3.3	10
22	.35	1.2	1.2	1.0	4.7	27	15	5.3	1.4	.22	2.5	.41
23	.34	1.2	5.1	1.1	4.5	30	12	5.1	1.3	.21	1.9	.40
24	.39	1.2	3.8	1.3	5.8	68	10	4.9	1.0	.20	1.5	.40
25	.43	1.2	2.6	1.4	8.2	24	8.6	4.8	1.1	.20	1.7	.40
26	.62	1.2	2.1	1.3	8.0	21	8.0	4.7	1.2	.19	1.4	.40
27	.87	1.2	1.8	7.2	19	18	7.0	4.6	1.0	1.9	1.2	.40
28	.63	1.2	1.7	2.2	34	16	6.5	4.4	.93	1.6	1.1	.42
29	.61	1.4	1.6	20	---	15	11	4.1	.98	1.4	1.0	.50
30	.58	25	1.5	6.5	---	14	18	3.9	.77	1.5	.95	.90
31	.59	---	1.5	4.5	---	13	---	4.0	---	1.8	.90	---
TOTAL	8.18	62.17	133.44	68.51	396.7	909.2	314.7	202.9	78.08	18.98	89.95	98.23
MEAN	.26	2.07	4.30	2.21	14.2	29.3	10.5	6.55	2.60	.61	2.90	3.27
MAX	.87	25	50	20	83	160	34	12	4.7	1.9	11	73
MIN	.05	.55	.86	.90	2.8	7.4	6.5	3.9	.77	.19	.90	.40
AC-FT	16	123	265	136	787	1800	624	402	155	38	178	195
CAL YR 1982	TOTAL	787.04	MEAN	2.16	MAX	50	MIN	0	AC-FT	1560		
WTR YR 1983	TOTAL	2381.04	MEAN	6.52	MAX	160	MIN	.05	AC-FT	4720		

## 10255850 VALLECITO CREEK NEAR JULIAN, CA

LOCATION.--Lat 32°59'10", long 116°25'10", in SW 1/4 NE 1/4 sec.1, T.14 S., R.5 E., San Diego County, Hydrologic Unit 18100200, on right bank 0.2 mi downstream from Cottonwood Wash, and 12.6 mi southeast of Julian.

DRAINAGE AREA.--39.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1963 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft, from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--20 years, 0.18 ft<sup>3</sup>/s, 130 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft<sup>3</sup>/s Sept. 10, 1976, gage height, 6.30 ft, from floodmark in well, from rating curve extended above 0.10 ft<sup>3</sup>/s on basis of slope-area study of maximum flow; maximum gage height, 6.47 ft Aug. 15, 1983; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 20 ft<sup>3</sup>/s.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 2	0315	33	5.80
Aug. 15	0745	*100	6.47

Minimum daily discharge, 0.11 ft<sup>3</sup>/s Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.17	.12	.40	.29	.34	4.2	2.2	1.0	.50	.30	.82
2	.14	.17	.12	.38	.29	16	4.2	2.1	.92	.50	.29	.80
3	.13	.17	.12	.34	.29	16	4.1	1.9	.85	.50	.27	.77
4	.13	.16	.12	.33	.29	17	4.2	1.9	.80	.49	.27	.76
5	.13	.16	.12	.31	.28	13	4.2	1.9	.75	.48	.27	.76
6	.15	.16	.12	.31	.28	8.9	4.2	1.9	.70	.46	.27	.75
7	.15	.16	.11	.31	.27	5.7	4.0	1.9	.65	.44	.29	.74
8	.15	.16	.12	.31	.26	4.6	3.8	1.9	.60	.43	.29	.73
9	.15	.16	5.5	.30	.25	3.7	3.6	2.0	.58	.42	.31	.71
10	.15	.17	2.5	.27	.24	3.5	3.4	2.0	.55	.40	.29	.71
11	.15	.16	1.0	.25	.24	3.4	3.3	2.1	.53	.39	.29	.71
12	.16	.16	.45	.23	.23	3.3	3.6	2.1	.52	.38	.29	.71
13	.16	.15	.28	.14	.23	3.2	3.8	2.1	.51	.37	.29	.71
14	.16	.15	.23	.14	.23	3.1	3.6	2.0	.50	.36	.31	.69
15	.16	.15	.21	.15	.22	3.1	3.4	2.1	.48	.35	11	.69
16	.16	.15	.20	.16	.23	3.0	3.1	2.0	.48	.34	9.0	.70
17	.16	.15	.20	.17	.22	2.9	2.9	2.0	.47	.32	6.8	.69
18	.17	.14	.20	.19	.21	2.9	2.7	2.0	.46	.32	5.0	.69
19	.17	.14	.20	.21	.21	3.7	2.6	2.0	.44	.31	3.5	.70
20	.17	.14	.20	.22	.21	3.8	2.4	1.9	.47	.40	2.9	.75
21	.17	.14	.20	.24	.21	3.9	2.9	1.8	.48	.59	2.3	.70
22	.17	.14	.20	.26	.21	3.8	2.2	1.6	.50	.57	1.9	.70
23	.17	.13	.20	.28	.22	4.0	2.1	1.5	.50	.55	1.6	.69
24	.18	.13	.20	.31	.22	4.9	1.9	1.5	.50	.53	1.2	.70
25	.18	.13	.21	.33	.23	5.9	1.8	1.5	.50	.50	1.0	.71
26	.19	.13	.22	.36	.24	5.9	1.9	1.5	.50	.49	.85	.71
27	.18	.13	.24	.43	.25	5.2	1.8	1.4	.50	.46	.84	.71
28	.18	.13	.28	.41	.27	4.6	1.6	1.3	.50	.44	.82	.72
29	.18	.13	.33	.27	---	4.3	1.5	1.2	.50	.41	.82	.74
30	.17	.29	.38	.30	---	4.2	1.8	1.1	.50	.37	.82	.76
31	.17	---	.43	.29	---	4.3	---	1.1	---	.33	.80	---
TOTAL	4.99	4.61	15.01	8.60	6.82	172.14	90.8	55.5	17.24	13.40	55.18	21.73
MEAN	.16	.15	.48	.28	.24	5.55	3.03	1.79	.57	.43	1.78	.72
MAX	.19	.29	5.5	.43	.29	17	4.2	2.2	1.0	.59	11	.82
MIN	.13	.13	.11	.14	.21	.34	1.5	1.1	.44	.31	.27	.69
AC-FT	9.9	9.1	30	17	14	341	180	110	34	27	109	43
CAL YR 1982	TOTAL	82.34	MEAN	.23	MAX	5.5	MIN	.10	AC-FT	163		
WTR YR 1983	TOTAL	466.02	MEAN	1.28	MAX	17	MIN	.11	AC-FT	924		

## SALTON SEA BASIN

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 bridge on State Highway 86, and 14.6 mi northwest of Westmorland.

DRAINAGE AREA.--1,693 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is -190 ft, 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.--Records fair. No regulation above station. Diversion and pumping for domestic use and irrigation in Borrego Valley 25 mi upstream.

AVERAGE DISCHARGE.--22 years (water years 1962-83) 7.91 ft<sup>3</sup>/s, 5,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft<sup>3</sup>/s Sept. 10, 1976, gage height, 19.0 ft, site and datum then in use from rating curve extended above 500 ft<sup>3</sup>/s on basis of contracted-opening and flow-over-road measurement of peak flow; no flow for many months each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 5,500 ft<sup>3</sup>/s:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 9	1430	*5,700	15.05	Aug. 2	0200	700	6.20
Feb. 2	2100	3,050	9.66	Aug. 15	1030	4,450	10.66
Mar. 2	0730	5,150	11.06	Aug. 17	2400	4,180	10.49
July 22	0300	628	6.00	Sept. 20	1330	347	6.88

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	.02	.12	.13	.10	0	.01	.01	.01	0	0
2	0	.02	.02	.12	874	1450	0	.01	.01	0	195	0
3	0	.02	.02	.12	93	200	0	.01	.01	0	50	0
4	0	.02	.02	.12	40	50	0	.01	.01	0	10	0
5	0	.02	.02	.12	10	15	0	.01	.01	0	1.5	0
6	0	.02	.02	.12	4.0	5.0	0	.01	.01	0	0	0
7	0	.02	.02	.12	1.5	1.5	0	.01	.01	0	0	0
8	0	.02	.02	.12	.50	.50	0	.01	.01	0	0	0
9	0	.02	2230	.12	.50	.40	0	.01	.01	0	0	0
10	0	.02	1450	.12	.50	.30	0	.01	.01	0	0	0
11	.01	.02	80	.12	.40	.20	0	.01	.01	0	0	0
12	.01	.02	5.0	.12	.40	.10	.01	.01	.01	0	84	0
13	.01	.02	.13	.12	.40	.05	.01	.01	.01	0	10	0
14	.01	.02	.13	.12	.40	0	.01	.01	.01	0	186	0
15	.01	.02	.13	.12	.40	0	.01	.01	.01	0	777	0
16	.01	.02	.12	.12	.30	0	.01	.01	.01	0	357	0
17	.01	.02	.12	.12	.30	0	.01	.01	.01	0	896	0
18	.01	.02	.12	.12	.30	0	.01	.01	.01	0	420	0
19	.01	.02	.12	.12	.30	0	.01	.01	.01	0	56	0
20	.01	.02	.12	.12	.30	0	.01	.01	.01	0	5.0	62
21	.02	.02	.12	.12	.20	0	.01	.01	.01	0	0	25
22	.02	.02	.12	.12	.20	0	.01	.01	.01	147	0	6.0
23	.02	.02	.12	.12	.20	0	.01	.01	.01	50	0	2.0
24	.02	.02	.12	.12	.20	0	.01	.01	.01	10	0	0
25	.02	.02	.12	.12	.20	0	.01	.01	.01	1.8	0	0
26	.02	.02	.12	.13	.10	0	.01	.01	.01	.30	0	0
27	.02	.02	.12	.13	.10	0	.01	.01	.01	0	0	0
28	.02	.02	.12	.13	.10	0	.01	.01	.01	0	0	0
29	.02	.02	.12	.13	---	0	.01	.01	.01	0	33	0
30	.02	.02	.12	.13	---	0	.01	.01	.01	0	6.0	0
31	.02	---	.12	.13	---	0	---	.01	---	0	0	---
TOTAL	0.32	0.60	3767.47	3.78	1028.93	1723.15	0.19	0.31	0.30	209.11	3087.3	95.5
MEAN	.010	.020	122	.12	36.7	55.6	.006	.010	.010	6.75	99.6	3.18
MAX	.02	.02	2230	.13	874	1450	.01	.01	.01	147	896	62
MIN	0	.02	.02	.12	.10	0	0	.01	.01	0	0	0
AC-FT	.6	1.2	7470	7.5	2040	3420	.4	.6	.6	415	6120	189
CAL YR 1982	TOTAL	4770.63	MEAN	13.1	MAX	2230	MIN	0	AC-FT	9460		
WTR YR 1983	TOTAL	9916.96	MEAN	27.2	MAX	2230	MIN	0	AC-FT	19670		



10256300 SAN GORGONIO RIVER AT BANNING, CA

LOCATION.--Lat 33°55'52", long 116°49'37", in NW 1/4 NE 1/4 NE 1/4 sec.12, T.3 S., R.1 E., Riverside County, Hydrologic Unit 18100200, on left bank 1.7 mi east of Banning.

DRAINAGE AREA.--44.2 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1981 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft from topographic map.

REMARKS.--Indefinite stage-discharge relation during year. No regulation above station. Some pumping upstream for irrigation. Discharge measurements and observations of no flow are given in table below.

EXTREMES FOR CURRENT YEAR.--Maximum discharge probably occurred Nov. 30, discharge 170 ft<sup>3</sup>/s estimated, or Dec. 23, discharge unknown; no flow many days.

## DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Time	Discharge (ft <sup>3</sup> /s)	Date	Time	Discharge (ft <sup>3</sup> /s)
Oct. 6	0915	0	Feb. 8	1030	15
Nov. 2	1145	0	10	1530	0
10	1130	0.53	23	1700	e6.7
30	unknown	e170	27	1530	e118
Dec. 1	1030	0	28	1630	15
7	1600	0	Mar. 8	0930	11
23	0945	12	21	1430	26
29	1215	0	Apr. 18	1045	48
Jan. 18	1200	0	29	1115	62
27	1315	5.1	July 26	1415	12
28	1400	0	Sept. 12	1100	6.4
Feb. 1	0945	e0.15			

e Estimated

## SALTON SEA BASIN

10256500 SNOW CREEK NEAR WHITE WATER, CA

LOCATION (REVISED).--Lat 33°52'14", long 116°40'49", in SE 1/4 NW 1/4 sec.33, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on left bank 5 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 mi<sup>2</sup>.

## 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. Altitude of both gages is 2,000 ft, from topographic map. Prior to September 1931, at various sites within 500 ft of present site at different datums. September 1931 to Oct. 6, 1970, at site 190 ft downstream at datum 15.9 ft lower. Oct. 6, 1970 to Oct. 25, 1978, at site 280 ft upstream above diversion at same datum. Gage moved to present site 10 ft downstream of diversion to concrete control Oct. 25, 1978.

REMARKS.--Records fair. 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: 31 years (water years 1923-26, 1929-31, 1960-83), 9.98 ft<sup>3</sup>/s, 7,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 13.8 ft, from floodmarks, site and datum then in use, from rating curve extended above 55 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 2.1 ft<sup>3</sup>/s June 23-27, Sept. 5-11, 1961.

EXTREMES FOR CURRENT YEAR.--Combined creek and diversion: Peak discharges above base of 100 ft<sup>3</sup>/s (revised) and maximum (\*), from rating curve extended above 41 ft<sup>3</sup>/s on basis of study of flow over broad-crested weir:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1030	*791	4.98	Mar. 24	0445	153	2.91
Dec. 22	2315	696	4.74	Apr. 29	1345	103	2.66
Jan. 27	1400	129	2.80	Aug. 16	1230	312	3.57
Feb. 8	0730	115	2.72	Aug. 18	1630	143	2.87
Mar. 1	1700	449	4.02	Sept. 20	1230	177	3.02

Minimum daily discharge, 4.3 ft<sup>3</sup>/s Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	4.8	31	10	17	153	38	49	54	27	15	12
2	4.7	4.6	20	10	18	130	38	42	48	27	14	12
3	4.6	4.6	16	10	19	60	37	39	43	28	14	11
4	4.5	4.6	15	10	17	50	33	39	42	27	13	11
5	4.5	4.6	14	10	18	49	30	37	42	27	13	10
6	4.5	4.5	13	10	19	48	27	33	44	27	13	9.8
7	4.4	4.5	12	10	24	46	25	34	46	25	16	9.8
8	4.5	5.4	12	9.4	58	44	24	39	43	25	14	9.6
9	4.4	7.7	12	9.3	32	42	23	42	43	24	20	9.4
10	4.5	10	12	8.7	25	40	22	40	43	22	17	9.5
11	4.4	7.8	12	8.5	23	37	23	37	44	21	15	9.1
12	4.4	7.0	12	8.4	21	32	21	34	42	21	14	11
13	4.5	6.8	12	8.3	20	31	21	32	48	20	14	11
14	4.4	6.7	12	8.7	19	46	21	31	36	21	14	9.6
15	4.4	6.4	12	8.9	18	36	20	35	36	21	19	9.1
16	4.4	6.2	12	9.5	18	31	19	41	37	19	68	9.2
17	4.4	5.9	11	9.9	16	33	20	40	38	17	38	9.0
18	4.4	6.0	11	9.3	18	43	45	38	38	18	55	8.7
19	4.3	17	11	9.9	17	33	30	41	36	18	46	9.8
20	4.5	11	10	9.0	17	29	33	45	34	18	28	52
21	4.5	8.6	10	9.1	16	35	56	48	32	18	22	22
22	4.5	8.0	92	9.6	15	30	39	45	31	18	20	15
23	4.4	8.0	35	16	15	33	34	61	30	17	18	13
24	5.2	7.7	14	27	16	73	32	59	29	17	18	11
25	5.1	7.3	13	27	16	48	30	58	29	16	17	11
26	8.2	7.5	12	16	27	40	28	60	30	15	16	12
27	10	7.8	11	55	117	36	27	60	28	15	16	12
28	7.2	7.7	10	32	90	33	28	63	27	15	16	10
29	5.0	8.4	10	47	---	34	67	67	27	14	14	11
30	4.9	100	10	23	---	38	71	65	27	14	13	13
31	4.8	---	10	19	---	41	---	62	---	15	12	---
TOTAL	153.2	307.1	499	468.5	746	1454	962	1416	1127	627	642	372.6
MEAN	4.94	10.2	16.1	15.1	26.6	46.9	32.1	45.7	37.6	20.2	20.7	12.4
MAX	10	100	92	55	117	153	71	67	54	28	68	52
MIN	4.3	4.5	10	8.3	15	29	19	31	27	14	12	8.7
AC-FT	304	609	990	929	1480	2880	1910	2810	2240	1240	1270	739
CAL YR 1982	TOTAL	3937.1	MEAN	10.8	MAX	123	MIN	3.4	AC-FT	7810		
WTR YR 1983	TOTAL	8774.4	MEAN	24.0	MAX	153	MIN	4.3	AC-FT	17400		

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 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (HG/L AS CAC03)	HARD- NESS NONCAR- BONATE (HG/L AS CAC03)	CALCIUM DIS- SOLVED (HG/L AS CA)	SODIUM, DIS- SOLVED (HG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
NOV 18...	1430	5.9	110	7.9	11.5	32	0	11	8.6	35	.7
MAY 16...	1215	37	63	8.1	11.5	20	0	6.9	5.1	34	.5

DATE	POTAS- SIUM, DIS- SOLVED (HG/L AS K)	ALKA- LINIT LAB (HG/L AS CAC03)	SULFATE DIS- SOLVED (HG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (HG/L AS F)	SILICA, DIS- SOLVED (HG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (HG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (HG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (HG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (HG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 18...	2.0	54	<5.0	<.10	20	73	--	<.10	<.01	10	0
MAY 16...	1.5	33	2.2	<.10	18	47	57	<.10	.01	<10	21

&lt; Actual value is known to be less than the value shown.

## SALTON SEA BASIN

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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,400 ft, from topographic map.

REMARKS.--Records poor. Slight regulation of low flow by two small dams with a combined capacity of about 3 acre-ft, 2 mi above station.

AVERAGE DISCHARGE.--16 years, 4.28 ft<sup>3</sup>/s, 3,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,750 ft<sup>3</sup>/s Aug. 17, 1983, gage height, 3.33 ft, on basis of slope-conveyance study of maximum flow; maximum gage-height, 6.40 ft Jan. 25, 1969; no flow for long periods in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 36 ft<sup>3</sup>/s on basis of slope-conveyance study:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1200	103	1.54	Aug. 17	2030	*1750	3.33
Dec. 22	2330	523	2.86				
Mar. 1	1300	80	1.51				

Minimum, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.1	2.5	0	0	25	9.9	10	6.9	6.2	4.1	1.5
2	1.3	1.1	0	0	6.8	36	10	9.5	6.9	5.9	4.1	1.5
3	1.3	1.1	0	0	5.5	16	11	9.5	6.7	5.9	3.9	1.0
4	.89	.89	0	0	1.4	8.6	10	9.9	6.7	5.7	3.6	1.0
5	1.1	.89	0	0	1.0	7.6	10	10	6.4	5.7	3.6	1.0
6	1.1	.89	0	0	0	7.0	10	10	6.4	5.5	3.6	.50
7	1.1	.56	0	0	0	6.7	9.5	9.9	6.4	5.5	4.3	.50
8	1.3	.56	1.0	0	3.0	6.4	9.1	11	6.4	5.5	4.7	0
9	1.3	1.1	1.9	0	.70	6.2	9.1	12	6.4	5.2	5.7	0
10	1.1	2.4	2.0	0	0	6.0	9.1	12	6.4	5.5	5.5	0
11	.89	2.0	1.9	0	0	5.8	9.1	12	6.4	5.2	4.7	0
12	.89	1.7	1.9	0	0	5.7	9.1	11	6.4	5.2	4.7	0
13	.89	1.6	1.9	0	0	5.6	9.1	11	6.2	5.2	4.5	0
14	.71	1.3	2.0	0	0	5.6	8.8	10	6.2	5.0	4.5	0
15	.71	1.1	2.0	0	0	5.6	8.4	10	6.2	4.7	5.7	0
16	.71	1.1	1.9	0	0	5.6	8.4	11	6.2	5.0	9.5	0
17	.71	1.1	1.9	0	0	5.6	8.4	10	5.9	5.0	47	0
18	.71	1.1	1.8	0	0	7.0	9.1	9.9	5.9	4.7	7.0	0
19	.71	1.1	1.8	0	0	6.0	8.8	9.9	6.2	4.5	4.0	0
20	.71	1.1	1.8	0	.40	6.0	9.9	9.9	6.2	4.5	4.0	0
21	.71	1.3	1.8	0	.70	7.0	9.9	9.5	6.2	4.5	3.6	0
22	.71	1.3	20	0	1.4	7.0	8.8	9.5	6.2	4.5	3.6	0
23	.71	1.3	2.5	0	2.2	6.0	9.1	9.1	6.2	4.5	3.0	0
24	.56	1.3	.50	0	2.6	8.0	9.1	8.8	6.2	4.3	3.0	0
25	.71	1.3	0	0	2.8	7.2	9.5	8.4	6.2	4.3	3.0	0
26	.89	1.3	0	0	3.2	7.2	9.5	8.1	6.2	4.3	2.5	0
27	.89	1.3	0	2.3	13	7.2	9.5	7.8	6.2	4.3	2.5	0
28	1.1	1.3	0	.95	3.6	7.8	9.5	7.5	6.2	4.1	2.5	0
29	1.1	1.6	0	5.0	---	8.1	11	6.9	6.2	4.1	2.0	0
30	1.1	9.3	0	1.7	---	8.8	12	6.9	6.2	4.1	2.0	0
31	1.1	---	0	0	---	9.5	---	6.9	---	4.1	1.5	---
TOTAL	29.31	45.09	51.10	9.95	48.30	267.8	284.7	297.9	189.4	152.7	167.9	7.00
MEAN	.95	1.50	1.65	.32	1.72	8.64	9.49	9.61	6.31	4.93	5.42	.23
MAX	1.6	9.3	20	5.0	13	36	12	12	6.9	6.2	47	1.5
MIN	.56	.56	0	0	0	5.6	8.4	6.9	5.9	4.1	1.5	0
AC-FT	58	89	101	20	96	531	565	591	376	303	333	14
CAL YR 1982	TOTAL	682.35	MEAN	1.87	MAX	20	MIN	0	AC-FT	1350		
WTR YR 1983	TOTAL	1551.15	MEAN	4.25	MAX	47	MIN	0	AC-FT	3080		

## 10257710 CHINO CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°50'21", long 116°36'45", in SW 1/4 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 2,500 ft, from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, Oct. 1 to Dec. 9, which are poor. Two diversions for the city of Palm Springs 0.5 mi upstream.

AVERAGE DISCHARGE.--9 years, 0.94 ft<sup>3</sup>/s, 679 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 247 ft<sup>3</sup>/s Aug. 15, 1977, gage height, 5.93 ft, from floodmark, from rating curve extended above 61 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8.0 ft<sup>3</sup>/s Nov. 30; no flow Oct. 1 to Nov. 9, Nov. 17-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	4.0	1.9	2.9	3.7	5.4	3.8	3.5	1.1	.30	1.9
2		0	3.0	1.8	3.0	.71	5.2	3.8	3.3	1.1	.28	1.6
3		0	2.6	1.6	3.1	.25	5.2	3.8	3.1	1.0	.25	1.4
4		0	2.3	1.5	3.3	.15	5.2	3.8	3.1	.93	.25	1.3
5		0	1.9	1.5	3.3	.23	4.9	3.8	2.6	.89	.22	1.3
6		0	1.6	1.4	3.4	.50	4.7	3.7	2.5	.89	.23	1.2
7		0	1.4	1.3	3.3	.73	4.5	3.5	2.4	.87	.36	1.3
8		0	.50	1.2	3.4	1.0	4.5	3.6	2.3	.81	.39	1.2
9		0	4.7	1.1	4.0	1.2	4.7	3.5	2.3	.77	.60	1.1
10		1.0	3.3	1.0	5.0	1.1	4.7	3.7	2.3	.68	.47	1.2
11		.60	3.2	.97	4.8	1.3	4.7	3.8	2.3	.60	.39	1.1
12		.54	3.0	.92	4.6	1.2	4.5	3.6	2.2	.44	.37	1.1
13		.46	2.7	.84	4.5	1.2	4.1	3.5	2.5	.33	.31	1.1
14		.43	2.6	.82	4.5	1.2	4.1	3.5	2.9	.33	.31	1.0
15		.40	2.1	.78	4.4	1.2	4.0	3.4	2.4	.33	.61	.98
16		.35	1.9	.70	4.2	1.2	3.4	3.4	1.9	.31	1.6	1.0
17		0	1.7	.61	3.9	1.2	3.0	3.4	1.8	.23	1.8	.99
18		0	1.5	.52	3.9	1.2	3.2	3.3	1.7	.18	1.2	1.0
19		0	1.3	.40	3.5	1.4	3.0	3.2	1.6	.18	.46	.95
20		0	1.1	.32	3.2	1.6	3.0	3.2	1.6	.24	.62	.98
21		0	1.0	.24	3.0	1.5	3.4	3.2	1.5	.42	.89	1.5
22		0	1.3	.20	2.6	1.7	3.2	3.2	1.5	.35	1.8	2.6
23		0	2.8	.80	2.3	1.9	3.0	3.3	1.5	.42	2.5	2.2
24		0	2.4	1.4	1.4	1.1	3.2	3.3	1.4	.37	2.8	2.0
25		0	2.4	2.0	1.0	1.1	3.3	3.4	1.3	.36	2.6	2.5
26		0	2.3	1.6	3.5	1.2	3.1	3.3	1.3	.34	2.4	2.6
27		0	2.2	2.0	4.1	1.1	3.3	3.4	1.3	.34	2.0	2.5
28		0	2.2	2.3	5.1	1.1	3.1	3.3	1.3	.31	2.0	2.4
29		0	2.2	2.5	---	1.3	3.4	3.3	1.2	.29	1.9	2.3
30		8.0	2.2	2.7	---	1.3	3.6	3.4	1.2	.28	1.7	2.2
31		---	2.1	2.8	---	3.0	---	3.5	---	.30	1.7	---
TOTAL	0	11.78	69.50	39.72	99.2	38.57	118.6	107.9	61.8	15.99	33.31	46.50
MEAN	0	.39	2.24	1.28	3.54	1.24	3.95	3.48	2.06	.52	1.07	1.55
MAX	0	8.0	4.7	2.8	5.1	3.7	5.4	3.8	3.5	1.1	2.8	2.6
MIN	0	0	.50	.20	1.0	.15	3.0	3.2	1.2	.18	.22	.95
AC-FT	0	23	138	79	197	77	235	214	123	32	66	92

CAL YR 1982 TOTAL 233.95 MEAN 0.64 MAX 8.0 MIN 0 AC-FT 464  
WTR YR 1983 TOTAL 642.87 MEAN 1.76 MAX 8.0 MIN 0 AC-FT 1280

NOTE.--No gage-height record Oct. 1 to Dec. 9.

## SALTON SEA BASIN

10257710 CHINO CANYON CREEK NEAR PALM SPRINGS, CA

## 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 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (HG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (HG/L CACO3)	CALCIUM DIS- SOLVED (HG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (HG/L AS MG)	SODIUM, DIS- SOLVED (HG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
MAY 16...	1430	3.3	190	8.7	17.0	76	0	26	2.8	8.6	18	.4

DATE	POTAS- SIUM, DIS- SOLVED (HG/L AS K)	ALKA- LINITY FIELD (HG/L AS CACO3)	SULFATE DIS- SOLVED (HG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (HG/L AS CL)	FLUO- RIDE, DIS- SOLVED (HG/L AS F)	SILICA, DIS- SOLVED (HG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (HG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (HG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (HG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (HG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
MAY 16...	4.9	98	7.4	2.3	<.10	19	116	130	<.10	<.01	20	10

&lt; Actual value is known to be less than the value shown.

## 10258030 TAHQUITZ CREEK AT PALM SPRINGS, CA

LOCATION.--Lat 33°48'39", long 116°32'34", in NW 1/4 SW 1/4 NW 1/4 sec.23, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on right bank 200 ft downstream of Palm Canyon Drive (Hwy 111), and 1.6 mi south of the Palm Springs post office.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1982 to June 1983 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 440 ft, from topographic map.

REMARKS.--Records poor. No gage-height record Mar. 1 to June 20. Gage removed June 20 for flood channel construction.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1982 TO JUNE 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.28	14	7.9	11		---	---	---			
2	.42	.27	8.3	7.3	14		---	---	---			
3	.45	.27	7.1	6.6	15		---	---	---			
4	.50	.29	6.3	6.6	13		---	---	---			
5	.40	.29	6.0	6.3	12		---	---	---			
6	.35	.29	5.8	6.0	11		---	---	---			
7	.36	.29	5.7	5.8	12		---	---	---			
8	.21	.29	6.1	5.8	21		---	---	---			
9	.23	.70	30	5.7	19		---	---	---			
10	.34	2.2	10	5.4	17		---	---	---			
11	.51	1.5	8.0	5.3	17		---	---	---			
12	.48	1.1	6.0	5.1	17		---	---	---			
13	.50	.94	5.7	5.1	16		---	---	---			
14	.31	.95	5.5	5.1	15		---	---	---			
15	.16	.94	5.4	5.1	14		a15	---	---			
16	.15	.94	5.4	5.2	14		---	---	---			
17	.13	.94	5.4	5.4	13		---	---	---			
18	.12	.94	5.3	5.4	13		---	---	---			
19	.10	3.2	4.8	5.6	13		---	---	---			
20	.09	4.1	4.5	5.5	13		---	---	a65			
21	.09	2.6	4.4	5.2	13		---	---	---			
22	.10	2.2	33	6.3	13		---	---	---			
23	.06	2.0	42	9.8	12		---	---	---			
24	.06	1.8	20	9.8	12		---	---	---			
25	.11	1.5	14	15	13		---	---	---			
26	.16	1.3	12	12	25		---	---	---			
27	1.1	1.2	11	13	47		---	a98	---			
28	.76	1.3	9.8	13	42		---	---	---			
29	.56	1.3	9.1	16	---		---	---	---			
30	.44	43	8.2	13	---		---	---	---			
31	.32	---	7.9	12	---		---	---	---			
TOTAL	10.07	78.92	326.7	241.3	467	---	---	---	---			
MEAN	.32	2.63	10.5	7.78	16.7	---	---	---	---			
MAX	1.1	.43	42	16	47	---	---	---	---			
MIN	.06	.27	4.4	5.1	11	---	---	---	---			
AC-PT	20	157	648	479	926	---	---	---	---			

a Result of discharge measurement

Note.--No gage-height record Mar. 1 to June 20.

## SALTON SEA BASIN

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°44'42", long 116°32'05", in NE 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 700 ft, from topographic map. Prior to Jan. 14, 1942, at datum 0.2 ft higher.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--47 years (water years 1931-41, 1948-83), 5.39 ft<sup>3</sup>/s, 3,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,000 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 7.29 ft, from rating curve extended above 650 ft<sup>3</sup>/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 above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 1,300 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 6.38 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1315	590	4.02	Mar. 1	1830	*4,140	6.30
Dec. 9	1230	1,630	5.03	Mar. 18	2115	210	3.03
Dec. 22	2400	676	4.17	Mar. 24	0600	724	3.98
Jan. 29	0445	416	3.76	Aug. 17	2230	3,900	6.21
Feb. 2	1645	233	3.34	Sept. 20	1330	1,360	4.82
Feb. 8	1030	492	4.02				

Minimum daily discharge, 0.05 ft<sup>3</sup>/s Oct. 1-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.27	14	9.5	33	684	83	49	15	4.8	3.1	3.3
2	.05	.23	5.4	9.5	81	776	76	53	16	4.7	2.9	3.2
3	.05	.23	2.9	9.5	86	628	69	39	16	4.7	2.2	3.2
4	.05	.23	2.1	9.5	69	334	65	35	15	4.5	2.2	3.2
5	.05	.23	1.5	8.2	69	229	59	32	14	4.3	1.8	3.2
6	.05	.23	1.4	8.2	93	183	54	31	14	4.0	1.8	3.2
7	.05	.34	1.1	8.2	144	146	51	31	13	3.7	3.4	3.2
8	.05	.38	4.4	7.6	229	119	48	30	12	3.9	4.0	3.2
9	.05	.84	576	7.1	52	102	45	27	12	3.7	6.0	3.2
10	.05	3.5	239	7.1	36	92	44	27	11	3.6	5.6	3.2
11	.05	1.8	50	7.1	33	82	44	26	9.5	3.6	7.6	2.9
12	.05	.97	10	6.5	30	74	44	25	9.1	3.4	5.8	3.2
13	.05	.84	7.0	6.5	28	66	41	25	8.1	3.4	3.9	3.2
14	.05	.71	5.6	6.5	27	61	38	23	7.5	3.2	3.4	2.9
15	.05	.66	4.8	6.5	25	56	35	22	7.0	3.1	3.9	2.7
16	.05	.66	4.4	6.5	24	52	32	21	6.7	2.9	15	2.9
17	.05	.71	4.0	6.5	23	55	30	21	6.5	2.9	387	2.7
18	.05	.77	3.7	6.5	22	119	34	20	6.2	2.7	483	2.7
19	.05	2.2	3.1	8.2	22	107	30	19	6.0	2.5	25	3.4
20	.05	1.5	2.9	8.2	22	80	30	18	5.8	2.7	9.6	278
21	.05	1.3	2.6	7.1	22	119	50	18	5.6	3.1	7.0	20
22	.05	1.1	32	7.1	22	102	39	17	5.6	3.2	5.0	10
23	.05	.97	118	13	22	95	35	17	5.4	2.9	4.5	7.6
24	.05	.90	28	12	22	374	32	17	5.2	3.1	4.3	7.0
25	.20	.84	21	13	24	248	30	16	5.2	2.7	4.1	6.8
26	.34	.77	19	10	34	201	30	16	5.2	2.7	3.9	6.6
27	.42	.77	16	64	65	163	28	15	5.2	2.5	3.8	6.4
28	.27	.77	13	44	93	144	27	14	5.0	2.5	3.7	6.2
29	.27	.97	12	185	---	127	30	14	5.0	2.2	3.6	6.2
30	.30	145	12	63	---	106	55	14	5.0	1.8	3.5	6.0
31	.30	---	11	43	---	96	---	14	---	2.0	3.4	---
TOTAL	3.30	170.69	1227.9	614.6	1452	5820	1308	746	262.8	101.0	1024.0	419.5
MEAN	.11	5.69	39.6	19.8	51.9	188	43.6	24.1	8.76	3.26	33.0	14.0
MAX	.42	145	576	185	229	776	83	53	16	4.8	483	278
MIN	.05	.23	1.1	6.5	22	52	27	14	5.0	1.8	1.8	2.7
AC-FT	6.5	339	2440	1220	2880	11540	2590	1480	521	200	2030	832

CAL YR 1982	TOTAL	3734.21	MEAN	10.2	MAX	576	MIN	0	AC-FT	7410
WTR YR 1983	TOTAL	13149.79	MEAN	36.0	MAX	776	MIN	.05	AC-FT	26080



10259000 ANDREAS CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°45'36", long 116°32'57", in NW 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 800 ft, from topographic map. Prior to Mar. 25, 1949, reference point at same site at different datum.

REMARKS.--Records poor. No regulation above station. One small diversion for domestic use about 1 mi above station.

AVERAGE DISCHARGE.--35 years, 2.98 ft<sup>3</sup>/s, 2,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft<sup>3</sup>/s Aug. 31, 1954, gage height, 7.11 ft, from rating curve extended above 80 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 80 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1130	419	4.19	Mar. 24	0445	62	2.71
Dec. 22	2315	*447	4.27	Aug. 7	1800	82	2.86
Jan. 29	0400	58	2.53	Aug. 16	1300	134	3.17
Feb. 8	0645	65	2.67	Sept. 20	1315	134	3.17
Mar. 1	1815	233	3.59				

Minimum daily discharge, 2.2 ft<sup>3</sup>/s Oct. 11-12, 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.6	14	5.5	10	54	23	21	15	9.9	7.6	3.9
2	2.6	2.4	5.0	6.1	20	59	21	20	15	9.7	7.2	3.8
3	2.5	2.6	4.6	6.4	21	48	21	20	14	9.6	5.4	3.8
4	2.5	2.7	4.2	7.0	14	36	20	19	14	9.5	4.9	3.8
5	2.5	2.7	3.8	7.5	13	32	20	19	14	9.3	4.5	3.8
6	2.5	2.8	3.6	7.4	14	32	19	18	14	9.1	4.2	3.7
7	2.4	2.9	3.4	7.2	21	31	19	19	14	9.0	5.0	3.7
8	2.4	2.6	4.5	7.2	36	29	19	19	14	8.8	6.0	3.7
9	2.3	4.8	21	7.2	18	29	19	19	13	8.6	9.0	3.7
10	2.3	6.3	12	6.7	16	29	17	18	13	8.5	8.0	3.7
11	2.2	4.0	5.8	6.6	15	29	19	18	13	8.4	6.0	3.7
12	2.2	3.4	4.9	6.7	14	28	19	18	13	8.3	5.2	3.7
13	2.3	3.3	4.5	6.5	14	28	21	18	13	8.1	4.8	3.7
14	2.4	3.2	4.1	7.2	14	28	19	18	13	7.9	4.5	3.7
15	2.4	3.1	3.9	8.2	14	26	19	18	12	7.7	16	3.7
16	2.4	3.2	3.7	8.6	13	26	19	17	12	7.7	35	3.6
17	2.3	3.1	3.6	9.0	13	26	20	17	12	7.6	15	3.6
18	2.3	3.1	3.5	8.8	12	28	25	17	12	7.3	49	3.6
19	2.4	5.2	3.3	9.7	12	27	19	17	12	7.0	35	3.5
20	2.5	3.9	3.3	9.6	12	26	21	17	12	6.8	10	48
21	2.5	3.1	3.3	11	12	27	28	17	11	6.6	7.0	18
22	2.3	3.1	38	11	12	27	22	16	11	6.4	6.0	6.4
23	2.2	3.1	64	20	12	28	19	16	11	6.2	5.1	5.4
24	2.2	3.1	20	18	12	33	18	16	11	6.0	4.9	5.2
25	2.2	3.0	11	24	12	26	18	16	11	5.8	4.7	4.9
26	2.7	2.9	7.1	17	27	25	18	16	11	5.7	4.5	4.8
27	2.5	2.6	6.3	34	38	24	17	16	11	5.5	4.4	4.7
28	2.6	2.5	5.9	27	27	24	17	15	10	5.3	4.2	4.6
29	2.6	2.8	5.7	33	---	23	21	15	10	5.1	4.1	4.5
30	2.6	59	5.6	20	---	23	23	15	10	4.9	4.0	4.5
31	2.7	---	5.5	14	---	23	---	15	---	6.5	4.0	---
TOTAL	75.2	153.1	289.1	378.1	468	934	600	540	371	232.8	295.2	181.4
MEAN	2.43	5.10	9.33	12.2	16.7	30.1	20.0	17.4	12.4	7.51	9.52	6.05
MAX	2.7	59	64	34	38	59	28	21	15	9.9	49	48
MIN	2.2	2.4	3.3	5.5	10	23	17	15	10	4.9	4.0	3.5
AC-FT	149	304	573	750	928	1850	1190	1070	736	462	586	360
CAL YR 1982	TOTAL	2062.3	MEAN	5.65	MAX	64	MIN	2.2	AC-FT	4090		
WTR YR 1983	TOTAL	4517.9	MEAN	12.4	MAX	64	MIN	2.2	AC-FT	8960		

## SALTON SEA BASIN

10259200 DEEP CREEK NEAR PALM DESERT, CA

LOCATION.--Lat 33°37'52", long 116°23'29", in SE 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,440 ft, from topographic map.

REMARKS.--Records fair except for periods of no gage-height record, Apr. 6 to June 8 and Aug. 20 to Sept. 19, which are poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--21 years, 2.30 ft<sup>3</sup>/s, 1,670 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft<sup>3</sup>/s Sept. 10, 1976, gage height, 7.84 ft, recorded in gage well, 9.85 ft, from floodmarks, from rating curve extended above 40 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 2.68 ft, 5.15 ft and 7.84 ft; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft<sup>3</sup>/s and maximum (\*), on basis of rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1400	86	3.03	Mar. 1	1930	941	4.86
Dec. 9	1000	*1,180	5.09	Mar. 24	0845	49	2.69
Dec. 23	0200	170	3.50	Aug. 18	1915	540	4.35
Jan. 29	0500	125	3.29	Sept. 20	1430	266	3.80
Feb. 8	1000	66	2.86				

Minimum daily discharge, 0.10 ft<sup>3</sup>/s, Oct. 25-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.12	8.9	4.6	11	139	22	9.5	5.3	3.0	2.2	2.5
2	.18	.12	2.5	4.3	13	423	20	9.2	5.2	3.0	1.7	2.4
3	.18	.12	1.4	4.1	14	188	19	8.9	5.1	2.9	1.5	2.3
4	.17	.13	1.9	3.9	16	72	18	8.7	5.0	2.8	.94	2.2
5	.16	.14	2.7	3.8	21	50	17	8.6	4.9	2.8	.89	2.1
6	.16	.14	2.4	3.6	29	44	16	8.4	4.8	2.7	.84	1.9
7	.16	.14	2.2	3.4	39	40	14	8.3	4.7	2.7	1.1	1.8
8	.14	.16	6.8	3.3	51	35	13	8.1	4.6	2.7	1.2	1.7
9	.14	.22	419	3.1	36	32	12	8.0	4.6	2.6	3.7	1.7
10	.14	.94	105	2.9	26	29	12	7.8	4.5	2.6	3.5	1.6
11	.14	.66	25	2.8	22	27	12	7.7	4.3	2.5	4.4	1.6
12	.12	.41	5.0	2.7	19	24	12	7.6	4.2	2.4	2.9	1.5
13	.12	.32	2.0	2.6	18	22	11	7.4	4.1	2.4	1.7	1.5
14	.12	.25	1.8	2.5	16	24	11	7.3	4.0	2.4	1.4	1.5
15	.12	.20	1.7	2.5	14	23	11	7.2	3.9	2.3	1.8	1.4
16	.12	.17	1.6	2.5	12	20	11	7.0	3.8	2.1	8.1	1.4
17	.12	.14	1.5	2.5	11	19	11	6.9	3.7	2.1	73	1.4
18	.12	.13	1.4	2.4	10	22	10	6.8	3.6	2.1	168	15
19	.12	.13	1.3	2.4	10	19	10	6.7	3.4	2.0	48	4.5
20	.12	.13	1.3	2.3	9.3	18	12	6.5	3.4	2.0	8.5	52
21	.12	.17	1.2	2.2	8.5	19	10	6.4	3.4	3.5	7.0	15
22	.12	.20	10	2.2	7.8	17	10	6.3	3.4	1.7	5.8	4.5
23	.12	.18	60	2.4	7.5	16	10	6.2	3.3	1.2	5.0	1.3
24	.12	.16	15	2.3	7.6	35	10	6.1	3.2	1.1	4.3	1.3
25	.10	.16	9.5	2.3	7.3	33	9.8	6.0	3.2	.94	4.0	1.3
26	.10	.16	7.8	2.4	7.8	27	9.6	5.9	3.2	.89	3.7	1.3
27	.10	.14	6.6	12	13	24	9.5	5.8	3.2	.86	3.4	1.3
28	.10	.14	6.0	15	32	23	9.4	5.7	3.1	.87	3.2	1.3
29	.10	.17	6.4	51	---	22	9.2	5.6	3.1	.82	2.9	1.6
30	.11	25	5.0	22	---	21	10	5.5	3.0	.78	2.8	2.5
31	.12	---	4.8	14	---	22	---	5.4	---	.79	2.6	---
TOTAL	4.04	31.25	727.7	190.0	488.8	1529	371.5	221.5	119.2	63.55	380.07	133.4
MEAN	.13	1.04	23.5	6.13	17.5	49.3	12.4	7.15	3.97	2.05	12.3	4.45
MAX	.18	25	419	51	51	423	22	9.5	5.3	3.5	168	52
MIN	.10	.12	1.2	2.2	7.3	16	9.2	5.4	3.0	.78	.84	1.3
AC-FT	8.0	62	1440	377	970	3030	737	439	236	126	754	265
CAL YR 1982	TOTAL	1197.62	MEAN	3.28	MAX	419	MIN	.02	AC-FT	2380		
WTR YR 1983	TOTAL	4260.01	MEAN	11.7	MAX	423	MIN	.10	AC-FT	8450		

## 10259300 WHITEWATER RIVER AT INDIO, CA

LOCATION.--Lat 33°44'14", long 116°14'07", in SW 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 0 ft, 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.--Records good. No regulation above station. Water diverted from tributary streams for municipal supply in vicinity of Palm Springs.

AVERAGE DISCHARGE.--17 years, 3.89 ft<sup>3</sup>/s, 2,820 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 14.41 ft, site and datum then in use, from rating curve extended above 1,300 ft<sup>3</sup>/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 ft<sup>3</sup>/s, on basis of slope-area measurement at site 5.0 mi upstream. Flood of Nov. 22, 1965, reached a stage of 15.3 ft from floodmarks, at site and datum used prior to Oct. 1, 1979, discharge 14,100 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 450 ft<sup>3</sup>/s on basis of critical-depth study:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 2	2000	1,570	3.30	Aug. 17	1930	*1,600	3.32
Aug. 8	0630	207	2.36	Sept. 20	1500	1,110	3.02

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0		0	15	0			0	0	0
2			0		0.5	286	0			0	0	0
3			0		0.5	81	0			0	0	0
4			0		0	30	0			0	0	0
5			0		0	.01	0			13	0	0
6			0		0	0	0			1.1	0	0
7			0		0	0	0			0	0	0
8			0		0	0	0			0	7.9	0
9			0		0	0	0			0	0	0
10			35		0	0	0			0	0	0
11			0		0	0	0			0	0	0
12			0		0	0	0			0	0	0
13			0		0	0	0			0	0	0
14			0		0	0	1.1			0	0	0
15			0		0	0	0			0	.11	0
16			0		0	0	0			0	6.3	0
17			0		0	0	0			0	300	0
18			0		0	0	0			0	535	0
19			0		0	0	0			0	62	0
20			0		0	0	0			0	0	39
21			0		0	0	0			0	0	2.6
22			0		0	0	0			0	0	0
23			0		0	0	0			0	0	0
24			0		0	0	0			0	0	0
25			0		0	0	0			0	0	0
26			0		0	0	0			0	0	0
27			0		0	0	0			0	0	0
28			0		2.2	0	0			0	0	0
29			0		---	0	0			0	0	0
30			0		---	0	0			0	0	0
31			0		---	0	---			0	0	---
TOTAL	0	0	35	0	3.2	412.01	1.1	0	0	14.1	911.31	41.6
MEAN	0	0	1.13	0	.11	13.3	.037	0	0	.45	29.4	1.39
MAX	0	0	35	0	2.2	286	1.1	0	0	13	535	39
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	69	0	6.3	817	2.2	0	0	28	1810	83
CAL YR 1982	TOTAL	118.00	MEAN	.32	MAX	83	MIN	0	AC-FT	234		
WTR YR 1983	TOTAL	1418.32	MEAN	3.89	MAX	535	MIN	0	AC-FT	2810		

## SALTON SEA BASIN

10259540 WHITEWATER RIVER NEAR MECCA, CA

LOCATION.--Lat 33°31'29", long 116°04'36", in NW 1/4 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 mi<sup>2</sup>.

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 Valley 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.--Records fair. Most of the flow represents seepage and return flow from irrigated areas.

COOPERATION.--Fifteen discharge measurements were furnished by Coachella Valley Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,500 ft<sup>3</sup>/s Jan. 25, 1969, estimated; minimum daily, 37 ft<sup>3</sup>/s Nov. 25-29, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,580 ft<sup>3</sup>/s Aug. 18; minimum daily, 45 ft<sup>3</sup>/s July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	111	125	96	122	144	152	151	129	94	62	153
2	114	98	124	102	131	864	184	137	123	82	52	142
3	110	97	139	99	132	509	154	144	137	66	57	133
4	94	136	132	96	215	159	116	166	154	86	63	136
5	101	206	155	102	137	126	123	175	167	99	64	129
6	105	229	183	93	120	182	143	174	155	83	73	130
7	104	187	130	103	136	250	153	168	149	60	59	162
8	97	125	125	108	140	255	154	163	186	54	56	190
9	100	106	165	108	138	262	146	165	121	62	63	145
10	98	98	184	108	156	247	145	154	98	57	64	144
11	96	104	391	100	136	227	136	155	115	60	61	126
12	96	110	168	96	140	204	123	167	104	56	55	125
13	104	125	119	101	133	195	139	148	87	57	65	118
14	98	149	119	106	100	171	139	174	94	67	74	112
15	101	134	119	112	104	144	153	159	102	76	79	113
16	103	102	127	122	104	146	145	137	107	75	85	117
17	105	102	137	115	109	152	154	128	118	62	391	104
18	103	108	129	114	122	147	148	141	126	55	1580	100
19	99	121	135	124	124	135	131	159	112	60	450	117
20	98	115	147	117	118	129	137	162	94	59	340	211
21	105	129	136	111	125	133	144	151	81	65	270	88
22	107	134	128	106	122	117	152	181	85	60	200	71
23	107	114	131	108	123	127	170	176	77	49	190	67
24	103	107	158	111	129	141	166	145	85	55	180	68
25	108	110	165	116	143	141	156	142	85	55	170	84
26	100	114	113	135	134	150	153	156	83	45	160	108
27	93	109	111	142	141	115	168	170	82	51	150	100
28	92	115	106	135	136	118	167	187	86	64	150	97
29	105	125	89	131	---	125	163	182	100	68	140	99
30	110	118	94	127	---	130	179	189	107	62	140	90
31	106	---	97	125	---	143	---	151	---	60	131	---
TOTAL	3172	3738	4381	3469	3670	6088	4493	4957	3349	2004	5674	3579
MEAN	102	125	141	112	131	196	150	160	112	64.6	183	119
MAX	114	229	391	142	215	864	184	189	186	99	1580	211
MIN	92	97	89	93	100	115	116	128	77	45	52	67
AC-FT	6290	7410	8690	6880	7280	12080	8910	9830	6640	3970	11250	7100
CAL YR 1982	TOTAL	45925	MEAN	126	MAX	391	MIN	89	AC-FT	91090		
WTR YR 1983	TOTAL	48574	MEAN	133	MAX	1580	MIN	45	AC-FT	96350		

## 10260500 DEEP CREEK NEAR HESPERIA, CA

LOCATION.--Lat 34°20'28", long 117°13'39", in NW 1/4 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 mi<sup>2</sup>.

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. Altitude of gage is 3,050 ft, from topographic map. See WSP 1314 for history of changes prior to Dec. 10, 1938.

REMARKS.--Records good. Slight regulation by Lake Arrowhead, capacity, 48,000 acre-ft, used principally for recreation.

AVERAGE DISCHARGE.--72 years, 73.0 ft<sup>3</sup>/s, 52,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft<sup>3</sup>/s Mar. 2, 1938, gage height unknown, based on slope-area measurement of maximum flow; maximum gage height, 23.81 ft Feb. 10, 1978, (backwater from Forks Reservoir); no flow July 17, 18, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 3,400 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 11.30 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1215	7,820	7.01	Mar. 24	0745	498	3.03
Dec. 23	0030	7,330	6.84	Apr. 18	1100	573	3.12
Jan. 27	1400	4,040	5.49	Apr. 21	0430	1,410	3.90
Feb. 8	0700	2,110	4.41	Apr. 29	1645	2,420	4.60
Mar. 1	1845	*16,600	10.68				

Minimum daily discharge, 4.2 ft<sup>3</sup>/s Oct. 2-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	8.3	232	31	171	8280	412	633	102	32	11	12
2	4.2	8.0	85	29	154	7180	389	460	95	32	11	12
3	4.2	7.8	59	29	156	3510	388	391	90	31	10	13
4	4.2	7.5	45	27	134	1610	314	376	88	30	10	11
5	4.2	7.5	37	27	125	1030	271	336	85	28	9.3	9.6
6	4.2	7.4	33	26	125	804	239	300	81	26	9.3	9.2
7	4.6	7.4	30	25	139	680	228	290	77	24	10	8.8
8	4.5	7.3	30	32	849	601	215	299	75	24	12	8.8
9	4.5	9.2	29	32	347	550	209	299	71	23	14	9.2
10	4.5	26	30	31	234	519	212	288	68	21	20	9.2
11	4.5	20	28	29	186	454	208	261	66	21	21	8.8
12	4.4	15	26	28	155	349	197	237	65	21	23	8.4
13	4.6	13	24	27	151	310	188	226	60	20	33	8.4
14	5.1	13	23	27	155	385	174	191	56	19	31	8.4
15	4.7	12	21	24	136	328	168	191	54	18	21	7.8
16	4.6	13	20	26	130	355	168	201	53	18	56	7.6
17	4.5	14	19	26	131	420	173	189	50	18	61	7.5
18	4.5	15	19	26	121	446	398	176	48	17	95	7.4
19	4.5	70	18	31	117	382	307	171	46	17	67	7.4
20	4.5	67	18	33	105	362	358	174	44	17	58	8.3
21	4.7	33	17	28	101	364	934	170	43	16	50	9.4
22	4.9	24	414	31	100	320	559	175	42	16	42	9.7
23	5.0	20	1540	145	101	278	486	173	41	15	37	9.2
24	4.9	18	258	114	99	377	426	164	40	14	33	8.8
25	4.9	17	148	221	95	333	354	151	39	13	30	8.6
26	5.2	15	114	119	112	296	292	145	37	13	28	8.7
27	32	15	95	1390	2830	297	272	139	36	13	26	9.0
28	17	14	78	524	2640	312	266	130	35	13	23	9.6
29	11	14	58	757	---	328	1180	124	34	13	23	10
30	9.5	1410	53	315	---	384	1060	118	32	12	17	28
31	8.8	---	34	220	---	427	---	110	---	11	13	---
TOTAL	197.2	1928.4	3635	4430	9899	32271	11045	7288	1753	606	904.6	293.8
MEAN	6.36	64.3	117	143	354	1041	368	235	58.4	19.5	29.2	9.79
MAX	32	1410	1540	1390	2830	8280	1180	633	102	32	95	28
MIN	4.2	7.3	17	24	95	278	168	110	32	11	9.3	7.4
AC-FT	391	3820	7210	8790	19630	64010	21910	14460	3480	1200	1790	583

CAL YR 1982 TOTAL 25987.0 MEAN 71.2 MAX 1540 MIN 1.7 AC-FT 51540  
WTR YR 1983 TOTAL 74251.0 MEAN 204 MAX 8280 MIN 4.2 AC-FT 147300

## MOJAVE RIVER BASIN

10260620 HOUSTON CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'33", long 117°16'48", in NW 1/4 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 and 0.1 mi southeast of intersection of Lake Gregory Road and Wildrose Road, and 0.3 mi east of Crestline.

DRAINAGE AREA.--0.35 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,540 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 295 ft<sup>3</sup>/s Feb. 19, 1980, gage height, 7.40 ft, from rating curve extended above 68 ft<sup>3</sup>/s on basis of slope-conveyance study at gage height 7.40 ft; minimum daily, no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0630	111	6.69	Feb. 7	2115	54	6.04
Dec. 22	2115	98	6.57	Feb. 28	0145	*129	6.79
Jan. 22	2245	52	6.02	Apr. 20	2145	51	6.00
Jan. 27	0745	79	6.37	Aug. 17	1630	101	6.60

Minimum daily discharge, 0.03 ft<sup>3</sup>/s, Aug. 8, 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.20	.78	.67	1.6	29	1.5	2.4	.57	.29	.08	.10
2	.19	.20	.43	.60	1.5	34	1.5	1.8	.50	.29	.06	.13
3	.21	.20	.38	.58	1.9	16	1.4	1.5	.45	.28	.07	.12
4	.20	.20	.27	.50	1.6	6.9	1.4	1.4	.42	.27	.07	.13
5	.20	.20	.23	.36	2.1	4.7	1.4	1.3	.36	.26	.05	.09
6	.20	.20	.21	.36	2.0	3.7	1.4	1.2	.34	.27	.04	.08
7	.20	.20	.19	.35	9.1	2.9	1.3	1.1	.34	.27	.09	.09
8	.20	.53	.29	.35	16	2.4	1.2	1.1	.34	.25	.03	.10
9	.20	2.4	.57	.34	3.3	2.1	1.2	1.0	.31	.26	.12	.08
10	.20	1.3	.30	.30	2.0	2.0	1.2	1.0	.32	.26	.03	.10
11	.20	.83	.24	.29	1.5	1.8	1.3	1.0	.34	.26	.03	.12
12	.20	.42	.21	.30	1.3	1.7	1.5	.92	.34	.24	.03	.15
13	.20	.22	.16	.32	1.1	3.6	1.5	.89	.36	.24	.03	.17
14	.20	.16	.16	.32	1.0	3.0	1.2	.88	.33	.24	.03	.18
15	.20	.10	.15	.35	.91	1.7	1.1	.85	.35	.22	.08	.14
16	.20	.10	.15	.35	.83	1.9	1.0	.83	.36	.20	.85	.15
17	.20	.10	.14	.44	.76	7.1	1.3	.77	.34	.18	4.8	.15
18	.20	2.5	.11	.35	.72	5.8	3.7	.72	.33	.16	.73	.15
19	.20	8.9	.13	2.8	.66	3.9	1.1	.65	.32	.13	.90	.16
20	.20	.62	.14	.68	.65	2.6	8.6	.61	.33	.12	.24	.15
21	.20	.42	.15	.62	.61	4.4	6.3	.60	.32	.12	.18	.15
22	.20	.35	28	8.6	.58	3.3	1.8	.59	.31	.07	.16	.17
23	.20	.34	4.4	4.1	.58	2.7	1.5	.58	.30	.09	.15	.17
24	.20	.34	1.9	6.5	.63	7.1	1.3	.57	.30	.09	.13	.18
25	.20	.30	1.3	2.3	.66	3.0	1.3	.53	.28	.10	.13	.18
26	4.7	.28	1.0	1.4	2.7	2.3	1.3	.49	.28	.13	.10	.17
27	.21	.28	.91	22	26	2.1	1.3	.47	.28	.12	.10	.17
28	.18	.28	.77	5.4	18	2.0	1.8	.45	.27	.11	.10	.18
29	.18	.35	.74	10	---	1.8	13	.41	.30	.09	.10	1.3
30	.20	18	.71	2.6	---	1.7	4.7	.42	.30	.09	.10	4.0
31	.20	---	.66	1.9	---	1.6	---	.42	---	.08	.11	---
TOTAL	10.65	40.52	45.78	76.03	100.29	168.8	70.1	27.45	10.29	5.78	9.72	9.21
MEAN	.34	1.35	1.48	2.45	3.58	5.45	2.34	.89	.34	.19	.31	.31
MAX	4.7	.18	.28	.22	.26	.34	.13	2.4	.57	.29	4.8	4.0
MIN	.18	.10	.11	.29	.58	1.6	1.0	.41	.27	.07	.03	.08
AC-FT	21	80	91	151	199	335	139	54	20	11	19	18
CAL YR 1982	TOTAL	318.41	MEAN	.87	MAX	28	MIN	0	AC-FT	631		
WTR YR 1983	TOTAL	574.62	MEAN	1.58	MAX	34	MIN	.03	AC-FT	1140		

## 10260630 ABONDIGAS CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'16", long 117°15'51", in SE 1/4 SW 1/4 SE 1/4 sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 80 ft north of south gate for San Moritz Park, and 1.4 mi east of Crestline.

DRAINAGE AREA.--1.15 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,550 ft, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft<sup>3</sup>/s Feb. 27, 1983, gage height 6.32 ft, from rating curve extended above 94 ft<sup>3</sup>/s on basis of field estimate of maximum flow; maximum gage height, 7.28 ft Jan. 29, 1980; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft<sup>3</sup>/s (revised), and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	0530	47	5.66	Feb. 27	1215	*580	6.32
Nov. 30	0645	144	6.23	Apr. 20	2330	61	4.60
Dec. 22	2115	172	5.23	Apr. 29	0715	71	4.68
Jan. 27	1030	68	4.68	Aug. 17	Unknown	120	Unknown
Feb. 8	0315	95	4.85				

Minimum daily discharge, 0.03 ft<sup>3</sup>/s Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.17	4.2	1.0	4.3	84	5.4	10	.92	.67	.30	.18
2	.16	.16	1.3	.88	4.1	100	5.2	6.2	.89	.72	.28	.23
3	.14	.15	.84	.71	3.8	46	5.1	4.9	.86	.67	.28	.21
4	.13	.15	.45	.58	3.7	20	5.0	4.4	.80	.65	.26	.23
5	.12	.15	.38	.53	3.8	13	4.9	4.2	.76	.59	.25	.16
6	.11	.14	.35	.47	3.9	13	4.7	4.2	.77	.54	.24	.14
7	.11	.15	2.7	.42	7.1	12	4.5	4.1	.73	.55	.22	.16
8	.10	.15	.59	.35	24	11	4.5	4.0	.72	.50	.22	.18
9	.06	.45	.56	.31	13	9.9	4.4	4.0	.72	.57	.40	.14
10	.06	.56	.46	.28	5.4	9.1	4.4	3.9	.72	.59	.22	.18
11	.05	.21	.36	.25	4.2	8.2	4.4	3.9	.78	.54	.22	.21
12	.06	.16	.33	.23	3.8	6.9	4.4	3.8	.79	.53	.22	.26
13	.06	.20	.31	.22	3.4	9.2	4.3	3.8	.72	.43	.22	.29
14	.06	.09	.27	.22	3.2	7.4	4.1	3.5	.66	.43	.22	.32
15	.06	.27	.26	.23	2.9	7.0	4.0	3.5	.69	.43	.22	.25
16	.05	.41	.25	.23	2.7	6.3	3.9	3.4	.69	.42	1.5	.26
17	.04	.38	.23	.23	2.4	13	4.0	3.3	.67	.42	1.1	.26
18	.04	.83	.22	.22	2.2	11	8.4	3.1	.69	.42	1.6	.26
19	.05	9.2	.21	1.7	2.0	10	4.4	3.1	.68	.42	2.0	.28
20	.07	.61	.20	.41	1.9	8.4	13	2.9	.68	.42	.42	.26
21	.07	.35	.33	.26	1.7	10	11	2.7	.69	.42	.32	.26
22	.04	.25	31	6.6	1.6	8.0	10	2.3	.67	.42	.26	.30
23	.03	.19	17	4.4	1.5	7.4	8.4	1.7	.65	.42	.25	.30
24	.04	.37	8.6	8.3	1.3	14	7.7	1.2	.64	.42	.23	.32
25	.08	.60	6.0	6.0	1.1	10	7.3	.92	.63	.42	.23	.32
26	5.6	.54	3.7	4.8	3.1	8.4	7.1	.92	.62	.40	.18	.30
27	.95	.49	2.5	22	61	7.4	6.8	.92	.68	.39	.18	.30
28	.55	.45	1.8	6.0	53	6.8	6.9	.92	.70	.36	.18	.32
29	.37	.35	1.5	12	---	6.2	26	.92	.65	.35	.18	2.9
30	.27	36	1.3	5.1	---	5.8	17	.92	.69	.35	.18	9.0
31	.20	---	1.2	4.5	---	5.5	---	.92	---	.33	.19	---
TOTAL	9.89	54.18	89.40	89.43	226.1	494.9	211.2	98.54	21.56	14.79	22.67	18.78
MEAN	.32	1.81	2.88	2.88	8.08	16.0	7.04	3.18	.72	.48	.73	.63
MAX	5.6	36	31	22	61	100	26	10	.92	.72	1.1	9.0
MIN	.03	.09	.20	.22	1.1	5.5	3.9	.92	.62	.33	.18	.14
AC-FT	20	107	177	177	448	982	419	195	43	29	45	37

CAL YR 1982	TOTAL	489.65	MEAN	1.30	MAX	36	MIN	0	AC-FT	971
WTR YR 1983	TOTAL	1351.44	MEAN	3.70	MAX	100	MIN	.03	AC-FT	2680

## MOJAVE RIVER BASIN

## 10260640 LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'35", long 117°16'22", in NE 1/4 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 mi<sup>2</sup>.

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 4,517.1 ft National Geodetic Vertical Datum of 1929.

REMARKS.--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 (furnished 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, 1,970 acre-ft Nov. 26, 1981, elevation, 4,515.78 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents recorded, 2,280 acre-ft Apr. 21, elevation, 4,519.47 ft; minimum, 2,070 acre-ft Sept. 29, elevation, 4,517.01 ft.

MONTHEND ELEVATION, 1892 DATUM, AND CONTENTS, AT 0800 HRS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	4,517.20	2,090	--
Oct. 31.....	4,517.21	2,090	0
Nov. 30.....	4,517.77	2,140	+50
Dec. 31.....	4,517.30	2,100	-40
CAL YR 1982.....	--	--	+60
Jan. 31.....	4,517.39	2,110	+10
Feb. 28.....	4,517.94	2,150	+40
Mar. 31.....	4,517.38	2,110	-40
Apr. 30.....	4,518.96	2,240	+130
May 31.....	4,518.22	2,180	-60
June 30.....	a4,518.75	2,220	+40
July 31.....	4,518.59	2,210	-10
Aug. 31.....	4,518.72	2,220	+10
Sept. 30.....	a4,517.10	2,080	-140
WTR YEAR 1983.....	--	--	-10

a Estimated



## 10260650 HOUSTON CREEK BELOW LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'54", long 117°16'05", SW 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft, from topographic map.

REMARKS.--Records good. Flow regulated by Lake Gregory (10260640) 0.2 mi upstream, usable capacity, 2,070 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 570 ft<sup>3</sup>/s Jan. 29, 1980, gage height, 7.31 ft, from rating curve extended above 180 ft<sup>3</sup>/s on basis of velocity-area study of maximum flow; minimum daily, no flow for several days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 292 ft<sup>3</sup>/s Dec. 22, gage height, 6.66 ft; minimum daily, 0.01 ft<sup>3</sup>/s Apr. 1-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.41	21	1.7	9.5	112	.01	23	.10	.92	.06	.30
2	.12	.34	8.1	1.6	9.5	126	.01	16	.10	1.1	.07	.33
3	.06	.17	4.3	1.6	11	90	.01	13	.10	.97	.08	.40
4	.02	.13	2.8	1.6	9.1	47	.01	11	.11	1.1	.07	.19
5	.02	.09	2.0	1.6	8.5	32	.01	9.9	.11	1.2	.06	.31
6	.02	.05	1.5	1.6	9.5	27	.01	9.0	.19	1.0	.07	3.8
7	.02	.02	1.1	1.5	14	22	.14	8.6	.57	.80	.08	24
8	.02	.03	1.2	1.4	52	18	3.9	7.1	1.5	.70	.08	29
9	.02	4.1	1.7	1.4	21	16	7.4	6.7	1.9	.55	.09	13
10	.02	19	1.7	1.3	14	15	8.2	8.5	2.9	.26	.11	3.8
11	.02	12	1.3	1.2	11	13	8.6	16	3.2	.28	.11	1.8
12	.02	7.1	1.1	1.2	9.7	12	11	15	2.7	.45	.11	1.2
13	.02	4.6	.77	1.2	8.5	13	11	8.4	2.8	.52	.11	.69
14	.02	2.9	.66	1.2	7.5	25	9.8	6.6	2.7	.60	.12	.45
15	.02	2.1	.60	1.2	6.8	15	8.8	6.0	2.9	1.0	.10	.32
16	.02	1.8	.55	1.2	6.4	13	7.8	5.4	2.5	.57	.16	.20
17	.02	1.7	.25	1.2	5.8	27	8.5	4.9	2.6	.41	10	.13
18	.02	3.6	.08	1.2	6.0	33	21	4.9	2.2	.27	14	.09
19	.02	44	.07	22	5.4	24	10	4.5	1.5	.16	8.8	.10
20	.02	14	.02	12	5.2	19	24	4.3	2.1	.14	4.1	.08
21	.02	6.3	.67	7.2	5.0	24	52	4.3	1.5	.20	2.2	.08
22	.02	3.6	78	32	5.0	21	33	4.1	1.0	.21	1.4	.09
23	.02	2.2	63	23	5.0	19	19	4.0	1.1	.24	1.1	.09
24	.02	1.7	17	27	5.0	33	12	3.6	.99	.24	.93	.10
25	.03	1.5	8.2	17	5.2	24	9.3	3.4	1.1	.20	.63	.10
26	8.3	1.2	5.1	10	7.1	18	8.2	3.2	1.0	.14	.44	.10
27	8.9	1.1	3.8	63	96	16	7.5	1.0	1.1	.14	.31	.11
28	3.5	1.2	2.9	35	71	15	7.2	.14	1.0	.14	.48	.11
29	1.7	1.6	2.6	34	---	14	56	.12	1.2	.11	.38	.24
30	1.2	77	2.0	17	---	13	37	.11	1.1	.07	.34	12
31	.51	---	1.8	12	---	4.7	---	.10	---	.06	.55	---
TOTAL	25.05	215.54	235.87	336.1	429.7	900.7	381.40	212.87	43.87	14.75	47.14	93.21
MEAN	.81	7.18	7.61	10.8	15.3	29.1	12.7	6.87	1.46	.48	1.52	3.11
MAX	8.9	77	78	63	96	126	56	23	3.2	1.2	14	29
MIN	.02	.02	.02	1.2	5.0	4.7	.01	.10	.10	.06	.06	.08
AC-FT	50	428	468	667	852	1790	757	422	87	29	94	185
CAL YR 1982	TOTAL	1259.69	MEAN	3.45	MAX	78	MIN	.01	AC-FT	2500		
WTR YR 1983	TOTAL	2936.20	MEAN	8.04	MAX	126	MIN	.01	AC-FT	5820		

## MOJAVE RIVER BASIN

10260820 WEST FORK MOJAVE RIVER BELOW SILVERWOOD LAKE, CA

LOCATION.--Lat 34°18'33", long 117°18'58", in SE 1/4 NW 1/4 NE 1/4 sec.32, T.3 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on downstream side of middle pier at Highway 173 bridge, 0.35 mi downstream from Cedar Springs Dam, 6.3 mi upstream from Mojave River Forks Reservoir, and 8.0 mi southwest of Hesperia.

DRAINAGE AREA.--34.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1980 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 3,160 ft, from topographic map.

REMARKS.--Records poor. Regulated by Cedar Springs Dam (holding basin for imported water), total capacity, 78,000 acre-ft, 0.35 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,290 ft<sup>3</sup>/s Mar. 2, 1983, gage height, 7.51 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,290 ft<sup>3</sup>/s Mar. 2, gage height, 7.51 ft; minimum daily, 0.11 ft<sup>3</sup>/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.27	390	.24	6.1	790	108	289	.24	.25	.25	.25
2	.12	.27	130	.24	6.6	1570	89	178	.24	.25	.25	.25
3	.12	.27	.12	.24	4.3	1990	78	122	.24	.25	.25	.25
4	.12	.27	.14	.24	.39	1360	39	126	.24	.25	.25	.25
5	.15	.27	.16	.24	.35	830	.72	126	.24	.25	.25	.25
6	.15	.27	.19	.24	.32	830	.38	129	.24	.25	.25	.25
7	.16	.27	.21	.24	23	555	.38	132	.24	.25	.25	.25
8	.16	.27	.23	.24	108	285	.38	134	.24	.25	.25	.25
9	.16	.58	.25	.24	244	164	.38	136	.24	.25	.25	.25
10	.16	.81	.25	.24	378	164	.38	137	.24	.25	.25	.25
11	.16	.32	.25	.24	569	86	.38	137	.24	.25	.25	.25
12	.18	.32	.27	.24	565	294	.38	137	.24	.25	.25	.25
13	.18	.30	.30	.24	562	560	28	136	.24	.25	.25	.25
14	.18	.32	.30	.24	492	585	55	136	49	.25	.25	.25
15	.18	.32	.30	.24	569	880	57	.32	46	.25	.25	.25
16	.18	.35	.30	.24	568	890	57	.32	4.0	.25	.25	.25
17	.18	.39	.32	.24	565	549	58	.35	.24	.25	.30	.25
18	.18	.39	.39	.24	562	736	88	.35	.24	.25	.30	.25
19	.19	.42	.39	.24	560	1010	106	.35	.24	.25	.25	.25
20	.19	.42	.39	.24	558	1010	122	.35	.25	.25	.25	.25
21	.21	.42	.25	.24	558	1010	154	.35	.27	.25	.25	.25
22	.21	.42	1.1	.24	557	588	266	.35	.29	.25	.25	.25
23	.21	.42	563	92	557	797	268	42	.29	.25	.25	28
24	.23	.42	468	154	554	806	270	78	35	.25	.25	.28
25	.25	.42	17	90	554	816	56	79	90	.25	.25	.27
26	.27	.42	.24	143	554	816	69	79	65	.25	.25	.25
27	.27	.42	.24	317	654	821	101	3.4	.30	.25	.25	.25
28	.27	.42	.24	590	941	826	101	.34	.29	.25	.25	.25
29	.27	.46	.24	391	---	830	101	.34	.29	.25	.25	.26
30	.27	110	.24	202	---	383	250	.34	.29	.25	.25	.35
31	.27	---	.24	81	---	84	---	.29	---	.25	.25	---
TOTAL	5.94	120.92	1575.55	2065.28	11270.06	22915	2524.38	2340.45	295.11	7.75	7.85	35.41
MEAN	.19	4.03	50.8	66.6	403	739	84.1	75.5	9.84	.25	.25	1.18
MAX	.27	110	563	590	941	1990	270	289	90	.25	.30	28
MIN	.11	.27	.12	.24	.32	84	.38	.29	.24	.25	.25	.25
AC-FT	12	240	3130	4100	22350	45450	5010	4640	585	15	16	70
CAL YR 1982	TOTAL	5884.72	MEAN	16.1	MAX	570	MIN	0	AC-FT	11670		
WTR YR 1983	TOTAL	43163.70	MEAN	118	MAX	1990	MIN	.11	AC-FT	85620		

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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,040 ft, 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 April 14, 1966, at datum 2.00 ft higher than datum then in use.

REMARKS.--Records fair. 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 ft<sup>3</sup>/s, 28,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,100 ft<sup>3</sup>/s Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,500 ft<sup>3</sup>/s Mar. 2, gage height, 12.30 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	242	13	53	3310	343	426	16	5.1	0	0
2		0	119	12	57	4490	216	257	15	4.7	0	0
3		0	12	12	61	2550	148	183	14	4.4	0	0
4		0	8.3	9.6	53	1310	81	167	12	4.1	0	0
5		0	7.6	8.3	40	614	25	160	12	3.8	0	0
6		0	7.1	7.6	37	580	23	151	12	3.6	0	0
7		0	6.0	8.9	55	160	15	147	12	3.3	0	0
8		0	8.3	9.6	430	188	12	140	11	3.1	.30	0
9		.38	7.6	8.9	332	278	7.9	140	11	1.7	.35	0
10		33	5.3	7.6	458	242	8.6	136	11	1.1	.41	0
11		1.5	2.7	7.1	650	182	9.3	133	11	.70	.49	0
12		.49	2.3	12	650	336	9.3	133	10	.42	.58	0
13		.49	1.5	9.6	650	576	27	131	9.7	.25	.68	0
14		.61	1.1	10	572	592	94	129	30	.10	.80	0
15		.61	1.1	11	669	878	109	49	49	0	.87	0
16		1.1	1.1	11	669	929	113	27	10	0	1.0	0
17		2.9	.74	10	669	615	117	25	8.8	0	5.0	0
18		3.6	.64	8.0	661	805	243	24	8.8	0	14	0
19		56	.74	17	653	1090	195	24	8.4	0	5.2	0
20		12	.55	13	653	1070	260	25	8.0	0	1.8	0
21		6.0	.48	10	653	1100	450	27	8.0	0	.60	0
22		5.5	181	15	653	670	462	25	8.4	0	.14	0
23		4.9	456	117	653	838	437	42	8.4	0	.11	7.5
24		4.5	292	152	653	914	430	80	16	0	.08	0
25		1.8	56	101	653	861	163	81	62	0	.05	0
26		1.3	10	131	669	842	133	75	60	0	.02	0
27		1.0	8.9	701	1210	838	182	29	12	0	0	0
28		.79	12	615	1600	834	173	17	11	0	0	0
29		.67	14	599	---	830	316	16	9.3	0	0	0
30		240	15	203	---	544	473	15	7.6	0	0	0
31		---	15	138	---	316	---	15	---	0	0	---
TOTAL	0	379.14	1496.05	2988.2	14816	29382	5275.1	3029	482.4	36.37	32.48	7.5
MEAN	0	12.6	48.3	96.4	529	948	176	97.7	16.1	1.17	1.05	.25
MAX	0	240	456	701	1600	4490	473	426	62	5.1	14	7.5
MIN	0	0	.48	7.1	37	160	7.9	15	7.6	0	0	0
AC-FT	0	752	2970	5930	29390	58280	10460	6010	957	72	64	15
CAL YR 1982	TOTAL	10163.31	MEAN	27.8	MAX	1240	MIN	0	AC-FT	20160		
WTR YR 1983	TOTAL	57924.24	MEAN	159	MAX	4490	MIN	0	AC-FT	114900		

## MOJAVE RIVER BASIN

10261100 MOJAVE RIVER BELOW MOJAVE FORKS RESERVOIR, NEAR HESPERIA, CA

LOCATION (REVISED).--Lat 34°20'38", long 117°14'15", in SW 1/4 NE 1/4 SW 1/4 sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on left bank of reservoir outlet channel, 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 3,000 ft, from topographic map.

REMARKS.--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 ft<sup>3</sup>/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.--6 years (water years 1972-74, 1981-83), 104 ft<sup>3</sup>/s, 75,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 11,700 ft<sup>3</sup>/s Mar. 2, 1983, on basis of flood routing; no flow for many days in 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 11,700 ft<sup>3</sup>/s Mar. 2; minimum daily, 1.9 ft<sup>3</sup>/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	5.0	474	44	224	11600	755	1060	118	36	8.3	10
2	2.8	6.1	204	41	211	11700	605	717	110	34	8.1	10
3	2.4	7.2	71	41	217	6060	536	574	104	32	8.0	8.6
4	2.0	7.2	54	37	187	2920	395	543	100	28	8.0	7.6
5	2.0	6.1	45	35	165	1640	296	496	97	27	8.0	6.9
6	2.0	6.1	40	34	162	1380	262	451	93	26	8.4	6.3
7	2.0	6.1	36	34	194	840	243	437	89	25	9.0	6.0
8	2.0	6.1	38	42	1280	789	227	439	86	24	9.7	5.9
9	1.9	8.4	37	41	680	828	217	439	82	22	11	5.8
10	2.4	46	35	39	692	761	221	424	79	21	12	5.6
11	2.8	18	31	38	836	636	218	394	77	20	15	5.5
12	2.8	14	28	40	805	685	207	370	75	19	19	5.5
13	2.8	11	26	37	801	886	215	357	70	18	24	5.4
14	3.4	11	23	37	727	977	268	320	86	16	21	5.2
15	4.0	12	20	35	805	1210	277	240	103	15	20	5.1
16	3.4	11	19	37	799	1280	281	228	63	14	23	5.0
17	2.8	12	17	36	800	1250	290	214	59	13	56	4.9
18	2.8	13	16	34	782	1470	641	200	57	12	96	4.9
19	2.4	119	16	48	770	1470	502	195	54	12	66	4.9
20	2.8	75	15	46	758	1430	618	199	52	11	48	5.0
21	2.8	36	15	48	754	1460	1380	197	51	11	38	5.2
22	2.8	27	595	46	753	990	1020	200	50	10	30	5.7
23	2.8	23	2000	262	754	1120	923	215	49	10	25	14
24	2.4	18	550	266	752	1290	856	244	54	10	23	7.6
25	2.8	14	204	322	748	1190	517	232	97	10	21	6.1
26	3.4	13	124	250	781	1140	425	220	92	9.7	20	6.0
27	19	13	104	2090	4040	1140	454	168	45	9.5	19	6.1
28	22	12	90	1140	4240	1150	439	147	44	9.3	16	6.3
29	14	12	72	1360	---	1160	1500	140	41	8.9	12	7.0
30	10	1650	68	508	---	928	1530	133	38	8.7	11	20
31	7.2	---	49	358	---	743	---	125	---	8.5	10	---
TOTAL	141.5	2218.3	5116	7426	24717	62123	16318	10318	2215	530.6	703.5	208.1
MEAN	4.56	73.9	165	240	883	2004	544	333	73.8	17.1	22.7	6.94
MAX	22	1650	2000	2090	4240	11700	1530	1060	118	36	96	20
MIN	1.9	5.0	15	34	162	636	207	125	38	8.5	8.0	4.9
AC-FT	281	4400	10150	14730	49030	123200	32370	20470	4390	1050	1400	413

CAL YR 1982 TOTAL 37349.52 MEAN 102 MAX 2430 MIN 0 AC-FT 74080  
WTR YR 1983 TOTAL 132035.0 MEAN 362 MAX 11700 MIN 1.9 AC-FT 261900

NOTE.--No gage-height record Nov. 9 to Sept. 30.

## 10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA

LOCATION.--Lat 34°34'23", long 117°19'11", in SW 1/4 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, 28 mi downstream from Mojave River Forks Reservoir, 33 mi downstream from Silverwood Lake on the West Fork Mojave River, and 40 mi downstream of Lake Arrowhead on Deep Creek (East Fork Mojave River).

DRAINAGE AREA.--513 mi<sup>2</sup>.

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 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.--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 ft<sup>3</sup>/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.

Water-quality records were discontinued in September 1982.

AVERAGE DISCHARGE.--60 years (water years 1900-06, 1931-83), 81.3 ft<sup>3</sup>/s, 58,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,600 ft<sup>3</sup>/s Mar. 2, 1938, gage height, 23.7 ft, present datum, from rating curve extended above 10,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 3.4 ft<sup>3</sup>/s July 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,600 ft<sup>3</sup>/s Mar. 1, gage height, 11.45 ft, from rating curve extended above 7,100 ft<sup>3</sup>/s on basis of velocity-area study of maximum flow; minimum daily, 14 ft<sup>3</sup>/s July 10, 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	36	67	48	195	6400	514	952	44	23	25	21
2	26	36	58	48	104	8950	459	650	44	21	25	20
3	26	32	54	48	117	4370	459	456	43	21	23	20
4	26	32	52	34	102	2700	353	440	43	18	20	20
5	25	32	40	32	67	2000	243	392	41	16	23	20
6	25	32	46	34	56	1700	213	367	40	17	23	20
7	23	29	49	32	58	1560	204	338	40	15	23	21
8	26	44	46	32	561	1100	180	324	38	16	27	20
9	26	52	46	36	631	748	164	347	38	15	27	20
10	28	89	46	39	405	715	167	338	37	14	26	22
11	27	56	46	39	635	675	173	270	36	15	23	22
12	27	51	48	40	659	640	167	278	33	16	25	20
13	26	46	48	52	651	765	152	255	32	17	20	19
14	26	46	43	52	658	786	173	240	32	16	20	19
15	25	44	48	52	617	796	177	202	31	14	21	19
16	28	44	48	49	673	828	186	133	30	14	21	19
17	27	40	46	56	680	817	189	107	29	15	21	19
18	31	44	48	51	687	817	189	94	29	16	22	19
19	31	44	46	60	673	917	450	92	28	16	26	19
20	29	44	44	56	659	1090	365	92	28	16	22	24
21	30	49	43	49	651	1180	825	90	28	17	26	18
22	31	44	46	49	651	1020	672	88	28	19	26	18
23	32	44	98	51	651	851	636	92	27	19	25	18
24	33	43	63	46	651	1010	560	109	27	15	23	18
25	34	44	44	48	644	1060	450	121	27	15	22	17
26	38	49	46	49	644	1020	262	121	26	18	22	19
27	28	49	46	175	1480	1010	298	98	26	20	22	25
28	32	48	46	836	2450	1010	278	60	25	20	21	26
29	31	48	46	1220	---	1060	513	54	25	22	21	30
30	36	62	46	629	---	991	1390	50	25	25	21	40
31	36	---	46	343	---	556	---	48	---	24	21	---
TOTAL	894	1353	1539	4385	16710	49142	11181	7298	980	545	713	632
MEAN	28.8	45.1	49.6	141	597	1585	373	235	32.7	17.6	23.0	21.1
MAX	38	89	98	1220	2450	8950	1390	952	44	25	27	40
MIN	23	29	40	32	56	556	152	48	25	14	20	17
AC-FT	1770	2680	3050	8700	33140	97470	22180	14480	1940	1080	1410	1250
CAL YR 1982	TOTAL	18834	MEAN	51.6	MAX	862	MIN	14	AC-FT	37340		
WTR YR 1983	TOTAL	95372	MEAN	261	MAX	8950	MIN	14	AC-FT	189200		

## MOJAVE RIVER BASIN

10262000 MOJAVE RIVER NEAR HODGE, CA

LOCATION.--Lat 34 50'09", long 117 11'27", in SW 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 2,260 ft, from topographic map. Prior to Oct. 1, 1970, at different datum.

REMARKS.--Records poor. 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 ft<sup>3</sup>/s. Diversion and pumping for irrigation of about 12,000 acres above station.

AVERAGE DISCHARGE.--15 years, (water years 1931-32, 1971-83), 53.1 ft<sup>3</sup>/s, 38,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft<sup>3</sup>/s Feb. 10, 1978, gage height, 8.80 ft, on basis of slope-area measurement of maximum flow; no flow all or most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,000 ft<sup>3</sup>/s Mar. 1, gage height, 8.34 ft, from rating curve extended above 4,300 ft<sup>3</sup>/s on basis of slope-conveyance study; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	93	4890	500	755	1.8		0	
2				0	84	8000	395	919	1.4		0	
3				0	102	6040	300	487	.95		0	
4				0	71	3450	230	447	.43		0	
5				0	63	2010	205	392	.11		0	
6				0	67	1600	190	315	0		0	
7				0	63	1190	187	250	0		0	
8				0	75	941	186	230	0		0	
9				0	438	608	117	252	0		0	
10				0	398	532	117	245	0		0	
11				0	417	431	120	185	0		0	
12				0	398	400	110	150	0		0	
13				0	478	490	130	100	0		0	
14				0	500	600	134	91	0		0	
15				0	500	700	140	70	0		0	
16				0	457	790	160	67	0		0	
17				0	363	740	170	63	0		0	
18				0	478	700	220	61	0		6.9	
19				0	519	770	370	22	0		0	
20				0	457	850	300	23	0		0	
21				0	538	1000	784	26	0		0	
22				0	558	910	600	18	0		0	
23				0	538	800	560	26	0		0	
24				0	579	840	485	20	0		0	
25				0	519	880	410	45	0		0	
26				0	558	959	262	65	0		0	
27				0	600	998	280	82	0		0	
28				.72	3900	814	250	56	0		0	
29				277	---	845	473	20	0		0	
30				492	---	814	751	5.8	0		0	
31				277	---	579	---	2.7	---		0	
TOTAL	0	0	0	1046.72	13811	45171	9136	5490.5	4.69	0	6.9	0
MEAN	0	0	0	33.8	493	1457	305	177	.16	0	.22	0
MAX	0	0	0	492	3900	8000	784	919	1.8	0	6.9	0
MIN	0	0	0	0	63	400	110	2.7	0	0	0	0
AC-FT	0	0	0	2080	27390	89600	18120	10890	9.3	0	14	0
CAL YR 1982	TOTAL	5128.0	MEAN	14.0	MAX	901	MIN	0	AC-FT	10170		
WTR YR 1983	TOTAL	74666.81	MEAN	205	MAX	8000	MIN	0	AC-FT	148100		

## 10262500 MOJAVE RIVER AT BARSTOW, CA

LOCATION.--Lat 34°54'25", long 117°01'19", in SE 1/4 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 mi<sup>2</sup>.

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

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

REMARKS.--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 ft<sup>3</sup>/s. Diversions and pumping for irrigation of about 15,000 acres above station.

AVERAGE DISCHARGE.--53 years, 26.6 ft<sup>3</sup>/s, 19,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,300 ft<sup>3</sup>/s Mar. 3, 1938, gage height, 8.60 ft, on basis of slope-area measurement of maximum flow; no flow for most months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,300 ft<sup>3</sup>/s Mar. 2, gage height, 3.94 ft, from rating curve extended above 3,400 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 8.60 ft; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0		0	0	2710	242	742				
2		0		0	0	7520	256	411				
3		0		0	0	6040	256	270				
4		0		0	0	3450	216	95				
5		0		0	0	2010	160	77				
6		0		0	0	1550	97	70				
7		0		0	0	1110	33	95				
8		0		0	0	860	15	77				
9		0		0	0	708	.06	86				
10		0		0	0	424	0	86				
11		0		0	0	246	0	47				
12		0		0	0	154	0	41				
13		0		0	0	174	0	41				
14		0		0	0	366	0	47				
15		0		0	0	467	0	25				
16		0		0	0	754	0	7.6				
17		0		0	0	561	0	0				
18		0		0	0	507	0	0				
19		0		0	0	661	0	0				
20		0		0	0	683	27	0				
21		0		0	0	880	57	0				
22		0		0	4.0	880	441	0				
23		0		0	10	646	457	0				
24		0		0	29	580	396	0				
25		0		0	23	753	286	0				
26		0		0	18	802	181	0				
27		0		0	75	928	97	0				
28		0		0	1130	880	121	0				
29		0		.48	---	729	216	0				
30		2.0		0	---	706	642	0				
31		---		0	---	438	---	0				
TOTAL	0	2.0	0	0.48	1289	39177	4196.06	2217.6	0	0	0	0
MEAN	0	.067	0	.015	46.0	1264	140	71.5	0	0	0	0
MAX	0	2.0	0	.48	1130	7520	642	742	0	0	0	0
MIN	0	0	0	0	0	154	0	0	0	0	0	0
AC-FT	0	4.0	0	1.0	2560	77710	8320	4400	0	0	0	0
CAL YR 1982	TOTAL	2.60	MEAN	.007	MAX	2.00	MIN	0	AC-FT	5.2		
WTR YR 1983	TOTAL	46882.14	MEAN	129	MAX	7520	MIN	0	AC-FT	92990		

## MOJAVE RIVER BASIN

10263000 MOJAVE RIVER AT AFTON, CA

LOCATION.--Lat 35°02'14", long 116°23'00", in SW 1/4 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929. Dec. 21, 1929, to Sept. 30, 1932, at site 1.7 mi downstream at different datum; Oct. 1952 to May 1978 at datum 2 ft higher.

REMARKS.--Records fair. 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.--32 years (water years 1930-32, 1953-78, 1981-83), 7.20 ft<sup>3</sup>/s, 5,220 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 3,200 ft<sup>3</sup>/s on basis of slope-conveyance study:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 2	Unknown	4,250	6.19
Aug. 19	1430	*5,350	6.79

Minimum daily discharge, 0.12 ft<sup>3</sup>/s Aug. 12, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.3	1.3	1.5	1.5	3.6	1.9	1.5	.26	.50	3.3	.28
2	.93	1.3	1.3	1.7	1.7	2200	1.8	1.5	.26	.50	.27	.25
3	.93	1.3	1.1	1.5	1.7	1500	1.8	1.5	.27	.49	.27	.23
4	.93	1.3	1.1	1.5	1.5	1130	1.7	1.5	.28	.46	.23	.32
5	.93	1.3	1.3	1.5	1.7	700	1.7	1.5	.30	.45	.20	.47
6	.93	1.3	1.1	1.5	1.7	150	1.6	1.5	.30	.43	.13	.51
7	.93	1.1	1.3	1.5	1.7	100	1.6	1.5	.31	.42	.14	.62
8	.93	1.1	1.5	1.5	1.7	70	1.6	1.4	.33	.41	.13	.63
9	.93	1.3	1.7	1.5	1.5	50	1.6	1.4	.35	.40	.18	.63
10	.93	1.3	1.5	1.5	1.5	18	1.6	1.4	.37	.40	.16	.63
11	1.1	1.3	1.3	1.5	1.5	17	1.6	1.4	.37	.39	.13	.70
12	1.1	1.3	1.3	1.5	1.5	16	1.6	1.4	.36	.38	.12	.63
13	1.1	1.3	1.3	1.5	1.5	15	1.6	1.4	.36	.37	.13	.70
14	1.1	1.3	1.3	1.5	1.6	14	1.6	1.4	.35	.37	.12	.70
15	1.1	1.3	1.3	1.5	1.7	13	1.6	1.3	.35	.36	.20	.77
16	1.3	1.3	1.3	1.5	1.7	12	1.6	1.3	.35	.35	.27	.77
17	1.3	1.3	1.3	1.5	1.7	11	1.6	1.3	.35	.34	.21	.84
18	1.3	1.3	1.3	1.5	2.0	10	1.6	1.2	.35	.32	.27	.84
19	1.3	1.3	1.3	1.7	2.0	9.0	1.6	1.2	.35	.31	263	.84
20	1.3	1.3	1.3	1.5	2.3	7.3	1.8	1.2	.35	.30	3.8	.84
21	1.3	1.3	1.1	1.5	2.6	6.0	1.6	1.1	.34	.29	.68	.93
22	1.3	1.3	1.5	1.5	2.6	4.5	1.6	1.0	.33	.29	.67	1.0
23	1.3	1.5	2.5	1.5	2.9	3.4	1.6	.92	.33	.28	.66	.93
24	1.3	1.5	1.1	1.5	3.2	3.1	1.6	.78	.34	.28	.65	.93
25	1.3	1.5	1.1	1.5	2.9	2.7	1.6	.63	.36	.27	.65	.93
26	1.5	1.3	1.1	1.5	2.8	2.5	1.6	.55	.39	.27	.64	1.0
27	1.3	1.3	1.1	1.7	4.0	2.3	1.6	.40	.41	.26	.63	1.0
28	1.3	1.3	1.3	1.5	3.6	2.1	1.6	.32	.44	.26	.63	1.0
29	1.3	1.3	1.5	1.7	---	2.0	1.5	.27	.49	.26	.63	1.0
30	1.3	3.9	1.5	1.5	---	2.0	1.5	.26	.50	.26	.38	1.0
31	1.3	---	1.5	1.5	---	1.9	---	.26	---	.26	.30	---
TOTAL	35.97	41.8	41.5	47.3	58.3	6078.4	48.9	34.29	10.50	10.93	279.78	21.92
MEAN	1.16	1.39	1.34	1.53	2.08	196	1.63	1.11	.35	.35	9.03	.73
MAX	1.5	3.9	2.5	1.7	4.0	2200	1.9	1.5	.50	.50	263	1.0
MIN	.93	1.1	1.1	1.5	1.5	1.9	1.5	.26	.26	.26	.12	.23
AC-FT	71	83	82	94	116	12060	97	68	21	22	555	43

CAL YR 1982	TOTAL	487.53	MEAN	1.34	MAX	29	MIN	.37	AC-FT	966
WTR YR 1983	TOTAL	6709.59	MEAN	18.4	MAX	2200	MIN	.12	AC-FT	13310



## 10263500 BIG ROCK CREEK NEAR VALYERMO, CA

LOCATION.--Lat 34°25'15", long 117°50'19", in NW 1/4 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 mi<sup>2</sup>.

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. Altitude of gage is 4,050 ft, 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.--Records good. No regulation or diversion above station.

AVERAGE DISCHARGE.--60 years (water years 1924-83), 18.1 ft<sup>3</sup>/s, 13,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,300 ft<sup>3</sup>/s Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of maximum flow; minimum daily, 0.70 ft<sup>3</sup>/s Nov. 5, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1030	209	3.15	Feb. 8	0330	95	2.76
Dec. 22	2215	395	3.47	Mar. 1	1900	*1,990	5.38
Jan. 29	0100	130	2.92	Apr. 29	1515	179	3.07

Minimum daily discharge, 5.4 ft<sup>3</sup>/s Oct. 25, Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	5.4	26	14	38	1210	86	120	140	43	28	21
2	8.2	5.5	16	14	35	1020	86	109	131	42	28	21
3	7.7	5.5	11	13	31	410	88	101	131	53	27	21
4	7.3	5.6	10	13	29	271	85	103	131	53	27	20
5	6.9	5.5	9.4	12	27	183	81	103	129	53	26	19
6	7.1	5.5	9.2	12	27	159	76	101	125	54	26	19
7	6.8	5.5	9.1	12	33	162	72	97	136	53	26	19
8	6.9	5.5	9.2	12	74	162	68	101	134	53	26	19
9	7.0	6.9	11	11	60	152	67	103	118	55	26	19
10	7.0	7.0	11	11	53	156	67	101	120	53	26	19
11	7.0	6.4	10	11	48	149	65	103	120	46	26	19
12	7.0	6.2	10	11	44	133	63	99	107	44	26	21
13	6.9	6.2	10	11	44	126	61	97	92	42	25	20
14	6.9	6.2	10	10	43	138	59	94	90	41	25	19
15	6.9	6.1	9.9	10	40	126	57	98	87	41	26	19
16	6.9	6.0	9.6	10	38	122	56	103	91	41	26	19
17	6.8	6.1	9.3	10	36	122	58	103	86	41	29	19
18	6.8	6.1	9.2	10	36	112	83	102	81	40	34	20
19	6.3	6.3	9.0	11	36	105	71	105	76	40	32	20
20	5.7	6.8	8.9	11	34	104	74	110	72	40	30	20
21	5.7	6.8	8.8	10	32	103	83	116	64	39	28	20
22	5.7	6.7	68	11	31	97	80	122	59	39	27	20
23	5.7	6.6	92	21	30	92	79	130	56	39	27	19
24	5.5	6.5	40	32	31	98	76	125	52	39	26	19
25	5.4	6.4	29	37	29	89	76	134	49	38	27	19
26	5.5	6.4	24	25	32	87	75	155	45	36	26	19
27	5.5	6.4	21	90	162	83	74	153	43	31	25	19
28	5.6	6.4	18	74	214	81	77	162	44	31	24	18
29	5.5	6.4	17	82	---	80	143	149	46	30	22	19
30	5.5	67	16	56	---	82	132	152	45	29	22	25
31	5.5	---	15	45	---	86	---	157	---	30	22	---
TOTAL	201.4	245.9	566.6	712	1367	6100	2318	3608	2700	1309	821	590
MEAN	6.50	8.20	18.3	23.0	48.8	197	77.3	116	90.0	42.2	26.5	19.7
MAX	8.2	67	92	90	214	1210	143	162	140	55	34	25
MIN	5.4	5.4	8.8	10	27	80	56	94	43	29	22	18
AC-FT	399	488	1120	1410	2710	12100	4600	7160	5360	2600	1630	1170
CAL YR 1982	TOTAL	5818.1	MEAN	15.9	MAX	194	MIN	3.1	AC-FT	11540		
WTR YR 1983	TOTAL	20538.9	MEAN	56.4	MAX	1210	MIN	5.4	AC-FT	40740		

## ANTELOPE VALLEY

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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft, from topographic map.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--26 years, 1.27 ft<sup>3</sup>/s, 920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft<sup>3</sup>/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 some months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 100 ft<sup>3</sup>/s, on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 1	0830	*187	4.64
Aug. 17	Unknown	165	4.40

Minimum daily discharge, 0.19 ft<sup>3</sup>/s Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.29	.60	.55	.85	91	23	19	15	6.4	4.1	4.8
2	.23	.28	.53	.57	.89	89	28	19	14	6.3	4.2	4.7
3	.22	.27	.54	.57	.82	41	24	19	14	6.1	4.3	4.3
4	.22	.28	.55	.57	.90	44	23	19	13	6.0	4.2	4.3
5	.22	.28	.57	.59	.92	49	21	19	13	5.9	4.2	4.3
6	.19	.28	.54	.61	1.0	40	21	20	12	5.7	4.1	4.1
7	.22	.30	.55	.64	1.6	47	20	19	12	6.0	4.2	4.3
8	.23	.30	.55	.65	1.6	43	20	19	12	5.9	4.4	4.3
9	.23	.37	.56	.66	1.2	40	20	20	11	5.9	4.7	4.3
10	.23	.36	.56	.66	1.1	42	20	20	11	5.9	4.8	4.2
11	.23	.33	.56	.67	1.1	30	21	19	11	5.8	4.6	4.2
12	.23	.34	.57	.69	1.1	52	22	19	10	5.6	4.5	4.0
13	.23	.34	.57	.70	1.2	35	20	19	10	5.4	4.5	3.9
14	.23	.35	.57	.70	1.1	31	20	19	9.7	5.4	4.6	3.8
15	.23	.36	.57	.71	1.1	28	19	19	9.4	5.4	4.5	4.0
16	.23	.36	.59	.72	1.1	36	19	20	9.1	5.4	8.0	4.0
17	.24	.36	.61	.73	1.1	36	19	20	8.9	5.4	20	3.9
18	.25	.36	.61	.74	1.1	35	23	20	8.7	5.4	7.0	3.9
19	.24	.37	.61	.81	1.0	28	20	20	8.5	5.3	9.0	3.8
20	.21	.38	.61	.77	.95	29	20	20	8.3	5.3	8.5	3.8
21	.22	.40	.61	.75	.83	36	20	20	8.1	5.2	8.0	3.8
22	.21	.40	.89	.82	.67	31	19	20	7.9	5.1	6.5	3.9
23	.21	.41	.86	.97	.43	21	19	19	7.6	5.1	6.2	3.8
24	.21	.41	.57	1.0	.43	21	20	19	7.5	5.0	6.0	3.7
25	.23	.43	.52	.91	.61	24	20	18	7.3	4.9	5.9	3.7
26	.24	.43	.56	.90	.93	29	20	18	7.1	4.9	5.6	3.8
27	.25	.44	.56	1.7	2.2	32	19	17	7.0	5.0	5.3	3.8
28	.26	.44	.54	1.0	4.4	30	20	17	6.8	4.9	5.1	4.0
29	.26	.48	.57	1.2	---	23	20	16	6.7	4.8	5.0	4.3
30	.28	.95	.56	1.0	---	20	19	15	6.6	3.4	5.2	4.9
31	.29	---	.54	.92	---	22	---	15	---	4.2	5.0	---
TOTAL	7.20	11.35	18.20	24.48	32.23	1155	619	582	293.2	167.0	182.2	122.6
MEAN	.23	.38	.59	.79	1.15	37.3	20.6	18.8	9.77	5.39	5.88	4.09
MAX	.29	.95	.89	1.7	4.4	91	28	20	15	6.4	20	4.9
MIN	.19	.27	.52	.55	.43	20	19	15	6.6	3.4	4.1	3.7
AC-FT	14	23	36	49	64	2290	1230	1150	582	331	361	243
CAL YR 1982	TOTAL	165.41	MEAN	0.45	MAX	1.2	MIN	.10	AC-FT	328		
WTR YR 1983	TOTAL	3214.46	MEAN	8.81	MAX	91	MIN	.19	AC-FT	6380		

## 10271210 BISHOP CREEK BELOW POWERPLANT NO. 6, NEAR BISHOP, CA

LOCATION.--Lat 37°20'59", long 118°27'41", in SE 1/4 SE 1/4 sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, below powerplant No. 6 tailrace, and 3.6 mi west of Bishop.

DRAINAGE AREA.--104 mi<sup>2</sup> natural flow.

PERIOD OF RECORD.--October 1936 to current year. Monthly and yearly mean discharge prior to October 1969, published in WSP 2127.

GAGE.--None.

REMARKS.--Flow regulated for power development by South Lake, Lake Sabrina, and Intake No. 2 Reservoir, combined capacity, 20,660 acre-ft and many powerhouses. Records for "actual flow" include Bishop Creek above powerplant no. 6 tailrace and Bishop Creek powerplant no. 6 conduit. Records for "natural flow" include "actual flow" of Bishop Creek below powerplant no. 6, Abelour ditch near Bishop, minus Birch-McGee diversion to Bishop Creek powerplant near Bishop, and the change in contents and evaporation for South Lake, Lake Sabrina, and Intake No. 2 Reservoir.

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

AVERAGE DISCHARGE (Actual flow).--48 years, 102 ft<sup>3</sup>/s, 73,900 acre-ft/yr.  
(Natural flow).--48 years, 107 ft<sup>3</sup>/s, 77,520 acre-ft/yr.

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 1,070 ft<sup>3</sup>/s Sept. 26, 1982; minimum daily, 32 ft<sup>3</sup>/s Dec. 19, 1977.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 621 ft<sup>3</sup>/s Aug. 10; minimum daily, 69 ft<sup>3</sup>/s Apr. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	198	120	145	138	132	101	113	86	344	334	247	196
2	134	128	135	137	133	85	112	91	323	353	278	221
3	137	136	129	138	125	91	112	89	311	351	327	237
4	138	131	120	137	129	88	112	100	311	345	326	235
5	118	129	127	137	123	91	112	90	317	366	311	220
6	112	128	127	139	123	95	118	90	328	381	297	210
7	112	130	128	136	123	92	112	91	363	356	332	217
8	93	143	128	137	122	93	109	103	359	332	479	202
9	110	131	130	139	124	96	105	104	365	324	599	200
10	110	131	132	140	122	92	108	100	380	311	621	188
11	110	131	129	139	117	92	106	99	406	312	537	175
12	111	126	126	136	123	91	85	70	401	323	436	172
13	113	133	140	130	123	94	84	93	382	325	375	168
14	132	130	128	128	133	72	81	92	381	338	358	168
15	116	128	136	129	123	108	81	93	397	342	387	167
16	116	107	130	128	121	107	69	107	407	336	415	171
17	118	123	131	134	121	106	70	107	425	318	411	172
18	120	128	131	130	123	108	72	97	426	283	427	173
19	122	125	129	128	122	108	72	121	404	239	448	169
20	117	129	135	129	126	109	75	122	406	245	415	164
21	120	123	132	127	123	112	73	130	416	234	362	153
22	118	123	138	132	122	109	80	146	417	229	316	173
23	122	122	137	129	129	109	92	165	431	230	277	188
24	126	125	138	132	124	110	85	171	423	229	250	157
25	132	127	135	128	117	110	86	192	416	228	227	159
26	132	128	136	136	111	109	90	201	416	221	212	160
27	131	131	138	132	111	110	89	220	417	212	203	156
28	131	134	139	133	112	117	86	240	409	217	193	153
29	131	132	138	134	---	110	90	250	417	225	184	155
30	133	137	140	134	---	109	89	257	400	232	181	156
31	131	---	137	133	---	109	---	290	---	236	178	---
TOTAL	3844	3849	4124	4139	3437	3133	2768	4207	11598	9007	10609	5435
MEAN	124	128	133	134	123	101	92.3	136	387	291	342	181
MAX	198	143	145	140	133	117	118	290	431	381	621	237
MIN	93	107	120	127	111	72	69	70	311	212	178	153
AC-FT	7620	7630	8180	8210	6820	6210	5490	8340	23000	17870	21040	10780
a	5630	4160	4240	3540	3370	3560	3260	10710	27890	24720	20710	9210

CAL YR 1982 TOTAL 57512 MEAN 158 MAX 1070 MIN 59 AC-FT 114100  
WTR YR 1983 TOTAL 66150 MEAN 181 MAX 621 MIN 69 AC-FT 131200 a 121000

a Computed natural flow, in acre-feet.

## OWENS LAKE BASIN

10277400 OWENS RIVER BELOW TINEMAHA RESERVOIR, NEAR BIG PINE, CA  
(National stream-quality accounting network station)

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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year. Since November 1951 in files of city of Los Angeles, Department of Water and Power as Owens River at Tinemaha Dam.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 3,860 ft, from topographic map.

REMARKS.--Records fair. Flow regulated since 1941 by Lake Crowley, capacity, 183,500 acre-ft and several small reservoirs, combined capacity, 41,400 acre-ft. Diversions from both main stream and tributaries. Water imported from Mono Basin since 1941 for diversion to Los Angeles Aqueduct which diverts 4 mi downstream.

COOPERATION.--Records were furnished by city of Los Angeles, Department of Water and Power.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,050 ft<sup>3</sup>/s Aug. 24, 1983; minimum daily, 5.0 ft<sup>3</sup>/s Sept. 15, 16, 25-30, 1976, Mar. 29, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,050 ft<sup>3</sup>/s Aug. 24; minimum daily, 295 ft<sup>3</sup>/s Oct. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	960	798	662	613	778	752	882	781	837	901	632	775
2	970	763	662	611	775	723	904	778	895	904	629	752
3	963	752	665	608	775	637	916	772	895	901	632	755
4	957	752	665	608	769	582	922	766	889	901	715	755
5	954	752	667	608	769	556	922	772	882	901	760	755
6	960	749	632	637	769	558	922	775	885	901	749	755
7	684	749	600	651	769	558	926	772	895	901	752	752
8	498	749	600	651	775	556	922	781	895	901	766	752
9	498	749	603	651	775	550	922	781	889	904	837	755
10	498	746	605	651	775	556	926	775	892	904	876	755
11	498	746	605	651	772	651	922	772	895	901	898	755
12	498	746	605	651	772	698	922	769	898	904	919	704
13	498	746	603	651	772	701	926	746	901	901	922	695
14	495	746	648	651	772	735	926	723	904	898	926	695
15	495	746	692	651	772	769	922	720	907	898	922	698
16	495	746	729	651	772	772	919	715	907	898	913	701
17	498	743	769	648	769	775	916	704	904	898	944	701
18	500	743	766	648	769	775	919	665	907	895	1020	698
19	500	718	766	645	769	746	919	651	907	837	1020	698
20	500	701	766	645	772	726	919	608	904	798	1020	695
21	500	701	778	645	769	726	855	561	929	795	1030	665
22	498	701	795	645	766	729	828	576	947	795	1030	667
23	498	701	801	643	766	729	825	584	951	793	1040	667
24	498	701	795	643	755	729	825	584	957	790	1050	670
25	295	701	801	743	749	790	828	619	963	793	1040	673
26	405	676	804	801	746	828	822	704	960	732	1040	673
27	795	659	690	801	749	828	828	706	944	695	1030	676
28	793	659	605	801	749	825	798	704	907	695	1020	643
29	795	659	608	798	---	822	775	698	907	654	1020	627
30	801	662	608	795	---	849	775	701	907	629	1020	627
31	798	---	611	790	---	870	---	746	---	632	843	---
TOTAL	19595	21760	21206	20886	21489	22101	26533	22009	27260	25850	28015	21189
MEAN	632	725	684	674	767	713	884	710	909	834	904	706
MAX	970	798	804	801	778	870	926	781	963	904	1050	775
MIN	295	659	600	608	746	550	775	561	837	629	629	627
AC-FT	38870	43160	42060	41430	42620	43840	52630	43650	54070	51270	55570	42030
CAL YR 1982	TOTAL	220407	MEAN	604	MAX	970	MIN	14	AC-FT	437200		
WTR YR 1983	TOTAL	277893	MEAN	763	MAX	1050	MIN	295	AC-FT	551200		

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

## WATER-QUALITY RECORDS

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

CHEMICAL ANALYSES: Water years 1975 to current year.

BIOLOGICAL DATA: Water years 1975-81.

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 micromhos Feb. 13, 1978; minimum recorded, 129 micromhos 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 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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-HF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 14...	1400	698	260	8.5	4.5	660	1.5	11.0	98	K4	70
MAR 24...	1045	732	395	8.2	8.5	650	6.8	10.0	100	K4	39
JUN 22...	1400	951	164	7.8	19.0	655	10	7.7	97	26	220
SEP 28...	1445	678	240	8.4	17.5	655	3.7	8.4	103	K6	210

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)	ALKA- LITY FIELD (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 14...	61	0	19	3.3	28	48	2	3.7	90	22	13
MAR 24...	77	0	23	4.7	48	56	2	4.7	133	26	18
JUN 22...	47	0	15	2.2	17	43	1	2.3	61	14	4.9
SEP 28...	60	0	19	3.0	23	44	1	2.9	84	16	8.3

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)	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 14...	.60	19	165	160	.22	<.10	.07	.50	.07	.06	.02
MAR 24...	.80	28	237	230	.32	<.10	<.06	.70	.08	.05	.05
JUN 22...	.40	13	95	110	.13	<.10	.06	.50	.11	.06	.02
SEP 28...	.50	20	142	140	.19	.19	.05	.70	.05	.02	.04

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

&lt; Actual value is known to be less than the value shown.

## OWENS LAKE BASIN

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

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 14...	1400	20	22	17	<.5	<1	<1	<3	2	22	1
MAR 24...	1045	20	41	18	<.5	<1	<1	<3	6	38	3
JUN 22...	1400	30	12	14	<.5	<1	<1	<3	9	61	3
SEP 28...	1445	<10	16	19	<.5	1	<1	<3	5	14	<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 14...	89	5	.1	30	1	<1	<1	93	<6	18
MAR 24...	170	4	.1	30	1	<1	<1	120	<6	31
JUN 22...	43	11	.1	40	<1	<1	<1	73	<6	8
SEP 28...	71	4	<.1	30	3	<1	1	90	<6	8

&lt; Actual value is known to be less than the value shown.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
MAR 24...	1045	732	8.5	17	34	89
JUN 22...	1400	951	19.0	19	49	92
SEP 28...	1445	678	17.5	8	15	86

## 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 mi<sup>2</sup>.

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 ft<sup>3</sup>/s.

COOPERATION.--Records furnished 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.

CORRECTIONS.--The elevations for water years 1977 to 1982 have been corrected, as shown in the following tables. They supersede figures published in the reports for 1977 to 1982.

## ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 6	6,372.87	Jan. 12	6,374.17	May 4	6,376.30	Aug. 3	6,377.88
13	6,372.93	Feb. 15	6,374.89	18	6,376.36	10	6,378.11
20	6,373.00	23	6,375.13	25	6,376.39	17	6,378.26
27	6,373.12	Mar. 2	6,375.41	June 1	6,376.57	24	6,378.43
Nov. 3	6,373.24	9	6,375.60	8	6,376.77	31	6,378.39
10	6,373.32	16	6,375.73	15	6,376.97	Sept. 7	6,378.41
17	6,373.35	23	6,375.83	22	6,377.13	14	6,378.44
24	6,373.46	Apr. 5	6,375.97	29	6,377.39	21	6,378.49
Dec. 1	6,373.61	13	6,376.09	July 6	6,377.56		
8	6,373.66	20	6,376.19	13	6,377.64		
15	6,373.77	27	6,376.23	20	6,377.69		
30	6,374.05			27	6,377.74		

## ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 7	6,377.69	Jan. 19	6,376.94	Apr. 21	6,376.88	July 18	6,376.46
14	6,377.66	Feb. 2	6,376.85	27	6,376.86	Aug. 4	6,376.29
25	6,377.54	9	6,376.80	May 12	6,376.75	11	6,376.24
Nov. 4	6,377.52	17	6,376.95	27	6,376.68	18	6,376.23
10	6,377.46	23	6,377.00	June 8	6,376.64	Sept. 8	6,375.85
22	6,377.15	Mar. 10	6,376.98	23	6,376.65	15	6,375.83
Dec. 7	6,377.12	22	6,376.97	July 11	6,376.64	22	6,375.63
28	6,376.96						

## ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 6	6,375.57	Mar. 13	6,376.01	June 15	6,375.85	July 27	6,375.65
13	6,375.45	Apr. 12	6,376.12	20	6,375.76	Aug. 3	6,375.61
Nov. 8	6,375.28	May 16	6,376.03	29	6,375.78	17	6,375.60
16	6,375.18	25	6,375.87	July 6	6,375.71	Sept. 15	6,375.66
Dec. 30	6,375.32	June 2	6,375.90	13	6,375.68	18	6,375.06
Jan. 20	6,375.57	8	6,375.83	20	6,375.67	25	6,375.02
Mar. 3	6,375.83						

## ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 2	6,374.98	Feb. 7	6,374.87	May 15	6,374.88	July 23	6,374.24
20	6,374.88	15	6,374.90	23	6,374.85	Aug. 2	6,374.18
Nov. 3	6,374.90	28	6,374.92	31	6,374.79	10	6,374.07
8	6,374.87	Mar. 8	6,374.94	June 8	6,374.71	16	6,373.99
15	6,374.89	20	6,374.97	14	6,374.67	23	6,373.85
29	6,374.92	Apr. 4	6,375.08	20	6,374.52	30	6,373.77
Dec. 14	6,374.69	12	6,375.08	26	6,374.47	Sept. 6	6,373.70
29	6,374.67	18	6,375.03	July 6	6,374.37	14	6,373.62
Jan. 4	6,374.85	25	6,374.95	11	6,374.28	20	6,373.56
19	6,374.85	May 1	6,374.97	18	6,374.21	27	6,373.47
Feb. 1	6,374.86	10	6,374.90				

## MONO LAKE BASIN

10287000 MONO LAKE NEAR MONO LAKE, CA--Continued

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 4	6,373.47	Jan. 30	6,373.39	Apr. 30	6,374.19	July 23	6,374.13
12	6,373.37	Feb. 5	6,373.38	May 7	6,374.24	30	6,374.23
18	6,373.29	13	6,373.41	16	6,374.32	Aug. 7	6,374.33
Nov. 5	6,373.14	22	6,373.81	21	6,374.38	11	6,374.30
14	6,373.10	28	6,373.76	28	6,374.33	13	6,374.28
28	6,372.99	Mar. 5	6,373.80	June 5	6,374.30	15	6,374.26
Dec. 6	6,372.99	12	6,373.84	11	6,374.26	20	6,374.21
12	6,372.99	20	6,373.86	19	6,374.21	27	6,374.15
19	6,372.99	26	6,373.86	25	6,374.13	Sept. 3	6,374.09
26	6,373.00	Apr. 2	6,373.87	July 1	6,374.18	10	6,374.10
Jan. 8	6,373.03	9	6,373.91	7	6,374.19	17	6,374.01
16	6,373.39	16	6,374.02	16	6,374.08	24	6,373.91
22	6,373.37	23	6,374.12				

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1980 TO SEPTEMBER 1981

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 1	6,373.87	Jan. 7	6,373.61	Apr. 8	6,373.94	July 1	6,373.47
8	6,373.88	14	6,373.64	15	6,373.93	8	6,373.38
15	6,373.79	21	6,373.68	22	6,373.96	15	6,373.26
22	6,373.72	Feb. 5	6,373.78	29	6,373.93	22	6,373.17
29	6,373.68	11	6,373.84	May 6	6,373.88	29	6,373.08
Nov. 5	6,373.66	18	6,373.87	13	6,373.85	Aug. 5	6,372.98
12	6,373.67	26	6,373.87	20	6,373.75	12	6,372.94
19	6,373.62	Mar. 4	6,373.93	28	6,373.79	19	6,372.82
25	6,373.57	11	6,373.92	June 3	6,373.74	26	6,372.69
Dec. 10	6,373.57	18	6,373.93	10	6,373.66	Sept. 2	6,372.61
17	6,373.57	25	6,373.91	17	6,373.57	9	6,372.53
23	6,373.57	Apr. 1	6,373.93	24	6,373.50	23	6,372.42
						30	6,372.33

ELEVATION, IN FEET NGVD, WATER YEAR 1981 TO SEPTEMBER 1982

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 7	6,372.21	Jan. 6	6,372.06	Apr. 8	6,372.36	July 7	6,372.40
14	6,372.14	13	6,372.08	15	6,372.48	15	6,372.51
21	6,372.11	20	6,372.04	21	6,372.55	21	6,372.59
28	6,372.08	28	6,372.04	28	6,372.54	28	6,372.66
Nov. 4	6,372.09	Feb. 4	6,372.07	May 5	6,372.52	Aug. 4	6,372.68
13	6,372.08	17	6,372.30	12	6,372.49	11	6,372.68
18	6,372.18	24	6,372.30	19	6,372.46	18	6,372.64
25	6,372.16	Mar. 3	6,372.33	26	6,372.42	26	6,372.70
Dec. 2	6,372.09	10	6,372.36	June 2	6,372.34	Sept. 1	6,372.76
9	6,372.07	17	6,372.34	9	6,372.28	8	6,372.76
17	6,372.00	24	6,372.33	16	6,372.24	15	6,372.68
30	6,372.00	31	6,372.30	23	6,372.31	22	6,372.68
				30	6,372.36	30	6,372.76



## 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 mi<sup>2</sup> 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. Altitude of gage is 7,760 ft, 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.

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

AVERAGE DISCHARGE (Actual flow).--42 years, 29.5 ft<sup>3</sup>/s, 21,370 acre-ft/yr.  
(Natural flow).--42 years, 31.1 ft<sup>3</sup>/s, 22,530 acre-ft/yr.

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 229 ft<sup>3</sup>/s June 22, 1983; no flow many days in 1971 and 1974.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 229 ft<sup>3</sup>/s June 22; minimum daily, 6.4 ft<sup>3</sup>/s Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	47	24	14	13	20	23	16	164	117	143	85
2	70	28	24	14	13	20	23	16	161	120	149	85
3	71	25	24	14	13	20	23	16	156	123	149	85
4	70	27	24	14	13	20	18	17	153	126	149	84
5	69	39	24	15	13	20	11	18	148	129	142	84
6	70	39	24	15	13	20	11	18	143	134	138	83
7	70	37	24	15	13	20	12	18	104	139	138	83
8	69	36	24	15	13	20	15	18	110	142	137	82
9	69	36	24	15	16	20	16	18	160	142	129	82
10	68	32	24	15	20	20	16	20	164	142	138	81
11	68	28	24	13	20	20	16	26	165	141	143	81
12	68	28	24	12	20	20	16	30	171	140	133	79
13	66	28	24	12	20	20	17	30	172	125	124	79
14	66	28	24	12	20	20	16	31	171	116	114	78
15	66	28	24	12	20	20	16	31	169	118	111	77
16	65	25	24	12	20	18	16	31	171	121	112	76
17	65	24	24	12	20	16	16	31	162	122	115	75
18	65	24	24	12	20	16	16	31	131	122	120	75
19	64	19	24	12	20	16	16	36	137	113	116	74
20	64	24	24	12	20	16	16	45	139	84	116	73
21	64	24	24	12	20	16	16	53	173	84	116	73
22	64	24	24	12	20	16	16	62	229	86	101	72
23	64	24	24	12	20	20	16	62	221	86	91	72
24	64	24	24	12	20	23	16	62	216	87	91	72
25	46	24	24	12	20	23	16	62	212	88	90	71
26	30	24	24	11	20	23	16	68	209	89	90	70
27	30	24	22	6.4	20	23	16	81	204	89	89	69
28	30	24	18	9.4	20	23	16	84	202	90	88	50
29	30	24	18	13	---	23	16	88	198	99	87	36
30	30	24	16	13	---	23	16	92	149	123	86	36
31	47	---	14	13	---	23	---	127	---	139	85	---
TOTAL	1861	842	712	392.8	500	618	489	1338	5064	3576	3630	2222
MEAN	60.0	28.1	23.0	12.7	17.9	19.9	16.3	43.2	169	115	117	74.1
MAX	71	47	24	15	20	23	23	127	229	142	149	85
MIN	30	19	14	6.4	13	16	11	16	104	84	85	36
AC-FT	3690	1670	1410	779	992	1230	970	2650	10040	7090	7200	4410
a	2370	1670	1230	1040	903	987	984	3740	10070	8920	6870	3200

CAL YR 1982 TOTAL 19281.4 MEAN 52.8 MAX 188 MIN 9.6 AC-FT 38240  
MTR YR 1983 TOTAL 21244.8 MEAN 58.2 MAX 229 MIN 6.4 AC-FT 42140

a Computed natural flow, in acre-feet.

## MONO LAKE BASIN

10287290 RUSH CREEK BELOW AGNEW LAKE, NR 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 the town of June Lake.

DRAINAGE AREA.--23.3 mi<sup>2</sup> 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. Altitude of gage is 8,480 ft, 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.

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

AVERAGE DISCHARGE (Actual flow).--32 years, 57.4 ft<sup>3</sup>/s, 41,590 acre-ft/yr.  
(Natural flow).--32 years, 61.7 ft<sup>3</sup>/s, 44,700 acre-ft/yr.

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 421 ft<sup>3</sup>/s July 15, 1978; minimum daily, 0.90 ft<sup>3</sup>/s Aug. 31 to Sept. 2, 1976.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 339 ft<sup>3</sup>/s Aug. 1; minimum daily, 9.6 ft<sup>3</sup>/s May 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	178	65	86	86	60	46	51	9.6	201	269	339	107
2	175	35	88	86	61	37	53	9.6	200	274	317	148
3	170	44	87	86	63	39	55	9.7	202	277	286	138
4	149	43	87	86	60	38	43	11	204	280	257	117
5	96	57	87	86	60	38	15	17	208	286	239	101
6	89	86	86	86	60	40	28	16	208	287	224	95
7	86	87	86	86	61	43	26	15	215	286	242	93
8	85	62	83	86	62	43	39	14	216	281	290	93
9	86	59	86	86	63	43	44	16	219	281	301	90
10	86	87	85	86	63	43	44	16	224	282	290	89
11	86	89	87	86	63	43	44	14	230	281	242	90
12	86	89	85	66	63	41	44	16	229	282	196	90
13	86	89	85	60	63	40	44	19	229	289	176	90
14	86	88	86	60	63	40	44	21	231	288	176	90
15	86	88	87	60	63	40	28	26	237	290	224	89
16	85	89	87	60	63	40	20	21	238	288	242	90
17	85	88	87	60	63	40	22	19	245	288	205	89
18	85	91	87	60	63	40	23	44	252	250	187	92
19	85	90	87	60	63	40	25	59	245	169	205	89
20	85	86	87	60	62	40	28	56	247	169	210	89
21	85	90	87	57	62	40	28	64	248	158	168	89
22	85	90	89	59	62	40	28	85	252	141	140	90
23	85	90	89	62	62	49	28	85	255	142	116	90
24	85	90	87	62	63	49	28	85	259	141	100	89
25	85	89	87	62	64	49	28	85	260	139	88	89
26	92	89	86	62	64	49	28	85	262	142	87	90
27	107	89	87	62	65	49	26	85	263	139	88	90
28	96	89	86	61	64	49	14	104	264	150	86	90
29	90	90	86	61	---	49	13	194	276	238	87	86
30	89	86	86	60	---	49	11	199	269	294	90	88
31	90	---	86	60	---	51	---	201	---	322	90	---
TOTAL	3044	2404	2682	2160	1748	1337	952	1700.9	7088	7403	5988	2860
MEAN	98.2	80.1	86.5	69.7	62.4	43.1	31.7	54.9	236	239	193	95.3
MAX	178	91	89	86	65	51	55	201	276	322	339	148
MIN	85	35	83	57	60	37	11	9.6	200	139	86	86
AC-FT	6040	4770	5320	4280	3470	2650	1890	3370	14060	14680	11880	5670
a	2040	1710	797	770	594	752	1	9800	23880	22220	11820	3780

CAL YR 1982 TOTAL 33251.0 MEAN 91.1 MAX 287 MIN 24 AC-FT 65950  
WTR YR 1983 TOTAL 39366.9 MEAN 108 MAX 339 MIN 9.6 AC-FT 78080

a Computed natural flow, in acre-feet.

## 11012000 COTTONWOOD CREEK ABOVE TECATE CREEK, NEAR DULZURA, CA

LOCATION.--Lat 32°34'30", long 116°45'11", in NW 1/4 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, and 5.1 mi south of Dulzura.

DRAINAGE AREA.--310 mi<sup>2</sup>.

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

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

REMARKS.--Records good. 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.--47 years, 15.7 ft<sup>3</sup>/s, 11,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 11.15 ft; no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,690 ft<sup>3</sup>/s Mar. 3, gage height, 9.76 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	7.6	31	19	890	707	656	147	33	.24	3.2
2		0	4.6	29	388	4320	649	624	144	31	.21	2.5
3		0	3.3	30	1200	5530	597	531	144	26	.21	2.1
4		0	2.7	31	915	4050	544	471	146	23	.19	1.9
5		0	2.1	31	784	2760	503	426	146	25	.17	1.7
6		0	1.9	30	799	1810	473	395	147	24	.20	1.3
7		0	1.9	30	870	1240	433	383	142	21	.22	.98
8		0	1.9	30	1150	884	403	361	139	17	.35	.75
9		0	2.3	30	949	698	381	343	134	16	.47	.85
10		.30	2.5	29	694	562	377	328	130	13	2.8	.87
11		.58	1.9	32	551	477	447	312	127	12	17	.56
12		.14	1.7	30	453	411	529	298	121	12	16	.36
13		.07	1.5	29	373	357	624	287	117	11	13	.28
14		.08	1.5	29	316	359	606	283	116	10	8.6	.20
15		.09	1.5	26	268	344	529	275	100	7.2	7.9	.23
16		.09	1.4	24	237	299	452	265	92	5.5	21	.16
17		.14	1.3	23	213	340	388	257	86	4.5	67	.16
18		.14	1.3	23	192	755	414	246	82	3.8	171	.13
19		.56	1.2	22	169	1560	451	232	76	2.8	120	.11
20		.28	1.1	25	152	1080	461	222	72	2.2	83	.22
21		.16	1.1	24	134	1210	762	214	68	1.7	58	.23
22		.14	1.4	22	120	1360	784	203	62	1.2	38	.18
23		.14	1.1	23	111	1330	635	200	53	.95	27	.15
24		.13	30	25	163	2530	548	194	48	.76	21	.12
25		.10	39	25	361	2680	497	185	43	.64	18	.11
26		.08	29	23	289	1760	467	177	41	.54	18	.11
27		.09	24	96	437	1360	444	174	39	.48	12	.08
28		.16	24	398	1050	1130	426	168	37	.43	9.4	.13
29		.95	24	178	---	986	446	160	36	.36	7.1	.15
30		5.6	28	75	---	867	630	153	36	.31	5.3	.47
31		---	33	19	---	784	---	149	---	.27	4.0	---
TOTAL	0	10.02	289.7	1472	13357	44723	15607	9172	2871	307.64	747.36	20.29
MEAN	0	.33	9.35	47.5	477	1443	520	296	95.7	9.92	24.1	.68
MAX	0	5.6	39	398	1200	5530	784	656	147	33	171	3.2
MIN	0	0	1.1	19	19	299	377	149	36	.27	.17	.08
AC-FT	0	20	575	2920	26490	88710	30960	18190	5690	610	1480	40
CAL YR 1982	TOTAL	2829.99	MEAN	7.75	MAX	214	MIN	0	AC-FT	5610		
WTR YR 1983	TOTAL	88577.01	MEAN	243	MAX	5530	MIN	0	AC-FT	175700		

## TIJUANA RIVER BASIN

11012500 CAMPO CREEK NEAR CAMPO, CA

LOCATION.--Lat 32°35'28", long 116°31'29", in SW 1/4 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 mi<sup>2</sup>, of which 3 mi<sup>2</sup> are in Mexico.

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

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 2,178.92 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1954, at datum 1 ft higher.

REMARKS.--Records good. Broad-crested weir buried by sand Mar. 25 to Sept. 30, 1983 and was ineffective as a control. Flow regulated by small conservation reservoir 1 mi upstream since August 1956. No diversion above station.

AVERAGE DISCHARGE.--47 years, 3.09 ft<sup>3</sup>/s, 2,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft<sup>3</sup>/s Mar. 24, 1983, gage height, 5.39 ft, from rating curve extended above 340 ft<sup>3</sup>/s; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 895 ft<sup>3</sup>/s Mar. 24, gage height, 5.39 ft, from rating curve as explained above; minimum daily, 0.36 ft<sup>3</sup>/s Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.85	69	7.5	11	68	150	118	34	27	23	21
2	.57	.93	21	7.9	64	399	145	112	39	28	24	20
3	.56	.89	11	7.8	72	347	140	107	38	26	26	19
4	.55	.96	9.0	7.7	35	305	135	95	36	25	24	18
5	.56	2.1	8.0	7.5	30	179	130	90	34	24	26	16
6	.53	3.0	7.3	7.3	33	121	125	80	35	24	28	18
7	.56	2.6	7.2	7.2	31	75	125	75	34	23	30	21
8	.50	2.4	9.9	6.8	39	49	120	70	32	21	32	19
9	.45	2.8	13	6.8	29	45	115	65	31	21	31	17
10	.43	5.2	19	6.4	27	65	110	60	32	21	30	16
11	.45	13	4.7	6.0	22	76	140	55	33	20	29	17
12	.42	5.5	3.4	6.0	19	66	165	48	34	18	32	17
13	.42	4.3	3.1	6.1	19	59	150	47	33	17	32	15
14	.41	3.8	2.9	6.4	17	69	135	44	29	17	36	16
15	.40	3.6	2.5	6.7	16	60	120	40	28	18	40	15
16	.38	3.7	2.5	6.8	16	61	110	39	29	16	44	14
17	.38	3.8	2.5	7.2	15	72	100	35	28	16	60	16
18	.36	3.8	2.4	7.3	15	115	90	32	28	16	32	14
19	.42	5.3	2.4	8.6	15	79	81	31	29	15	21	14
20	.44	6.2	2.4	8.8	14	70	93	28	27	15	20	19
21	.47	5.0	2.4	7.9	15	130	122	28	26	15	17	17
22	.46	4.5	2.7	7.7	15	138	103	31	26	17	16	18
23	.48	4.4	28	8.1	15	192	97	31	26	18	16	16
24	.52	4.3	14	8.2	36	454	99	30	27	19	16	13
25	.55	4.0	9.6	9.9	39	282	100	31	30	19	18	13
26	.61	3.8	8.4	8.7	23	240	110	32	29	20	15	15
27	.61	3.7	8.2	20	34	210	120	33	26	20	18	14
28	.61	3.9	8.1	21	81	200	124	31	27	21	19	16
29	.64	6.3	8.1	32	---	180	129	33	26	23	21	16
30	.69	75	9.0	16	---	170	149	33	27	23	22	16
31	.75	---	8.5	12	---	160	---	33	---	20	23	---
TOTAL	15.80	189.63	310.2	294.3	797	4736	3632	1617	913	623	821	496
MEAN	.51	6.32	10.0	9.49	28.5	153	121	52.2	30.4	20.1	26.5	16.5
MAX	.75	75	69	32	81	454	165	118	39	28	60	21
MIN	.36	.85	2.4	6.0	11	45	81	28	26	15	15	13
AC-FT	31	376	615	584	1580	9390	7200	3210	1810	1240	1630	984

CAL YR 1982 TOTAL 2439.98 MEAN 6.68 MAX 84 MIN .25 AC-FT 4840  
WTR YR 1983 TOTAL 14444.93 MEAN 39.6 MAX 454 MIN .36 AC-FT 28650

## 11012000 COTTONWOOD CREEK ABOVE TECATE CREEK, NEAR DULZURA, CA

LOCATION.--Lat 32°34'30", long 116°45'11", in NW 1/4 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, and 5.1 mi south of Dulzura.

DRAINAGE AREA.--310 mi<sup>2</sup>.

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

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

REMARKS.--Records good. 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.--47 years, 15.7 ft<sup>3</sup>/s, 11,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 11.15 ft; no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,690 ft<sup>3</sup>/s Mar. 3, gage height, 9.76 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	7.6	31	19	890	707	656	147	33	.24	3.2
2		0	4.6	29	388	4320	649	624	144	31	.21	2.5
3		0	3.3	30	1200	5530	597	531	144	26	.21	2.1
4		0	2.7	31	915	4050	544	471	146	23	.19	1.9
5		0	2.1	31	784	2760	503	426	146	25	.17	1.7
6		0	1.9	30	799	1810	473	395	147	24	.20	1.3
7		0	1.9	30	870	1240	433	383	142	21	.22	.98
8		0	1.9	30	1150	884	403	361	139	17	.35	.75
9		0	2.3	30	949	698	381	343	134	16	.47	.85
10		.30	2.5	29	694	562	377	328	130	13	2.8	.87
11		.58	1.9	32	551	477	447	312	127	12	17	.56
12		.14	1.7	30	453	411	529	298	121	12	16	.36
13		.07	1.5	29	373	357	624	287	117	11	13	.28
14		.08	1.5	29	316	359	606	283	116	10	8.6	.20
15		.09	1.5	26	268	344	529	275	100	7.2	7.9	.23
16		.09	1.4	24	237	299	452	265	92	5.5	21	.16
17		.14	1.3	23	213	340	388	257	86	4.5	67	.16
18		.14	1.3	23	192	755	414	246	82	3.8	171	.13
19		.56	1.2	22	169	1560	451	232	76	2.8	120	.11
20		.28	1.1	25	152	1080	461	222	72	2.2	83	.22
21		.16	1.1	24	134	1210	762	214	68	1.7	58	.23
22		.14	1.4	22	120	1360	784	203	62	1.2	38	.18
23		.14	1.1	23	111	1330	635	200	53	.95	27	.15
24		.13	30	25	163	2530	548	194	48	.76	21	.12
25		.10	39	25	361	2680	497	185	43	.64	18	.11
26		.08	29	23	289	1760	467	177	41	.54	18	.11
27		.09	24	96	437	1360	444	174	39	.48	12	.08
28		.16	24	398	1050	1130	426	168	37	.43	9.4	.13
29		.95	24	178	---	986	446	160	36	.36	7.1	.15
30		5.6	28	75	---	867	630	153	36	.31	5.3	.47
31		---	33	19	---	784	---	149	---	.27	4.0	---
TOTAL	0	10.02	289.7	1472	13357	44723	15607	9172	2871	307.64	747.36	20.29
MEAN	0	.33	9.35	47.5	477	1443	520	296	95.7	9.92	24.1	.68
MAX	0	5.6	39	398	1200	5530	784	656	147	33	171	3.2
MIN	0	0	1.1	19	19	299	377	149	36	.27	.17	.08
AC-FT	0	20	575	2920	26490	88710	30960	18190	5690	610	1480	40
CAL YR 1982	TOTAL	2829.99	MEAN	7.75	MAX	214	MIN	0	AC-FT	5610		
WTR YR 1983	TOTAL	88577.01	MEAN	243	MAX	5530	MIN	0	AC-FT	175700		

## TIJUANA RIVER BASIN

11012500 CAMPO CREEK NEAR CAMPO, CA

LOCATION.--Lat 32°35'28", long 116°31'29", in SW 1/4 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 mi<sup>2</sup>, of which 3 mi<sup>2</sup> are in Mexico.

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

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 2,178.92 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1954, at datum 1 ft higher.

REMARKS.--Records good. Broad-crested weir buried by sand Mar. 25 to Sept. 30, 1983 and was ineffective as a control. Flow regulated by small conservation reservoir 1 mi upstream since August 1956. No diversion above station.

AVERAGE DISCHARGE.--47 years, 3.09 ft<sup>3</sup>/s, 2,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 895 ft<sup>3</sup>/s Mar. 24, 1983, gage height, 5.39 ft, from rating curve extended above 340 ft<sup>3</sup>/s; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 895 ft<sup>3</sup>/s Mar. 24, gage height, 5.39 ft, from rating curve as explained above; minimum daily, 0.36 ft<sup>3</sup>/s Oct. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.85	69	7.5	11	68	150	118	34	27	23	21
2	.57	.93	21	7.9	64	399	145	112	39	28	24	20
3	.56	.89	11	7.8	72	347	140	107	38	26	26	19
4	.55	.96	9.0	7.7	35	305	135	95	36	25	24	18
5	.56	2.1	8.0	7.5	30	179	130	90	34	24	26	16
6	.53	3.0	7.3	7.3	33	121	125	80	35	24	28	18
7	.56	2.6	7.2	7.2	31	75	125	75	34	23	30	21
8	.50	2.4	9.9	6.8	39	49	120	70	32	21	32	19
9	.45	2.8	13	6.8	29	45	115	65	31	21	31	17
10	.43	5.2	19	6.4	27	65	110	60	32	21	30	16
11	.45	13	4.7	6.0	22	76	140	55	33	20	29	17
12	.42	5.5	3.4	6.0	19	66	165	48	34	18	32	17
13	.42	4.3	3.1	6.1	19	59	150	47	33	17	32	15
14	.41	3.8	2.9	6.4	17	69	135	44	29	17	36	16
15	.40	3.6	2.5	6.7	16	60	120	40	28	18	40	15
16	.38	3.7	2.5	6.8	16	61	110	39	29	16	44	14
17	.38	3.8	2.5	7.2	15	72	100	35	28	16	60	16
18	.36	3.8	2.4	7.3	15	115	90	32	28	16	32	14
19	.42	5.3	2.4	8.6	15	79	81	31	29	15	21	14
20	.44	6.2	2.4	8.8	14	70	93	28	27	15	20	19
21	.47	5.0	2.4	7.9	15	130	122	28	26	15	17	17
22	.46	4.5	2.7	7.7	15	138	103	31	26	17	16	18
23	.48	4.4	28	8.1	15	192	97	31	26	18	16	16
24	.52	4.3	14	8.2	36	454	99	30	27	19	16	13
25	.55	4.0	9.6	9.9	39	262	100	31	30	19	18	13
26	.61	3.8	8.4	8.7	23	240	110	32	29	20	15	15
27	.61	3.7	8.2	20	34	210	120	33	26	20	18	14
28	.61	3.9	8.1	21	81	200	124	31	27	21	19	16
29	.64	6.3	8.1	32	---	160	129	33	26	23	21	16
30	.69	75	9.0	16	---	170	149	33	27	23	22	16
31	.75	---	8.5	12	---	160	---	33	---	20	23	---
TOTAL	15.80	189.63	310.2	294.3	797	4736	3632	1617	913	623	821	496
MEAN	.51	6.32	10.0	9.49	28.5	153	121	52.2	30.4	20.1	26.5	16.5
MAX	.75	75	69	32	81	454	165	118	39	28	60	21
MIN	.36	.85	2.4	6.0	11	45	81	28	26	15	15	13
AC-FT	31	376	615	584	1580	9390	7200	3210	1810	1240	1630	984

CAL YR 1982 TOTAL 2439.98 MEAN 6.68 MAX 84 MIN .25 AC-FT 4840  
WTR YR 1983 TOTAL 14444.93 MEAN 39.6 MAX 454 MIN .36 AC-FT 28650

## 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, and 5.5 mi south of Dulzura.

DRAINAGE AREA.--481 mi<sup>2</sup>, of which 70 mi<sup>2</sup> are in Mexico.

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

GAGE.--Water-stage recorder. Datum of gage is 542.42 ft 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.--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.--47 years, 26.1 ft<sup>3</sup>/s, 18,910 acre-ft/yr.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft<sup>3</sup>/s Mar. 3, gage height, 7.03 ft, from rating curve extended as explained above; minimum daily, 0.04 ft<sup>3</sup>/s Nov. 2-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.05	86	49	23	1590	1100	682	205	86	49	33
2	.08	.04	38	45	450	7830	1000	653	199	82	50	31
3	.08	.04	22	43	1500	6340	900	517	197	78	51	29
4	.08	.04	14	41	1100	5230	850	473	196	76	53	25
5	.08	.04	8.0	40	900	3500	800	439	197	73	58	23
6	.07	.04	6.1	38	1000	1970	750	419	192	70	58	21
7	.07	.05	7.9	38	1100	1210	700	411	186	67	64	21
8	.07	.05	22	41	1400	1060	650	397	180	61	67	19
9	.07	.06	21	42	1100	1070	615	377	175	53	78	18
10	.07	21	53	38	593	1010	618	363	169	49	69	16
11	.06	19	46	44	494	920	711	348	163	47	93	15
12	.06	2.9	34	40	390	711	743	331	156	50	93	14
13	.06	.70	29	38	334	681	684	324	160	49	88	14
14	.06	.45	16	34	308	714	686	321	164	50	81	14
15	.06	.07	10	32	285	677	625	315	150	50	89	14
16	.05	.19	7.2	30	237	611	577	306	135	51	117	14
17	.05	.36	5.3	28	206	681	550	295	128	52	213	17
18	.05	.58	4.0	28	183	1340	642	296	122	50	359	16
19	.05	4.8	2.7	26	166	2400	602	293	117	50	210	17
20	.05	6.6	1.4	30	170	1700	629	286	113	50	147	19
21	.05	1.1	1.0	28	168	1900	895	279	108	48	114	20
22	.05	.84	2.1	26	165	2100	839	274	102	49	94	18
23	.05	1.5	109	27	176	2500	630	269	93	51	80	18
24	.06	1.4	116	29	249	4000	620	266	88	51	68	17
25	.06	.61	121	30	568	4300	586	258	82	52	61	18
26	.08	.69	92	29	479	3000	563	250	95	52	56	18
27	.07	.51	75	150	796	2200	539	247	96	55	50	18
28	.06	1.2	64	500	1830	1800	510	234	95	52	45	19
29	.05	9.4	58	250	---	1500	552	222	94	52	41	20
30	.05	96	72	90	---	1400	711	213	92	56	39	21
31	.05	---	59	23	---	1200	---	207	---	51	35	---
TOTAL	1.93	170.31	1202.7	1927	16370	67145	20877	10565	4249	1763	2770	577
MEAN	.062	5.68	38.8	62.2	585	2166	696	341	142	56.9	89.4	19.2
MAX	.08	96	121	500	1830	7830	1100	682	205	86	359	33
MIN	.05	.04	1.0	23	23	611	510	207	82	47	35	14
AC-FT	3.8	338	2390	3820	32470	133200	41410	20960	8430	3500	5490	1140
CAL YR 1982	TOTAL	6527.01	MEAN	17.9	MAX	350	MIN	.04	AC-FT	12950		
WTR YR 1983	TOTAL	127617.94	MEAN	350	MAX	7830	MIN	.04	AC-FT	253100		

## TIJUANA RIVER BASIN

## 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 mi<sup>2</sup>, of which 10 mi<sup>2</sup> are in the United States.

PERIOD OF RECORD.--April 1937 to current year. Published with record for Tijuana River near Nestor, Calif., October 1953 to September 1957. Monthend contents for April 1937 to September 1950 published in WSP 1315-B and for 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 Otoy aqueduct into the reservoir for Tijuana emergency use; this year none was imported.

COOPERATION.--Records were furnished 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, 112,000 acre-ft Apr. 26, 30; minimum observed, 61,080 acre-ft Dec. 9.

## MONTHEND CONTENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	64,400	--
Oct. 31.....	62,620	-1,780
Nov. 30.....	61,350	-1,270
Dec. 31.....	67,550	+6,200
CAL YR 1982.....	--	+7,320
Jan. 31.....	69,420	+1,870
Feb. 28.....	90,640	+21,220
Mar. 31.....	103,900	+13,260
Apr. 30.....	112,000	+8,100
May 31.....	105,300	-6,700
June 30.....	104,800	-500
July 31.....	90,790	-14,010
Aug. 31.....	74,780	-16,010
Sept. 30.....	73,560	-1,220
WTR YR 1983.....	--	+9,160



## 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 mi east of Chula Vista.

DRAINAGE AREA.--99.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1945 to September 1959 (published with Otay River at Savage Dam, station 11014500). October 1972 to current year. Records of 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 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 furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1945-59 AND SINCE 1972).--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, 51,860 acre-ft, spilling, Mar. 3, elevation, 486.78 ft; minimum observed, 44,140 acre-ft Jan. 27, elevation, 479.64 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	483.16	47,820	--
Oct. 31.....	482.72	47,350	-470
Nov. 30.....	481.68	46,240	-1,110
Dec. 31.....	480.56	45,080	-1,160
CAL YR 1982.....	--	--	-3,820
Jan. 31.....	480.12	44,620	-460
Feb. 28.....	483.14	47,800	+3,180
Mar. 31.....	484.98	49,820	+2,020
Apr. 30.....	484.74	49,550	-270
May 31.....	484.08	48,820	-730
June 30.....	483.06	47,710	-1,110
July 31.....	482.56	47,180	-530
Aug. 31.....	482.64	47,260	+80
Sept. 30.....	482.27	46,870	-390
WTR YR 1983.....	--	--	-950

## 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1905 to September 1927, October 1956 to current year. Monthly discharge only for October to December 1905, January to February 1916, February, March, June to September 1927, published in WSP 1315-B. Combined records of river and diversion since October 1956.

GAGE.--Water-stage recorder on river; water-stage recorder on concrete diversion. Datum of river gage is 3,269.24 ft National Geodetic Vertical Datum of 1929. Prior to June 25, 1927, nonrecording gages at several sites within 0.1 mi upstream at various datums. Diversion gage at different datum.

REMARKS.--Records fair. No regulation above station. Sweetwater River diversion diverts 0.3 mi above station for irrigation below. No diversion since November 1976.

AVERAGE DISCHARGE.--River only: 49 years, 12.4 ft<sup>3</sup>/s, 8,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 11,200 ft<sup>3</sup>/s Feb. 16, 1927, gage height, 13.2 ft, from floodmarks, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s (revised) and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1245	1,050	7.99	Mar. 19	0030	682	7.36
Dec. 9	1115	1,160	8.14	Mar. 21	1300	521	6.92
Jan. 29	0715	439	6.83	Mar. 24	0600	1,470	8.55
Feb. 8	1015	795	7.57	Apr. 21	1115	272	6.31
Mar. 2	0400	*2,140	9.28	Apr. 30	1215	208	6.08

Minimum daily discharge, 0.02 Nov. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	.07	80	27	50	320	215	129	40	14	3.3	5.0
2	.27	.06	28	26	102	1470	198	107	39	13	3.3	4.4
3	.17	.04	17	25	103	1060	183	99	38	13	3.1	3.4
4	.18	.02	12	24	82	910	171	98	37	12	3.0	2.9
5	.24	.02	7.3	23	85	473	165	94	36	12	3.0	2.6
6	.18	.03	3.2	21	138	430	157	94	34	11	3.6	2.4
7	.21	.04	3.3	19	405	300	149	89	33	11	3.7	2.3
8	.22	.06	8.5	18	489	267	144	86	32	11	4.2	2.2
9	.12	2.5	426	18	211	237	139	83	31	10	5.4	2.3
10	.16	14	211	18	137	202	136	80	30	9.8	6.0	2.2
11	.15	9.4	47	17	107	183	150	77	29	9.5	4.8	2.1
12	.14	4.0	31	16	94	172	143	74	28	9.2	4.2	2.3
13	.18	2.5	25	15	89	162	140	73	27	8.9	3.7	2.6
14	.23	1.3	22	15	82	171	133	71	26	8.6	3.4	2.3
15	.23	.41	22	15	76	151	131	68	25	8.3	5.2	2.2
16	.25	.14	22	16	72	139	127	65	24	7.9	15	2.0
17	.31	.09	22	16	67	167	120	62	23	7.7	42	1.9
18	.31	.08	22	15	62	469	110	60	22	7.4	31	2.0
19	.29	5.2	21	19	59	356	98	58	21	7.2	23	2.2
20	.16	2.8	21	19	55	197	108	56	21	7.0	19	2.9
21	.18	1.2	21	15	52	361	207	54	20	6.3	14	3.0
22	.11	.25	23	15	50	336	132	52	19	6.1	10	2.4
23	.11	.17	35	17	48	359	111	51	18	5.8	8.6	2.3
24	.10	.13	36	16	71	857	108	49	18	5.3	7.2	2.2
25	.11	.11	35	21	142	479	105	47	17	5.0	6.5	2.1
26	.43	.10	30	16	103	330	102	45	17	4.8	5.5	2.4
27	.23	.10	30	92	239	286	96	43	16	4.6	4.9	2.6
28	.09	.14	29	98	425	268	94	40	15	4.5	4.1	2.9
29	.08	5.4	30	231	---	256	109	40	15	4.2	3.8	3.7
30	.08	341	32	83	---	249	156	40	14	3.9	3.6	5.4
31	.08	---	29	55	---	234	---	40	---	3.5	3.7	---
TOTAL	6.31	391.36	1381.3	1045	3695	11851	4137	2124	765	252.5	261.8	81.2
MEAN	.20	13.0	44.6	33.7	132	382	138	68.5	25.5	8.15	8.45	2.71
MAX	.71	341	426	231	489	1470	215	129	40	14	42	5.4
MIN	.08	.02	3.2	15	48	139	94	40	14	3.5	3.0	1.9
AC-FT	13	776	2740	2070	7330	23510	8210	4210	1520	501	519	161
CAL YR 1982	TOTAL	7299.35	MEAN	20.0	MAX	426	MIN	0	AC-FT	14480		
WTR YR 1983	TOTAL	25991.47	MEAN	71.2	MAX	1470	MIN	.02	AC-FT	51550		

## 11020600 EL CAPITAN LAKE NEAR LAKESIDE, CA

LOCATION.--Lat 32°53'00", long 116°48'25", in NE 1/4 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 mi east of Lakeside.

DRAINAGE AREA.--188 mi<sup>2</sup>.

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 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 furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1945-66 AND SINCE 1972).--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, 112,700 acre-ft, May 10, elevation, 749.96 ft; minimum observed, 34,550 acre-ft Nov. 29, elevation, 681.00 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	688.38	40,450	--
Oct. 31.....	683.98	36,880	-3,570
Nov. 30.....	681.02	34,560	-2,320
Dec. 31.....	689.12	41,070	+6,510
CAL YR 1982.....	--	--	+19,310
Jan. 31.....	690.26	42,030	+960
Feb. 28.....	705.00	55,570	+13,540
Mar. 31.....	744.60	104,500	+48,930
Apr. 30.....	749.13	111,500	+7,000
May 31.....	749.40	111,900	+400
June 30.....	748.17	110,000	-1,900
July 31.....	746.21	107,000	-3,000
Aug. 31.....	744.15	103,900	-3,100
Sept. 30.....	740.72	98,830	-5,070
WTR YR 1983.....	--	--	+58,380

## SAN DIEGO RIVER BASIN

## 11022100 SAN VICENTE RESERVOIR NEAR LAKESIDE, CA

LOCATION.--Lat 32°54'45", long 116°55'25", in SE 1/4 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929 (levels by county of San Diego); gage readings have been reduced to elevations 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 furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1946-61 AND SINCE 1972).--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, 90,970 acre-ft, Mar. 25, elevation, 650.69 ft; minimum observed, 72,050 acre-ft Sept. 30, elevation, 632.21 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	635.41	75,190	--
Oct. 31.....	637.26	77,030	+1,840
Nov. 30.....	638.61	78,390	+1,360
Dec. 31.....	634.53	74,320	-4,070
CAL YR 1982.....	--	--	+3,760
Jan. 31.....	632.64	72,470	-1,850
Feb. 28.....	634.56	74,350	+1,880
Mar. 31.....	650.27	90,520	+16,170
Apr. 30.....	649.26	89,440	-1,080
May 31.....	645.72	85,700	-3,740
June 30.....	641.37	81,200	-4,500
July 31.....	637.83	77,600	-3,600
Aug. 31.....	632.78	72,600	-5,000
Sept. 30.....	632.21	72,050	-550
WTR YR 1983.....	--	--	-3,140

## 11022480 SAN DIEGO RIVER AT MAST ROAD, NEAR SANTEE, CA

LOCATION.--Lat 32°50'25", long 117°01'30", in Ex Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, near left bank on downstream side of Mast Road bridge, 1.1 mi upstream from Old Mission Damsite, in Santee.

DRAINAGE AREA.--368 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1912 to December 1915, March 1916 to current year. Monthly discharge only for some periods and yearly estimates only for 1924-25, published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 300 ft, from topographic map. Prior to Nov. 10, 1920, nonrecording gage at site 1.1 mi downstream at different datum. Nov. 10, 1920, to Jan. 19, 1982 at site 2.6 mi downstream at different datum.

REMARKS.--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.--70 years (water years 1913-15, 1917-83), 25.7 ft<sup>3</sup>/s, 18,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,200 ft<sup>3</sup>/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, 9,590 ft<sup>3</sup>/s Mar. 1, gage height, 11.16 ft, from rating curve extended above 3,300 ft<sup>3</sup>/s; minimum daily, 4.2 ft<sup>3</sup>/s Oct. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	4.4	114	19	37	1080	212	154	27	11	8.1	7.6
2	6.5	4.5	51	18	246	1730	219	128	26	11	8.0	6.7
3	6.2	4.3	35	17	92	2270	199	121	26	11	8.0	6.4
4	5.8	4.4	27	16	65	1300	181	119	25	11	8.0	6.5
5	5.5	4.3	22	15	44	506	170	116	25	10	8.1	6.3
6	5.4	4.6	19	15	46	363	162	114	25	10	8.3	6.3
7	5.3	4.8	17	14	64	254	155	116	25	11	8.5	6.2
8	5.4	5.0	20	13	358	191	142	116	24	11	8.3	6.2
9	5.3	109	37	12	102	143	138	115	24	12	8.1	6.1
10	5.1	251	24	12	62	145	137	115	23	11	7.9	5.5
11	5.1	74	15	11	45	213	142	113	22	9.5	7.9	5.8
12	4.7	37	13	11	33	207	149	113	21	8.5	8.1	5.2
13	4.5	24	12	11	26	185	139	113	20	8.6	7.9	5.3
14	5.0	17	12	11	22	196	134	114	18	8.5	26	5.6
15	4.8	12	11	10	18	179	132	115	16	9.0	8.6	6.1
16	4.8	9.7	11	10	17	172	130	115	15	8.6	7.4	6.2
17	4.8	9.0	11	10	16	278	131	115	14	8.4	7.1	6.3
18	4.8	8.2	10	9.9	15	503	152	114	15	8.4	9.0	6.7
19	4.6	51	10	36	14	422	132	77	14	8.3	8.1	7.0
20	4.4	11	10	11	14	261	197	62	13	8.1	7.7	6.8
21	4.3	9.3	10	10	13	569	214	57	14	8.1	7.2	7.1
22	4.5	9.2	48	9.8	12	436	157	51	13	8.0	7.4	6.9
23	4.6	9.4	207	12	12	605	151	47	12	7.9	7.3	7.0
24	4.6	9.8	40	13	80	1090	153	43	11	8.3	7.6	6.9
25	4.6	11	28	12	35	698	151	40	11	8.5	7.7	7.1
26	8.9	11	25	10	55	446	149	36	12	8.1	7.7	7.5
27	5.6	12	23	194	340	351	153	34	12	8.2	7.3	6.8
28	4.5	14	23	67	475	285	155	32	11	8.2	6.7	6.9
29	4.2	60	56	422	---	231	192	30	11	8.1	6.6	7.8
30	4.3	540	36	62	---	184	164	29	11	8.0	6.4	11
31	4.5	---	22	44	---	188	---	28	---	8.0	6.2	---
TOTAL	159.3	1334.9	999	1137.7	2358	15681	4792	2692	536	284.3	257.2	199.8
MEAN	5.14	44.5	32.2	36.7	84.2	506	160	86.8	17.9	9.17	8.30	6.66
MAX	8.9	540	207	422	475	2270	219	154	27	12	26	11
MIN	4.2	4.3	10	9.8	12	143	130	28	11	7.9	6.2	5.2
AC-FT	316	2650	1980	2260	4680	31100	9500	5340	1060	564	510	396

CAL YR 1982 TOTAL 9703.9 MEAN 26.6 MAX 926 MIN 3.7 AC-FT 19250  
WTR YR 1983 TOTAL 30431.2 MEAN 83.4 MAX 2270 MIN 4.2 AC-FT 60360

## SAN DIEGO RIVER BASIN

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 10 ft downstream from footbridge at Fashion Valley Mall, 500 ft upstream from Fashion Valley road crossing.

DRAINAGE AREA.--429 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 20 ft, from topographic map.

REMARKS.--Records excellent. Flow regulated by Cuyamaca Reservoir, capacity 11,540 acre-ft, El Capitan Reservoir (station 11020500), and San Vicente Reservoir (station 11022000). Diversions by city of San Diego for municipal supply and by Helix Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,280 ft<sup>3</sup>/s Mar. 2, 1983, gage height, 13.11 ft, from rating curve extended above 5,800 ft<sup>3</sup>/s; minimum daily, 1.80 ft<sup>3</sup>/s Sept. 11, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,280 ft<sup>3</sup>/s Mar 2, gage height, 13.11 ft, from rating curve extended above 5,800 ft<sup>3</sup>/s; minimum daily, 2.2 ft<sup>3</sup>/s Oct. 13, 14.

REVISIONS.--The daily discharge figures for Jan. 1-17, 1982 have been revised and are shown in the table below; also delete the 1982 water year totals. All changes supersede figures published in the report for 1982.

Date	Discharge	Date	Discharge	Date	Discharge	Jan. Totals (revised)
Jan. 1	160	Jan. 7	15	Jan. 13	10	TOTAL 1918.4
2	110	8	11	14	8.0	MEAN 61.9
3	33	9	10	15	7.0	MAX 574
4	19	10	12	16	7.0	MIN 7.0
5	33	11	62	17	7.0	AC-FT 3810
6	29	12	15			

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	3.9	370	30	44	1230	269	241	33	13	5.5	4.9
2	5.3	3.0	109	22	258	2870	288	230	32	13	5.1	5.3
3	4.6	2.9	54	18	340	4760	288	197	30	13	5.6	5.4
4	3.9	3.5	39	17	126	2150	268	189	30	13	6.7	5.8
5	3.7	3.7	32	16	74	1040	258	186	30	12	6.1	6.0
6	3.5	3.3	24	15	66	598	248	187	30	12	6.1	5.3
7	3.5	4.2	21	15	113	408	234	187	29	13	9.0	4.7
8	2.9	4.2	28	14	424	321	225	186	29	12	6.5	4.4
9	3.1	22	57	14	310	245	214	185	29	14	5.8	4.2
10	3.4	360	111	12	130	188	216	184	28	13	5.6	4.3
11	3.0	235	54	11	82	227	211	183	26	12	5.4	4.8
12	2.4	78	32	11	64	264	217	183	26	10	5.7	4.7
13	2.2	42	24	11	54	247	223	179	24	8.5	5.8	4.6
14	2.2	29	20	11	46	243	206	179	21	8.5	25	4.0
15	2.3	21	18	11	40	223	202	183	19	7.6	47	3.7
16	2.3	17	17	11	38	208	201	182	18	7.0	27	4.1
17	2.9	15	16	11	35	284	203	180	17	7.2	11	4.5
18	2.8	13	16	11	31	589	299	177	18	5.9	12	4.3
19	2.6	45	16	71	30	603	221	165	17	5.7	10	3.7
20	3.0	62	14	58	28	338	313	99	15	7.3	8.2	3.5
21	2.7	35	14	27	27	743	391	72	16	7.8	8.7	3.6
22	3.0	19	16	16	25	532	275	61	15	6.7	8.9	4.2
23	3.2	13	192	17	24	735	223	54	14	6.4	7.6	4.6
24	3.2	12	96	18	96	1680	210	51	13	6.8	6.9	4.3
25	3.0	11	45	29	133	897	201	47	13	6.2	6.2	4.6
26	3.5	11	31	20	99	638	192	42	14	5.7	5.8	4.6
27	3.2	10	23	208	312	493	186	40	14	5.7	6.2	3.8
28	3.5	10	19	212	757	413	188	37	13	5.5	6.7	4.0
29	4.1	22	39	504	---	349	294	36	13	5.8	6.3	5.0
30	4.8	366	125	189	---	301	295	34	13	6.3	5.9	10
31	4.5	---	55	68	---	256	---	31	---	6.1	5.2	---
TOTAL	104.8	1476.7	1727	1698	3806	24073	7259	4187	639	276.7	293.5	140.9
MEAN	3.38	49.2	55.7	54.8	136	777	242	135	21.3	8.93	9.47	4.70
MAX	6.5	366	370	504	757	4760	391	241	33	14	47	10
MIN	2.2	2.9	14	11	24	188	186	31	13	5.5	5.1	3.5
AC-FT	208	2930	3430	3370	7550	47750	14400	8300	1270	549	582	279

CAL YR 1982 TOTAL 16445.3 MEAN 45.1 MAX 2240 MIN 1.8 AC-FT 3810  
WTR YR 1983 TOTAL 45681.6 MEAN 125 MAX 4760 MIN 2.2 AC-FT 90610

## 11023250 POWAY CREEK NEAR POWAY, CA

LOCATION.--Lat 32°57'13", long 117°00'50", in SE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to current year. Data for period October 1969 to October 1977 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 540 ft, from topographic map.

REMARKS.--Records fair. Flow partly regulated by small conservation reservoirs.

AVERAGE DISCHARGE.--6 years, 2.38 ft<sup>3</sup>/s, 1,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 7.26 ft, on basis of rating extended above 40 ft<sup>3</sup>/s based on a step-backwater analysis up to 8.3 ft; no flow many months each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1115	49	4.84	Mar. 6	0530	78	4.99
Dec. 29	1900	30	4.84	Mar. 18	1915	74	4.97
Feb. 2	1545	46	4.82	Mar. 21	0500	74	4.97
Feb. 8	0630	51	4.85	Mar. 24	0445	215	5.59
Feb. 27	2115	126	5.22	Apr. 21	0100	30	4.72
Mar. 3	0700	*271	5.79				

Minimum daily discharge, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.10	.01	.08	61	10	3.0	.52	.22	.06	.01
2		0	0	.01	8.7	100	8.8	2.6	.47	.20	.10	.01
3		0	0	0	3.2	150	7.7	2.4	.48	.18	.06	.01
4		0	0	0	1.5	95	6.7	2.2	.48	.16	.04	.01
5		0	0	0	1.3	52	6.1	2.0	.48	.13	.10	.01
6		0	.34	0	1.8	57	5.8	2.0	.64	.11	.03	.01
7		0	.44	0	3.8	41	4.9	1.8	.77	.09	.03	0
8		0	.17	0	25	29	4.2	1.7	.87	.08	.08	0
9		.18	.46	0	7.6	20	3.9	1.6	.91	.08	.08	0
10		2.0	.14	0	4.7	17	3.9	1.6	.98	.09	.04	0
11		.05	.01	0	2.7	14	4.0	1.4	1.2	.09	.03	.01
12		0	0	0	2.3	11	4.0	1.4	1.1	.10	.04	0
13		0	0	0	2.0	9.2	3.8	1.3	.95	.10	.03	0
14		0	0	0	1.7	9.0	3.2	1.1	.65	.10	.04	0
15		0	0	0	1.4	7.1	2.7	1.2	.55	.09	.03	.01
16		0	0	0	1.2	6.3	2.5	1.2	.46	.08	.03	0
17		0	.01	.01	1.0	16	2.5	1.1	.55	.07	.03	0
18		0	.01	.01	.92	43	3.3	.94	.36	.07	.10	.01
19		.10	.01	.06	.82	35	2.4	.85	.36	.08	.04	.01
20		0	.01	0	.77	20	4.8	.82	.30	.07	.03	.01
21		0	.01	0	.71	36	13	.84	.36	.07	.03	.01
22		0	.24	0	.62	25	6.0	.89	.33	.07	.02	0
23		0	.94	0	.65	33	4.7	.88	.35	.07	.02	0
24		0	.01	.01	2.2	74	4.1	.87	.24	.06	.03	.01
25		0	0	0	2.6	46	3.8	.84	.25	.06	.02	.01
26		0	0	.38	2.8	36	3.2	.80	.26	.06	.02	.01
27		0	0	2.2	26	30	2.8	.67	.25	.06	.01	.01
28		0	0	.37	52	24	2.6	.66	.23	.06	0	.01
29		1.4	2.5	4.4	---	19	3.5	.63	.25	.05	0	0
30		5.8	.34	.82	---	15	3.2	.56	.23	.05	0	0
31		---	.02	.29	---	12	---	.52	---	.05	0	---
TOTAL	0	9.53	5.76	8.57	160.07	1142.6	142.1	40.37	15.83	2.85	1.17	0.17
MEAN	0	.32	.19	.28	5.72	36.9	4.74	1.30	.53	.092	.038	.006
MAX	0	5.8	2.5	4.4	52	150	13	3.0	1.2	.22	.10	.01
MIN	0	0	0	0	.08	6.3	2.4	.52	.23	.05	0	0
AC-FT	0	19	11	17	317	2270	282	80	31	5.7	2.3	.3

CAL YR 1982	TOTAL	193.14	MEAN	.53	MAX	45	MIN	0	AC-FT	383
WTR YR 1983	TOTAL	1529.02	MEAN	4.19	MAX	150	MIN	0	AC-FT	3030

## LOS PENASQUITOS CREEK BASIN

11023310 RATTLESNAKE CREEK AT POWAY, CA

LOCATION.--Lat 32°57'07", long 117°02'56", in NE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to current year. Data for period October 1969 to October 1977 are available in files of the Geological Survey.

GAGE.--Water-stage recorder. Altitude of gage is 457 ft, from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--6 years, 3.84 ft<sup>3</sup>/s, 2,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,430 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 2.88 ft, from rating curve extended above 100 ft<sup>3</sup>/s on basis of step-backwater computations and slope-conveyence study at 1.20 ft; no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 27	1815	196	1.03	Mar. 21	0500	112	.82
Mar. 1	1545	*300	1.26	Mar. 24	0345	209	1.06

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	2.5	.47	.72	63	7.8	7.2	1.2	.25	.06	.01
2	0	.73	.96	.47	18	87	6.8	5.9	.98	.24	.08	.01
3	0	.26	.63	.41	4.4	97	6.2	5.6	.89	.22	.05	.01
4	0	.01	.47	.32	2.8	64	5.6	5.7	1.1	.21	.05	.01
5	0	.12	.44	.32	2.4	22	5.0	5.4	1.3	.19	.05	.01
6	0	.03	.32	.32	2.6	34	4.5	5.5	1.4	.66	.05	.01
7	0	.02	2.0	.32	8.2	20	4.0	4.8	2.0	.48	.19	0
8	0	2.5	4.0	.32	21	17	3.6	4.8	1.9	.05	.28	0
9	0	3.6	5.2	.32	4.8	15	3.4	4.4	1.9	.03	.33	0
10	0	12	2.8	.21	3.6	13	3.3	3.9	2.0	.03	.26	0
11	0	2.8	.86	.21	2.5	12	3.2	3.9	2.1	.03	.12	.01
12	0	.13	.70	.21	1.6	10	7.1	3.7	2.2	.03	.03	0
13	0	.10	.49	.21	1.4	8.9	6.8	2.9	1.4	.19	.04	0
14	0	.09	.47	.21	1.2	9.5	5.9	2.6	.86	.16	.07	0
15	0	.08	.40	.21	1.1	7.8	5.0	2.6	.51	.14	.07	0
16	0	.07	.32	.29	.92	8.5	3.2	2.2	.56	.14	.02	.04
17	0	.07	.32	.32	.91	20	3.1	2.0	.50	.12	.02	.20
18	0	.29	.33	.23	.73	43	10	1.6	.65	.12	.85	.15
19	0	5.5	.32	1.7	.70	22	6.5	1.4	.40	.11	.17	.01
20	0	.16	.32	.32	.69	19	9.8	1.3	.34	.05	.09	0
21	0	.07	.33	.21	.65	40	16	1.2	.40	.05	.16	0
22	0	.05	4.6	.22	.54	23	7.5	1.2	.37	.04	.08	0
23	0	.04	9.0	.46	.56	20	6.4	1.3	.40	.17	.03	.01
24	0	.04	1.1	1.3	10	62	5.5	1.2	.27	.05	.02	.01
25	.02	.02	.69	.44	3.6	23	5.5	.99	.28	.05	.02	0
26	3.1	.02	.49	.27	3.5	18	4.8	.88	.29	.05	.02	.04
27	.16	.02	.47	20	51	15	4.4	.98	.28	.03	.01	.01
28	0	.01	.48	2.1	24	13	3.9	.84	.26	.03	0	.02
29	0	7.9	3.8	17	---	11	7.3	.81	.28	.03	0	.06
30	0	20	1.9	1.3	---	9.8	7.2	.84	.27	.03	0	1.0
31	1.6	---	.61	.86	---	8.9	---	1.0	---	.03	.01	---
TOTAL	4.88	56.75	47.32	51.55	174.12	836.4	179.3	88.64	27.29	4.01	3.23	1.62
MEAN	.16	1.89	1.53	1.66	6.22	27.0	5.98	2.86	.91	.13	.10	.054
MAX	3.1	20	9.0	20	51	97	16	7.2	2.2	.66	.85	1.0
MIN	0	.01	.32	.21	.54	7.8	3.1	.81	.26	.03	0	0
AC-FT	9.7	113	94	102	345	1660	356	176	54	8.0	6.4	3.2

CAL YR 1982 TOTAL 562.08 MEAN 1.54 MAX 71 MIN 0 AC-FT 1110  
WTR YR 1983 TOTAL 1475.11 MEAN 4.04 MAX 97 MIN 0 AC-FT 2930



## 11023325 BEELER CREEK AT POMERADO ROAD NEAR POWAY, CA

LOCATION.--Lat 32°56'23", long 117°03'57", in SW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 465 ft, from topographic map.

REMARKS.--Records good. Flow partially regulated by several conservation reservoirs above station.

AVERAGE DISCHARGE.--7 years, 2.58 ft<sup>3</sup>/s, 1,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft<sup>3</sup>/s Jan. 29, 1980, gage height, 9.20 ft, from rating curve extended above 80 ft<sup>3</sup>/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 above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 3	0115	*962	8.61
Mar. 24	0500	154	6.52

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.04	.10	.42	103	2.4	.59	.16	.06		
2		0	.04	.10	9.7	201	2.1	.61	.18	.06		
3		0	.05	.11	13	237	1.7	.75	.18	.05		
4		0	.05	.11	5.8	83	1.5	.78	.19	.04		
5		0	.06	.11	3.6	45	1.4	.73	.21	.04		
6		0	.07	.11	3.6	33	1.2	.71	.21	.03		
7		0	.08	.11	5.8	20	1.1	.69	.22	.03		
8		0	.07	.11	30	12	.95	.63	.21	.02		
9		.01	.09	.10	13	8.0	.92	.57	.21	.01		
10		.02	.07	.10	8.0	5.3	.72	.56	.21	0		
11		.01	.08	.10	5.3	3.7	1.0	.61	.23	0		
12		.01	.08	.10	3.8	2.5	.96	.52	.16	0		
13		0	.09	.09	3.2	2.0	.88	.45	.17	0		
14		0	.10	.09	2.9	2.1	.71	.44	.17	0		
15		0	.10	.09	2.3	1.4	.79	.43	.18	0		
16		0	.10	.09	1.8	.88	.64	.46	.18	0		
17		.01	.10	.09	1.6	3.7	.59	.38	.18	0		
18		.02	.10	.08	1.4	16	1.1	.34	.18	0		
19		.02	.10	.08	1.3	34	.76	.35	.18	0		
20		.02	.10	.07	1.2	16	1.0	.31	.18	0		
21		.02	.10	.08	1.1	32	1.6	.22	.17	0		
22		.02	.11	.08	.92	23	.93	.18	.16	0		
23		.02	.09	.08	.92	29	.79	.18	.15	0		
24		.02	.09	.08	1.5	67	.63	.15	.13	0		
25		.03	.09	.07	1.4	34	.61	.15	.12	0		
26		.03	.08	.07	1.3	19	.68	.18	.11	0		
27		.03	.09	.10	7.0	12	.67	.18	.10	0		
28		.03	.09	.13	40	8.4	.71	.18	.08	0		
29		.04	.11	3.4	---	5.6	.77	.15	.08	0		
30		.07	.10	1.0	---	4.4	.62	.15	.07	0		
31		---	.10	.52	---	3.4	---	.16	---	0		
TOTAL	0	0.43	2.62	7.55	171.86	1067.38	30.43	12.79	4.96	0.34	0	0
MEAN	0	.014	.085	.24	6.14	34.4	1.01	.41	.17	.011	0	0
MAX	0	.07	.11	3.4	40	237	2.4	.78	.23	.06	0	0
MIN	0	0	.04	.07	.42	.88	.59	.15	.07	0	0	0
AC-FT	0	.9	5.2	15	341	2120	60	25	9.8	.7	0	0
CAL YR 1982	TOTAL	506.72	MEAN	1.39	MAX	130	MIN	0	AC-FT	1010		
WTR YR 1983	TOTAL	1298.36	MEAN	3.56	MAX	237	MIN	0	AC-FT	2580		

## LOS PENASQUITOS CREEK BASIN

11023330 LOS PENASQUITOS CREEK BELOW POWAY CREEK, NEAR POWAY, CA

LOCATION.--Lat 32°56'58", long 117°04'08", in NW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 415 ft, from topographic map.

REMARKS.--Records fair. Flow partly regulated by small conservation reservoirs.

AVERAGE DISCHARGE.--13 years, 7.41 ft<sup>3</sup>/s, 5,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,990 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 11.11 ft, from rating curve extended above 300 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 9.58 ft, and 11.11 ft; no flow for parts of some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1215	480	6.04	Feb. 27	1900	902	6.95
Dec. 23	0015	297	5.49	Mar. 1	1545	*2540	9.02
Jan. 29	0200	261	5.37	Mar. 18	2345	306	5.52
Feb. 2	1600	552	6.22	Mar. 21	0500	558	6.26
Feb. 8	0645	573	6.27	Mar. 24	0345	1690	8.11

Minimum daily discharge, 0.08 ft<sup>3</sup>/s Oct 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.24	.60	6.0	1.4	4.2	495	26	15	2.5	1.7	.75	.37
2	.22	.42	1.7	1.2	114	695	23	12	2.1	1.7	.90	.45
3	.21	.28	1.1	1.1	41	910	20	10	2.1	1.6	.80	.44
4	.24	.24	.78	1.0	21	491	19	12	2.1	1.5	.85	.40
5	.23	.23	.74	1.0	16	180	16	11	2.4	1.4	.71	.41
6	.19	.24	.70	.98	20	190	14	12	3.1	1.7	.82	.41
7	.26	.30	3.6	.96	49	130	13	11	4.0	1.3	.79	.40
8	.24	.70	18	.94	145	75	12	11	3.9	1.2	.53	.40
9	.21	26	14	.90	47	60	10	10	4.1	1.0	.56	.41
10	.14	82	14	.85	29	45	10	10	4.3	.83	.50	.38
11	.10	20	1.4	.82	18	34	11	11	4.5	1.2	.45	.37
12	.08	2.0	.99	.80	14	29	15	10	4.7	1.3	.43	.36
13	.08	1.2	1.2	.73	11	25	15	9.2	3.4	1.1	.43	.36
14	.09	.85	1.0	.91	9.1	28	13	8.8	2.5	1.3	.41	.35
15	.13	.75	.95	.95	7.4	19	10	8.6	2.0	1.3	.40	.33
16	.12	.70	.84	.98	5.8	18	8.5	8.8	1.7	.96	.43	.75
17	.12	.65	.80	1.2	5.1	66	8.0	8.2	1.7	.85	.41	.56
18	.12	.64	.79	1.3	4.7	161	35	7.4	1.8	.90	2.4	.36
19	.16	19	.79	5.3	4.0	130	14	6.9	1.6	.82	.64	.56
20	.20	2.0	.78	1.4	3.8	75	32	6.0	1.5	.82	.60	1.4
21	.20	.85	.82	1.2	3.4	170	57	5.4	1.5	.80	.53	1.8
22	.21	.73	12	1.2	2.9	114	20	5.2	1.5	1.6	.46	1.4
23	.21	.65	25	1.8	2.9	127	17	5.2	1.7	1.1	.45	.66
24	.20	.60	4.0	4.1	40	427	15	4.7	1.9	.85	.69	.42
25	.21	.55	1.7	1.8	20	158	14	4.2	2.1	.74	.52	.26
26	3.6	.50	1.4	1.5	21	115	12	4.0	1.9	.75	.43	1.3
27	.88	.46	1.3	66	165	90	9.8	3.7	1.8	.82	.42	1.6
28	.55	.46	1.3	29	206	60	9.5	3.6	1.7	.75	.37	1.7
29	.34	34	14	70	---	45	24	3.3	1.6	.73	.35	1.0
30	.32	85	2.8	17	---	38	19	2.5	1.5	.70	.34	12
31	.90	---	1.7	4.5	---	31	---	2.4	---	.70	.33	---
TOTAL	11.00	282.60	136.18	222.82	1030.3	5231	521.8	243.1	73.2	34.02	18.70	31.61
MEAN	.35	9.42	4.39	7.19	36.8	169	17.4	7.84	2.44	1.10	.60	1.05
MAX	3.6	85	25	70	206	910	57	15	4.7	1.7	2.4	12
MIN	.08	.23	.70	.73	2.9	18	8.0	2.4	1.5	.70	.33	.26
AC-FT	22	561	270	442	2040	10380	1030	482	145	67	37	63

CAL YR 1982	TOTAL	2763.28	MEAN	7.57	MAX	380	MIN	.03	AC-FT	5480
WTR YR 1983	TOTAL	7836.33	MEAN	21.5	MAX	910	MIN	.08	AC-FT	15540

## 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 260 ft, from topographic map.

REMARKS.--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.--19 years, 8.89 ft<sup>3</sup>/s, 6,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 10.26 ft from rating curve extended above 1,400 ft<sup>3</sup>/s; no flow at times in 1968, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1400	645	5.07	Feb. 27	2030	1,060	6.05
Dec. 23	0215	428	4.43	Mar. 1	1700	*3,660	9.33
Jan. 29	0400	402	4.34	Mar. 6	0600	567	4.87
Feb. 2	1745	630	5.05	Mar. 21	0630	675	5.17
Feb. 8	0830	638	5.07	Mar. 24	0530	1,950	7.43

Minimum daily discharge, 0.18 ft<sup>3</sup>/s Oct. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.93	14	1.8	5.3	655	31	23	4.4	2.0	.96	.76
2	.36	.59	3.6	1.6	146	811	26	17	4.0	2.0	1.1	.89
3	.35	.39	2.3	1.5	74	1000	22	16	3.4	2.0	.88	.86
4	.29	.33	1.7	1.5	33	562	19	19	2.8	1.8	.91	.77
5	.30	.31	1.5	1.4	21	233	17	18	2.7	1.7	.87	.81
6	.31	.35	1.4	1.3	25	255	15	20	2.8	2.1	.97	.77
7	.31	.40	2.7	1.3	70	141	14	20	4.1	1.9	2.4	.75
8	.31	.67	35	1.3	218	100	13	18	4.6	2.0	1.1	.76
9	.27	27	7.3	1.3	68	78	12	17	4.8	1.7	.92	.78
10	.21	108	30	1.2	30	64	11	16	4.3	1.5	.99	.71
11	.19	23	2.6	1.1	17	52	15	17	3.4	1.4	.84	.70
12	.18	2.6	1.7	1.1	12	43	20	16	3.1	1.5	.83	.70
13	.18	1.4	1.5	1.1	10	36	15	15	2.8	1.4	.82	.70
14	.21	1.1	1.3	1.1	9.0	40	11	14	2.6	1.3	.75	.70
15	.23	1.0	1.1	1.1	8.7	27	10	14	2.2	1.3	.75	.80
16	.22	1.0	1.1	1.1	7.7	21	9.6	14	2.0	1.2	.81	.98
17	.22	1.1	1.1	1.1	6.8	77	9.3	13	2.0	1.2	.79	.72
18	.23	1.3	1.1	1.1	6.1	208	45	12	2.2	1.2	3.4	.60
19	.25	45	1.1	6.8	5.6	178	14	11	1.9	1.1	2.2	.55
20	.28	2.8	1.0	1.8	5.0	84	32	9.5	1.8	1.1	1.2	.66
21	.29	1.2	1.0	1.2	4.2	226	84	8.5	1.8	1.1	.96	1.1
22	.29	.95	8.5	1.1	3.6	123	27	8.1	1.8	1.0	.87	1.2
23	.28	.87	76	1.6	3.5	176	20	8.4	2.2	1.6	.88	1.1
24	.28	.82	3.9	2.1	46	550	17	7.7	2.3	1.1	1.1	.86
25	.30	.75	2.2	5.4	45	320	15	6.3	2.5	1.0	.93	.75
26	1.0	.67	1.7	1.4	29	180	15	6.0	2.3	.99	.82	.71
27	1.7	.63	1.6	106	189	130	15	5.5	2.0	1.1	.79	1.0
28	.77	.64	1.6	20	287	90	16	5.1	2.0	.99	.69	1.1
29	.51	66	15	115	---	65	48	4.4	1.9	.98	.64	1.2
30	.46	160	21	12	---	44	29	4.0	2.0	.94	.63	3.3
31	.92	---	2.8	6.4	---	41	---	3.9	---	.93	.63	---
TOTAL	12.11	451.80	248.4	303.8	1385.5	6610	646.9	387.4	82.7	43.13	32.43	27.29
MEAN	.39	15.1	8.01	9.80	49.5	213	21.6	12.5	2.76	1.39	1.05	.91
MAX	1.7	160	76	115	287	1000	84	23	4.8	2.1	3.4	3.3
MIN	.18	.31	1.0	1.1	3.5	21	9.3	3.9	1.8	.93	.63	.55
AC-FT	24	896	493	603	2750	13110	1280	768	164	86	64	54
CAL YR 1982	TOTAL	4066.09	MEAN	11.1	MAX	547	MIN	.18	AC-FT	8070		
WTR YR 1983	TOTAL	10231.46	MEAN	28.0	MAX	1000	MIN	.18	AC-FT	20290		

## LOS PENASQUITOS CREEK BASIN

11023350 LOS PENASQUITOS CREEK NEAR LA JOLLA, CA

LOCATION.--Lat 32°54'23", long 117°12'45", in SE 1/4 SE 1/4 sec.32, T.14 S., R.3 W., San Diego County, Hydrologic Unit 18070304, on left bank 0.7 mi east of intersection of Interstate 5 and 805, and 3.8 mi northeast of La Jolla.

DRAINAGE AREA.--57.4 mi<sup>2</sup>.

PERIOD OF RECORD.--

SEDIMENT RECORDS.--January 1982 to August 1983 (discontinued).

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO AUGUST 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L)	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	SED. SUSP. FALL DIAM, % FINER THAN .016 MM
NOV 30...	0945	58	258	40	83	93	99	99
MAR 02...	0800	419	272	308	77	87	93	97
APR 21...	1115	137	219	81	--	--	--	--

DATE	SED. SUSP. FALL DIAM, % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM, % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM, % FINER THAN .125 MM	TOTAL SEDIMENT LOAD T/DAY
NOV 30...	99	99	100	40
MAR 02...	99	99	100	308
APR 21...	--	99	100	81

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO AUGUST 1983

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	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
AUG 08...	1400	--	3	0	20	32	52	75	90	99	100

## 11025500 SANTA YSABEL CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°06'25", long 116°51'55", in SW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1912 to February 1923, October 1943 to current year. Monthly discharge only for February 1912, published in WSP 1315-B.

GAGE.--Water-stage recorder and concrete cutoff wall. Datum of gage is 847.88 ft 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.--Records good. Flow regulated by Sutherland Reservoir (station 11024000) since July 1954. Some small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,400 ft<sup>3</sup>/s Jan. 27, 1916, gage height, 14.0 ft, datum then in use, from rating curve extended above 1,500 ft<sup>3</sup>/s on basis of slope-conveyance computation of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,070 ft<sup>3</sup>/s Mar. 2, gage height, 7.17 ft; minimum daily, 0.53 ft<sup>3</sup>/s Nov. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	.74	64	7.3	20	483	263	239	62	16	5.1	5.0
2	.75	.67	24	6.9	31	763	241	211	61	16	4.9	4.9
3	.71	.53	13	6.6	56	863	229	178	60	16	4.7	4.5
4	.75	.56	9.9	6.3	37	545	216	163	60	15	4.5	4.3
5	.78	.61	8.1	6.0	27	269	203	153	60	14	4.3	4.3
6	.73	.66	7.0	5.8	39	272	192	146	58	14	4.2	4.2
7	.83	.77	6.3	5.7	116	183	181	141	54	13	5.2	4.1
8	.75	.92	6.6	5.6	384	146	171	135	54	12	12	3.9
9	.59	4.7	7.7	5.3	104	120	164	129	56	11	9.1	3.8
10	.57	8.3	8.0	4.9	64	102	160	124	54	11	12	3.6
11	.55	6.1	7.4	4.6	49	92	185	121	52	10	8.5	3.5
12	.56	3.1	6.5	4.3	40	84	206	116	51	9.8	7.5	3.2
13	.56	2.2	6.1	4.2	35	78	209	113	49	9.3	6.8	3.2
14	.56	1.9	5.9	4.2	33	84	172	111	44	8.3	6.6	3.2
15	.56	1.7	5.4	4.2	29	71	154	107	40	7.9	8.0	3.1
16	.59	1.7	4.9	4.4	25	64	143	103	37	7.9	9.5	3.3
17	.61	1.7	4.8	4.6	23	98	135	97	35	8.0	84	3.4
18	.64	1.7	4.6	4.8	21	379	166	90	35	7.7	70	3.3
19	.68	4.9	4.5	6.1	20	276	157	86	35	7.2	30	3.5
20	.70	10	4.4	6.7	18	326	180	84	33	6.8	7.0	4.3
21	.63	8.5	4.5	5.7	18	487	577	81	32	6.4	6.8	4.5
22	.58	6.9	5.0	5.3	17	463	343	79	31	6.3	6.5	4.4
23	.55	5.4	119	7.0	17	633	240	77	30	6.2	6.2	4.2
24	.56	4.3	25	9.1	29	1130	201	74	29	6.2	6.0	3.9
25	.67	3.5	15	13	50	734	183	72	30	6.2	5.9	3.9
26	1.0	2.8	11	9.5	61	490	172	69	30	6.1	5.8	4.0
27	.97	2.3	9.6	46	327	406	160	67	30	6.1	5.7	4.0
28	.78	1.8	8.4	66	420	383	151	65	29	6.0	5.6	4.4
29	.70	3.2	8.2	111	---	348	189	61	19	5.6	5.4	5.2
30	.73	245	9.5	41	---	316	262	59	17	5.4	5.3	6.9
31	.78	---	8.4	26	---	288	---	59	---	5.3	5.1	---
TOTAL	21.23	337.16	432.7	448.1	2110	10976	6205	3410	1267	286.7	368.2	122.0
MEAN	.68	11.2	14.0	14.5	75.4	354	207	110	42.2	9.25	11.9	4.07
MAX	1.0	245	119	111	420	1130	577	239	62	16	84	6.9
MIN	.55	.53	4.4	4.2	17	64	135	59	17	5.3	4.2	3.1
AC-FT	42	669	858	889	4190	21770	12310	6760	2510	569	730	242
CAL YR 1982	TOTAL	4801.82	MEAN	13.2	MAX	386	MIN	.39	AC-FT	9520		
WTR YR 1983	TOTAL	25984.09	MEAN	71.2	MAX	1130	MIN	.53	AC-FT	51540		

## 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 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 mi<sup>2</sup>.

PERIOD OF RECORD.--November 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 National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, at datum 1.78 ft lower.

REMARKS.--Records good, except those below 2.0 ft<sup>3</sup>/s, which are fair. No regulation above station.

AVERAGE DISCHARGE.--44 years (water years 1914-20, 1947-83) 6.40 ft<sup>3</sup>/s, 4,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 14.39 ft, from rating curve extended above 130 ft<sup>3</sup>/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 above base of 250 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 29	0815	338	2.80	Mar. 2	2245	*2,670	6.48
Feb. 2	2000	514	3.25	Mar. 18	2030	919	4.11
Feb. 8	1030	919	4.11	Mar. 21	1345	725	3.72
Feb. 25	0130	265	2.60	Mar. 24	0830	1,040	4.34
Feb. 27	2330	1,880	5.62	Apr. 21	0645	429	3.04

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.04	6.0	2.1	15	628	57	62	12	3.7	.53	.39
2	.07	.02	1.9	2.1	134	1100	52	43	11	4.2	.39	.38
3	.05	0	.77	2.2	107	1260	49	32	11	4.2	.32	.56
4	.08	.02	.77	1.9	33	692	47	30	11	3.6	.42	.74
5	.09	.03	.92	1.3	46	347	46	27	11	2.7	.40	.96
6	.02	.04	.99	1.2	59	422	45	26	10	2.6	.47	1.0
7	.06	.08	1.2	1.2	101	265	42	25	10	2.3	.41	1.0
8	.05	.10	1.8	1.3	423	200	39	24	11	1.8	.29	.86
9	.05	.29	1.2	1.3	97	155	38	22	12	1.4	.61	.39
10	.07	.76	1.9	1.1	45	115	39	19	12	1.2	.54	.20
11	.04	.34	1.2	.92	32	83	48	22	12	1.0	.50	.13
12	.05	.05	.89	.78	25	71	55	21	11	.86	.53	.04
13	.06	.04	.98	.79	22	60	54	21	11	.74	.54	0
14	.01	.05	1.3	.79	19	62	42	21	9.2	.64	.41	0
15	.02	.07	1.1	.85	17	51	38	21	7.6	.56	.21	0
16	.01	.11	.92	.96	16	42	34	21	6.3	.49	3.4	0
17	.01	.10	.78	1.2	15	71	32	20	5.4	.50	53	0
18	.01	.08	1.7	1.0	13	482	52	19	4.7	.55	41	0
19	.04	.15	1.7	2.3	11	376	42	18	4.4	.55	8.5	0
20	.04	.01	1.4	1.9	11	157	57	19	5.1	.53	4.0	0
21	.03	.01	.81	1.2	11	381	288	18	4.6	.44	2.3	0
22	.05	.01	2.5	1.1	11	217	104	18	4.0	.42	1.3	0
23	.04	.01	80	1.6	11	297	57	18	4.1	.45	.75	0
24	.05	0	10	2.3	89	494	44	18	3.7	.50	.65	0
25	.08	0	3.6	3.3	146	262	38	18	3.9	.51	.56	0
26	.11	0	2.3	2.6	51	161	36	16	4.4	.51	.52	0
27	.05	0	1.9	65	457	124	31	14	4.6	.54	.60	0
28	.02	0	3.2	50	611	108	29	12	4.4	.55	.54	0
29	.05	.04	1.7	167	---	93	42	12	3.9	.52	.49	0
30	.04	19	9.4	33	---	77	54	11	4.4	.53	.48	0
31	.03	---	3.4	19	---	65	---	11	---	.53	.42	---
TOTAL	1.47	21.45	148.23	373.29	2628	8918	1631	679	229.7	39.62	125.08	6.65
MEAN	.047	.72	4.78	12.0	93.9	288	54.4	21.9	7.66	1.28	4.03	.22
MAX	.11	19	80	167	611	1260	288	62	12	4.2	53	1.0
MIN	.01	0	.77	.78	11	42	29	11	3.7	.42	.21	0
AC-FT	2.9	43	294	740	5210	17690	3240	1350	456	79	248	13

CAL YR 1982	TOTAL	3592.83	MEAN	9.84	MAX	560	MIN	0	AC-FT	7130
WTR YR 1983	TOTAL	14801.49	MEAN	40.6	MAX	1260	MIN	0	AC-FT	29360

## 11030020 LAKE HODGES NEAR ESCONDIDO, CA

LOCATION.--Lat 33°02'41", long 117°07'39", in SE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1945 to September 1968 (published with San Dieguito River at Lake Hodges, station 11030000), October 1972 to current year. Records of 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 National Geodetic Vertical Datum of 1929 (levels by county of San Diego); gage readings have been reduced to elevations 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 furnished by city of San Diego, Utilities Engineering Division.

EXTREMES FOR PERIOD OF RECORD (1945-68 AND SINCE 1972).--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, 37,490 acre-ft, spilling, Mar. 3, elevation, 318.10 ft; minimum observed, 27,700 acre-ft Nov. 9, elevation, 309.92 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	311.20	29,090	--
Oct. 31.....	310.17	27,970	-1,120
Nov. 30.....	310.55	28,380	+410
Dec. 31.....	313.09	31,250	+2,870
CAL YR 1982.....	--	--	+4,250
Jan. 31.....	315.41	34,060	+2,810
Feb. 28.....	316.96	36,030	+1,970
Mar. 31.....	315.86	34,620	-1,410
Apr. 30.....	315.68	34,400	-220
May 31.....	315.44	34,100	-300
June 30.....	315.26	33,880	-220
July 31.....	314.54	32,990	-890
Aug. 31.....	313.99	32,320	-670
Sept. 30.....	312.98	31,120	-1,200
WTR YR 1983.....	--	--	+2,030

## SAN DIEGUITO RIVER BASIN

11030500 SAN DIEGUITO RIVER NEAR DEL MAR, CA

LOCATION.--Lat 32°58'39", long 117°13'47", sec.7, T.14 S., R.3 W., San Diego County, Hydrologic Unit 18070304, on left bank of El Camino Real bridge 0.3 mi south of intersection of El Camino Real and Via Del La Valle, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--338 mi<sup>2</sup>.

PERIOD OF RECORD.--

SEDIMENT RECORDS: January 1982 to current year.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	
MAR 02...	0930	3360	14.0	1270	11500	12	14	17	
		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	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	TOTAL SEDIMENT LOAD T/DAY
MAR 02...	21	28	37	59	87	98	100	12100	

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAMPLING 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
AUG 05...	1030	--	5	0	2	9	45	90	99	100



## 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 mi<sup>2</sup>.

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 heights were furnished 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, 6,770 acre-ft Apr. 25-28, elevation, 1,479.2 ft; minimum observed, 2,080 acre-ft Dec. 21, 22, elevation, 1,451.6 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS, AT 0700, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,474.8	5,840	--
Oct. 31.....	1,468.8	4,680	-1,160
Nov. 30.....	1,458.0	2,930	-1,750
Dec. 31.....	1,452.4	2,180	-750
CAL YR 1982.....	--	--	+440
Jan. 31.....	1,456.8	2,760	+580
Feb. 28.....	1,463.9	3,830	+1,070
Mar. 31.....	1,478.6	6,640	+2,810
Apr. 30.....	1,479.0	6,730	+90
May 31.....	1,478.1	6,530	-200
June 30.....	1,478.2	6,560	+30
July 31.....	1,478.2	6,580	+20
Aug. 31.....	1,478.2	6,580	--
Sept. 30.....	1,477.5	6,400	-180
WTR YR 1983.....	--	--	+560

LOCATION.--Lat 33°05'18", long 117°15'39", in SE 1/4 NE 1/4 sec.35, T.12 S., R.4 W., San Diego County, Hydrologic Unit 18070303, on left bank 0.3 mi upstream from El Camino Real, on the western edge of the La Costa Country Club.

PERIOD OF RECORD.--

SEDIMENT RECORDS: January 1982 to September 1983. (discontinued).

DATE	TIME	STREAM FLOW, INSTAN- TANEOUS (Ft <sup>3</sup> /s)	TEMPER- ATURE (DEG C)	SEDI- MENT SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. DIAM. % FINER THAN .002 MM	SED. SUSP. DIAM. % FINER THAN .004 MM	SED. SUSP. DIAM. % FINER THAN .008 MM
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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	TOTAL SEDIMENT LOAD T/DAY
JAN 27...	--	--	95	--	--	--	--	11
29...	--	--	92	96	100	--	--	6.5
FEB 28...	--	--	89	--	--	--	--	147
MAR 02...	80	83	86	92	96	98	100	234
APR 21...	--	--	84	93	100	--	--	4.8

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM FLOW, INSTAN- TANEOUS (Ft <sup>3</sup> /s)	BED	BED
					MAT.	MAT.
					SIEVE DIAM.	SIEVE DIAM.
					% FINER THAN	% FINER THAN
					.062 MM	.125 MM

AUG 05...	1230	33.0	3	1.00	2	4
	BED MAT. SIEVE	BED MAT. SIEVE	BED MAT. SIEVE	BED MAT. SIEVE	BED MAT. SIEVE	BED MAT. SIEVE
	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN	% FINER THAN
DATE	.250 MM	.500 MM	1.00 MM	2.00 MM	4.00 MM	8.00 MM
AUG 05...	10	32	68	90	98	100

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 left bank 60 ft upstream from bridge on State Highway 79, 1.2 mi upstream from Canada Verde Creek, and 1.2 mi northwest of Warner Springs. Prior to November 4, 1982, at site 60 ft downstream.

DRAINAGE AREA.--19.0 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft, from topographic map. Jan. 29, 1966 to Nov. 4, 1982, at site 60 ft downstream at same datum.

REMARKS.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--22 years, 2.91 ft<sup>3</sup>/s, 2,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 4.80 ft, from rating curve extended above 110 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; maximum gage height, 5.36 ft Nov. 30, 1982; no flow for many days some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1045	*1,020	5.36	Mar. 1	2015	452	4.81
Dec. 9	1300	297	4.62	Mar. 18	1900	141	3.86
Dec. 23	0145	280	4.59	Mar. 24	0730	240	4.21
Jan. 29	0645	84	4.06	Apr. 21	0645	89	3.82
Feb. 8	0830	384	4.76	Aug. 18	0015	315	4.42
Feb. 27	1945	239	4.51	Sept. 20	1700	60	3.72

Minimum daily discharge, 0.13 ft<sup>3</sup>/s Nov. 15-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	.18	21	3.0	5.6	122	18	31	6.5	3.7	.50	.82
2	.35	.20	7.1	2.9	7.0	257	16	25	7.2	3.7	1.5	.91
3	.28	.19	3.2	2.8	9.4	192	14	22	7.0	3.7	.68	.71
4	.35	.19	1.6	2.6	9.2	96	13	20	6.8	3.3	.63	.61
5	.35	.19	.82	2.5	13	59	11	19	6.5	3.0	.63	.58
6	.35	.19	.48	2.2	41	59	10	20	6.1	2.7	.69	.54
7	.35	.19	.33	2.1	62	45	9.2	18	5.8	2.3	.96	.47
8	.22	.18	1.1	2.0	111	39	8.4	17	5.9	2.0	1.0	.38
9	.22	.22	69	1.8	33	34	7.7	17	6.1	1.9	2.5	.31
10	.22	.24	28	1.6	23	29	7.4	17	5.9	1.7	3.3	.45
11	.18	.18	7.1	1.5	20	25	8.0	16	6.0	1.6	3.6	.38
12	.18	.16	4.5	1.3	16	22	8.0	15	6.4	1.4	2.1	.37
13	.18	.15	4.4	1.3	13	20	7.3	14	5.9	1.3	1.7	.31
14	.18	.14	3.1	1.4	11	20	6.7	12	5.4	1.5	1.6	.29
15	.14	.13	2.2	1.5	9.7	17	6.0	12	5.4	1.1	2.5	.36
16	.14	.13	1.8	1.6	8.7	15	5.4	12	5.3	1.1	3.1	.38
17	.14	.13	1.4	1.8	7.3	19	5.1	11	5.1	1.2	21	.37
18	.14	.13	1.3	1.9	6.5	82	7.2	10	4.9	1.1	50	.33
19	.14	.16	1.1	2.5	5.8	89	5.9	10	4.7	.94	6.7	.34
20	.14	.15	.99	2.5	5.0	60	8.7	9.7	4.3	.83	3.9	12
21	.18	.15	.91	2.3	4.3	81	52	9.2	4.2	.80	2.9	5.0
22	.14	.15	3.0	2.4	3.8	82	30	9.0	4.1	.81	2.6	1.6
23	.14	.15	63	4.3	3.5	82	23	8.6	3.9	.72	2.2	.93
24	.14	.15	14	4.1	5.2	143	19	8.1	3.8	.65	1.8	.72
25	.14	.15	8.5	4.4	8.3	87	18	7.6	3.8	.62	1.6	.64
26	.14	.15	6.0	3.3	7.6	56	16	7.1	4.0	.61	1.4	.68
27	.15	.15	5.3	16	64	41	14	6.8	4.0	.61	1.1	.73
28	.16	.17	4.7	26	83	35	3.0	6.4	3.9	.58	1.0	.71
29	.17	.17	4.1	37	---	28	17	5.7	4.0	.56	.89	.85
30	.17	176	4.3	14	---	24	65	5.2	3.8	.54	.83	1.3
31	.17	---	3.4	8.1	---	21	---	5.8	---	.51	.81	---
TOTAL	6.30	180.82	277.73	162.7	596.9	1981	440.0	407.2	156.7	47.08	125.72	34.07
MEAN	.20	6.03	8.96	5.25	21.3	63.9	14.7	13.1	5.22	1.52	4.06	1.14
MAX	.35	.176	.69	.37	.111	.257	.65	.31	.7.2	.3.7	.50	.12
MIN	.14	.13	.33	1.3	3.5	15	3.0	5.2	3.8	.51	.50	.29
AC-FT	12	359	551	323	1180	3930	873	808	311	93	249	68

CAL YR 1982	TOTAL	1825.38	MEAN	5.00	MAX	176	MIN	.13	AC-FT	3620
WTR YR 1983	TOTAL	4416.22	MEAN	12.1	MAX	257	MIN	.13	AC-FT	8760

## SAN LUIS REY RIVER BASIN

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 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1913 to November 1915, October 1956 to current year. Low-flow records not equivalent prior to Nov. 5, 1971, due to undetermined amount of underflow between sites.

REVISED RECORDS.--WDR CA-74-1: 1973(P).

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft, 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.--Records good except those periods below 1.0 ft<sup>3</sup>/s, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--28 years (water years 1914-15, 1957-83), 10.7 ft<sup>3</sup>/s, 7,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,200 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 15.60 ft, from floodmarks, from rating curve extended above 130 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1130	1,040	13.23	Mar. 1	1745	*1,070	13.26
Dec. 23	0045	827	13.02	Mar. 18	1815	365	12.38
Jan. 29	0345	546	12.68	Mar. 24	0500	894	13.07
Feb. 8	0700	1,060	13.25	Apr. 21	0700	443	12.51
Feb. 27	1815	846	13.04				

Minimum daily discharge, 0.11 ft<sup>3</sup>/s Oct. 17, 18, 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.16	62	9.2	27	342	88	80	21	6.3	.82	1.2
2	.14	.16	24	8.6	25	436	83	69	22	6.3	.75	1.4
3	.14	.16	15	7.8	33	444	79	61	21	5.9	.80	1.2
4	.14	.17	12	7.0	33	248	74	58	21	5.4	.74	1.1
5	.14	.18	9.8	6.8	53	173	70	55	20	5.0	.72	1.1
6	.14	.18	8.6	6.2	95	177	67	54	18	4.6	.91	.90
7	.14	.18	7.9	6.0	154	136	63	51	17	4.1	1.4	.85
8	.14	.20	9.2	5.8	356	116	59	49	16	3.7	3.2	.79
9	.14	.27	9.3	5.5	106	94	54	49	15	3.4	2.9	.88
10	.13	4.0	9.3	5.1	72	76	52	48	15	3.1	2.9	.89
11	.13	2.9	7.8	4.6	56	70	62	48	14	3.0	2.3	.79
12	.13	1.0	7.1	3.9	46	63	65	45	14	2.7	2.1	.73
13	.13	.62	6.8	3.9	40	58	58	44	14	2.5	1.8	.72
14	.12	.46	6.5	4.0	35	76	53	43	12	2.2	1.7	.72
15	.12	.45	6.2	4.3	31	57	49	40	11	2.2	1.9	.71
16	.12	.45	6.0	4.7	28	51	45	38	10	2.2	2.9	.71
17	.11	.42	5.7	5.2	25	98	44	36	9.7	2.2	4.1	.71
18	.11	.40	5.7	5.8	23	298	83	34	8.9	2.1	13	.70
19	.12	7.5	5.5	7.2	22	185	58	33	8.9	2.0	6.0	.68
20	.12	6.1	5.4	7.1	19	127	81	32	8.5	1.9	4.1	.74
21	.13	3.2	5.2	5.4	18	189	245	31	8.1	1.7	3.4	.75
22	.13	2.5	36	5.1	17	182	111	30	8.0	1.6	2.9	.72
23	.12	2.2	197	18	17	236	85	30	7.6	1.5	2.5	.70
24	.11	1.9	34	21	27	397	74	28	7.0	1.4	2.2	.68
25	.11	1.7	21	36	41	219	65	26	7.0	1.4	2.2	.68
26	.14	1.5	16	19	114	164	52	25	7.0	1.4	2.2	.68
27	.16	1.4	14	119	307	140	46	24	7.0	1.3	1.9	.68
28	.18	1.4	13	75	272	133	43	22	7.0	1.3	1.8	.68
29	.16	1.6	11	173	---	118	81	21	6.6	1.2	1.7	.79
30	.16	301	11	50	---	107	128	20	6.6	1.1	1.5	1.5
31	.16	---	10	34	---	98	---	20	---	.96	1.2	---
TOTAL	4.17	344.36	598.0	674.2	2092	5308	2217	1244	368.9	85.66	78.54	25.38
MEAN	.13	11.5	19.3	21.7	74.7	171	73.9	40.1	12.3	2.76	2.53	.85
MAX	.18	301	197	173	356	444	245	80	22	6.3	13	1.5
MIN	.11	.16	5.2	3.9	17	51	43	20	6.6	.96	.72	.68
AC-FT	8.3	683	1190	1340	4150	10530	4400	2470	732	170	156	50
CAL YR 1982	TOTAL	4354.58	MEAN	11.9	MAX	301	MIN	.11	AC-FT	8640		
WTR YR 1983	TOTAL	13040.21	MEAN	35.7	MAX	444	MIN	.11	AC-FT	25870		

## 11040000 SAN LUIS REY RIVER AT MONSERATE NARROWS, NEAR PALA, CA

LOCATION.--Lat 33°20'14", long 117°08'07", in SW 1/4 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929 (levels by State of California). Prior to October 1946, at same site at different datum. Oct. 22, 1946, to Nov. 30, 1954, at datum 1.0 ft higher.

REMARKS.--Records fair. Flow regulated by Lake Henshaw since 1923, capacity, 194,300 acre-ft. Several diversions above station.

AVERAGE DISCHARGE.--40 years (water years 1939-41, 1947-83), 19.0 ft<sup>3</sup>/s, 13,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since 1938, 15,500 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 9.68 ft, on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft<sup>3</sup>/s Mar. 3, gage height, 6.20 ft; minimum daily, 0.53 ft<sup>3</sup>/s Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.0	137	17	35	250	206	347	85	34	22	13
2	1.7	4.3	36	16	35	272	205	332	83	34	21	13
3	.79	3.3	19	17	65	950	210	360	79	35	21	13
4	1.3	3.3	14	16	44	550	210	345	75	35	20	12
5	1.2	3.4	11	15	37	430	210	339	74	36	19	11
6	2.4	3.9	8.8	16	39	350	209	326	70	35	19	11
7	3.1	4.5	7.4	15	66	290	213	319	67	32	18	10
8	2.0	5.3	6.8	15	313	240	211	316	66	29	19	9.3
9	.68	8.4	5.7	14	124	200	251	299	64	28	20	9.7
10	1.3	17	5.3	13	69	170	259	275	62	28	19	7.6
11	1.2	12	4.9	13	46	160	264	260	58	27	18	5.1
12	.95	10	4.6	12	35	153	266	246	59	26	19	6.8
13	.53	9.4	4.1	12	31	142	257	237	57	26	17	6.3
14	.57	8.7	3.8	11	24	154	256	226	52	26	17	5.4
15	.56	8.6	4.2	11	22	141	252	215	49	26	18	6.5
16	.58	8.8	4.6	10	20	133	247	206	47	26	31	6.9
17	.61	9.1	4.3	9.9	18	149	250	196	47	25	30	5.6
18	.72	9.4	4.6	9.7	17	267	288	185	44	25	40	6.0
19	.84	15	4.7	11	16	231	279	176	45	25	30	6.6
20	.90	12	4.6	11	14	169	290	167	44	25	25	5.3
21	.91	11	4.6	10	13	196	372	156	41	25	23	5.9
22	2.2	11	5.5	10	12	195	299	151	40	25	22	5.9
23	3.0	11	151	13	12	241	282	143	40	25	22	5.4
24	2.4	10	62	14	14	315	282	128	40	25	20	5.7
25	2.8	11	37	23	22	230	303	120	42	25	19	6.0
26	4.3	9.9	30	18	35	198	324	111	38	24	18	5.7
27	4.9	9.7	25	46	168	203	319	100	36	24	17	4.7
28	3.0	10	22	86	166	207	313	93	35	23	16	5.5
29	1.9	12	22	148	---	203	339	91	35	22	15	6.3
30	2.3	239	24	78	---	202	345	97	35	23	14	7.2
31	3.5	---	19	44	---	204	---	90	---	22	14	---
TOTAL	56.54	495.0	697.5	754.6	1512	7795	8011	6652	1609	846	643	228.4
MEAN	1.82	16.5	22.5	24.3	54.0	251	267	215	53.6	27.3	20.7	7.61
MAX	4.9	239	151	148	313	950	372	360	85	36	40	13
MIN	.53	3.3	3.8	9.7	12	133	205	90	35	22	14	4.7
AC-FT	112	982	1380	1500	3000	15460	15890	13190	3190	1680	1280	453
CAL YR 1982	TOTAL	8635.68	MEAN	23.7	MAX 1000	MIN	.01	AC-FT	17130			
WTR YR 1983	TOTAL	29300.04	MEAN	80.3	MAX 950	MIN	.53	AC-FT	58120			

## SAN LUIS REY RIVER BASIN

## 11040200 KEYS CREEK TRIBUTARY AT VALLEY CENTER, CA

LOCATION.--Lat 33°13'45", long 117°02'09", in NW 1/4 SE 1/4 SE 1/4 sec.12, T.11 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 140 ft upstream from bridge on Valley Center Road, 0.3 mi downstream from unnamed tributary, and 0.8 mi north of Valley Center.

DRAINAGE AREA.--7.65 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1970 to September 30, 1983 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,279.99 ft San Diego County Special District Services datum.

REMARKS.--Records fair. No regulation above station. Some pumping for irrigation above station.

AVERAGE DISCHARGE.--13 years, 2.35 ft<sup>3</sup>/s, 1,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 8.80 ft; no flow for part of most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 990 ft<sup>3</sup>/s, by San Diego County Special District Services.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 8	0730	121	4.61	Mar. 18	1845	198	4.18
Feb. 27	1715	587	5.93	Mar. 24	0415	485	5.53
Mar. 1	1645	*787	6.62	Aug. 16	1630	140	3.87

Minimum daily discharge, 0.05 ft<sup>3</sup>/s Oct. 10.

REVISIONS.--Revised figures of discharge for the water year 1982, superseding those published in the report for 1982 are given herein.

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 222 ft<sup>3</sup>/s Mar. 17, gage height, 5.40 ft, no other peak above base of 100 ft<sup>3</sup>/s; minimum, no flow Nov. 5, 6, July 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEAN VALUES  
(REVISED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.03	.09	2.2	.24	.57	26	.74	.27	.12	.03	.03
2	.03	.04	.09	1.2	.22	.67	12	.70	.25	.11	.04	.03
3	.03	.04	.08	.15	.22	.63	7.0	.65	.25	.10	.04	.03
4	.03	.02	.08	.13	.22	.57	4.9	.71	.27	.09	.04	.03
5	.03	0	.08	1.1	.20	.57	3.9	.63	.26	.09	.04	.02
6	.03	0	.08	.28	.20	.64	3.6	.60	.19	.08	.04	.02
7	.02	.01	.08	.17	.20	.60	3.1	.63	.22	.08	.03	.03
8	.03	.02	.08	.17	.19	.62	3.0	.60	.18	.07	.03	.04
9	.03	.03	.08	.17	.28	.68	2.5	.65	.19	.07	.01	.03
10	.03	.03	.08	.19	18	.77	2.1	.60	.20	.07	.01	.03
11	.01	.04	.08	.19	11	1.0	2.0	.65	.23	.07	.02	.04
12	.03	.04	.08	.18	2.6	6.7	1.9	.66	.24	.07	.02	.04
13	.04	.05	.06	.17	2.1	2.2	1.7	.67	.22	.07	.03	.04
14	.04	.04	.09	.17	1.8	17	1.6	.58	.23	.06	.03	.06
15	.04	.04	.09	.17	1.6	5.9	1.6	.62	.22	.06	.03	.05
16	.04	.05	.09	.17	1.5	2.8	1.4	.55	.20	.06	.03	.09
17	.04	.05	.09	.17	1.4	75	1.3	.53	.25	.06	.03	.14
18	.03	.05	.09	.17	1.3	33	1.2	.56	.32	.06	.03	.11
19	.03	.05	.09	.17	1.1	15	1.1	.44	.35	.06	.01	.10
20	.03	.05	.10	9.7	.94	5.3	1.0	.40	.38	.06	.02	.05
21	.04	.05	.10	17	.86	4.1	.92	.39	.48	.06	.02	.05
22	.03	.05	.10	1.40	.92	3.6	.91	.33	.56	.06	.02	.05
23	.03	.05	.10	.61	.90	3.0	.84	.36	.54	.06	.02	.04
24	.03	.06	.10	.44	.78	2.6	.84	.33	.48	.07	.04	.04
25	.04	.06	.11	.34	.75	2.6	.80	.30	.41	.07	.05	.06
26	.04	.08	.11	.27	.75	8.9	.76	.28	.28	.07	.04	.09
27	.05	.11	.11	.22	.80	3.9	.76	.31	.20	.05	.04	.07
28	.04	.28	.11	.27	.56	3.8	.72	.30	.17	.03	.03	.06
29	.05	.35	.11	.48	---	8.7	.76	.28	.15	.02	.03	.07
30	.04	.10	.16	.26	---	6.8	.77	.27	.13	.01	.02	.07
31	.03	---	.13	.24	---	3.8	---	.27	---	0	.02	---
TOTAL	1.03	1.87	2.94	38.55	51.63	222.02	90.98	15.59	8.32	2.01	.89	1.61
MEAN	.033	.062	.095	1.24	1.84	7.16	3.03	.50	.28	.065	.029	.054
MAX	.05	.35	.16	17	18	75	26	.74	.56	.12	.05	.14
MIN	.01	0	.08	.13	.19	.57	.72	.27	.13	0	.01	.02
AC-FT	2.0	3.7	5.8	76	102	440	180	31	17	4.0	1.8	3.2
CAL YR 1981	TOTAL	279.37	MEAN	.77	MAX	75	MIN	0	AC-FT	554		
WTR YR 1982	TOTAL	437.44	MEAN	1.20	MAX	75	MIN	0	AC-FT	868		

## 11040000 SAN LUIS REY RIVER AT MONSERATE NARROWS, NEAR PALA, CA

LOCATION.--Lat 33°20'14", long 117°08'07", in SW 1/4 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929 (levels by State of California). Prior to October 1946, at same site at different datum. Oct. 22, 1946, to Nov. 30, 1954, at datum 1.0 ft higher.

REMARKS.--Records fair. Flow regulated by Lake Henshaw since 1923, capacity, 194,300 acre-ft. Several diversions above station.

AVERAGE DISCHARGE.--40 years (water years 1939-41, 1947-83), 19.0 ft<sup>3</sup>/s, 13,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since 1938, 15,500 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 9.68 ft, on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft<sup>3</sup>/s Mar. 3, gage height, 6.20 ft; minimum daily, 0.53 ft<sup>3</sup>/s Oct. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.0	137	17	35	250	206	347	85	34	22	13
2	1.7	4.3	36	16	35	272	205	332	83	34	21	13
3	.79	3.3	19	17	65	950	210	360	79	35	21	13
4	1.3	3.3	14	16	44	550	210	345	75	35	20	12
5	1.2	3.4	11	15	37	430	210	339	74	36	19	11
6	2.4	3.9	8.8	16	39	350	209	326	70	35	19	11
7	3.1	4.5	7.4	15	66	290	213	319	67	32	18	10
8	2.0	5.3	6.8	15	313	240	211	316	66	29	19	9.3
9	.68	8.4	5.7	14	124	200	251	299	64	28	20	9.7
10	1.3	17	5.3	13	69	170	259	275	62	28	19	7.6
11	1.2	12	4.9	13	46	160	264	260	58	27	18	5.1
12	.95	10	4.6	12	35	153	266	246	59	26	19	6.8
13	.53	9.4	4.1	12	31	142	257	237	57	26	17	6.3
14	.57	8.7	3.8	11	24	154	256	226	52	26	17	5.4
15	.56	8.6	4.2	11	22	141	252	215	49	26	18	6.5
16	.58	8.8	4.6	10	20	133	247	206	47	26	31	6.9
17	.61	9.1	4.3	9.9	18	149	250	196	47	25	30	5.6
18	.72	9.4	4.6	9.7	17	267	288	185	44	25	40	6.0
19	.84	15	4.7	11	16	231	279	176	45	25	30	6.6
20	.90	12	4.6	11	14	169	290	167	44	25	25	5.3
21	.91	11	4.6	10	13	196	372	156	41	25	23	5.9
22	2.2	11	5.5	10	12	195	299	151	40	25	22	5.9
23	3.0	11	151	13	12	241	282	143	40	25	22	5.4
24	2.4	10	62	14	14	315	282	128	40	25	20	5.7
25	2.8	11	37	23	22	230	303	120	42	25	19	6.0
26	4.3	9.9	30	18	35	198	324	111	38	24	18	5.7
27	4.9	9.7	25	46	168	203	319	100	36	24	17	4.7
28	3.0	10	22	86	166	207	313	93	35	23	16	5.5
29	1.9	12	22	148	---	203	339	91	35	22	15	6.3
30	2.3	239	24	78	---	202	345	97	35	23	14	7.2
31	3.5	---	19	44	---	204	---	90	---	22	14	---
TOTAL	56.54	495.0	697.5	754.6	1512	7795	8011	6652	1609	846	643	228.4
MEAN	1.82	16.5	22.5	24.3	54.0	251	267	215	53.6	27.3	20.7	7.61
MAX	4.9	239	151	148	313	950	372	360	85	36	40	13
MIN	.53	3.3	3.8	9.7	12	133	205	90	35	22	14	4.7
AC-FT	112	982	1380	1500	3000	15460	15890	13190	3190	1680	1280	453
CAL YR 1982	TOTAL	8635.68	MEAN	23.7	MAX	1000	MIN	.01	AC-FT	17130		
WTR YR 1983	TOTAL	29300.04	MEAN	80.3	MAX	950	MIN	.53	AC-FT	58120		

## SAN LUIS REY RIVER BASIN

11040200 KEYS CREEK TRIBUTARY AT VALLEY CENTER, CA

LOCATION.--Lat 33°13'45", long 117°02'09", in NW 1/4 SE 1/4 SE 1/4 sec.12, T.11 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 140 ft upstream from bridge on Valley Center Road, 0.3 mi downstream from unnamed tributary, and 0.8 mi north of Valley Center.

DRAINAGE AREA.--7.65 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1970 to September 30, 1983 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,279.99 ft San Diego County Special District Services datum.

REMARKS.--Records fair. No regulation above station. Some pumping for irrigation above station.

AVERAGE DISCHARGE.--13 years, 2.35 ft<sup>3</sup>/s, 1,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 8.80 ft; no flow for part of most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 990 ft<sup>3</sup>/s, by San Diego County Special District Services.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 8	0730	121	4.61	Mar. 18	1845	198	4.18
Feb. 27	1715	587	5.93	Mar. 24	0415	485	5.53
Mar. 1	1645	*787	6.62	Aug. 16	1630	140	3.87

Minimum daily discharge, 0.05 ft<sup>3</sup>/s Oct. 10.

REVISIONS.--Revised figures of discharge for the water year 1982, superseding those published in the report for 1982 are given herein.

EXTREMES FOR 1982 WATER YEAR.--Maximum discharge, 222 ft<sup>3</sup>/s Mar. 17, gage height, 5.40 ft, no other peak above base of 100 ft<sup>3</sup>/s; minimum, no flow Nov. 5, 6, July 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEAN VALUES  
(REVISED)

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.03	.09	2.2	.24	.57	26	.74	.27	.12	.03	.03
2	.03	.04	.09	1.2	.22	.67	12	.70	.25	.11	.04	.03
3	.03	.04	.08	.15	.22	.63	7.0	.65	.25	.10	.04	.03
4	.03	.02	.08	.13	.22	.57	4.9	.71	.27	.09	.04	.03
5	.03	0	.08	1.1	.20	.57	3.9	.63	.26	.09	.04	.02
6	.03	0	.08	.28	.20	.64	3.6	.60	.19	.08	.04	.02
7	.02	.01	.08	.17	.20	.60	3.1	.63	.22	.08	.03	.03
8	.03	.02	.08	.17	.19	.62	3.0	.60	.18	.07	.03	.04
9	.03	.03	.08	.17	.28	.68	2.5	.65	.19	.07	.01	.03
10	.03	.03	.08	.19	18	.77	2.1	.60	.20	.07	.01	.03
11	.01	.04	.08	.19	11	1.0	2.0	.65	.23	.07	.02	.04
12	.03	.04	.08	.18	2.6	6.7	1.9	.66	.24	.07	.02	.04
13	.04	.05	.08	.17	2.1	2.2	1.7	.67	.22	.07	.03	.04
14	.04	.04	.09	.17	1.8	17	1.6	.58	.23	.06	.03	.06
15	.04	.04	.09	.17	1.6	5.9	1.6	.62	.22	.06	.03	.05
16	.04	.05	.09	.17	1.5	2.8	1.4	.55	.20	.06	.03	.09
17	.04	.05	.09	.17	1.4	75	1.3	.53	.25	.06	.03	.14
18	.03	.05	.09	.17	1.3	33	1.2	.56	.32	.06	.03	.11
19	.03	.05	.09	.17	1.1	15	1.1	.44	.35	.06	.01	.10
20	.03	.05	.10	9.7	.94	5.3	1.0	.40	.38	.06	.02	.05
21	.04	.05	.10	17	.86	4.1	.92	.39	.48	.06	.02	.05
22	.03	.05	.10	1.40	.92	3.6	.91	.33	.56	.06	.02	.05
23	.03	.05	.10	.61	.90	3.0	.84	.36	.54	.06	.02	.04
24	.03	.06	.10	.44	.78	2.6	.84	.33	.48	.07	.04	.04
25	.04	.06	.11	.34	.75	2.6	.80	.30	.41	.07	.05	.06
26	.04	.08	.11	.27	.75	8.9	.76	.28	.28	.07	.04	.09
27	.05	.11	.11	.22	.80	3.9	.76	.31	.20	.05	.04	.07
28	.04	.28	.11	.27	.56	3.8	.72	.30	.17	.03	.03	.06
29	.05	.35	.11	.48	---	8.7	.76	.28	.15	.02	.03	.07
30	.04	.10	.16	.26	---	6.8	.77	.27	.13	.01	.02	.07
31	.03	---	.13	.24	---	3.8	---	.27	---	0	.02	---
TOTAL	1.03	1.87	2.94	38.55	51.63	222.02	90.98	15.59	8.32	2.01	.89	1.61
MEAN	.033	.062	.095	1.24	1.84	7.16	3.03	.50	.28	.065	.029	.054
MAX	.05	.35	.16	17	18	75	26	.74	.56	.12	.05	.14
MIN	.01	0	.08	.13	.19	.57	.72	.27	.13	0	.01	.02
AC-FT	2.0	3.7	5.8	76	102	440	180	31	17	4.0	1.8	3.2
CAL YR 1981	TOTAL	279.37	MEAN	.77	MAX	75	MIN	0	AC-FT	554		
WTR YR 1982	TOTAL	437.44	MEAN	1.20	MAX	75	MIN	0	AC-FT	868		



## 11040200 KEYS CREEK TRIBUTARY AT VALLEY CENTER, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.15	.85	.74	.64	129	6.8	4.6	1.9	.31	.07	.08
2	.07	.15	.56	.73	12	148	6.6	2.5	1.8	.46	.09	.06
3	.06	.14	.52	.71	2.4	96	7.2	2.2	1.9	.42	.09	.07
4	.08	.15	.51	.69	.94	78	7.1	2.3	1.9	.31	.09	.07
5	.08	.16	.47	.68	.82	22	7.1	4.0	1.9	.27	.09	.07
6	.09	.16	.46	.66	.84	18	7.6	4.7	1.9	.23	.09	.07
7	.09	.17	.46	.68	3.1	11	7.8	4.8	2.1	.18	.08	.07
8	.09	.19	.48	.68	32	12	8.0	5.0	2.2	.13	.09	.07
9	.09	.25	.45	.65	2.2	12	7.7	4.9	2.3	.12	.11	.07
10	.05	.36	.56	.61	1.4	13	7.7	4.7	2.1	.14	.11	.07
11	.07	.48	.46	.60	1.0	14	7.9	4.1	1.8	.13	.12	.07
12	.08	.22	.45	.59	.89	14	9.7	3.7	1.8	.13	.12	.07
13	.09	.21	.45	.60	.78	14	8.9	3.4	1.8	.12	.06	.07
14	.09	.21	.42	.58	.73	15	6.4	3.0	1.8	.13	.09	.07
15	.09	.21	.40	.57	.69	14	6.3	2.5	1.6	.11	.11	.07
16	.10	.22	.41	.60	.67	15	6.8	2.6	1.5	.12	11	.07
17	.10	.22	.42	.57	.64	32	6.5	2.4	1.4	.14	3.1	.07
18	.10	.22	.43	.54	.57	91	9.9	2.3	1.4	.14	1.2	.07
19	.11	.26	.43	.70	.56	16	7.8	2.2	1.4	.13	.44	.06
20	.11	.58	.42	.60	.53	6.3	7.1	2.1	1.2	.13	.29	.08
21	.12	.45	.40	.53	.52	38	28	2.0	1.0	.13	.21	.08
22	.11	.35	4.5	.54	.50	16	4.5	1.9	.95	.13	.19	.09
23	.12	.28	17	.80	.52	18	3.4	1.9	.92	.13	.18	.06
24	.08	.26	1.0	.91	1.1	81	2.9	1.8	.88	.13	.15	.07
25	.11	.25	.71	.87	1.1	9.7	4.6	1.8	.85	.12	.13	.08
26	.13	.25	.65	.73	5.3	4.5	5.6	1.8	.76	.11	.13	.09
27	.14	.25	.63	14	109	3.9	5.5	1.9	.67	.09	.11	.09
28	.13	.24	.60	5.4	44	7.2	5.1	1.9	.45	.10	.10	.10
29	.14	.30	1.4	14	---	8.4	7.5	1.8	.28	.10	.09	.11
30	.15	2.5	1.4	.97	---	7.5	20	1.8	.25	.10	.09	.11
31	.15	---	.79	.72	---	7.2	---	1.8	---	.10	.07	---
TOTAL	3.09	9.84	38.69	52.25	225.44	971.7	238.0	88.4	42.71	5.09	18.89	2.28
MEAN	.10	.33	1.25	1.69	8.05	31.3	7.93	2.85	1.42	.16	.61	.076
MAX	.15	2.5	17	14	109	148	28	5.0	2.3	.46	.11	.11
MIN	.05	.14	.40	.53	.50	3.9	2.9	1.8	.25	.09	.06	.06
AC-FT	6.1	20	77	104	447	1930	472	175	85	10	37	4.5
CAL YR 1982	TOTAL	483.22	MEAN	1.32	MAX	75	MIN	0	AC-FT	958		
WTR YR 1983	TOTAL	1696.38	MEAN	4.66	MAX	148	MIN	.05	AC-FT	3360		

## SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA  
(National stream-quality accounting network station)

LOCATION (REVISED).--Lat 33°13'05", long 117°22'34", in SW 1/4 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. Prior to Nov. 9, 1981, at site 0.8 mi downstream.

DRAINAGE AREA.--557 mi<sup>2</sup>.

## 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. Altitude of gage is 20 ft, 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.

REMARKS.--Records good. 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.--51 years (water years 1913-14, 1930-41, 1947-83), 34.7 ft<sup>3</sup>/s, 25,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,600 ft<sup>3</sup>/s Jan. 27, 1916, from hydrograph based on discharge measurements; no flow for several months in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,350 ft<sup>3</sup>/s Mar. 3, gage height, 14.23 ft, minimum daily, 5.7 ft<sup>3</sup>/s Oct. 14, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	15	499	70	144	2320	395	576	145	40	25	16
2	12	15	110	58	146	3300	432	460	122	42	24	17
3	12	13	59	59	176	5380	432	423	114	42	23	16
4	11	11	51	64	149	2380	432	451	110	42	21	15
5	11	9.4	48	64	129	1490	349	406	110	44	23	15
6	11	8.6	47	56	122	1050	349	365	110	40	27	15
7	12	9.7	46	59	139	725	349	349	114	37	25	15
8	10	12	61	56	926	664	349	349	110	36	21	15
9	8.8	18	55	54	684	606	349	349	98	36	25	15
10	9.1	35	46	54	232	598	342	335	98	36	29	14
11	7.7	18	48	54	177	560	367	307	91	30	22	14
12	7.0	24	45	50	121	545	365	296	95	28	24	14
13	6.2	31	49	48	102	508	357	291	85	26	27	13
14	5.7	36	46	49	88	545	342	278	72	26	18	13
15	5.8	38	43	49	72	508	300	234	61	26	21	13
16	5.7	38	44	50	63	454	296	234	55	24	32	12
17	7.5	36	41	51	56	545	296	231	53	24	110	14
18	7.9	35	41	51	53	1250	389	231	53	24	48	14
19	8.0	15	43	54	51	982	389	215	53	21	49	11
20	8.4	9.7	44	55	50	342	510	210	51	18	43	13
21	8.6	14	40	55	49	516	802	200	51	15	36	15
22	9.3	18	40	54	48	423	597	196	49	19	28	18
23	9.7	19	125	66	47	577	490	194	51	17	27	21
24	9.9	23	115	70	47	1950	451	190	49	18	28	21
25	11	24	85	81	46	1050	423	186	53	19	24	20
26	12	26	75	70	56	540	406	184	45	19	25	19
27	13	27	70	117	441	441	414	184	44	18	22	18
28	15	27	65	147	1900	406	381	172	44	15	18	20
29	15	18	67	407	---	397	490	131	42	17	18	19
30	16	352	78	238	---	342	703	145	42	21	17	20
31	16	---	78	171	---	389	---	122	---	25	16	---
TOTAL	316.3	975.4	2304	2581	6314	31783	12546	8494	2270	845	896	475
MEAN	10.2	32.5	74.3	83.3	226	1025	418	274	75.7	27.3	28.9	15.8
MAX	16	352	499	407	1900	5380	802	576	145	44	110	21
MIN	5.7	8.6	40	48	46	342	296	122	42	15	16	11
AC-FT	627	1930	4570	5120	12520	63040	24880	16850	4500	1680	1780	942
CAL YR 1982	TOTAL	28160.7	MEAN	77.2	MAX	3210	MIN	4.1	AC-FT	55860		
WTR YR 1983	TOTAL	69799.7	MEAN	192	MAX	5380	MIN	5.7	AC-FT	138400		

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,580 mg/L Jan 17, 1978; minimum daily, 2 mg/L on several days in 1972 and 1977.

SEDIMENT DISCHARGE: Maximum daily, 59,700 tons Jan. 17, 1978; minimum daily, 0.01 tons Nov. 4, 1969.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV 23...	1500	30	2090	8.2	17.0	760	3.2	9.5	99	K100	420
JAN 24...	1300	69	1840	8.2	15.0	765	32	9.6	95	980	1700
MAR 09...	1200	639	1070	7.9	19.0	760	150	9.3	101	2100	4600
MAY 18...	1230	247	950	8.3	24.5	755	22	8.9	108	340	920
JUL 19...	1300	23	2010	8.5	30.5	760	3.6	9.8	132	230	1200
SEP 15...	1200	13	2040	8.6	30.0	760	1.6	13.6	182	840	2600

DATE	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)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV 23...	660	450	140	76	190	38	3	6.2	--	390	340
JAN 24...	600	400	130	68	160	36	3	6.1	203	350	290
MAR 09...	320	190	71	35	89	37	2	5.6	131	180	140
MAY 18...	300	140	67	31	78	36	2	4.2	153	160	120
JUL 19...	640	430	140	71	190	39	3	7.6	216	360	330
SEP 15...	620	420	130	71	190	40	3	7.7	198	380	340

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)	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)
NOV 23...	.30	--	1330	1300	1.8	1.1	.07	1.1	.10	.06	.05
JAN 24...	.30	29	1220	1200	1.7	2.0	.09	1.1	.22	.12	.09
MAR 09...	.30	31	670	630	.91	2.4	.19	2.5	.50	.21	.16
MAY 18...	.30	30	585	580	.80	1.0	<.06	.90	.23	.12	.11
JUL 19...	.40	28	1310	1300	1.8	1.0	.04	.90	.18	.17	.10
SEP 15...	.30	22	1310	1300	1.8	--	.06	1.1	.13	.10	.09

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.

## SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 23...	1500	10	1	<100	<10	1	<1	<1	1	20	<1
MAR 09...	1200	20	1	62	<.5	<1	<1	<3	3	12	<1
MAY 18...	1230	20	1	61	<.5	1	<1	<3	2	3	<1
SEP 15...	1200	10	1	100	.5	<1	<1	2	3	<3	1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	HOLYB- 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 23...	10	80	<.1	12	1	1	<1	640	13	10
MAR 09...	13	42	<.1	<10	3	1	<1	350	11	9
MAY 18...	18	--	<.1	<10	1	1	<1	330	10	16
SEP 15...	7	50	<.1	13	4	2	<1	700	11	4

&lt; Actual value is known to be less than the value shown.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
NOV 23...	1500	30	17.0	112	9.1	--	--	--	--	--
JAN 24...	1300	69	15.0	94	18	--	--	--	--	--
MAR 29...	1030	609	--	3700	6080	--	43	--	64	74
MAR 02...	1230	1540	--	4420	18400	--	--	--	--	--
MAR 03...	1700	4110	--	9640	107000	--	10	11	14	18
MAR 09...	1330	639	19.0	1530	2640	--	--	--	--	--
MAY 18...	1200	247	24.0	478	319	11	12	13	15	19
JUL 19...	1300	23	30.5	92	5.7	--	--	--	--	--
SEP 15...	1200	13	30.0	36	1.3	--	--	--	--	--

DATE	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. 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. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV 23...	--	25	--	--	--	--	--	--	--
JAN 24...	--	81	--	84	--	93	--	100	--
MAR 29...	89	--	95	--	98	--	100	--	--
MAR 02...	--	46	--	--	--	--	--	--	--
MAR 03...	--	26	--	54	--	86	--	97	100
MAR 09...	--	37	--	--	--	--	--	--	--
MAY 18...	26	26	--	46	--	86	--	99	100
JUL 19...	--	25	--	--	--	--	--	--	--
SEP 15...	--	29	--	--	--	--	--	--	--

11042400 TEMECULA CREEK NEAR AGUANGA, CA

LOCATION.--Lat 33°27'33", long 116°55'22", in NE 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,590 ft, from topographic map.

REMARKS.--Records good. No regulation above station. Pumping for irrigation above station.

AVERAGE DISCHARGE.--26 years, 7.25 ft<sup>3</sup>/s, 5,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft<sup>3</sup>/s Apr. 3, 1958, gage height, 6.57 ft, from rating curve extended above 1,200 ft<sup>3</sup>/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 above base of 100 ft<sup>3</sup>/s, and maximum (\*), from rating curve extended above 700 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 7.34 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1300	429	3.60	Mar. 1	1815	*754	4.42
Dec. 23	0145	339	3.33	Mar. 18	1600	214	2.88
Jan. 29	0515	203	2.83	Mar. 24	0700	297	3.19
Feb. 2	1800	127	2.51	Apr. 21	0830	145	2.59
Feb. 8	0815	321	3.27	Apr. 30	0800	120	2.47

Minimum daily discharge, 3.5 ft<sup>3</sup>/s Oct. 6, 17-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.9	39	7.9	16	220	39	58	14	9.7	6.4	7.3
2	4.0	3.7	15	7.7	41	249	36	41	14	9.6	6.4	7.7
3	4.0	3.9	11	7.5	44	262	34	35	14	9.5	6.3	7.2
4	4.1	3.9	9.3	7.6	23	135	32	31	14	9.2	6.3	6.9
5	3.8	4.1	8.3	7.7	20	89	30	28	13	8.9	6.4	6.8
6	3.5	4.2	7.7	7.3	21	72	28	28	13	8.5	6.8	6.6
7	3.8	4.4	7.6	7.0	21	57	26	25	12	8.1	8.0	6.6
8	3.9	4.7	7.9	6.7	130	46	23	24	12	8.2	13	6.5
9	3.7	5.9	7.3	6.6	62	38	24	24	12	7.9	10	6.5
10	3.9	8.9	6.9	6.4	35	33	23	23	12	7.8	11	6.4
11	3.8	7.3	6.2	6.3	24	30	24	22	12	7.5	9.0	6.3
12	3.8	5.8	6.0	6.1	19	27	24	21	12	7.2	8.4	6.2
13	3.8	5.3	6.0	6.1	16	24	22	21	12	7.1	8.0	5.9
14	3.8	5.0	5.8	6.3	14	25	21	21	10	6.9	7.7	5.1
15	3.7	5.0	5.7	6.5	12	22	20	20	9.6	7.0	8.5	5.1
16	3.6	5.1	5.7	6.4	11	20	19	19	9.3	7.2	12	6.2
17	3.5	5.0	5.7	6.2	10	30	18	18	9.2	7.5	19	6.0
18	3.5	4.9	5.6	6.2	9.6	142	29	17	9.4	7.3	19	5.9
19	3.5	5.3	5.5	6.6	8.8	109	23	17	10	7.0	13	6.0
20	3.6	6.1	5.5	6.6	8.1	68	26	17	10	6.8	12	6.5
21	3.6	5.5	5.7	6.5	7.7	86	101	15	10	6.5	11	6.7
22	3.6	5.5	6.7	6.5	7.5	74	54	15	9.5	6.7	10	6.9
23	3.7	5.3	98	7.6	7.3	97	39	15	9.1	6.6	9.7	6.8
24	3.9	5.3	24	7.6	7.8	186	33	14	9.5	6.7	9.1	6.9
25	4.1	5.1	15	9.1	8.9	127	30	14	9.3	6.7	8.8	7.3
26	4.6	4.8	12	8.2	13	90	27	14	9.8	6.5	8.4	7.2
27	4.4	4.6	10	47	105	75	25	13	10	6.6	7.9	7.4
28	3.9	4.7	9.3	52	133	67	24	13	9.5	6.7	7.7	7.4
29	3.8	4.9	8.9	104	---	58	40	12	9.6	6.6	7.4	8.0
30	4.0	134	8.9	35	---	50	75	12	9.6	6.3	7.1	8.6
31	4.1	---	8.3	21	---	44	---	14	---	6.4	7.1	---
TOTAL	118.8	282.1	384.5	440.2	835.7	2652	969	661	329.4	231.2	291.4	200.9
MEAN	3.83	9.40	12.4	14.2	29.8	85.5	32.3	21.3	11.0	7.46	9.40	6.70
MAX	4.6	134	98	104	133	262	101	58	14	9.7	19	8.6
MIN	3.5	3.7	5.5	6.1	7.3	20	18	12	9.1	6.3	6.3	5.1
AC-FT	236	560	763	873	1660	5260	1920	1310	653	459	578	398
CAL YR 1982	TOTAL	4379.3	MEAN	12.0	MAX	258	MIN	3.1	AC-FT	8690		
WTR YR 1983	TOTAL	7396.2	MEAN	20.3	MAX	262	MIN	3.5	AC-FT	14670		

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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1960 to current year. October 1960 to September 1977 published with Temecula Creek at Vail Dam.

GAGE.--Nonrecording gage. Prior to June 3, 1979, water-stage recorder at same site and datum. Datum of gage is 1,350 ft National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation); gage readings have been reduced to elevations above NGVD.

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 ft<sup>3</sup>/s occurred (from theoretical discharge curve). Water is released as required down Temecula Creek for diversion about 1 mi below dam.

COOPERATION.--Water levels were furnished 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 49,100 acre-ft May 31, elevation, 1,469.75 ft, from observed high-water mark; minimum observed, 37,970 acre-ft Oct. 31, elevation, 1,458.60 ft.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,459.85	39,140	--
Oct. 31.....	1,458.60	37,970	-1,170
Nov. 30.....	1,460.22	39,490	+1,520
Dec. 31.....	1,461.43	40,640	+1,150
CAL YR 1982.....	--	--	+4,460
Jan. 31.....	1,462.80	41,970	+1,330
Feb. 28.....	1,465.11	44,260	+2,290
Mar. 31.....	1,468.45	47,720	+3,460
Apr. 30.....	1,468.70	47,980	+260
May 31.....	1,469.75	49,100	+1,120
June 30.....	1,469.63	48,970	-130
July 31.....	1,468.97	48,270	-700
Aug. 31.....	1,468.40	47,660	-610
Sept. 30.....	1,467.95	47,190	-470
WTR YR 1983.....	--	--	+8,050

## 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 about 12 mi downstream from Skinner Reservoir on Tualota Creek.

DRAINAGE AREA.--222 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only October 1924 to September 1930, published in WSP 1315-B.

GAGE.--Water-stage recorder. Concrete control since Aug. 30, 1981. Altitude of gage is 970 ft, from topographic map. See WSP 1735 for history of changes prior to Dec. 16, 1938.

REMARKS.--Records good except those for October to April, which are fair. 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.--59 years, 11.6 ft<sup>3</sup>/s, 8,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,800 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 13.70 ft; minimum daily, 0.02 ft<sup>3</sup>/s at times in 1969, no flow Dec. 11, 1976 (upstream channel work).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1245	300	2.90	Feb. 27	1745	5,510	8.42
Dec. 23	0130	843	4.22	Mar. 2	1945	*12,800	11.59
Jan. 29	0415	1,240	4.87	Mar. 24	0445	3,720	7.24
Feb. 3	0215	324	2.98	Apr. 30	0615	297	2.73
Feb. 8	0815	403	3.22				

Minimum daily discharge, 0.55 ft<sup>3</sup>/s Nov. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.94	.74	11	1.4	4.0	2300	58	53	1.7	1.7	.78	.67
2	.92	.75	3.8	1.3	31	3710	50	39	1.4	1.5	.76	.65
3	.92	.65	2.2	1.4	132	1360	45	24	1.7	1.5	.76	.61
4	.92	.55	1.7	1.4	21	287	40	18	1.6	1.4	.76	.62
5	.92	.55	1.4	1.3	9.3	152	36	15	1.4	1.3	.78	.63
6	.91	.55	1.5	1.4	9.6	100	31	11	1.4	1.4	.81	.61
7	.92	.58	1.6	1.4	9.6	64	27	9.3	1.5	1.3	.84	.60
8	.92	.70	5.0	1.4	177	50	25	8.9	1.6	1.3	.82	.62
9	.92	2.0	1.7	1.4	38	40	22	8.6	1.6	1.2	1.3	.63
10	1.0	12	1.6	1.4	15	43	20	7.6	1.4	1.2	.85	.63
11	2.1	3.5	1.6	1.4	9.1	40	19	7.3	1.6	1.1	.78	.63
12	2.2	1.1	1.5	1.4	6.0	37	17	6.8	1.6	1.5	.79	.64
13	1.3	1.0	1.4	1.4	4.8	35	16	7.1	2.4	1.1	.75	.65
14	.80	.93	1.4	1.4	4.5	38	12	7.6	1.3	1.1	.65	.66
15	.65	.89	1.4	1.4	4.1	34	11	4.4	1.5	1.1	.70	.67
16	.65	.87	1.4	1.5	4.0	29	7.7	6.7	1.3	1.1	.75	.68
17	.66	.88	1.4	1.4	3.7	32	6.4	5.4	1.2	1.2	.73	.67
18	.70	1.0	1.4	1.5	3.4	120	27	4.5	1.3	1.2	.83	.68
19	.74	3.5	1.4	2.0	3.1	110	12	3.9	1.5	1.2	.78	.77
20	.75	1.6	1.4	1.7	2.9	40	60	3.4	1.4	1.1	.73	1.0
21	.71	1.2	1.4	1.5	2.8	160	110	2.3	1.3	.91	.70	.88
22	.65	1.1	21	1.6	2.7	60	33	2.4	1.4	.88	.70	.91
23	.62	1.0	180	4.0	2.7	50	18	3.1	2.1	.87	.71	1.2
24	.62	.96	3.3	4.2	2.7	767	14	2.6	1.4	.92	.69	.79
25	.60	.98	1.7	3.8	9.9	143	12	1.9	1.4	.90	.66	.75
26	.87	.95	1.6	1.9	20	117	11	1.9	1.5	.83	.64	.76
27	.64	.95	1.5	73	881	100	9.5	1.8	1.4	.82	.61	.77
28	.65	.95	1.5	17	302	90	8.1	1.6	1.3	.81	.61	.85
29	.66	2.0	1.5	317	---	80	22	1.6	1.5	.82	.62	.90
30	.68	150	1.5	21	---	70	131	1.5	1.7	.80	.62	1.7
31	.70	---	1.4	6.8	---	64	---	1.7	---	.81	.62	---
TOTAL	27.24	194.43	262.2	480.7	1715.9	10322	910.7	273.9	45.4	34.87	23.13	22.83
MEAN	.88	6.48	8.46	15.5	61.3	333	30.4	8.84	1.51	1.12	.75	.76
MAX	2.2	150	180	317	881	3710	131	53	2.4	1.7	1.3	1.7
MIN	.60	.55	1.4	1.3	2.7	29	6.4	1.5	1.2	.80	.61	.60
AC-FT	54	386	520	953	3400	20470	1810	543	90	69	46	45

CAL YR 1982	TOTAL	3516.69	MEAN	9.63	MAX	1210	MIN	.55	AC-FT	6980
WTR YR 1983	TOTAL	14313.30	MEAN	39.2	MAX	3710	MIN	.55	AC-FT	28390

## SANTA MARGARITA RIVER BASIN

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 Lake, and about 12 mi downstream from Skinner Reservoir.

DRAINAGE AREA.--588 mi<sup>2</sup>.

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. Concrete control since Nov. 3, 1966. Altitude of gage is 950 ft, from topographic map. Prior to Nov. 3, 1966, at site 100 ft downstream at same datum.

REMARKS.--Records fair. Flow partly regulated since November 1948 by Vail Lake (station 11042510) on Temecula Creek, and since 1974 by Skinner Reservoir on Tocalota 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 ft<sup>3</sup>/s, 20,420 acre-ft/yr; 35 years (water years 1949-83), 16.5 ft<sup>3</sup>/s, 11,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft<sup>3</sup>/s, Feb. 16, 1927, gage height, 14.6 ft, at site then in use, from rating curve extended above 10,000 ft<sup>3</sup>/s; minimum daily, 0.30 ft<sup>3</sup>/s Aug. 18-22, 1965, (during period of upstream construction).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,800 ft<sup>3</sup>/s, Mar. 2, gage height, 12.11 ft, from rating curve extended above 140 ft<sup>3</sup>/s on basis of slope-area measurement on Murrieta Creek 0.5 mi upstream; minimum daily, 1.3 ft<sup>3</sup>/s Oct. 14-17, Nov. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.6	21	3.2	7.0	2560	68	67	3.8	3.5	2.3	1.6
2	1.8	1.6	7.5	3.2	29	4010	62	41	3.3	3.3	2.1	1.7
3	1.7	1.3	4.3	3.1	126	1410	56	27	3.5	3.3	2.0	1.7
4	1.6	1.3	3.5	3.0	28	290	54	22	3.7	3.3	2.1	1.6
5	1.7	1.3	2.9	2.8	11	145	52	18	3.1	3.3	2.1	1.5
6	1.7	1.3	2.9	2.8	11	122	46	14	3.2	3.4	2.2	1.5
7	1.9	1.4	2.9	2.9	12	89	37	11	3.5	3.4	2.2	1.5
8	1.7	1.5	7.1	2.9	169	72	33	10	3.7	3.4	2.3	1.5
9	1.6	3.3	3.9	2.9	53	57	28	10	3.6	3.2	3.2	1.5
10	1.6	21	3.1	2.9	25	63	27	9.5	3.5	3.2	2.3	1.5
11	1.6	5.4	2.9	2.8	14	55	26	8.7	3.5	3.2	2.0	1.5
12	1.6	2.7	2.8	2.7	9.9	52	24	8.0	3.7	3.7	2.0	1.5
13	1.4	2.1	2.6	2.7	7.5	49	21	7.3	4.3	2.6	2.0	1.5
14	1.3	2.0	2.6	2.7	6.7	54	17	7.8	3.2	2.5	1.9	1.5
15	1.3	1.9	2.6	2.9	5.7	42	16	6.3	3.4	2.5	2.1	1.6
16	1.3	1.8	2.6	2.7	5.2	40	11	9.1	3.2	2.7	2.1	1.6
17	1.3	1.9	2.6	2.7	4.5	58	9.1	8.2	3.1	2.6	2.2	1.6
18	1.5	2.1	2.6	2.7	4.2	136	40	6.8	3.1	2.6	2.3	1.6
19	1.5	4.9	2.6	4.5	4.3	127	26	5.9	3.2	2.6	2.3	1.6
20	1.5	3.0	2.6	3.6	3.9	53	81	5.4	3.1	2.5	2.3	2.0
21	1.5	2.4	2.6	3.0	3.7	175	146	4.0	3.1	2.3	2.2	1.8
22	1.4	2.1	37	3.3	3.7	85	49	4.1	3.1	2.3	2.1	1.7
23	1.4	2.0	227	8.6	3.7	79	31	5.1	3.8	2.4	2.2	2.2
24	1.4	2.0	11	9.3	5.1	902	24	4.6	3.3	2.4	2.3	1.8
25	1.7	2.0	5.1	8.2	6.0	180	20	3.8	3.2	2.4	2.3	1.6
26	2.0	1.9	4.1	3.9	23	139	19	4.0	3.4	2.3	2.2	1.8
27	1.7	1.9	3.7	105	1020	120	27	4.0	3.5	2.4	1.7	1.6
28	1.5	1.9	3.3	28	315	110	29	3.8	3.4	2.3	1.7	1.6
29	1.5	2.5	3.5	411	---	95	38	3.9	3.4	2.3	1.6	1.9
30	1.6	221	3.4	33	---	86	152	3.6	3.4	2.4	1.6	3.4
31	1.7	---	3.3	11	---	78	---	3.7	---	2.4	1.6	---
TOTAL	48.8	303.1	389.6	684.0	1917.1	11533	1269.1	347.6	102.3	86.7	65.5	51.0
MEAN	1.57	10.1	12.6	22.1	68.5	372	42.3	11.2	3.41	2.80	2.11	1.70
MAX	2.0	221	227	411	1020	4010	152	67	4.3	3.7	3.2	3.4
MIN	1.3	1.3	2.6	2.7	3.7	40	9.1	3.6	3.1	2.3	1.6	1.5
AC-FT	97	601	773	1360	3800	22880	2520	689	203	172	130	101
CAL YR 1982	TOTAL	6671.9	MEAN	18.3	MAX	2120	MIN	1.3	AC-FT	13230		
WTR YR 1983	TOTAL	16797.8	MEAN	46.0	MAX	4010	MIN	1.3	AC-FT	33320		



## 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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. 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.--Records poor. Flow partly regulated by Vail Lake since November 1948 (station 11042500). Diversions for irrigation on Rancho California (formerly Santa Margarita Ranch and Pauba Ranch).

AVERAGE DISCHARGE.--60 years, 35.6 ft<sup>3</sup>/s, 25,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft<sup>3</sup>/s Feb. 16, 1927, gage height, 18.00 ft, site and datum then in use, on basis of slope-area measurement of maximum 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, 14,540 ft<sup>3</sup>/s, Mar. 2, gage height, 10.4 ft; no flow Oct. 14-20.

REVISIONS.--The daily discharge figures for Sept. 26-30, 1982 have been revised and are shown in the table below. All changes supersede figures published in the report for 1982.

	Date		Discharge		Date		Discharge					
	Sept. 26	27	2.1	30	Sept. 29	6.2	5.3					
	28	28	11	11	30							
DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983												
MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.8	368	35	103	1320	420	274	34	17	7.6	12
2	4.5	3.8	55	35	147	4350	399	218	28	17	7.6	9.6
3	2.7	3.8	20	35	466	3360	399	185	45	17	7.6	5.7
4	2.7	1.9	11	36	168	1240	310	165	34	17	7.6	4.3
5	1.9	2.7	8.4	36	117	836	253	135	28	17	7.6	4.3
6	5.3	3.8	5.3	30	103	785	218	116	28	17	9.6	3.2
7	9.7	4.5	5.3	30	114	600	192	116	28	17	34	3.3
8	11	4.5	38	25	554	463	173	90	50	17	34	3.2
9	3.8	6.2	7.2	28	377	413	173	90	55	15	19	3.1
10	1.3	20	8.4	25	166	399	165	104	45	12	60	3.0
11	2.7	58	8.4	28	142	340	192	90	45	9.6	34	3.0
12	.30	23	9.7	25	126	316	192	97	50	5.7	34	3.0
13	.07	14	5.3	27	112	281	192	90	45	5.7	28	2.9
14	0	9.7	5.3	31	103	295	149	84	45	4.3	21	2.9
15	0	8.4	2.7	25	106	260	140	72	28	4.3	28	2.8
16	0	8.4	1.9	25	93	240	130	84	23	5.7	34	2.7
17	0	8.4	1.9	25	93	446	130	72	23	7.6	55	2.7
18	0	8.4	1.3	26	88	839	125	60	23	7.6	60	2.6
19	0	18	1.9	30	88	943	125	84	23	7.6	97	2.5
20	0	23	1.9	35	78	399	120	90	23	5.7	90	3.0
21	.14	20	1.9	30	73	932	120	72	21	5.7	66	3.5
22	.37	13	1.9	38	78	111	115	55	21	5.7	45	4.3
23	.09	20	893	49	73	399	115	45	21	7.6	34	5.0
24	.12	16	88	53	71	1120	110	34	21	9.6	28	5.0
25	1.1	20	56	64	80	836	110	21	19	9.6	28	4.9
26	1.9	21	47	60	302	670	100	34	19	9.6	28	4.9
27	3.8	8.4	40	433	954	617	100	41	17	5.7	21	4.8
28	4.5	13	47	356	1070	549	100	41	17	4.3	17	4.8
29	4.5	26	60	985	---	471	300	34	17	4.3	12	4.7
30	1.3	1080	49	276	---	449	679	34	17	5.7	12	4.7
31	1.9	---	40	168	---	434	---	34	---	5.7	12	---
TOTAL	69.49	1471.7	1890.7	3104	6045	24713	6046	2761	893	300.3	978.6	126.4
MEAN	2.24	49.1	61.0	100	216	797	202	89.1	29.8	9.69	31.6	4.21
MAX	11	1080	893	985	1070	4350	679	274	55	17	97	12
MIN	0	1.9	1.3	25	71	111	100	21	17	4.3	7.6	2.5
AC-FT	138	2920	3750	6160	11990	49020	11990	5480	1770	596	1940	251
CAL YR 1982	TOTAL	17851.36	MEAN	48.9	MAX	2500	MIN	0	AC-FT	35410		
WTR YR 1983	TOTAL	48399.19	MEAN	133	MAX	4350	MIN	0	AC-FT	96000		

## SANTA MARGARITA RIVER BASIN

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA--Continued

PERIOD OF RECORD.--Water years 1969 to September 1983 (discontinued).

CHEMICAL ANALYSES: Water years 1980-81.

WATER TEMPERATURES: Water years 1969-81.

SEDIMENT RECORDS: Water years 1969 to September 1978, January 1982 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--

SEDIMENT RECORDS: October 1968 to September 1978.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 .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
DEC 01...	1400	202	15.0	857	467	75	83	88	92	--
JAN 29...	1300	1620	11.0	5570	24400	--	--	--	--	75
MAR 02...	1500	1920	14.5	2540	13200	18	20	25	33	42
03...	1430	3360	--	5030	45600	12	13	18	24	--

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. FALL 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	TOTAL SEDIMENT LOAD T/DAY
DEC 01...	92	--	93	--	96	--	100	--	--	--	567
JAN 29...	--	--	--	--	--	--	--	--	--	--	25,400
MAR 02...	--	52	--	70	--	87	--	99	--	100	15,200
03...	32	--	46	--	65	--	86	--	98	100	52,000

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	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
AUG 08...	1530	30.0	5	5.0	1	3	16	42	75	93	99	100

## LAS FLORES CREEK BASIN

123

11046100 LAS FLORES CREEK NEAR OCEANSIDE, CA

LOCATION.--Lat 33°17'36", long 117°27'06", in SE 1/4 NW 1/4 sec.24, T.10 S., R.6 W., San Diego County,  
Hydrologic Unit 18070301, on left bank 0.8 mi upstream from mouth, and 8.5 mi northwest of Oceanside.

DRAINAGE AREA.--26.6 mi<sup>2</sup>.

PERIOD OF RECORD.--

SEDIMENT RECORDS: January 1982 to August 1983 (discontinued).

## PARTICLE -SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO AUGUST 1983

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)	SEDI- MENT, FALL DIAM. % FINER THAN .004 MM	SEDI- MENT, 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
JAN 29...	1230	19	--	1370	69	--	--	--	--	58
MAR 02...	1145	104	14.5	2580	724	21	22	29	34	--
SED. SED. SED. SED. SED. SED. SED. SED. SED. SED. SED.										
SUSP. SUSP. SUSP. SUSP. SUSP. SUSP. SUSP. SUSP. SUSP. SUSP. SUSP.										
FALL FALL FALL FALL FALL FALL FALL FALL FALL FALL FALL										
DIAM. DIAM. DIAM. DIAM. DIAM. DIAM. DIAM. DIAM. DIAM. DIAM. DIAM.										
% FINER % FINER % FINER % FINER % FINER % FINER % FINER % FINER % FINER % FINER % FINER										
THAN THAN THAN THAN THAN THAN THAN THAN THAN THAN THAN										
DATE .062 MM .125 MM .250 MM .500 MM 1.00 MM TOTAL										
JAN 29... -- -- -- -- -- 82										
MAR 02... 46 65 91 99 100 1660										

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO AUGUST 1983

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	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
AUG 05...	1500	--	3	0	1	5	22	53	84	97	100

## SAN ONOFRE CREEK BASIN

11046250 SAN ONOFRE CREEK AT SAN ONOFRE, CA

LOCATION.--Lat 33°23'00", long 117°34'22", in SE 1/4 SE 1/4, sec. 14, T.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on left bank 0.2 mi north of San Onofre, 0.3 mi upstream from Interstate 5, and 0.5 mi upstream from mouth.

DRAINAGE AREA.--42.2 mi<sup>2</sup>.

PERIOD OF RECORD.--

SEDIMENT RECORDS: January 1982 to September 1983 (discontinued).

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	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
JAN 29...	1430	98	--	910	240	12	15	18	22
FEB 28...	1445	104	15.0	2140	601	--	--	--	--
MAR 02...	1445	481	14.0	7370	9571	--	27	30	37
APR 18...	1500	33	26.5	306	28	--	--	--	--

DATE	SED. SUSP. FALL % FINER THAN .031 MM	SED. SUSP. SIEVE % FINER THAN .062 MM	SED. SUSP. FALL % FINER THAN .062 MM	SED. SUSP. SIEVE % FINER THAN .125 MM	SED. SUSP. SIEVE % FINER THAN .250 MM	SED. SUSP. SIEVE % FINER THAN .500 MM	SED. SUSP. SIEVE % FINER THAN 1.00 MM	TOTAL SEDIMENT LOAD T/DAY
JAN 29...	25	29	29	35	64	97	100	523
FEB 28...	--	28	--	--	--	--	--	633
MAR 02...	46	57	--	66	79	96	100	9720
APR 18...	--	44	--	--	--	--	--	28

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
AUG 05...	--	--	3	--	0	1	6
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		
AUG 05...	32	72	95	99	100		

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, 1.9 S., R.7 W., San Diego County, Hydrologic Unit 18070301, on downstream side of old U.S. Highway 101 bridge, 0.45 mi upstream from mouth, and 2.55 mi downstream from Cristianitos Creek.

DRAINAGE AREA.--132 mi<sup>2</sup>.

PERIOD OF RECORD.--

SEDIMENT RECORDS: January 1982 to current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
JAN 29...	1545	419	--	470	532	33	40	49	59	67
FEB 28...	1130	389	15.0	820	861	--	--	--	--	--
MAR 01...	1730	9230	16.0	14200	354000	--	13	17	23	33
MAR 02...	1745	3480	14.0	7290	68500	--	14	17	24	31
APR 18...	1315	161	26.0	362	157	--	--	--	--	--

DATE	TIME	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	SED. SUSP. SIEVE DIAM % FINER THAN 4.00 MM	TOTAL SEDI- MENT LOAD (T/DAY)
JAN 29...	1545	73	80	89	99	100	--	--	962
FEB 28...	1130	32	--	--	--	--	--	--	1240
MAR 01...	1730	41	60	78	91	97	99	100	365000
MAR 02...	1745	39	55	76	96	100	--	--	74900
APR 18...	1315	55	--	--	--	--	--	--	227

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	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
AUG 05...	1600	31.0	3	3.0	--	2	18	63	91	99	100

## SAN JUAN CREEK BASIN

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 above Camino Capistrano bridge, 0.3 mi upstream from Arroyo Trabuco, and 0.6 mi south of San Juan Capistrano.

DRAINAGE AREA.--117 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 67 ft, from topographic map. Prior to Jan. 10, 1979, at datum 10.00 ft higher. Prior to Aug. 29, 1979, at site 300 ft downstream on downstream side of bridge.

REMARKS.--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 2.6 mi upstream was published as creek only and combined.

AVERAGE DISCHARGE.--14 years, 28.3 ft<sup>3</sup>/s, 20,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft<sup>3</sup>/s, estimated, Mar. 4, 1978, 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 ft<sup>3</sup>/s, at site and datum 2.8 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1900	970	13.12	Mar. 18	2200	771	12.68
Dec. 23	0700	979	13.13	Mar. 24	0345	1,400	13.48
Jan. 29	0900	522	12.48	Apr. 18	0630	524	12.15
Feb. 8	1100	228	11.80	Apr. 29	2400	486	11.82
Mar. 2	2130	*5,770	15.88	Sept. 30	0400	214	11.27

Minimum daily discharge, 0.55 ft<sup>3</sup>/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	1.1	.65	1.8	41	1660	381	214	24	19	5.2	1.5
2	.59	1.2	15	1.7	40	2180	368	200	22	18	3.8	1.5
3	.62	1.0	8.9	1.6	63	1510	352	180	22	18	1.8	1.4
4	.65	1.0	7.2	1.5	41	588	325	157	24	17	1.8	1.4
5	.69	1.0	6.3	1.4	46	361	300	150	27	16	1.8	1.3
6	.76	1.0	4.5	1.3	40	262	280	145	31	15	1.8	1.3
7	.80	1.0	4.5	1.3	58	198	260	139	31	15	1.8	1.3
8	.80	1.0	13	1.3	119	154	240	123	31	14	1.8	1.2
9	.76	1.3	5.2	1.4	105	106	220	105	32	14	1.7	1.2
10	.76	9.0	4.7	1.2	25	84	220	97	33	13	1.6	1.2
11	.80	5.0	4.5	1.2	21	59	214	92	35	13	1.5	1.2
12	.76	1.0	4.7	1.1	19	52	214	86	37	12	1.5	1.1
13	.76	1.0	4.7	1.1	17	41	214	81	37	12	1.5	1.1
14	.76	1.0	4.7	1.2	16	45	183	78	36	11	1.2	1.1
15	.80	1.0	4.7	1.1	16	37	167	76	36	11	1.1	1.1
16	.80	1.0	4.5	1.2	14	37	160	73	33	10	1.1	1.1
17	.84	1.0	4.5	1.2	14	54	156	71	31	9.8	2.0	1.1
18	.93	1.1	5.2	1.1	13	214	223	64	31	9.4	5.0	1.1
19	.93	2.9	5.5	1.6	13	364	136	59	31	9.0	15	1.1
20	.98	1.3	6.0	.88	12	168	208	55	36	8.6	15	1.2
21	.98	1.2	5.7	1.0	11	388	272	54	30	8.6	4.5	1.6
22	1.0	1.3	27	1.2	12	247	230	51	26	8.6	3.7	1.8
23	1.0	1.5	144	1.4	11	228	206	47	26	8.6	3.4	2.0
24	1.0	1.6	25	1.7	10	905	200	46	26	8.6	3.0	2.0
25	.98	1.6	7.8	1.9	11	631	197	45	25	7.5	2.6	2.2
26	1.0	1.3	4.5	4.5	110	454	200	37	24	6.8	2.4	2.0
27	1.0	1.2	3.5	140	1000	365	200	35	23	6.0	2.2	2.0
28	1.0	1.3	2.7	152	1200	372	209	33	22	5.2	2.1	2.0
29	1.0	2.0	2.4	204	---	372	250	30	21	4.8	1.9	29
30	1.0	120	2.2	74	---	381	295	28	20	4.8	1.7	67
31	1.0	---	2.0	54	---	381	---	26	---	8.6	1.6	---
TOTAL	26.30	167.9	410.1	661.88	3098	12918	7080	2677	863	342.9	97.1	136.1
MEAN	.85	5.60	13.2	21.4	111	417	236	86.4	28.8	11.1	3.13	4.54
MAX	1.0	120	144	204	1200	2180	381	214	37	19	15	67
MIN	.55	1.0	2.0	.88	10	37	136	26	20	4.8	1.1	1.1
AC-FT	52	333	813	1310	6140	25620	14040	5310	1710	680	193	270

CAL YR 1982	TOTAL	4996.10	MEAN	13.7	MAX	886	MIN	.10	AC-FT	9910
WTR YR 1983	TOTAL	28478.28	MEAN	78.2	MAX	2180	MIN	.55	AC-FT	56490

WATER-QUALITY RECORDS

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
ONCE-DAILY

[illegible]

## SAN JUAN CREEK BASIN

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.55	26	.04	1.1	---	.02	65	614	147
2	.59	26	.04	1.2	---	.02	15	48	1.9
3	.62	25	.04	1.0	---	.01	8.9	24	.58
4	.65	24	.04	1.0	---	.01	7.2	15	.29
5	.69	23	.04	1.0	---	.01	6.3	9	.15
6	.76	22	.05	1.0	---	.01	4.5	6	.07
7	.80	21	.05	1.0	---	.01	4.5	3	.04
8	.80	19	.04	1.0	---	.01	13	206	18
9	.76	18	.04	1.3	---	.03	5.2	8	.11
10	.76	17	.03	9.0	---	1.1	4.7	2	.03
11	.80	15	.03	5.0	---	.36	4.5	2	.02
12	.76	16	.03	1.0	---	.01	4.7	2	.03
13	.76	16	.03	1.0	---	.01	4.7	2	.03
14	.76	15	.03	1.0	---	.01	4.7	1	.01
15	.80	15	.03	1.0	20	.05	4.7	1	.01
16	.80	15	.03	1.0	18	.05	4.5	1	.01
17	.84	15	.03	1.0	12	.03	4.5	2	.02
18	.93	14	.04	1.1	10	.03	5.2	3	.04
19	.93	14	.04	2.9	100	.98	5.5	4	.06
20	.98	14	.04	1.3	47	.16	6.0	5	.08
21	.98	14	.04	1.2	16	.05	5.7	3	.05
22	1.0	13	.04	1.3	6	.02	27	380	80
23	1.0	13	.04	1.5	6	.02	144	1060	1020
24	1.0	13	.04	1.6	6	.03	25	110	7.4
25	.98	13	.03	1.6	6	.03	7.8	52	1.1
26	1.0	12	.03	1.3	6	.02	4.5	35	.43
27	1.0	12	.03	1.2	5	.02	3.5	20	.19
28	1.0	12	.03	1.3	4	.01	2.7	15	.11
29	1.0	12	.03	2.0	48	.26	2.4	12	.08
30	1.0	11	.03	120	1140	1090	2.2	10	.06
31	1.0	11	.03	---	---	---	2.0	9	.05
TOTAL	26.30	---	1.11	167.9	---	1093.38	410.1	---	1277.95

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.8	8	.04	41	105	12	1660	8710	62600
2	1.7	7	.03	40	179	19	2180	10500	79100
3	1.6	9	.04	63	532	92	1510	7410	35200
4	1.5	10	.04	41	310	34	588	2530	4140
5	1.4	16	.06	46	282	35	361	2200	2140
6	1.3	22	.08	40	225	25	262	1750	1240
7	1.3	10	.04	58	355	65	198	1060	567
8	1.3	4	.01	119	1260	435	154	800	333
9	1.4	2	.01	105	560	159	106	660	189
10	1.2	1	0	25	---	9.3	84	---	122
11	1.2	1	0	21	---	6.5	59	---	70
12	1.1	1	0	19	---	5.3	52	---	49
13	1.1	1	0	17	---	4.2	41	---	30
14	1.2	1	0	16	---	3.7	45	---	24
15	1.1	1	0	16	---	3.7	37	---	15
16	1.2	1	0	14	---	2.8	37	---	12
17	1.2	1	0	14	---	2.8	54	920	134
18	1.1	1	0	13	---	2.4	214	1660	1570
19	1.6	20	.18	13	---	2.4	364	3130	3520
20	.88	6	.01	12	---	2.1	168	1630	754
21	1.0	11	.03	11	---	1.7	388	3160	3740
22	1.2	11	.04	12	---	2.1	247	2760	1840
23	1.4	11	.04	11	---	1.7	228	2810	1730
24	1.7	11	.05	10	---	1.4	905	3960	10400
25	1.9	11	.06	11	---	1.7	631	1400	2390
26	4.5	32	.39	110	---	83	454	640	785
27	140	1370	868	1000	---	240	385	420	437
28	152	1070	480	1200	---	265	372	380	382
29	204	1570	1030	---	---	---	372	380	382
30	74	680	136	---	---	---	381	400	411
31	54	255	37	---	---	---	381	400	411
TOTAL	661.88	---	2552.15	3098	---	1517.8	12918	---	214717



11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

APRIL				MAY			JUNE		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	381	400	411	214	540	312	24	---	.33
2	368	370	368	200	420	227	22	---	.26
3	352	340	323	180	315	153	22	---	.26
4	325	270	237	157	250	106	24	---	.33
5	300	220	178	150	220	89	27	---	.44
6	280	175	132	145	185	72	31	---	.55
7	260	140	98	139	155	58	31	---	.55
8	240	105	68	123	120	40	31	---	.55
9	220	80	48	105	95	27	32	4	.35
10	220	80	48	97	88	23	33	5	.45
11	214	70	40	92	83	21	35	5	.47
12	214	50	29	86	78	18	37	5	.50
13	214	45	26	81	72	16	37	5	.50
14	183	38	19	78	66	14	36	4	.39
15	167	20	9.0	76	59	12	36	3	.29
16	160	14	6.0	73	53	10	33	3	.27
17	156	13	5.5	71	47	9.0	31	3	.25
18	223	844	575	64	40	6.9	31	2	.17
19	136	340	125	59	33	5.3	31	1	.08
20	208	990	556	55	26	3.9	36	1	.10
21	272	1170	859	54	18	2.6	30	2	.16
22	230	650	404	51	14	1.9	26	2	.14
23	206	490	273	47	11	1.4	26	3	.21
24	200	360	194	46	12	1.5	26	4	.28
25	197	280	149	45	21	2.6	25	4	.27
26	200	280	151	37	23	2.3	24	4	.26
27	200	300	162	35	---	.94	23	4	.25
28	209	280	158	33	---	.80	22	4	.24
29	250	1380	1020	30	---	.62	21	4	.23
30	295	1310	1110	28	---	.52	20	4	.22
31	---	---	---	26	---	.42	---	---	---
TOTAL	7080	---	7781.5	2677	---	1238.70	863	---	9.35

JULY				AUGUST			SEPTEMBER		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	3	.15	5.2	3	.04	1.5	---	.04
2	18	3	.15	3.8	2	.02	1.5	---	.04
3	18	3	.15	1.8	---	0	1.4	---	.04
4	17	3	.14	1.8	---	0	1.4	---	.04
5	16	3	.13	1.8	---	0	1.3	---	.04
6	15	3	.12	1.8	---	0	1.3	---	.04
7	15	3	.12	1.8	---	0	1.3	---	.04
8	14	2	.08	1.8	---	0	1.2	---	.04
9	14	2	.08	1.7	---	0	1.2	---	.04
10	13	2	.07	1.6	---	0	1.2	---	.04
11	13	2	.07	1.5	---	0	1.2	---	.04
12	12	2	.06	1.5	---	0	1.1	---	.04
13	12	2	.06	1.5	---	0	1.1	---	.04
14	11	2	.06	1.2	---	0	1.1	---	.04
15	11	2	.06	1.1	---	0	1.1	15	.04
16	10	2	.05	1.1	---	0	1.1	15	.04
17	9.8	1	.03	2.0	---	0	1.1	15	.04
18	9.4	1	.03	5.0	---	1.0	1.1	15	.04
19	9.0	1	.02	15	---	14	1.1	15	.04
20	8.6	1	.02	15	---	10	1.2	15	.05
21	8.6	1	.02	4.5	---	.50	1.6	15	.06
22	8.6	2	.05	3.7	---	.10	1.8	15	.07
23	8.6	2	.05	3.4	---	.08	2.0	16	.09
24	8.6	3	.07	3.0	---	.07	2.0	15	.08
25	7.5	3	.06	2.6	---	.06	2.2	15	.09
26	6.8	2	.04	2.4	---	.05	2.0	15	.08
27	6.0	2	.03	2.2	---	.04	2.0	15	.08
28	5.2	2	.03	2.1	---	.04	2.0	15	.08
29	4.8	2	.03	1.9	---	.04	29	218	28
30	4.8	2	.03	1.7	---	.04	67	312	77
31	8.6	2	.05	1.6	---	.04	---	---	---
TOTAL	342.9	---	2.11	97.1	---	26.12	136.1	---	106.44

YEAR 28478.28 230323.61

## SAN JUAN CREEK BASIN

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

			SED1- MENT, DIS- CHARGE, SUS- PENDE (MG/L)	SED1- 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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)						
NOV 10...	1130	9.7	15.0	112	2.9	--	--	--	--
DEC 23...	1045	145	14.0	844	330	42	54	63	72
JAN 27...	1215	125	14.0	1350	456	--	71	79	90
MAR 01...	1510	3090	15.0	14900	124000	--	26	30	38
02...	1345	1800	15.0	11800	57300	--	15	16	20
03...	1215	1420	15.0	6030	23100	--	12	15	19
21...	0945	562	15.0	4670	7340	--	16	18	20
APR 29...	1040	226	17.5	1220	744	--	44	46	54
		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	SED. SUSP. SIEVE DIAM. % FINER THAN 4.0 MM	
NOV 10...	86	87	91	96	100	--	--		
DEC 23...	82	83	86	95	99	100	--		
JAN 27...	97	97	99	100	--	--	--		
MAR 01...	56	69	79	89	97	99	100		
02...	28	37	53	69	99	100	--		
03...	29	38	52	71	91	99	100		
21...	28	33	43	69	91	96	100		
APR 29...	70	81	90	98	100	--	--		

## 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. Prior to Oct. 1, 1982 at site 2.5 mi upstream.

DRAINAGE.--41.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949 to current year. 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, 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.--Records fair. Sewage treatment effluent and irrigation runoff cause low-flow fluctuations in discharge.

AVERAGE DISCHARGE.--34 years, 6.46 ft<sup>3</sup>/s, 4,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft<sup>3</sup>/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 above base of 1,500 ft<sup>3</sup>/s and maximum (\*), from study of flow through culvert:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 27	0845	3,570	7.29	Mar. 1	1445	*10,400	14.48
Feb. 26	1200	2,550	6.18	Mar. 2	2115	2,230	5.83
Feb. 27	1515	3,290	6.98	Mar. 3	0945	2,580	6.21

Minimum daily discharge, 1.2 ft<sup>3</sup>/s Aug. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	4.1	8.8	3.3	3.2	1740	7.8	62	3.3	6.4	5.9	3.7
2	2.6	4.1	2.6	4.2	50	864	7.5	6.8	4.2	6.2	5.3	3.3
3	2.8	5.1	2.3	3.8	15	524	7.7	5.4	4.4	5.1	5.7	3.2
4	3.2	5.9	2.3	3.4	3.4	26	9.1	5.0	3.7	4.2	6.1	3.2
5	3.5	4.8	2.8	2.9	20	19	10	4.7	2.8	5.9	5.5	2.7
6	4.0	3.6	2.7	3.2	12	20	9.2	4.8	2.5	5.5	5.9	2.7
7	4.2	3.1	2.9	3.7	19	10	11	3.8	3.2	4.5	6.3	4.2
8	6.1	3.6	2.4	3.2	87	7.5	12	3.7	3.1	4.0	5.7	7.5
9	6.2	55	3.3	4.1	5.4	5.9	12	3.9	5.7	5.4	5.3	6.7
10	5.6	109	3.3	4.0	3.4	4.8	11	3.2	5.3	7.1	5.2	6.6
11	5.2	12	3.4	5.1	3.3	3.9	13	3.5	3.5	7.0	4.7	6.6
12	5.2	3.6	3.3	5.3	2.9	3.3	12	4.8	3.2	6.1	4.9	6.4
13	5.0	3.6	3.4	6.8	5.5	3.2	8.0	4.5	2.9	4.6	6.0	6.3
14	5.9	5.7	3.4	6.2	3.3	12	8.1	3.3	2.5	3.4	4.5	6.2
15	5.4	8.0	3.7	5.1	3.0	4.4	9.4	3.2	2.6	3.3	37	6.3
16	4.1	8.5	3.4	5.2	3.3	4.5	5.1	1.9	3.7	3.5	8.4	7.0
17	2.8	6.7	4.4	5.7	4.0	33	6.1	2.0	2.8	4.2	5.7	7.6
18	3.4	5.8	4.4	4.9	4.7	205	23	1.8	2.6	3.4	5.8	6.3
19	4.0	27	4.0	13	3.5	138	4.9	2.6	3.9	2.9	7.8	5.7
20	3.9	4.8	3.8	4.0	3.5	5.0	92	3.8	3.8	2.6	6.4	11
21	5.2	4.6	3.8	3.5	4.9	79	46	3.7	3.1	4.0	6.3	5.3
22	4.1	4.8	115	3.8	5.6	17	11	2.4	2.6	4.4	6.5	4.1
23	4.0	4.1	73	105	5.6	20	7.6	2.7	2.2	4.8	3.0	2.8
24	4.6	4.4	4.5	34	23	284	7.2	3.1	3.3	4.0	1.9	4.9
25	4.1	5.9	3.0	9.5	6.0	8.1	7.2	3.8	3.1	4.9	1.8	5.1
26	5.1	6.5	2.5	3.4	231	7.5	7.8	4.3	3.3	6.2	1.3	5.6
27	3.3	5.6	3.1	466	512	7.4	6.6	4.5	3.1	5.9	1.2	4.8
28	4.5	5.8	3.4	13	156	8.1	7.9	5.1	2.7	4.5	2.9	5.7
29	5.0	11	3.5	262	---	6.7	186	4.8	5.4	5.2	3.0	22
30	5.4	332	4.4	7.7	---	6.0	86	4.6	4.6	5.9	3.1	100
31	3.8	---	3.9	4.7	---	6.7	---	3.1	---	5.9	3.4	---
TOTAL	134.5	668.7	290.7	1009.7	1199.5	4084.0	652.2	176.8	103.1	151.0	182.5	273.5
MEAN	4.34	22.3	9.38	32.6	42.8	132	21.7	5.70	3.44	4.87	5.89	9.12
MAX	6.2	332	115	466	512	1740	186	62	5.7	7.1	37	100
MIN	2.3	3.1	2.3	2.9	2.9	3.2	4.9	1.8	2.2	2.6	1.2	2.7
AC-FT	267	1330	577	2000	2380	8100	1290	351	204	300	362	542

CAL YR 1982	TOTAL	3726.3	MEAN	10.2	MAX	639	MIN	0	AC-FT	7390
WTR YR 1983	TOTAL	8926.2	MEAN	24.5	MAX	1740	MIN	1.2	AC-FT	17710

## SAN DIEGO CREEK BASIN

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, 1200 ft above the confluence with San Diego Creek and 1.5 mi north of Irvine.

DRAINAGE AREA.--45.2 mi<sup>2</sup> (furnished by Orange County Environmental Management Agency).

PERIOD OF RECORD.--October 1982 to September 1983.

GAGE.--Water-stage recorder. Altitude of gage is 25 ft, from topographic map.

REMARKS.--Records fair. Flow slightly regulated by reservoirs and pumping for irrigation upstream. Low flows augmented by irrigation return flows.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0345	3,090	9.75	Feb. 27	1330	3,610	10.42
Jan. 27	0845	2,980	9.59	Mar. 1	1430	*5,530	13.36
Jan. 29	0100	1,820	8.27				

Minimum daily discharge, 3.9 ft<sup>3</sup>/s Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	15	11	8.9	1570	20	125	21	21	17	18
2	11	13	7.5	11	64	846	20	18	22	21	17	20
3	11	16	5.8	11	14	326	18	17	22	18	18	23
4	11	15	5.3	8.9	10	54	17	16	21	17	19	23
5	11	16	4.7	8.8	26	42	18	14	23	17	17	22
6	12	16	4.8	9.0	13	63	15	11	23	16	19	22
7	12	16	4.7	9.5	25	33	16	10	22	18	20	19
8	12	13	5.7	9.1	58	30	16	11	21	17	17	14
9	13	208	8.1	9.0	14	22	16	11	21	18	16	11
10	16	35	8.5	8.9	14	17	18	13	23	18	15	12
11	19	14	8.0	9.6	17	17	16	15	23	18	15	15
12	19	6.9	6.9	11	20	15	16	15	23	20	16	20
13	13	7.1	5.9	12	26	21	17	15	22	18	17	24
14	15	6.4	6.1	11	24	47	16	17	21	21	15	24
15	13	6.4	6.2	10	27	18	16	17	27	21	52	23
16	12	6.0	6.3	10	27	16	17	16	25	20	115	23
17	12	5.6	6.0	9.5	28	103	23	17	22	18	55	26
18	12	5.7	7.3	8.1	30	264	104	18	22	14	20	25
19	11	34	7.5	17	30	134	26	20	22	12	22	24
20	12	5.8	7.4	9.4	29	88	188	20	22	13	26	41
21	14	5.0	6.3	7.9	31	104	51	20	21	14	22	26
22	14	4.2	227	15	31	56	24	26	19	16	22	23
23	14	4.2	44	205	33	52	24	24	20	18	15	23
24	16	4.1	8.0	87	88	143	24	26	22	18	10	23
25	26	3.9	7.4	7.1	12	89	23	27	21	18	8.2	22
26	18	3.9	10	4.0	63	55	22	25	23	18	7.2	22
27	16	5.4	8.8	583	121	36	20	23	21	17	6.2	21
28	13	5.5	11	30	69	32	26	22	21	18	13	21
29	12	24	9.6	265	---	26	304	24	21	19	15	30
30	14	632	9.9	26	---	24	51	22	21	19	16	225
31	11	---	11	17	---	18	---	21	---	18	17	---
TOTAL	426	1149.1	490.7	1450.8	952.9	4361	1182	676	658	549	679.6	865
MEAN	13.7	38.3	15.8	46.8	34.0	141	39.4	21.8	21.9	17.7	21.9	28.8
MAX	26	632	227	583	121	1570	304	125	27	21	115	225
MIN	11	3.9	4.7	4.0	8.9	15	15	10	19	12	6.2	11
AC-FT	845	2280	973	2880	1890	8650	2340	1340	1310	1090	1350	1720

WTR YR 1983 TOTAL 13440.1 MEAN 36.8 MAX 1570 MIN 3.9 AC-FT 26660

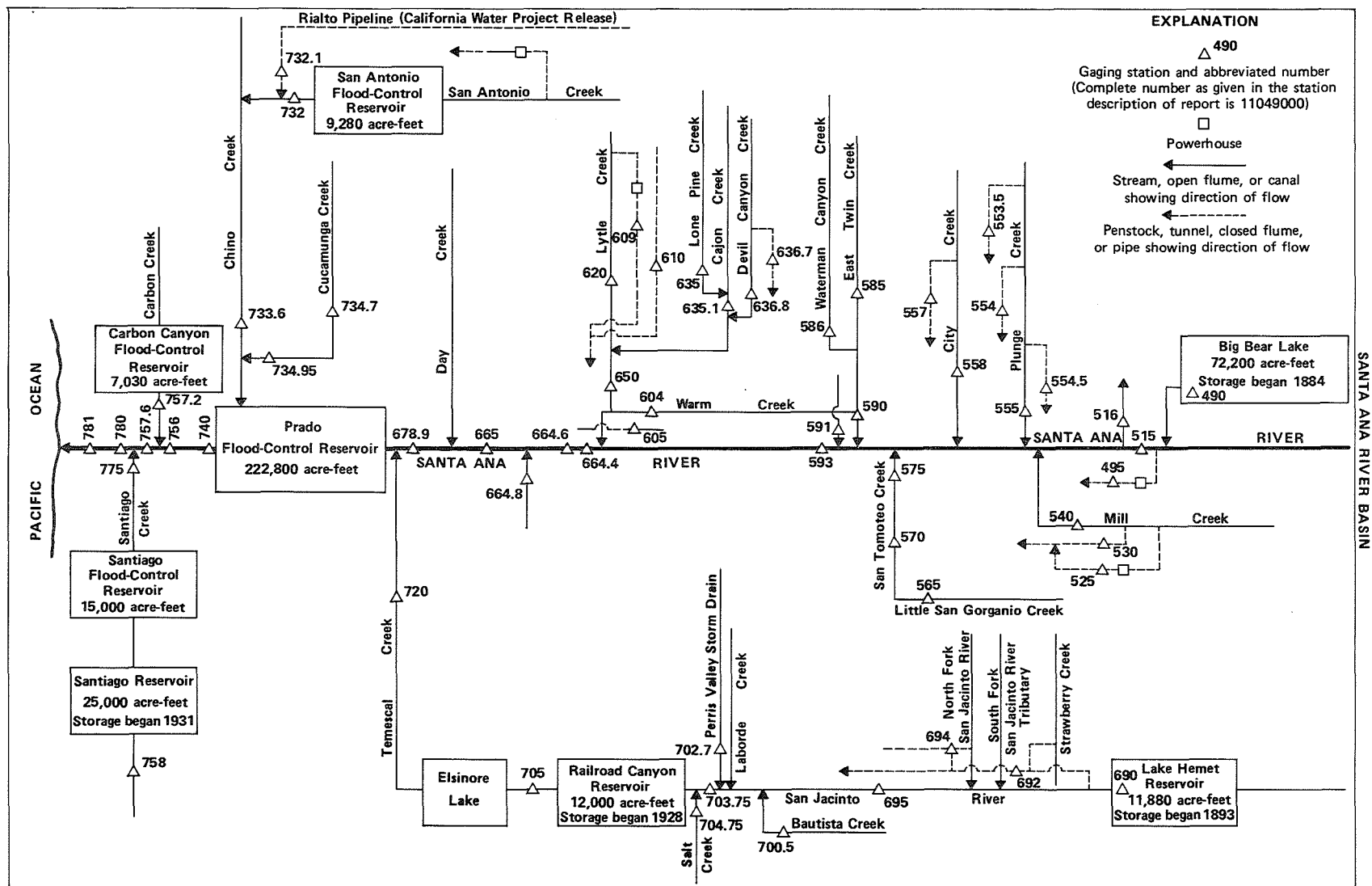


FIGURE 5. — Schematic diagram showing diversions and storage in Santa Ana River basin.

## 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 mi<sup>2</sup>, revised, 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 Co.

GAGE.--Nonrecording gage. Datum of gage is 6,670.9 ft National Geodetic Vertical Datum of 1929 (levels by Bear Valley Mutual Water Co). 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 furnished by Big Bear Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents unknown, lake spilled in 1916, 1917, 1922, 1923, 1938, 1939, 1959, 1970, 1980, 1983; lake dry October, November 1898, August to November 1899, October, November 1904.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 73,230 acre-ft Apr. 30, May 1; minimum contents observed, 64,420 acre-ft Nov. 1.

## MONTHEND CONTENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	66,260	--
Oct. 31.....	64,420	-1,840
Nov. 30.....	65,270	+850
Dec. 31.....	66,830	+1,560
CAL YR 1982.....	--	+11,130
Jan. 31.....	64,980	-1,850
Feb. 28.....	68,140	+3,160
Mar. 31.....	71,630	+3,490
Apr. 30.....	73,230	+1,600
May 31.....	72,360	-870
June 30.....	71,330	-1,030
July 31.....	69,860	-1,470
Aug. 31.....	69,860	0
Sept. 30.....	67,120	-2,740
WTR YR 1983.....	--	+860

## 11051500 SANTA ANA RIVER NEAR MENTONE, CA

LOCATION.--Lat 34°06'30", long 117°05'59", in NE 1/4 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 mi<sup>2</sup>, 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. Altitude of the main and supplementary gages is 1,950 ft, 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.--Records fair. 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: 69 years (water years 1915-83), 38.0 ft<sup>3</sup>/s, 27,530 acre-ft/yr.  
Combined river and canal: 87 years, 84.8 ft<sup>3</sup>/s, 61,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 52,300 ft<sup>3</sup>/s Mar. 2, 1938, gage height, 14.3 ft, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow at times in some years.  
Combined river and canal: Maximum discharge, 52,300 ft<sup>3</sup>/s Mar. 2, 1938; minimum daily 7.4 ft<sup>3</sup>/s Sept. 21, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Combined river and canal: Flood of Feb. 23, 1891, 53,700 ft<sup>3</sup>/s, from notes furnished by F. C. Finkle, consulting engineer, Los Angeles.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 3,280 ft<sup>3</sup>/s Feb. 27, gage height, 10.64 ft; minimum daily, 2.10 ft<sup>3</sup>/s several days during October.  
Combined river and canal: Maximum discharge, 3,280 ft<sup>3</sup>/s Feb. 27; minimum daily, 41 ft<sup>3</sup>/s Nov. 6, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.1	148	90	350	1300	371	608	340	114	41	18
2	2.7	2.7	104	88	208	1200	367	536	331	111	41	16
3	2.3	2.7	83	84	182	1010	362	475	294	109	39	17
4	2.5	2.5	66	64	176	755	344	492	282	104	38	18
5	2.3	2.7	47	62	156	589	323	519	278	104	36	14
6	2.1	2.3	32	80	109	525	302	367	270	99	36	14
7	2.1	2.3	15	122	46	503	274	310	251	97	42	13
8	2.1	2.3	13	122	312	503	231	362	200	95	45	20
9	2.1	13	17	122	248	470	211	367	176	92	45	25
10	2.9	25	18	114	159	331	211	371	166	88	46	25
11	2.3	12	13	36	90	294	211	362	166	82	38	25
12	2.1	6.8	13	17	78	239	204	344	162	80	37	28
13	2.1	5.1	13	12	70	219	176	340	156	74	33	49
14	2.7	4.8	12	6.7	64	200	156	323	150	72	32	33
15	2.7	4.6	8.4	5.9	59	189	144	327	147	70	34	48
16	2.3	3.8	5.5	5.5	52	226	141	335	144	70	62	48
17	2.7	3.5	4.8	5.5	49	282	144	331	141	68	79	49
18	2.3	3.8	4.6	5.2	48	371	200	323	141	66	141	49
19	2.5	24	4.3	8.6	46	340	176	323	141	62	107	51
20	2.1	18	4.0	5.9	41	353	251	331	156	62	57	54
21	2.5	6.1	3.8	4.8	37	254	376	340	138	61	51	66
22	2.3	5.8	370	67	34	235	306	349	133	61	43	56
23	2.1	6.8	499	144	34	251	314	358	130	57	38	56
24	2.3	5.5	227	110	38	449	306	362	127	56	33	54
25	2.1	4.6	189	140	45	353	298	358	127	54	31	52
26	22	4.6	159	122	125	254	290	358	130	54	30	54
27	46	7.2	141	668	952	235	282	353	119	52	26	36
28	5.5	5.1	133	620	755	316	286	349	116	49	24	33
29	4.3	4.3	114	655	---	531	506	358	114	46	23	37
30	3.8	491	90	497	---	475	692	358	114	45	21	54
31	3.5	---	54	454	---	385	---	353	---	43	20	---
TOTAL	145.1	686.0	2605.4	4538.1	4563	13637	8455	11642	5340	2297	1369	1112
MEAN	4.68	22.9	84.0	146	163	440	282	376	178	74.1	44.2	37.1
MAX	46	491	499	668	952	1300	692	608	340	114	141	66
MIN	2.1	2.3	3.8	4.8	34	189	141	310	114	43	20	13
AC-FT	288	1360	5170	9000	9050	27050	16770	23090	10590	4560	2720	2210
CAL YR 1982	TOTAL	11681.72	MEAN	32.0	MAX	650	MIN	.40	AC-FT	23170		
WTR YR 1983	TOTAL	56389.6	MEAN	155	MAX	1300	MIN	2.1	AC-FT	111800		

## SANTA ANA RIVER BASIN

11051500 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 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	45	148	166	366	1300	447	610	413	192	119	96
2	60	43	104	161	262	1200	447	574	409	188	119	95
3	59	43	83	156	251	1010	440	553	372	187	118	95
4	60	43	78	137	250	755	421	570	360	181	117	95
5	60	42	73	133	230	589	402	598	356	180	115	88
6	60	41	75	152	183	533	381	446	348	178	115	87
7	61	42	73	199	121	520	349	389	320	174	122	87
8	60	42	80	201	343	533	302	441	263	172	125	101
9	56	58	89	201	267	511	289	446	255	169	126	106
10	58	82	85	192	220	355	289	449	245	166	126	107
11	59	67	77	84	167	329	289	440	246	160	117	107
12	59	58	74	71	156	304	281	422	241	157	116	110
13	58	54	73	67	147	293	252	419	231	151	112	131
14	58	52	72	63	141	278	236	402	224	149	111	114
15	59	52	70	61	136	268	224	406	220	147	113	129
16	57	51	70	61	129	255	221	414	218	149	144	130
17	58	51	67	60	126	282	224	410	216	146	142	132
18	58	51	66	58	124	371	278	402	217	144	141	132
19	62	81	63	67	123	340	253	402	213	141	149	134
20	60	66	63	58	117	401	330	410	218	139	137	137
21	54	59	61	54	113	331	457	418	213	138	130	149
22	46	54	405	123	110	313	384	427	209	138	122	139
23	44	52	499	151	110	314	392	437	207	133	118	139
24	44	52	227	110	115	449	384	440	205	132	113	137
25	43	50	189	140	123	390	376	436	200	131	108	135
26	71	41	159	122	168	330	368	436	200	130	106	136
27	84	52	153	668	952	311	360	431	197	128	102	118
28	54	48	168	620	755	364	364	427	193	127	100	115
29	48	49	161	655	---	571	573	436	191	124	98	120
30	47	512	148	497	---	547	695	436	192	123	96	136
31	47	---	126	454	---	456	---	436	---	122	94	---
TOTAL	1765	2033	3879	5942	6305	14803	10708	13959	7597	4696	3671	3537
MEAN	56.9	67.8	125	192	225	478	357	450	253	151	118	118
MAX	84	512	499	668	952	1300	695	610	418	192	149	149
MIN	43	41	61	54	110	255	221	389	191	122	94	87
AC-FT	3500	4030	7690	11790	12510	29360	21240	27690	15070	9310	7280	7020
CAL YR 1982	TOTAL	31052	MEAN	85.1	MAX	683	MIN	33	AC-FT	61590		
WTR YR 1983	TOTAL	78895	MEAN	217	MAX	1300	MIN	41	AC-FT	156500		



WATER-QUALITY RECORDS

WATER TEMPERATURES: Water years 1982 to current year.  
SEDIMENT RECORDS: Water years 1982 to current year.

SEDIMENT RECORDS: January 1982 to current year.

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.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 10,100 mg/L Mar. 1, 2; minimum daily mean, 0 mg/L Oct. 1-5, 12-14.

SEDIMENT DISCHARGE: Maximum daily, 49,300 tons Mar. 1; minimum daily, 0 ton Oct. 1-5, 12-14.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
ONCE-DAILY

[illegible]

## SANTA ANA RIVER BASIN

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.8	0	0	3.1	1	.01	148	433	201
2	2.7	0	0	2.7	1	.01	104	175	49
3	2.3	0	0	2.7	2	.01	83	80	18
4	2.5	0	0	2.5	4	.03	66	45	8.0
5	2.3	0	0	2.7	4	.03	47	25	3.2
6	2.1	1	.01	2.3	3	.02	32	10	.86
7	2.1	1	.01	2.3	3	.02	15	5	.20
8	2.1	1	.01	2.3	3	.02	13	5	.18
9	2.1	1	.01	13	36	2.4	17	10	.46
10	2.9	2	.02	25	79	7.2	18	10	.49
11	2.3	2	.01	12	6	.19	13	5	.18
12	2.1	0	0	6.8	5	.09	13	5	.18
13	2.1	0	0	5.1	4	.06	13	4	.14
14	2.7	0	0	4.8	4	.05	12	3	.10
15	2.7	1	.01	4.6	3	.04	8.4	3	.07
16	2.3	1	.01	3.8	2	.02	5.5	2	.03
17	2.7	1	.01	3.5	2	.02	4.8	2	.03
18	2.3	2	.01	3.8	1	.01	4.6	2	.02
19	2.5	1	.01	24	47	4.9	4.3	2	.02
20	2.1	1	.01	18	22	1.6	4.0	2	.02
21	2.5	1	.01	6.1	5	.08	3.8	2	.02
22	2.3	1	.01	5.8	5	.08	370	2630	11900
23	2.1	1	.01	6.8	6	.11	499	2580	6540
24	2.3	1	.01	5.5	6	.09	227	780	965
25	2.1	1	.01	4.6	5	.06	189	310	158
26	22	48	9.2	4.6	5	.06	159	305	131
27	46	101	17	7.2	14	.37	141	310	118
28	5.5	5	.07	5.1	5	.07	133	280	101
29	4.3	2	.02	4.3	4	.05	114	190	58
30	3.8	2	.02	491	3810	10600	90	100	24
31	3.5	1	.01	---	---	---	54	40	5.8
TOTAL	145.1	---	26.50	686.0	---	10617.70	2605.4	---	20283.00

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	90	100	24	350	165	156	1300	10100	49300
2	88	90	21	208	40	22	1200	10100	34400
3	84	80	18	182	30	15	1010	7500	20500
4	64	60	10	176	30	14	755	1800	3670
5	62	40	6.7	156	25	11	589	550	875
6	80	70	15	109	15	4.4	525	350	496
7	122	210	69	46	5	.62	503	250	340
8	122	220	72	312	135	149	503	255	346
9	122	200	66	248	50	33	470	235	298
10	114	160	49	159	25	11	331	180	161
11	36	25	24	90	10	2.4	294	180	143
12	17	5	.23	78	10	2.1	239	140	90
13	12	3	.10	70	10	1.9	219	130	77
14	6.7	3	.05	64	5	.86	200	75	41
15	5.9	2	.03	59	8	1.3	189	55	28
16	5.5	1	.01	52	5	.70	226	45	27
17	5.5	1	.01	49	5	.66	282	80	61
18	5.2	5	.07	48	5	.65	371	120	120
19	8.6	15	.35	46	5	.62	340	110	101
20	5.9	5	.08	41	5	.55	353	75	71
21	4.8	3	.04	37	5	.50	254	65	45
22	67	15	2.7	34	5	.46	235	55	35
23	144	380	148	34	5	.46	251	40	27
24	110	300	89	38	5	.51	449	262	370
25	140	380	144	45	5	.61	353	90	86
26	122	185	61	125	23	12	254	50	34
27	668	4670	11600	952	6300	37900	235	30	19
28	620	1300	2180	755	4000	8150	316	80	68
29	655	1910	4280	---	---	---	531	310	444
30	497	395	530	---	---	---	475	180	231
31	454	320	392	---	---	---	385	155	161
TOTAL	4538.1	---	19802.37	4563	---	46492.30	13637	---	112665

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	371	150	150	608	1050	1720	340	170	156
2	367	150	149	536	900	1300	331	160	143
3	362	150	147	475	300	385	294	120	95
4	344	130	121	492	250	332	282	90	69
5	323	95	83	519	325	455	278	90	68
6	302	90	73	367	260	258	270	86	63
7	274	65	48	310	260	218	251	105	71
8	231	42	26	362	210	205	200	70	38
9	211	45	26	367	175	173	176	35	17
10	211	45	26	371	175	175	166	30	13
11	211	30	17	362	110	108	166	25	11
12	204	40	22	344	85	79	162	25	11
13	176	25	12	340	100	92	156	25	11
14	156	15	6.3	323	90	78	150	30	12
15	144	10	3.9	327	70	62	147	25	9.9
16	141	8	3.0	335	70	63	144	30	12
17	144	10	3.9	331	60	54	141	25	9.5
18	200	45	24	323	60	52	141	20	7.6
19	176	28	13	323	55	48	141	20	7.6
20	251	93	77	331	50	45	156	40	17
21	376	256	284	340	47	43	138	15	5.6
22	306	90	74	349	50	47	133	25	9.0
23	314	80	68	358	100	97	130	25	8.8
24	306	75	62	362	110	108	127	25	9.6
25	298	70	56	358	103	100	127	15	5.1
26	290	65	51	358	170	164	130	20	7.0
27	282	90	69	353	185	176	119	15	4.8
28	286	170	131	349	175	165	116	15	4.7
29	506	410	701	358	170	164	114	15	4.6
30	692	1190	2280	358	170	164	114	10	3.1
31	---	---	---	353	170	162	---	---	---
TOTAL	8455	---	4807.1	11642	---	7292	5340	---	902.9
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	114	15	4.6	41	4	.44	18	2	.10
2	111	10	3.0	41	5	.55	16	3	.13
3	109	15	4.4	39	3	.32	17	1	.05
4	104	15	4.2	38	3	.31	18	3	.15
5	104	12	3.4	36	3	.29	14	3	.11
6	99	11	2.9	36	3	.29	14	3	.11
7	97	10	2.6	42	3	.34	13	1	.04
8	95	10	2.6	45	4	.49	20	7	.38
9	92	11	2.7	45	5	.61	25	5	.34
10	88	10	2.4	46	6	.75	25	5	.34
11	82	9	2.0	38	4	.41	25	5	.34
12	80	8	1.7	37	5	.50	28	6	.45
13	74	8	1.6	33	5	.45	49	34	6.8
14	72	7	1.4	32	5	.43	33	7	.62
15	70	7	1.3	34	5	.46	48	5	.65
16	70	7	1.3	62	31	5.2	48	6	.78
17	68	6	1.1	79	71	26	49	5	.66
18	66	6	1.1	141	88	34	49	6	.79
19	62	6	1.0	107	19	6.4	51	5	.69
20	62	6	1.0	57	6	.92	54	6	.87
21	61	5	.82	51	5	.69	66	13	2.3
22	61	7	1.2	43	5	.58	56	10	1.5
23	57	6	.92	38	4	.41	56	5	.76
24	56	6	.91	33	3	.27	54	6	.87
25	54	6	.87	31	2	.17	52	5	.70
26	54	5	.73	30	3	.24	54	8	1.2
27	52	5	.70	26	3	.21	36	3	.29
28	49	5	.66	24	2	.13	33	2	.18
29	46	5	.62	23	2	.12	37	1	.10
30	45	4	.49	21	2	.11	54	8	1.2
31	43	4	.46	20	1	.05	---	---	---
TOTAL	2297	---	54.68	1369	---	82.14	1112	---	23.50
YEAR	56389.6		223049.2						

## SANTA ANA RIVER BASIN

11051500 SANTA ANA RIVER NEAR MENTONE, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	TEMPER- ATURE (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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 27...	1400	17.0	35	101	9.5	--	--	--
JAN 29...	1055	7.5	639	1790	3090	6	6	7
FEB 27...	1350	10.0	2310	11500	71700	--	8	10
MAR 01...	1400	10.0	1050	10800	30600	--	4	5
APR 30...	0715	9.0	810	1650	3610	10	11	15
MAY 09...	0640	11.0	380	175	176	--	--	--

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
OCT 27...	--	--	86	90	94	100	--	--
JAN 29...	8	10	12	18	40	78	97	100
FEB 27...	16	24	--	--	--	--	--	--
MAR 01...	8	11	16	24	39	60	83	97
APR 30...	20	26	33	47	64	85	97	99
MAY 09...	--	--	41	46	57	82	100	--

## 11054000 MILL CREEK NEAR YUCAIPA, CA

LOCATION.--Lat 34°05'27", long 117°02'12", in NW 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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. Datum 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.--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: 55 years (water years 1920-38, 1948-83), 16.6 ft<sup>3</sup>/s, 12,030 acre-ft/yr.  
Combined creek and canals: 55 years, 38.7 ft<sup>3</sup>/s, 28,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,400 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 16.8 ft, from floodmark, from rating curve extended above 1,100 ft<sup>3</sup>/s on basis of two field estimates at gage height 14.5 ft and slope-area measurement of maximum flow; no flow at times in some years.  
Combined creek and canals: Maximum discharge, 35,400 ft<sup>3</sup>/s Jan. 25, 1969; minimum daily, 2.7 ft<sup>3</sup>/s Feb. 23, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Creek only		Combined Creek and Canals	
		Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	
Nov. 30	1100	*587	7.83	*587	
Dec. 22	2300	516	7.67	516	
Jan. 27	1730	123	6.83	147	
Feb. 8	0500	110	6.75	152	
Feb. 27	1400	551	7.75	551	
Mar. 1	1700	440	7.50	440	
Mar. 17	1730	269	7.14	298	
Mar. 24	0500	241	7.00	282	
Apr. 29	0600	274	7.15	323	
Aug. 9	1600	137	6.95	165	

Creek only: Minimum daily discharge, 0.04 ft<sup>3</sup>/s several days during October

Combined creek and canals: Minimum daily discharge, 21 ft<sup>3</sup>/s Dec. 2, 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.10	32	.61	4.3	207	101	169	284	75	9.9	9.9
2	.05	.10	21	.61	4.0	206	110	145	241	72	11	8.9
3	.05	.10	10	.61	3.3	182	113	127	206	70	12	9.9
4	.05	.10	.30	.30	2.8	127	107	127	197	68	15	12
5	.05	.20	.29	.17	2.8	90	104	134	193	70	12	7.1
6	.05	.23	.26	.17	2.8	84	101	145	190	68	8.9	9.4
7	.04	.20	.23	.14	1.9	82	98	153	193	59	14	9.4
8	.04	.26	.20	.14	44	82	90	174	165	57	27	7.5
9	.04	5.9	.17	.14	13	84	87	186	149	56	31	5.9
10	.04	6.5	.17	.14	3.5	84	90	186	153	57	22	4.9
11	.04	.26	.17	.14	3.3	84	87	190	157	52	8.4	5.9
12	.04	.14	.17	.14	1.7	84	87	182	161	48	5.2	5.9
13	.04	.14	.17	.14	.67	84	87	169	161	43	4.9	5.6
14	.04	.14	.17	.14	.38	98	84	165	157	42	5.2	5.9
15	.04	.12	.14	.14	.30	90	77	178	149	37	31	5.2
16	.04	.12	.14	.20	.26	82	75	190	145	36	79	4.3
17	.04	.10	.14	.26	.23	125	77	190	141	33	79	7.5
18	.04	.10	.20	.17	.43	169	95	165	141	29	82	7.5
19	.04	1.1	.30	.58	.43	145	90	161	130	30	68	6.7
20	.04	.09	.26	.17	.43	137	107	193	127	39	61	7.1
21	.04	.09	.20	.17	.49	141	137	218	122	29	57	8.9
22	.04	.09	70	.44	.43	123	120	236	117	20	47	5.9
23	.04	.09	65	26	.38	116	113	214	112	20	35	5.6
24	.04	.09	5.9	20	.34	151	120	232	108	20	25	7.9
25	.04	.09	4.0	9.6	.34	110	107	232	108	19	20	8.4
26	1.3	.09	1.3	3.5	30	95	104	250	98	18	20	6.3
27	.14	.09	.83	53	203	98	101	314	93	23	18	5.6
28	.20	.12	.83	26	110	107	101	274	89	24	16	7.1
29	.20	.20	.75	47	---	104	202	236	84	16	14	13
30	.10	96	.67	13	---	107	223	255	79	14	13	35
31	.10	---	.67	5.6	---	107	---	304	---	9.9	12	---
TOTAL	3.10	112.95	216.63	209.42	435.51	3585	3195	6094	4450	1253.9	863.5	250.2
MEAN	.10	3.76	6.99	6.76	15.6	116	106	197	148	40.4	27.9	8.34
MAX	1.3	.96	.70	.53	.203	.207	.223	.314	.284	.75	.82	.35
MIN	.04	.09	.14	.14	.23	.82	.75	.127	.79	9.9	4.9	4.3
AC-FT	6.1	224	430	415	864	7110	6340	12090	8830	2490	1710	496
CAL YR 1982	TOTAL	3792.84	MEAN	10.4	MAX	111	MIN	.04	AC-FT	7520		
WTR YR 1983	TOTAL	20669.21	MEAN	56.6	MAX	314	MIN	.04	AC-FT	41000		

## SANTA ANA RIVER BASIN

## 11054000 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 1982 TO SEPTEMBER 1983

## MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	32	28	41	207	146	175	313	124	68	55
2	24	25	21	27	43	206	154	166	269	120	68	54
3	23	25	26	27	41	182	155	162	242	116	68	52
4	23	25	28	26	39	137	151	163	236	114	67	51
5	23	24	27	26	39	117	151	176	232	118	68	46
6	23	24	25	26	39	111	145	191	226	119	67	45
7	23	24	26	26	39	112	142	199	230	110	63	45
8	23	24	25	26	77	111	138	222	213	107	74	45
9	23	31	26	26	51	113	135	235	197	106	78	44
10	23	33	26	26	47	112	139	240	201	97	64	44
11	24	29	25	25	46	113	137	236	207	99	65	42
12	24	28	23	25	45	113	138	237	208	102	65	43
13	24	28	22	26	44	113	135	224	206	99	63	45
14	24	27	21	26	43	127	134	220	201	99	60	43
15	24	27	21	26	44	122	133	234	195	96	65	42
16	24	25	22	26	43	119	131	245	193	96	85	43
17	24	25	22	27	43	158	132	239	189	93	85	45
18	24	25	22	26	44	196	147	214	190	89	85	43
19	24	35	22	31	44	173	137	211	177	88	72	44
20	24	29	22	28	43	167	156	239	174	88	67	46
21	24	27	22	27	42	171	176	263	170	85	66	46
22	23	25	88	30	42	156	161	262	163	83	68	43
23	23	25	77	29	44	153	157	239	159	78	69	43
24	23	24	30	34	45	191	163	255	154	72	67	42
25	25	24	30	38	45	156	156	258	150	79	63	41
26	36	24	29	34	54	140	159	276	148	79	61	43
27	32	24	29	77	203	137	155	339	145	74	59	44
28	29	24	30	46	110	140	155	301	140	73	57	42
29	26	24	30	68	---	149	217	264	135	74	56	47
30	26	106	30	42	---	153	225	284	130	70	56	65
31	26	---	29	43	---	152	---	332	---	69	55	---
TOTAL	764	865	908	998	1480	4507	4560	7301	5793	2916	2074	1373
MEAN	24.6	28.8	29.3	32.2	52.9	145	152	236	193	94.1	66.9	45.8
MAX	36	106	88	77	203	207	225	339	313	124	85	65
MIN	23	24	21	25	39	111	131	162	130	69	55	41
AC-FT	1520	1720	1800	1980	2940	8940	9040	14480	11490	5780	4110	2720
CAL YR 1982	TOTAL	14330	MEAN	39.3	MAX	120	MIN	17	AC--FT	28420		
WTR YR 1983	TOTAL	33539	MEAN	91.9	MAX	339	MIN	21	AC-FT	66520		

## 11054000 MILL CREEK NEAR YUCAIPA, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1982 to September 1983.

WATER TEMPERATURES: November 1982 to September 1983.

SEDIMENT RECORDS: November 1982 to September 1983.

REMARKS.--Periodic suspended sediment sample concentrations November 1982 to September 1983 given in table below:

## SUSPENDED SEDIMENT MEASUREMENTS, NOVEMBER 1982 TO SEPTEMBER 1983

DATE	TIME	WATER TEMPER- ATURE (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDIMENT CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)
Nov. 10, 1982	0915	8.0	--	24	--
Nov. 30	0900	10.5	--	1,020	--
Dec. 1	1115	8.0	31	94	7.9
Dec. 28	1130	8.5	.79	5	.01
Jan. 5, 1983	1100	9.5	.16	0	--
Jan. 23	1045	10.0	30	96	7.8
Jan. 27	0945	10.0	30	567	46
Jan. 29	0930	7.5	50	361	49
Feb. 8	1010	9.0	59	449	72
Feb. 11	1310	14.5	3.3	12	.11
Feb. 27	1435	9.0	530	21,700	31100
Mar. 7	1535	12.0	80	33	7.1
Mar. 16	1055	10.5	85	170	39
Mar. 28	1020	10.5	116	42	13
Apr. 6	1225	10.0	101	50	14
Apr. 9	1125	13.0	87	48	11
Apr. 30	0750	9.0	250	751	507
May 7	1105	13.0	153	77	32
May 21	1100	14.0	223	1,160	698
June 6	0900	12.0	193	135	70
June 21	1300	14.0	122	26	8.6
June 29	1345	17.5	85	26	6.0
July 9	1200	18.0	56	9	1.4

## SANTA ANA RIVER BASIN

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA

LOCATION.--Lat 34°07'06", long 117°08'27", in SW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--Creek only: 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. Altitude of creek gage is 1,590 ft, from topographic map. Prior to Oct. 1, 1969, creek gage at datum 4.00 ft higher. Diversions are all at different datums.

REMARKS.--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: 64 years, 7.00 ft<sup>3</sup>/s, 5,070 acre-ft/yr.  
Combined creek and diversions: 32 years, 9.37 ft<sup>3</sup>/s, 6,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 5,340 ft<sup>3</sup>/s Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow for part of most years.

Combined creek and diversions: Maximum discharge, 4,770 ft<sup>3</sup>/s Dec. 6, 1966; no flow Nov. 12, 1964, Sept. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 520 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 9.20 ft:

Date	Time	Creek only	Gage height (ft)	Combined Creek and Diversions
		Discharge (ft <sup>3</sup> /s)		Discharge (ft <sup>3</sup> /s)
Nov. 30	Unknown	476	5.24	476
Dec. 22	2300	1,130	6.11	1,130
Jan. 27	1900	755	4.80	755
Feb. 8	0600	254	4.35	254
Feb. 27	1400	*1,360	5.30	*1,360
Mar. 1	1530	755	4.80	755
Apr. 21	0330	400	4.50	400
Apr. 29	1430	294	4.39	294
Aug. 17	1845	502	4.59	511

Creek only: Minimum daily discharge, 0.01 ft<sup>3</sup>/s Nov. 6, 7.

Combined creek and diversions: Minimum daily discharge, 1.6 ft<sup>3</sup>/s Oct. 10, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.11	22	9.3	35	216	60	76	14	7.5	2.3	2.8
2	.41	.09	14	8.8	37	163	52	62	14	7.0	2.1	3.1
3	.18	.09	10	8.2	36	210	48	58	14	6.5	1.9	2.4
4	.35	.03	8.6	7.0	29	197	45	52	13	6.0	1.9	1.5
5	.04	.03	7.5	7.0	35	129	42	47	13	5.5	1.8	1.1
6	.03	.01	6.9	7.0	36	102	38	41	13	5.5	1.7	1.0
7	.04	.01	6.7	6.4	39	80	35	39	13	5.0	1.9	1.1
8	.04	.03	6.2	6.4	99	67	33	38	13	4.8	1.9	1.1
9	.04	1.7	6.2	6.4	64	56	32	37	13	4.6	2.2	1.1
10	.03	11	6.0	6.2	56	48	31	37	12	4.4	2.2	1.2
11	.03	4.9	5.7	6.0	45	45	31	35	12	4.4	2.0	1.2
12	.03	2.1	5.5	5.5	40	40	32	34	12	4.3	1.9	1.1
13	.02	.68	5.3	3.6	37	40	31	33	11	4.2	1.8	1.3
14	.02	1.2	5.1	1.4	32	57	28	31	9.8	4.1	1.8	1.1
15	.02	.90	5.1	1.4	28	40	26	28	8.3	4.0	3.9	.91
16	.02	.68	4.9	1.4	25	35	25	27	8.0	3.8	7.9	.91
17	.02	.54	4.7	1.2	22	52	24	26	7.8	3.8	40	.92
18	.02	.35	4.7	.97	21	93	42	23	7.2	3.8	14	.91
19	.02	19	4.7	7.2	20	76	31	20	7.2	2.8	13	.97
20	.03	4.9	4.5	4.0	19	63	92	19	7.5	2.6	9.1	1.2
21	.04	2.9	4.5	3.2	18	88	218	18	7.5	2.5	7.2	1.3
22	.04	1.7	130	4.0	18	74	74	18	7.5	2.5	5.4	1.3
23	.04	1.1	78	57	17	72	57	17	7.5	2.3	2.8	1.3
24	.04	.83	28	42	19	108	46	16	7.5	2.3	3.1	1.3
25	.04	.61	21	39	19	90	41	16	7.2	2.3	2.9	1.3
26	8.4	.61	16	23	31	78	37	16	7.8	2.3	2.1	1.3
27	3.6	.23	14	232	261	74	35	15	8.0	2.1	2.1	1.4
28	.54	.23	12	74	108	74	33	14	8.0	2.0	2.4	1.5
29	.03	.23	8.8	71	---	74	155	14	7.5	2.2	2.5	2.1
30	.02	108	8.8	56	---	72	108	14	7.5	2.5	2.6	7.0
31	.04	---	8.8	42	---	67	---	14	---	2.4	2.7	---
TOTAL	15.19	164.79	474.2	748.57	1246	2680	1582	935	298.8	120.0	151.1	46.72
MEAN	.49	5.49	15.3	24.1	44.5	86.5	52.7	30.2	9.96	3.87	4.87	1.56
MAX	8.4	108	130	232	261	216	218	76	14	7.5	40	7.0
MIN	.02	.01	4.5	.97	17	35	24	14	7.2	2.0	1.7	.91
AC-FT	30	327	941	1480	2470	5320	3140	1850	593	238	300	93
CAL YR 1982	TOTAL	2897.12	MEAN	7.94	MAX	186	MIN	0	AC-FT	5750		
WTR YR 1983	TOTAL	8462.37	MEAN	23.2	MAX	261	MIN	.01	AC-FT	16790		



## 11055500 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 1982 TO SEPTEMBER 1983

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.3	22	9.3	35	216	60	76	18	11	5.3	5.9
2	2.6	2.2	14	8.8	37	163	52	62	18	10	4.9	6.1
3	2.1	2.2	10	8.2	36	210	48	58	18	9.8	4.5	5.6
4	2.3	2.0	8.6	7.0	29	197	45	52	17	9.3	4.4	4.8
5	1.9	2.0	7.5	7.0	35	129	42	47	17	8.7	4.2	4.3
6	1.9	2.0	6.9	7.0	36	102	38	41	17	8.6	4.0	4.2
7	2.0	2.1	6.7	6.4	39	80	35	39	17	8.0	4.5	4.2
8	1.9	2.3	6.2	6.4	99	67	33	38	16	7.9	4.5	4.3
9	1.7	4.6	6.2	6.4	64	56	32	37	16	7.6	5.0	4.3
10	1.6	14	6.0	6.2	56	48	31	37	15	7.3	5.1	4.2
11	1.8	7.9	5.7	6.0	45	45	31	35	15	7.2	4.7	4.1
12	1.8	5.0	5.5	5.5	40	40	32	34	15	7.0	4.4	3.9
13	1.8	3.6	5.3	5.1	37	40	32	33	15	6.7	4.2	4.0
14	1.7	4.0	5.1	5.3	32	57	31	31	14	6.6	4.2	4.1
15	1.7	4.2	5.1	5.3	28	40	29	28	12	6.5	7.3	4.0
16	1.7	4.1	4.9	5.4	25	35	28	27	12	6.4	13	4.0
17	1.7	4.2	4.7	5.2	22	52	27	26	12	6.4	44	3.9
18	1.7	3.8	4.7	5.0	21	93	46	26	11	6.3	14	3.8
19	1.7	21	4.7	11	20	76	34	24	11	5.7	13	4.0
20	1.8	7.0	4.5	7.2	19	63	96	23	11	5.7	9.1	4.4
21	1.8	6.2	4.5	6.4	18	88	222	22	11	5.6	7.2	4.4
22	1.7	5.3	130	7.3	18	74	75	22	11	5.5	6.0	4.3
23	1.6	4.8	78	58	17	72	57	21	11	5.2	5.9	4.2
24	1.7	5.0	28	42	19	108	46	20	11	5.2	7.1	3.9
25	1.8	5.0	21	39	19	90	41	20	11	5.1	6.7	3.8
26	11	4.8	16	23	31	78	37	20	12	5.1	5.5	3.8
27	7.2	4.5	14	232	261	74	35	19	12	5.3	5.4	4.1
28	3.7	4.6	12	74	108	74	33	18	12	5.4	5.5	4.2
29	2.5	4.7	8.8	71	---	74	155	18	11	5.5	5.5	5.7
30	2.4	109	8.8	56	---	72	108	18	11	5.7	5.6	12
31	2.4	---	8.8	42	---	67	---	18	---	5.5	5.7	---
TOTAL	76.7	254.4	474.2	784.4	1246	2680	1611	990	410	211.8	230.4	138.5
MEAN	2.47	8.48	15.3	25.3	44.5	86.5	53.7	31.9	13.7	6.83	7.43	4.62
MAX	11	109	130	232	261	216	222	76	18	11	44	12
MIN	1.6	2.0	4.5	5.0	17	35	27	18	11	5.1	4.0	3.8
AC-FT	152	505	941	1560	2470	5320	3200	1960	813	420	457	275
CAL YR 1982	TOTAL	3488.3	MEAN	9.56	MAX	186	MIN	0.81	AC-FT	6920		
WTR YR 1983	TOTAL	9107.4	MEAN	25.0	MAX	261	MIN	1.6	AC-FT	18060		

## SANTA ANA RIVER BASIN

11055800 CITY CREEK NEAR HIGHLAND, CA

LOCATION.--Lat 34°08'38", long 117°11'16", in SE 1/4 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 mi<sup>2</sup>.

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. Altitude of creek gage is 1,580 ft, from topographic map. Prior to Mar. 1, 1939, at site 0.2 mi downstream at different datum. Canal gage at different datum.

REMARKS.--Records fair. 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: 64 years, 9.95 ft<sup>3</sup>/s, 7,210 acre-ft/yr.

Combined creek and canal: 59 years, 11.6 ft<sup>3</sup>/s, 8,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 7,000 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 9.39 ft, from rating curve extended above 580 ft<sup>3</sup>/s on basis of slope-area estimate at gage height 8.82 ft; no flow for several months in some years.

Combined creek and canal: Maximum discharge, 7,000 ft<sup>3</sup>/s Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 250 ft<sup>3</sup>/s on basis of slope-area estimate at gage height 8.82 ft:

Date	Time	Creek only Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Combined Creek and Canal Discharge (ft <sup>3</sup> /s)
Nov. 30	1000	266	6.35	266
Dec. 22	2215	504	7.03	504
Jan. 27	1745	762	6.36	762
Feb. 8	0530	309	5.46	309
Feb. 27	1400	*1,140	6.89	*1,140
Mar. 1	1530	609	6.11	609
Apr. 21	0115	209	5.12	209
Apr. 29	1030	189	5.03	189
Aug. 17	1745	582	6.06	584

Creek only: Minimum daily discharge, 0.28 ft<sup>3</sup>/s Oct. 14.

Combined creek and canal: Minimum daily discharge, 1.8 ft<sup>3</sup>/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.4	20	8.7	34	243	60	82	32	17	6.0	6.1
2	.79	2.7	14	8.7	34	269	56	74	31	18	5.9	6.3
3	.53	2.5	11	8.6	38	235	53	68	30	17	5.9	5.7
4	.59	2.6	9.9	8.6	29	153	51	66	28	16	5.7	5.4
5	.71	2.5	9.4	8.7	27	124	50	63	27	15	5.5	5.2
6	.51	2.6	9.0	8.7	25	107	47	60	25	15	5.2	5.1
7	.84	3.1	8.9	8.2	27	93	45	57	24	14	5.7	5.1
8	.84	3.6	8.9	7.7	124	81	42	54	24	12	5.5	5.1
9	.34	10	9.0	7.5	63	71	41	53	24	11	6.5	5.1
10	.40	22	9.0	7.2	49	64	40	51	23	11	6.6	5.0
11	.35	12	8.7	6.9	40	59	40	49	23	11	5.8	4.8
12	.34	9.5	8.7	6.9	34	55	43	47	23	10	5.2	4.7
13	.29	8.1	8.6	6.8	31	53	40	46	20	8.8	4.8	4.8
14	.28	7.0	8.4	6.5	28	69	37	45	20	8.6	4.7	4.8
15	.35	6.2	8.3	6.5	25	52	35	43	20	8.7	7.1	4.8
16	.37	5.6	8.1	6.5	24	48	33	42	21	9.4	10	4.8
17	.41	5.6	8.1	6.5	22	63	32	40	20	9.4	53	4.9
18	.60	5.7	8.1	6.5	21	103	47	39	20	8.8	25	4.8
19	.78	19	8.0	10	19	90	37	38	20	8.4	23	4.9
20	.93	11	7.9	7.6	18	78	62	37	20	7.8	15	5.4
21	.93	9.1	8.0	7.2	17	97	114	36	19	7.4	12	5.5
22	.65	7.9	67	8.6	17	89	71	35	18	7.4	11	5.4
23	.46	7.2	41	22	17	86	61	34	17	7.3	9.8	5.4
24	.67	6.6	17	17	17	106	56	32	17	7.2	8.3	5.3
25	1.3	6.0	13	17	17	95	52	30	18	7.1	7.0	5.1
26	9.6	5.6	12	13	24	87	49	29	18	7.0	6.5	5.1
27	7.0	5.6	11	222	264	81	47	27	18	7.0	6.2	5.4
28	4.6	5.6	10	92	145	77	46	26	17	6.8	6.0	5.6
29	3.7	5.9	9.6	94	---	73	105	25	17	6.5	5.9	7.5
30	3.6	69	8.8	56	---	69	94	26	16	6.3	5.8	14
31	3.9	---	8.8	42	---	65	---	30	---	6.1	5.7	---
TOTAL	48.16	273.2	398.2	744.1	1230	3035	1586	1384	650	313.0	296.3	167.1
MEAN	1.55	9.11	12.8	24.0	43.9	97.9	52.9	44.6	21.7	10.1	9.56	5.57
MAX	9.6	69	67	222	264	269	114	82	32	18	53	14
MIN	.28	2.5	7.9	6.5	17	48	32	25	16	6.1	4.7	4.7
AC-FT	96	542	790	1480	2440	6020	3150	2750	1290	621	588	331

CAL YR 1982 TOTAL 3467.65 MEAN 9.50 MAX 176 MIN .06 AC-FT 6880  
WTR YR 1983 TOTAL 10125.06 MEAN 27.7 MAX 269 MIN .28 AC-FT 20080

## 11055800 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 1982 TO SEPTEMBER 1983

## MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.8	20	8.7	34	244	60	82	32	17	7.6	7.8
2	2.7	4.0	14	8.7	34	270	57	74	31	18	7.5	7.9
3	2.3	3.7	11	8.6	38	236	54	68	30	17	7.4	7.3
4	2.3	3.9	9.9	8.6	29	154	51	66	28	16	7.1	6.9
5	2.4	3.8	9.4	8.7	27	124	50	63	27	15	6.8	6.7
6	2.1	3.9	9.0	8.7	25	107	47	60	25	15	6.5	6.6
7	2.4	4.3	8.9	8.2	27	93	45	57	24	14	7.3	6.6
8	2.4	4.8	8.9	7.7	124	81	42	54	24	13	7.1	6.6
9	1.8	10	9.0	7.5	63	71	41	53	24	12	8.2	6.6
10	1.9	22	9.0	7.4	49	64	40	51	23	12	8.4	6.5
11	2.0	12	8.7	7.1	40	59	40	49	23	12	7.5	6.2
12	2.0	9.5	8.7	7.1	34	55	43	47	23	11	6.8	6.0
13	2.1	8.1	8.6	6.9	31	53	40	46	20	10	6.3	6.1
14	2.1	7.0	8.4	6.6	28	69	37	45	20	10	6.3	6.1
15	2.2	6.2	8.3	6.6	25	52	35	43	20	10	9.1	6.1
16	2.2	5.6	8.1	6.6	24	48	33	42	21	11	12	6.1
17	2.0	5.6	8.1	6.6	22	63	32	40	20	11	55	6.2
18	2.1	5.7	8.1	6.5	21	103	47	39	20	11	26	6.1
19	2.3	19	8.0	10	19	90	37	38	20	10	24	6.2
20	2.5	11	7.9	7.6	18	78	62	37	20	9.5	16	6.9
21	2.5	9.1	8.0	7.2	17	97	114	36	19	9.0	12	7.0
22	2.2	7.9	67	8.6	17	89	71	35	18	9.0	11	6.9
23	2.0	7.2	42	22	17	86	61	34	17	8.9	9.9	6.9
24	2.3	6.6	17	17	17	107	56	32	17	8.9	9.5	6.8
25	3.0	6.0	13	17	17	96	52	30	18	8.8	8.9	6.5
26	12	5.6	12	13	24	88	49	29	18	8.8	8.3	6.6
27	8.7	5.6	11	222	265	82	47	27	18	8.8	7.9	7.0
28	6.1	5.6	10	92	145	78	46	26	17	8.6	7.7	7.2
29	5.1	5.9	9.6	94	---	74	105	25	17	8.3	7.6	9.1
30	5.0	69	8.8	56	---	70	94	26	16	8.0	7.4	16
31	5.3	---	8.8	42	---	66	---	30	---	7.7	7.3	---
TOTAL	99.5	283.4	399.2	745.2	1231	3047	1588	1384	650	349.3	340.4	211.5
MEAN	3.21	9.45	12.9	24.0	44.0	98.3	52.9	44.6	21.7	11.3	11.0	7.05
MAX	12	69	67	222	265	270	114	82	32	18	55	16
MIN	1.8	3.7	7.9	6.5	17	48	32	25	16	7.7	6.3	6.0
AC-FT	197	562	792	1480	2440	6040	3150	2750	1290	693	675	420
CAL YR 1982	TOTAL	3783.47	MEAN	10.4	MAX	176	MIN	.61	AC-FT	7500		
WTR YR 1983	TOTAL	10328.5	MEAN	28.3	MAX	270	MIN	1.8	AC-FT	20490		

## 11056500 LITTLE SAN GORGONIO CREEK NEAR BEAUMONT, CA

LOCATION.--Lat 34°01'45", long 116°56'43", in NW 1/4 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 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR-CA-79-1: 1969(M).

GAGE.--Water-stage recorder and v-notched concrete control. Altitude of gage is 4,320 ft, from topographic map. July 30, 1970 to September 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.--Records poor. No regulation above station. Several small diversions above station for irrigation. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--35 years, 0.65 ft<sup>3</sup>/s, 471 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 8.50 ft, from flood-marks, from rating curve extended above 32 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 2.18 ft, 3.45 ft, and 8.50 ft; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 3.8 ft<sup>3</sup>/s on basis of field estimate at gage-height 5.21 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1030	Unknown	Unknown	Feb. 27	1300	*53	5.21
Dec. 22	2230	Unknown	Unknown				

Minimum daily discharge, 0.36 ft<sup>3</sup>/s Oct. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.48	1.0	.83	.70	5.8	3.4	2.3	2.0	1.9	1.6	1.1
2	.37	.50	.90	.78	.76	6.3	3.2	2.2	2.0	2.1	1.6	1.1
3	.36	.50	.81	.77	.70	7.1	3.0	2.1	2.0	2.3	1.6	1.2
4	.36	.50	.81	.75	.68	5.7	2.8	2.1	2.0	2.2	1.6	1.2
5	.37	.50	.81	.70	.68	4.9	2.6	2.1	2.0	2.0	1.6	1.2
6	.38	.50	.81	.69	.68	4.8	2.4	2.1	2.0	2.0	1.6	1.3
7	.41	.52	.81	.65	.68	4.6	2.3	2.1	2.0	1.9	1.6	1.5
8	.42	.53	.81	.65	1.7	4.4	2.2	2.1	2.0	1.9	1.6	1.4
9	.41	.72	.81	.65	1.5	4.2	2.2	2.1	2.0	2.1	1.6	1.3
10	.42	.80	.81	.65	1.4	4.0	2.2	2.1	2.0	1.9	1.6	1.3
11	.42	.69	.83	.65	1.2	4.1	2.2	2.1	2.0	1.7	1.6	1.3
12	.42	.65	.84	.65	1.2	4.1	2.2	2.1	2.0	1.8	1.6	1.2
13	.41	.62	.85	.65	1.2	4.1	2.1	2.1	2.0	1.7	1.6	1.2
14	.42	.57	.86	.65	1.2	4.5	2.1	2.1	2.0	1.6	1.3	1.1
15	.40	.54	.86	.65	1.2	4.3	2.1	2.1	2.0	1.6	1.3	1.1
16	.40	.52	.86	.65	1.1	4.1	2.2	2.1	2.0	1.7	1.4	1.1
17	.41	.52	.86	.65	1.1	5.8	2.1	2.1	2.0	1.6	1.7	1.1
18	.41	.52	.86	.65	1.1	6.0	2.5	2.1	2.0	1.6	2.2	1.2
19	.41	.77	.86	.80	1.1	5.6	2.2	2.1	2.0	1.6	2.2	1.3
20	.43	.62	.86	.65	1.1	5.5	2.3	2.1	2.0	1.6	2.1	1.3
21	.42	.59	.86	.65	1.1	5.2	2.6	2.1	2.0	1.6	1.5	1.3
22	.40	.62	5.0	.65	1.1	5.0	2.2	2.1	2.0	1.6	1.4	1.4
23	.40	.67	1.0	.95	1.1	4.9	2.1	2.1	2.0	1.6	1.3	1.3
24	.42	.65	.95	.80	1.1	6.6	2.1	2.1	2.2	1.6	1.3	1.3
25	.42	.68	.92	.78	1.1	6.0	2.1	2.1	2.3	1.6	1.2	1.2
26	.58	.68	.89	.78	2.2	5.8	2.1	2.0	2.4	1.6	1.2	1.2
27	.51	.65	.85	1.1	12	5.3	2.1	2.0	2.4	1.7	1.2	1.2
28	.48	.67	.82	.90	3.2	4.8	2.1	2.0	1.8	1.7	1.2	1.3
29	.47	.68	.89	1.0	---	4.4	3.5	2.0	1.8	1.6	1.1	1.3
30	.47	12	.87	.90	---	4.0	3.0	2.0	1.9	1.6	1.1	1.6
31	.47	---	.82	.80	---	3.6	---	2.0	---	1.6	1.1	---
TOTAL	13.06	29.46	30.79	23.08	43.88	155.5	72.2	64.8	60.8	54.6	46.6	37.6
MEAN	.42	.98	.99	.74	1.57	5.02	2.41	2.09	2.03	1.76	1.50	1.25
MAX	.58	12	5.0	1.1	12	7.1	3.5	2.3	2.4	2.3	2.2	1.6
MIN	.36	.48	.81	.65	.68	3.6	2.1	2.0	1.8	1.6	1.1	1.1
AC-FT	26	58	61	46	87	308	143	129	121	108	92	75
CAL YR 1982	TOTAL	283.17	MEAN	0.78	MAX	12	MIN	.22	AC-FT	562		
WTR YR 1983	TOTAL	632.37	MEAN	1.73	MAX	12	MIN	.36	AC-FT	1250		

## 11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA

LOCATION.--Lat 34°03'46", long 117°16'16", in SE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1954 to September 1965, February 1968 to October 1973, April 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,030 ft, from topographic map. Prior to April 1979, water-stage recorders at site 0.2 mi downstream at different datum.

REMARKS.--Records poor. No gage-height record Oct. 26 to Nov. 12, Mar. 21 to Apr. 18. No regulation above station. Natural flow affected by pumping and return flow from irrigated areas.

AVERAGE DISCHARGE.--20 years (1954-65, 1968-73, 1980-83), 3.00 ft<sup>3</sup>/s, 2,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 8.2 ft from floodmark, from rating curve extended above 2,100 ft<sup>3</sup>/s on basis of slope-conveyance study of maximum flow, at site and datum then in use; no flow for several days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 930 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 7.50 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1400	1,230	5.56	Feb. 27	1800	*2,100	7.18
Dec. 23	0200	700	4.70	Mar. 17	2030	271	3.89
Jan. 27	2000	706	4.50	Aug. 17	1500	151	3.58
Feb. 8	0700	244	3.80				

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.8	1.1	.39	0	400	.14	1.7	.58	1.2	.41	0
2	1.6	1.3	.32	.45	12	400	.20	1.0	.54	1.5	1.2	0
3	.60	.38	.16	.21	1.4	75	.16	.43	.92	2.2	.97	.05
4	.29	.37	.16	.09	.12	5.2	.08	.46	.31	1.5	.37	.01
5	.05	.77	.27	.06	4.9	1.3	0	.30	.14	.20	.08	.29
6	.66	1.9	.08	.01	.88	.68	0	0	.80	.36	.84	.70
7	.50	.95	.05	.09	1.4	.16	0	0	.60	.98	2.0	0
8	.31	1.5	.12	.01	47	.16	0	0	.32	.70	1.9	0
9	.10	21	.11	.04	.02	.11	0	0	.54	.22	1.8	0
10	.32	34	0	.09	.02	.08	0	0	.07	0	.74	0
11	.86	4.3	0	.21	.02	.08	0	0	.22	.95	1.5	0
12	1.2	3.4	0	.18	.04	.08	1.1	.14	1.4	1.1	.08	.60
13	1.1	1.3	0	.07	.04	.84	1.0	.24	.90	.62	.04	.26
14	1.2	1.2	.28	.02	.04	3.8	.07	.03	.47	.43	.01	.14
15	.65	1.2	.15	.01	.04	.74	0	0	.25	.28	0	.36
16	1.7	2.4	.45	.06	.04	.78	0	.22	.93	.17	2.1	1.2
17	2.0	2.6	0	.35	.04	17	0	.22	1.9	1.1	14	.30
18	1.3	.34	0	.17	.04	43	2.4	.10	2.1	2.0	6.5	.47
19	.75	3.1	0	4.1	.04	5.7	0	.44	1.1	1.3	2.4	1.4
20	.09	.09	0	.01	.04	.50	10	0	.09	.10	.10	.61
21	.45	.01	0	0	.04	3.1	10	.04	.97	.56	0	.10
22	.17	.01	22	4.0	.04	1.6	.75	1.0	.98	.35	.05	.54
23	.03	0	78	19	.04	.33	.07	1.2	.04	.39	.04	.91
24	0	0	.68	11	.05	26	0	.39	1.3	0	.12	.46
25	.20	0	.32	2.9	.04	.33	.04	.02	0	.14	.09	.31
26	1.8	.53	.21	.03	9.2	.43	0	.44	0	0	.19	.29
27	.34	.84	.32	200	550	.70	0	0	.47	0	0	.15
28	.81	.94	.16	15	12	.81	.09	0	1.1	0	0	.08
29	.51	3.2	.39	111	---	.52	17	0	0	0	0	2.3
30	.40	258	.39	.05	---	.30	8.8	.68	.05	0	.11	4.8
31	1.2	---	.39	0	---	.18	---	1.4	---	.49	.18	---
TOTAL	22.49	347.43	106.11	369.60	639.53	989.51	51.90	10.45	19.09	18.84	37.82	16.33
MEAN	.73	11.6	3.42	11.9	22.8	31.9	1.73	.34	.64	.61	1.22	.54
MAX	2.0	258	78	200	550	400	17	1.7	2.1	2.2	14	4.8
MIN	0	0	0	0	0	.08	0	0	0	0	0	0
AC-FT	45	689	210	733	1270	1960	103	21	38	37	75	32
CAL YR 1982	TOTAL	1594.14	MEAN	4.37	MAX	461	MIN	0	AC-FT	3160		
WTR YR 1983	TOTAL	2629.10	MEAN	7.20	MAX	550	MIN	0	AC-FT	5210		

## SANTA ANA RIVER BASIN

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°10'45", long 117°15'53", in NW 1/4 NE 1/4 NE 1/4 sec.14, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 100 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 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1919 to current year. Prior to October 1952, published as Strawberry Creek near Arrowhead Springs.

GAGE.--Water-stage recorder. Broad-crested weir since September 1938. Altitude of gage is 1,590 ft, from topographic map.

REMARKS.--Records poor. No regulation above station. One small diversion for domestic use above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--63 years (water years 1921-83), 4.96 ft<sup>3</sup>/s, 3,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,710 ft<sup>3</sup>/s Jan. 29, 1980, gage height, 8.35 ft, on basis of slope-area measurement of maximum flow; no flow at times in 1929, 1931-35.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 120 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 8.35 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	0800	112	3.32	Feb. 8	0415	726	4.94
Nov. 30	0845	660	4.77	Feb. 27	1230	*938	5.89
Dec. 22	Unknown	780	5.34	Apr. 20	2330	264	3.80
Jan. 23	0200	124	3.18	Apr. 29	1045	189	3.52
Jan. 27	1430	736	4.92	Aug. 17	1745	448	4.57

Minimum daily discharge, 1.8 ft<sup>3</sup>/s several days in October and November.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.2	33	5.2	24	216	29	35	15	10	6.1	6.2
2	2.1	1.9	9.3	5.0	22	240	28	37	14	11	6.1	7.3
3	2.1	1.8	8.0	4.8	21	97	27	32	14	10	6.1	6.0
4	2.0	1.8	5.7	4.6	17	57	28	27	13	9.7	6.1	5.0
5	1.9	1.8	5.0	4.4	15	44	31	25	13	9.2	5.9	5.6
6	2.1	1.8	4.6	4.3	13	38	29	25	12	9.0	5.8	4.9
7	2.1	1.9	4.6	4.2	18	39	28	24	12	8.6	6.2	4.4
8	1.9	2.1	4.3	4.1	156	39	26	23	12	8.6	6.1	4.9
9	1.8	4.5	4.2	4.1	49	39	26	22	12	8.6	6.7	4.8
10	1.8	15	4.2	4.0	21	38	25	22	12	8.4	6.5	4.5
11	1.9	6.8	4.0	4.0	23	35	24	20	12	8.4	6.2	4.3
12	1.9	3.8	3.9	4.0	23	33	27	19	13	8.7	6.1	4.4
13	1.8	3.1	3.9	4.0	21	34	24	19	12	9.4	6.0	4.1
14	1.8	2.8	4.0	4.0	19	40	22	18	11	10	6.2	3.7
15	1.8	2.6	4.1	4.0	17	26	21	18	11	11	7.7	3.8
16	1.8	2.6	4.0	4.0	16	23	19	17	11	12	11	3.6
17	1.9	2.4	3.9	4.0	15	36	19	16	11	12	40	3.6
18	2.0	2.6	3.8	4.0	15	57	31	15	11	12	29	3.9
19	2.1	29	3.7	7.1	14	41	22	15	11	12	26	3.9
20	2.1	6.0	3.7	4.2	13	32	42	15	11	12	18	4.3
21	2.2	3.4	3.7	4.0	12	38	56	15	11	11	18	4.3
22	1.8	2.8	164	13	11	32	24	15	10	11	20	4.3
23	1.8	2.7	52	42	11	32	25	14	10	9.9	19	4.7
24	2.0	2.2	20	37	11	47	27	14	10	9.2	15	4.6
25	2.1	2.1	16	36	11	39	28	14	10	8.3	20	4.5
26	11	2.0	12	18	16	38	22	14	11	7.7	17	4.6
27	3.3	2.0	9.8	81	120	37	21	14	11	7.3	13	4.6
28	2.4	2.0	7.6	38	79	36	21	14	10	7.0	8.9	5.2
29	2.2	2.0	6.4	53	---	33	66	13	10	6.7	7.6	7.2
30	2.3	122	5.6	30	---	31	37	13	11	6.5	6.5	11
31	2.3	---	5.4	26	---	30	---	14	---	6.2	6.4	---
TOTAL	72.5	239.7	424.4	466.0	803	1597	855	598	347	291.4	369.2	148.2
MEAN	2.34	7.99	13.7	15.0	28.7	51.5	28.5	19.3	11.6	9.40	11.9	4.94
MAX	11	122	164	81	156	240	66	37	15	12	40	11
MIN	1.8	1.8	3.7	4.0	11	23	19	13	10	6.2	5.8	3.6
AC-FT	144	475	842	924	1590	3170	1700	1190	688	578	732	294
CAL YR 1982	TOTAL	2316.7	MEAN	6.35	MAX	164	MIN	1.0	AC-FT	4596		
WTR YR 1983	TOTAL	6211.4	MEAN	17.0	MAX	240	MIN	1.8	AC-FT	12320		

## 11058600 WATERMAN CANYON CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°11'36", long 117°16'25", in NE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1911 to October 1914 (published as "near San Bernardino"), December 1919 to current year.

GAGE.--Water-stage recorder. Broad-crested weir since September 1938. Datum of gage is 2,045.46 ft National Geodetic Vertical Datum of 1929. Prior to December 1919, nonrecording gage at site 300 ft downstream at different datum.

REMARKS.--Records 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 1913-14, 1921-83), 2.82 ft<sup>3</sup>/s, 2,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (SINCE 1920).--Maximum discharge, 2,350 ft<sup>3</sup>/s Mar. 2, 1938, based on rainfall-runoff studies; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 35 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	0545	113	3.09	Feb. 27	1115	*197	3.47
Nov. 30	0845	182	3.41	Mar. 13	2345	58	2.75
Dec. 22	2115	167	3.35	Apr. 20	2330	64	2.77
Jan. 22	2300	46	2.69	Apr. 29	0945	69	2.80
Jan. 27	0915	97	2.99	Aug. 17	Unknown	157	Unknown
Feb. 8	0330	158	3.31				

Minimum daily discharge, 0.91 ft<sup>3</sup>/s Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.2	6.1	3.9	12	85	19	20	9.9	5.4	4.0	3.4
2	1.1	1.0	4.2	3.7	13	93	19	18	9.2	5.9	4.0	3.4
3	1.1	.95	3.5	3.4	13	78	18	18	9.2	5.3	4.0	3.3
4	1.1	.95	3.0	3.2	12	56	18	18	8.5	5.1	4.0	3.3
5	1.1	.95	2.7	3.0	11	47	18	18	8.5	4.8	4.0	3.2
6	1.1	.95	2.6	3.0	11	42	17	18	7.8	4.6	3.9	3.1
7	1.1	1.0	2.6	2.9	15	36	17	17	7.8	4.4	4.2	3.1
8	1.0	1.1	2.8	3.2	38	33	16	16	7.7	4.3	4.2	3.1
9	.92	3.3	2.8	3.4	18	30	16	16	7.7	4.3	4.6	3.1
10	.92	5.0	2.7	3.3	16	28	16	16	7.7	4.2	4.6	3.0
11	1.0	2.2	2.6	3.2	14	26	16	14	7.7	4.2	4.3	3.0
12	1.0	1.9	2.6	3.2	13	25	16	13	8.3	4.2	4.3	2.9
13	.92	1.7	2.6	3.2	13	27	15	13	7.6	4.2	4.3	2.9
14	.92	1.5	2.7	3.2	12	28	15	13	6.9	4.2	4.5	2.8
15	.92	1.6	2.7	3.1	12	23	15	13	6.9	4.2	5.5	2.8
16	.92	1.6	2.6	3.1	12	21	14	12	6.8	4.2	8.0	2.8
17	.92	1.6	2.6	3.2	11	29	14	11	6.7	4.2	22	2.8
18	1.0	1.9	2.5	3.1	11	33	17	10	6.7	4.1	10	2.8
19	1.1	18	2.5	5.3	11	28	14	10	6.6	4.1	4.3	2.9
20	1.1	2.3	2.5	2.4	10	26	20	10	6.6	4.1	4.0	2.9
21	1.1	1.8	2.5	2.2	9.9	28	24	10	6.5	4.1	3.9	2.9
22	.91	1.6	48	11	9.5	25	17	10	5.9	4.1	3.8	2.9
23	.95	1.5	17	12	9.3	24	16	9.5	5.8	4.1	3.8	2.9
24	1.1	1.4	11	13	9.4	31	16	9.5	5.8	4.1	3.7	2.9
25	1.1	1.3	8.2	9.9	9.3	25	16	9.5	5.7	4.0	3.6	2.9
26	5.8	1.2	6.8	7.7	12	23	15	9.4	6.3	4.0	3.6	2.9
27	1.7	1.1	5.8	37	53	23	15	9.4	6.2	4.0	3.5	2.8
28	1.2	1.2	4.9	19	37	22	15	9.4	5.6	4.0	3.5	2.8
29	1.2	1.4	4.6	26	---	21	33	8.7	5.5	4.0	3.5	4.3
30	1.2	40	4.5	15	---	21	22	8.6	6.1	4.0	3.4	8.0
31	1.2	---	4.3	13	---	20	---	9.2	---	4.0	3.4	---
TOTAL	37.80	103.20	176.5	231.8	427.4	1057	519	397.2	214.2	134.4	152.4	95.9
MEAN	1.22	3.44	5.69	7.48	15.3	34.1	17.3	12.8	7.14	4.34	4.92	3.20
MAX	5.8	40	48	37	53	93	33	20	9.9	5.9	22	8.0
MIN	.91	.95	2.5	2.2	9.3	20	14	8.6	5.5	4.0	3.4	2.8
AC-FT	75	205	350	460	848	2100	1030	788	425	267	302	190
CAL YR 1982	TOTAL	1123.8	MEAN	3.07	MAX	48	MIN	.77	AC-FT	2227		
WTR YR 1983	TOTAL	3546.80	MEAN	9.72	MAX	93	MIN	.91	AC-FT	7040		

Note.--No gage-height record Oct. 1 to Nov. 9, May 5 to Sept. 30.

## SANTA ANA RIVER BASIN

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 mi<sup>2</sup>, revised.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1939 to September 1954, October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 940 ft, from topographic map. Prior to Nov. 10, 1950, water-stage recorder on right bank 0.4 mi upstream at datum 964.50 ft National Geodetic Vertical Datum of 1929. Nov. 11, 1950 to Sept. 30, 1954, water-stage recorder on both banks 0.4 mi upstream at datum 964.50 ft NGVD. Oct. 1, 1966 to Sept. 30, 1976, water-stage recorder on right bank 0.4 mi upstream at datum 954.50 ft 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 altitude 950 ft, from topographic map.

REMARKS.--Records poor. Flow partly regulated by Big Bear Lake (station 11049000) 26 mi upstream. 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 causes sustained flow past gage since 1967. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--15 years (water years 1940-54), 12.5 ft<sup>3</sup>/s, 9,050 acre-ft/yr;  
17 years (water years 1967-83), 105 ft<sup>3</sup>/s, 76,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft<sup>3</sup>/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 ft<sup>3</sup>/s; no flow many days prior to 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 5,200 ft<sup>3</sup>/s:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	0800	1,750	5.05	Mar. 2	1600	*11,000e	Unknown
Nov. 30	1400	5,830	4.85	Apr. 21	Unknown	Unknown	Unknown
Dec. 23	0100	10,500	5.12	Apr. 30	Unknown	Unknown	Unknown
Jan. 27	1900	5,000e	Unknown	Aug. 17	1730	4,810	4.76
Feb. 27	1400	10,500	Unknown				

Minimum daily discharge, 30 ft<sup>3</sup>/s Oct. 24.

e Estimated

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	37	222	140	271	3360	670	1020	720	179	82	72
2	37	37	49	130	285	4150	660	900	670	233	72	72
3	34	36	47	120	200	1940	650	810	600	210	68	72
4	33	36	46	110	127	1400	625	810	570	170	67	67
5	34	37	46	110	127	1060	600	830	560	152	67	67
6	33	37	45	130	170	840	565	680	550	127	62	67
7	33	36	44	180	127	700	530	630	530	143	80	72
8	33	40	44	180	875	600	465	690	450	135	95	77
9	34	149	43	172	546	500	445	710	410	120	120	82
10	33	443	43	148	425	450	440	710	380	143	135	58
11	33	88	43	94	245	420	440	700	355	127	100	50
12	33	58	42	68	210	380	440	670	335	120	94	58
13	31	53	42	58	179	350	405	650	320	127	90	54
14	32	49	42	55	143	390	375	630	305	127	90	50
15	31	45	42	54	143	370	350	630	290	100	126	54
16	31	45	42	54	135	360	340	650	280	100	224	54
17	31	45	42	54	100	350	340	640	265	94	1280	63
18	32	45	42	54	99	900	465	600	250	120	380	67
19	32	182	42	174	98	760	400	600	240	113	260	72
20	31	60	42	70	97	720	615	630	225	100	200	72
21	31	48	42	59	96	680	965	660	179	88	170	82
22	32	45	552	144	95	610	640	690	170	100	170	82
23	31	40	2110	530	94	615	620	680	170	100	127	67
24	30	40	900	288	88	950	600	690	222	106	135	63
25	32	39	370	290	100	745	570	690	210	106	120	77
26	46	40	250	225	290	605	550	700	189	106	106	88
27	40	42	143	1820	2580	580	530	765	189	106	94	67
28	38	43	130	1040	2350	665	530	719	189	100	88	63
29	38	52	120	1740	---	870	1120	685	161	100	88	160
30	38	1450	110	713	---	805	1220	700	189	100	88	200
31	38	---	110	449	---	705	---	760	---	94	88	---
TOTAL	1055	3397	5887	9453	10295	27830	17165	21929	10173	3846	4966	2249
MEAN	34.0	113	190	305	368	898	572	707	339	124	160	75.0
MAX	46	1450	2110	1820	2580	4150	1220	1020	720	233	1280	200
MIN	30	36	42	54	88	350	340	600	161	88	62	50
AC-FT	2090	6740	11680	18750	20420	55200	34050	43500	20180	7630	9850	4460
CAL YR 1982	TOTAL	30887	MEAN	84.6	MAX	2120	MIN	27	AC-FT	61260		
WTR YR 1983	TOTAL	118245	MEAN	325	MAX	4150	MIN	30	AC-FT	234500		



WATER-QUALITY RECORDS

SEDIMENT CONCENTRATIONS: Maximum daily mean, not determined; minimum daily mean, not determined.  
SEDIMENT DISCHARGE: Maximum daily, 93,000 tons (estimated) Mar. 2; minimum daily, 0.57 tons (estimated) Oct. 24.

[illegible]

## SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	40		.97	37		.70	222		563
2	37		.80	37		.70	49		37
3	34		.64	36		.68	47		19
4	33		.62	36		.68	46		12
5	34		.64	37		.70	46		12
6	33		.62	37		.70	45		9.7
7	33		.62	36		.68	44		8.3
8	33		.62	40		.86	44		8.3
9	34		.64	149		845	43		8.1
10	33		.62	443		6280	43		7.0
11	33		.62	88		309	43		7.0
12	33		.62	58		78	42		6.8
13	31		.59	53		36	42		5.7
14	32		.60	49		33	42		5.7
15	31		.59	45		22	42		5.7
16	31		.59	45		12	42		5.7
17	31		.59	45		12	42		4.5
18	32		.60	45		12	42		4.5
19	32		.60	182		357	42		4.5
20	31		.59	60		28	42		4.5
21	31		.59	48		21	42		4.5
22	32		.60	45		19	552		3580
23	31		.59	40		6.5	2110		43300
24	30		.57	40		5.4	900		9230
25	32		.60	39		4.2	370		1620
26	46		1.2	40		3.2	250		743
27	40		.86	42		3.4	143		181
28	38		.72	43		3.5	130		164
29	38		.72	52		7.6	120		148
30	38		.72	1450		22500	110		132
31	38		.72	---		---	110		128
TOTAL	1055		20.67	3397		30603.50	5887		59969.5

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	140		157	271		878	3360	---	66900
2	130		141	285		962	4150	---	93000
3	120		126	200		448	1940	---	28000
4	110		111	127		144	1400	---	6350
5	110		107	127		144	1060	---	4210
6	130		121	170		308	840	---	3290
7	180		161	127		144	700	---	2680
8	180		155	875		14900	600	---	2240
9	172		141	546		3540	500	---	1820
10	148		116	425		2180	450	---	1590
11	94		74	245		708	420	---	1440
12	68		51	210		499	380	---	1270
13	58		44	179		358	350	---	1130
14	55		39	143		199	390	---	1230
15	54		38	143		199	370	---	1130
16	54		38	135		169	360	---	1070
17	54		36	100		103	350	---	1040
18	54		36	99		63	900	---	2670
19	174		714	98		56	760	---	2260
20	70		125	97		49	720	---	2140
21	59		70	96		42	680	---	2000
22	144		389	95		35	610	---	1780
23	530		5800	94		24	615	---	1780
24	288		1870	88		19	950	---	2740
25	290		1880	100		22	745	---	2150
26	225		1150	290		1020	605	---	1750
27	1820		33900	2580		52200	580	---	1680
28	1040		12100	2350		38700	665	---	1940
29	1740		31500	---		---	870	---	2650
30	713		5870	---		---	805	---	2520
31	449		2420	---		---	705	1150	2190
TOTAL	9453		99480	10295		118113	27830	---	250640

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	670	1160	2100	1020	1620	4460	720	850	1650
2	660	1030	1840	900	1220	2960	670	860	1560
3	650	955	1680	810	970	2120	600	870	1410
4	625	890	1500	810	950	2080	570	860	1320
5	600	690	1120	830	1030	2310	560	850	1290
6	565	850	1300	680	980	1800	550	840	1250
7	530	850	1220	630	900	1530	530	790	1130
8	465	735	923	690	890	1660	450	630	765
9	445	640	769	710	890	1710	410	510	565
10	440	720	855	710	850	1630	380	440	451
11	440	800	950	700	850	1610	355	440	422
12	440	760	903	670	850	1540	335	490	689
13	405	550	601	650	900	1580	320	430	372
14	375	560	567	630	1400	2380	305	350	288
15	350	500	473	630	1600	2720	290	340	266
16	340	500	459	650	1630	2860	280	430	325
17	340	565	519	640	1480	2560	265	550	394
18	465	760	954	600	1270	2060	250	450	304
19	400	830	896	600	1270	2060	240	340	220
20	615	1750	2920	630	1280	2180	225	242	147
21	965	2850	7430	660	1260	2250	179	237	115
22	640	1420	2450	690	1140	2120	170	217	100
23	620	1220	2040	680	1020	1870	170	210	96
24	600	1630	1670	690	820	1530	222	202	121
25	570	860	1320	690	630	1170	210	177	100
26	550	820	1220	700	650	1230	189	147	75
27	530	800	1140	765	690	1430	189	120	61
28	530	800	1140	719	720	1400	189	115	59
29	1120	2140	6470	685	750	1390	161	118	51
30	1220	3100	10200	700	780	1470	189	119	61
31	---	---	---	760	810	1660	---	---	---
TOTAL	17165	---	57629	21929	---	61330	10173	---	15657
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	179	120	58	82	11	2.4	72	18	3.5
2	233	120	75	72	13	2.5	72	19	3.7
3	210	121	69	68	12	2.2	72	19	3.7
4	170	122	56	67	18	3.3	67	18	3.3
5	152	122	50	67	18	3.3	67	16	2.9
6	127	122	42	62	17	3.8	67	18	3.3
7	143	123	47	80	16	3.5	72	21	4.1
8	135	123	45	95	22	5.6	77	25	5.2
9	120	125	41	120	108	35	82	29	6.4
10	143	128	49	135	229	83	58	18	2.8
11	127	130	45	100	55	15	50	14	1.9
12	120	132	43	94	24	6.1	58	14	2.2
13	127	126	43	90	24	5.8	54	16	2.3
14	127	92	32	90	23	5.6	50	13	1.8
15	100	88	24	126	110	37	54	10	1.5
16	100	72	19	224	295	178	54	12	1.7
17	94	67	17	1280	5200	18000	63	18	3.1
18	120	60	19	380	1730	1770	67	25	4.5
19	113	52	16	260	430	302	72	15	2.9
20	100	49	13	200	140	76	72	13	2.5
21	88	46	11	170	70	32	82	33	7.3
22	100	43	12	170	70	32	82	31	6.9
23	100	41	11	127	55	19	67	26	4.7
24	106	39	11	135	48	17	63	31	5.3
25	106	36	10	120	33	11	77	19	4.0
26	106	49	14	106	42	12	88	18	4.3
27	106	55	16	94	38	9.6	67	17	3.1
28	100	32	8.6	88	30	7.1	63	17	2.9
29	100	29	7.8	88	23	5.5	160	620	268
30	100	22	5.9	88	22	5.2	200	820	443
31	94	16	4.1	88	19	4.5	---	---	---
TOTAL	3846	---	914.4	4966	---	20695.0	2249	---	812.8
YEAR 118245.0			715864.9						

## SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	TEMPER- ATURE (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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
NOV								
10...	1530	13.0	190	2360	1350	--	46	55
19...	1000	11.0	195	796	419	14	19	25
JAN								
19...	0830	10.0	271	2310	1690	--	46	53
MAR								
02...	0940	11.0	3100	7300	61100	--	14	17
APR								
05...	1335	11.0	500	649	876	--	--	--
29...	1935	14.0	2220	2660	15900	--	23	28
MAY								
10...	1720	17.0	1180	839	2673	--	--	--

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
NOV								
10...	63	65	69	74	87	96	99	100
19...	30	35	41	58	89	99	100	--
JAN								
19...	71	79	--	--	--	--	--	--
MAR								
02...	23	29	--	--	--	--	--	--
APR								
05...	--	--	11	25	75	98	100	--
29...	36	49	--	--	--	--	--	--
MAY								
10...	--	--	14	22	61	96	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 State Highway 395 bridge, and 2.0 mi southeast of San Bernardino.

DRAINAGE AREA.--11.0 mi<sup>2</sup> (revised).

PERIOD OF RECORD.--February 1964 to September 1972, October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 960 ft, from topographic map. Prior to Oct. 1, 1974, at site 0.1 mi upstream at different datum.

REMARKS.--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. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years (water years 1965-72), 1.61 ft<sup>3</sup>/s, 1,170 acre-ft/yr; 9 years (water years 1975-83), 18.4 ft<sup>3</sup>/s, 13,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft<sup>3</sup>/s, estimated, Mar. 1, 1978, gage height unknown; no flow some days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,440 ft<sup>3</sup>/s Aug. 17, gage height, 3.91 ft; minimum daily, 5.8 ft<sup>3</sup>/s Nov. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	5.8	21	20	22	231	23	24	23	26	22	26
2	11	6.0	21	21	48	233	23	23	23	25	21	27
3	11	6.3	21	21	24	47	23	24	23	25	22	27
4	12	6.1	20	21	22	25	22	24	23	25	21	28
5	12	7.1	19	21	23	26	22	25	23	23	21	27
6	11	7.2	20	20	24	27	21	26	23	23	21	27
7	12	8.3	20	18	30	21	21	24	23	24	26	27
8	11	8.8	21	17	94	22	21	26	23	25	22	27
9	11	47	20	17	18	24	21	27	23	24	45	27
10	10	117	19	19	17	26	21	26	24	22	27	28
11	10	19	20	20	16	26	23	26	23	23	23	30
12	10	18	19	17	17	25	28	26	23	23	23	31
13	9.5	18	19	17	16	46	22	26	23	23	25	32
14	9.7	17	16	15	17	53	23	25	23	22	24	32
15	9.0	17	17	15	17	25	24	23	23	24	33	31
16	8.7	18	17	15	18	26	24	22	24	23	93	31
17	8.4	18	16	14	18	76	27	20	23	23	677	32
18	7.7	19	16	76	18	93	81	19	23	23	39	32
19	7.7	67	15	22	19	28	29	21	23	23	64	31
20	7.0	19	15	25	19	27	138	21	23	23	27	29
21	6.9	18	14	23	20	61	60	23	25	23	24	30
22	7.1	19	208	202	19	31	27	23	26	23	23	29
23	6.8	17	24	25	18	27	26	24	25	23	26	29
24	7.4	16	17	77	19	108	25	25	25	22	28	27
25	7.0	16	17	22	25	24	25	23	25	23	28	27
26	11	15	18	23	84	21	25	23	25	22	30	27
27	6.3	15	19	182	327	23	24	23	25	22	29	27
28	6.3	17	19	95	59	22	24	23	25	21	27	26
29	6.6	19	20	33	---	22	132	23	25	22	26	40
30	6.0	226	19	23	---	22	31	23	25	22	26	66
31	6.1	---	20	24	---	23	---	23	---	22	26	---
TOTAL	277.2	827.6	767	1160	1068	1491	1036	734	713	717	1569	910
MEAN	8.94	27.6	24.7	37.4	38.1	48.1	34.5	23.7	23.8	23.1	50.6	30.3
MAX	12	226	208	202	327	233	138	27	26	26	677	66
MIN	6.0	5.8	14	14	16	21	21	19	23	21	21	26
AC-FT	550	1640	1520	2300	2120	2960	2050	1460	1410	1420	3110	1800
CAL YR 1982	TOTAL	7021.8	MEAN	19.2	MAX	298	MIN	5.8	AC-FT	13920		
WTR YR 1983	TOTAL	11269.8	MEAN	31.0	MAX	677	MIN	5.8	AC-FT	22350		

## 11062000 LYTLE CREEK NEAR FONTANA, CA

LOCATION.--Lat 34°12'44", long 117°27'26", in SE 1/4 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 unnamed tributary, 2.3 mi downstream from Lytle Creek conduit, and 8 mi north of Fontana.

DRAINAGE AREA.--46.6 mi<sup>2</sup>, revised.

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 Riatio" 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.

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. Altitude of creek gage is 2,380 ft, 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.--Records, creek only, fair, combined creek and diversion, fair. No regulation above station. Southern California Edison Co.'s Lytle Creek conduit diverts 2.3 mi upstream for power development, and Fontana Union Water Co. 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: 65 years, 18.8 ft<sup>3</sup>/s, 13,600 acre-ft/yr.  
Combined creek and diversions: 80 years (water years 1899, 1905-83), 46.1 ft<sup>3</sup>/s, 33,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,900 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 15.0 ft, from floodmark, from rating curve extended above 570 ft<sup>3</sup>/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 ft<sup>3</sup>/s Jan. 25, 1969; minimum daily, 0.12 ft<sup>3</sup>/s June 21, 22, 1976.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges above base of 300 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 120 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 10.60 ft:

Date	Time	Creek only Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Combined Creek and Diversion Discharge (ft <sup>3</sup> /s)
Nov. 30	0830	683	6.27	695
Dec. 22	2045	1,380	6.85	1,390
Jan. 27	0830	566	5.25	571
Feb. 8	0315	345	4.61	370
Mar. 2	1615	*4,000	7.56	*4,000
Apr. 29	2400	352	4.83	357

Creek only: Minimum daily discharge, 6.2 ft<sup>3</sup>/s Nov. 7, 8.

Combined creek and diversions: Minimum daily discharge, 26 ft<sup>3</sup>/s Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	6.6	58	16	73	1370	156	193	165	159	89	63
2	7.0	6.6	30	16	80	1530	154	174	162	164	89	62
3	7.6	6.5	26	17	83	710	154	168	158	163	89	64
4	7.8	6.4	24	17	78	642	152	165	157	164	88	68
5	7.1	6.3	23	17	78	577	147	160	160	161	87	67
6	7.2	6.3	23	17	79	470	142	154	164	153	85	67
7	7.3	6.2	17	17	91	406	138	154	162	150	84	66
8	7.3	6.2	31	17	170	298	136	157	161	153	82	64
9	7.3	9.8	33	17	96	267	135	153	165	150	82	64
10	7.4	16	31	17	87	242	134	152	160	150	81	64
11	7.5	8.4	28	17	82	228	135	153	156	149	80	62
12	7.8	8.0	20	17	81	215	133	152	154	146	78	62
13	7.7	7.9	17	17	80	210	130	154	154	143	77	63
14	7.7	7.8	16	16	79	209	128	162	154	140	75	63
15	7.6	7.7	15	16	77	197	125	154	154	137	74	63
16	7.7	7.8	13	16	76	194	123	151	154	134	73	63
17	7.6	7.7	13	16	76	200	125	148	150	131	82	63
18	7.5	7.9	13	16	75	198	177	148	152	128	92	62
19	7.4	11	13	17	74	190	146	152	155	125	85	63
20	7.3	9.4	13	16	73	184	179	152	155	122	83	64
21	7.2	9.3	13	16	72	189	192	155	154	119	81	64
22	7.2	9.2	195	36	72	183	167	157	155	116	79	64
23	7.1	9.1	100	56	71	180	154	158	154	113	77	65
24	7.0	9.0	40	59	71	196	147	160	156	110	75	64
25	6.9	8.9	28	40	70	179	143	162	155	107	74	63
26	7.6	8.8	24	24	77	173	139	161	158	104	72	63
27	6.9	8.7	23	149	971	171	134	161	160	101	70	63
28	6.7	8.5	23	77	765	169	133	161	160	98	68	64
29	6.7	8.6	16	163	---	164	251	167	155	95	66	69
30	6.7	275	16	89	---	160	257	168	157	92	64	115
31	6.6	---	16	77	---	159	---	168	---	89	63	---
TOTAL	224.7	515.6	951	1118	3857	10460	4566	4934	4716	4066	2444	1971
MEAN	7.25	17.2	30.7	36.1	138	337	152	159	157	131	78.8	65.7
MAX	7.8	275	195	163	971	1530	257	193	165	164	92	115
MIN	6.3	6.2	13	16	70	159	123	148	150	89	63	62
AC-FT	446	1020	1890	2220	7650	20750	9060	9790	9350	8060	4850	3910
CAL YR 1982	TOTAL	5616.11	MEAN	15.4	MAX	354	MIN	0	AC-FT	11140		
WTR YR 1983	TOTAL	39823.3	MEAN	109	MAX	1530	MIN	6.2	AC-FT	78990		

## 11062000 LYTLE CREEK NEAR FONTANA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF LYTLE CREEK,  
SOUTHERN CALIFORNIA EDISON CO.'S LYTLE CONDUIT, AND FONTANA UNION WATER  
CO.'S INFILTRATION LINE, NEAR FONTANA, CA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	33	61	41	97	1370	181	210	189	184	114	88
2	27	33	42	41	105	1530	179	198	185	189	114	87
3	28	32	52	42	108	710	179	193	181	188	114	89
4	31	32	50	42	103	644	177	190	179	189	113	92
5	32	32	49	42	103	582	172	185	181	186	112	91
6	32	32	49	43	104	475	167	179	185	178	110	91
7	32	32	43	43	116	411	163	179	183	175	109	91
8	32	32	57	43	177	314	161	182	182	177	107	89
9	32	31	59	43	110	292	160	178	186	174	105	88
10	32	27	57	43	112	266	159	176	181	174	106	88
11	33	34	54	43	107	252	160	177	177	173	105	86
12	34	33	46	43	106	239	158	175	175	171	103	87
13	34	34	43	43	105	234	154	177	175	168	102	88
14	34	33	41	42	104	233	150	185	176	165	100	88
15	34	34	40	42	102	221	147	178	177	162	99	88
16	34	34	38	42	101	218	145	175	178	159	99	88
17	34	34	38	42	101	224	147	173	175	156	107	88
18	34	34	38	42	100	222	199	173	177	153	118	87
19	33	37	38	43	99	214	168	178	180	150	110	88
20	32	35	38	42	98	209	202	178	177	147	108	89
21	33	35	38	42	97	214	216	181	175	144	106	89
22	32	35	213	60	97	208	190	182	175	140	102	89
23	32	35	102	61	96	205	177	183	174	136	102	90
24	33	35	54	65	96	221	170	185	177	135	100	89
25	33	35	52	54	95	203	166	187	177	132	99	88
26	34	35	49	49	102	198	161	185	183	129	97	88
27	33	35	48	163	987	196	157	185	185	126	95	88
28	33	34	48	82	771	194	156	185	185	123	93	89
29	33	35	41	168	---	189	263	191	181	120	90	94
30	33	286	41	104	---	185	262	192	183	117	88	131
31	33	---	41	101	---	184	---	192	---	114	86	---
TOTAL	1002	1258	1660	1796	4499	11057	5246	5687	5394	4834	3213	2706
MEAN	32.3	41.9	53.5	57.9	161	357	175	183	180	156	104	90.2
MAX	34	286	213	168	987	1530	263	210	189	189	118	131
MIN	26	27	38	41	95	184	145	173	174	114	86	86
AC-FT	1990	2500	3290	3560	8920	21930	10410	11280	10700	9590	6370	5370
CAL YR 1982	TOTAL	14492	MEAN	39.7	MAX	369	MIN	20	AC-FT	28740		
WTR YR 1983	TOTAL	48352	MEAN	133	MAX	1530	MIN	26	AC-FT	95910		

## SANTA ANA RIVER BASIN

11063000 CAJON CREEK NEAR KEENBROOK, CA

LOCATION.--Lat 34°16'01", long 117°27'33", in SE 1/4 SW 1/4 SE 1/4 sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 1,300 ft upstream from Lone Pine Creek, 1.2 mi north of Keenbrook.

DRAINAGE AREA.--40.6 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1919 to September 1971, October 1977 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 2,630 ft, from topographic map. Prior to Oct. 24, 1935, at site 1,300 ft downstream at different datum. Oct. 24, 1935, to Jan. 26, 1966, and Oct. 1, 1977 to Sept. 30, 1980, at site 500 ft upstream at datum 13.40 ft higher.

REMARKS.--Records poor. Indefinite stage-discharge relation Oct. 1 to Dec. 22, no gage height record Dec. 22 to Sept. 30 (gage destroyed by Dec. 22 flood). No regulation or diversion above station. See schematic diagram of Santa Ana River basin. Discharge measurements made during the 1983 water year are given in table below.

AVERAGE DISCHARGE.--56 years (water years 1921-71, 1978-82), 11.0 ft<sup>3</sup>/s, 7,970 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft<sup>3</sup>/s Mar. 2, 1938, gage height, 26.0 ft datum then in use, on basis of slope-area measurement of maximum flow; minimum daily, 0.05 ft<sup>3</sup>/s June 25, 1920.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,930 ft<sup>3</sup>/s Mar. 1, on basis of slope-conveyance study of maximum flow.

## DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Time	Discharge (ft <sup>3</sup> /s)	Date	Time	Discharge (ft <sup>3</sup> /s)
Oct. 8	1300	4.7	Feb. 3	1045	38
Nov. 8	1445	4.7	8	1000	65
12	0930	5.9	24	1000	14
22	1600	5.4	25	1430	12
30	1530	30	27	1600	90
Dec. 1	1630	11	Mar. 3	1045	356
8	0930	6.3	4	1745	126
22	1115	22	10	1430	41
28	0845	8.7	Apr. 6	1330	22
Jan. 4	1130	8.5	26	1045	21
14	1245	7.5	29	1500	42
19	1030	8.3	May 2	1320	25
24	0930	12	9	1245	19
24	1530	40	June 6	1315	11
25	1000	15	July 1	1330	9.6
28	0915	35	19	1245	7.9
31	1300	28	Aug. 5	1215	6.7
			Sept. 3	1255	6.4



11063500 LONE PINE CREEK NEAR KEENBROOK, CA

LOCATION.--Lat 34°15'59", long 117°27'47", in SE 1/4 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 mi<sup>2</sup>.

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 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.--Records good. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--52 years (water years 1921-38, 1950-83) 1.86 ft<sup>3</sup>/s, 1,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,180 ft<sup>3</sup>/s Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of maximum flow; no flow Aug. 6-8, Sept. 29, 30, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft<sup>3</sup>/s, and maximum (\*), from rating curve extended above 330 ft<sup>3</sup>/s on basis of slope-conveyance study:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 29	0230	120	3.00
Mar. 1	1300	*589	5.46

Minimum daily discharge, 1.3 ft<sup>3</sup>/s Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.4	2.3	2.0	2.2	167	8.6	8.1	7.0	4.6	3.2	5.6
2	1.5	1.4	1.7	2.0	3.8	195	8.4	8.7	5.3	4.6	3.1	5.5
3	1.5	1.4	1.5	2.1	5.5	60	8.6	8.9	5.3	4.3	3.1	5.1
4	1.5	1.4	1.5	2.3	3.3	18	8.9	9.2	5.6	3.8	3.2	4.6
5	1.5	1.4	1.5	2.2	2.7	13	7.6	9.5	4.9	4.0	3.3	4.9
6	1.5	1.5	1.5	2.1	2.4	14	7.3	9.2	5.6	4.0	5.1	5.9
7	1.5	1.6	1.6	2.1	2.7	13	7.0	9.0	5.8	4.2	4.5	5.8
8	1.5	1.9	1.7	2.2	4.3	9.6	6.9	9.2	5.9	4.4	4.2	5.8
9	1.5	2.8	2.0	2.1	2.5	9.8	6.9	9.4	5.9	4.3	4.6	5.8
10	1.5	2.1	2.1	2.0	2.4	9.2	6.9	9.7	5.3	4.1	4.6	5.5
11	1.5	1.5	2.1	2.1	2.4	8.2	6.8	9.5	5.0	4.1	4.5	5.4
12	1.4	1.6	2.1	2.2	2.4	8.2	6.8	9.9	5.7	4.3	4.4	5.1
13	1.4	1.5	2.1	2.1	2.5	8.1	6.9	9.8	7.1	4.9	4.1	5.4
14	1.4	1.6	3.0	2.1	2.7	7.8	6.7	8.9	6.9	3.9	4.0	5.3
15	1.4	1.5	3.5	2.3	2.7	7.5	6.7	8.4	6.7	4.0	4.0	5.4
16	1.4	1.5	3.1	2.3	2.7	8.1	6.4	7.9	6.6	3.9	4.2	5.4
17	1.4	1.5	3.2	2.2	2.7	8.7	6.3	8.3	6.5	3.6	5.6	5.1
18	1.4	1.6	3.1	2.4	2.7	8.0	6.5	8.5	6.3	3.4	5.3	4.9
19	1.4	1.6	3.1	2.2	2.7	7.3	5.9	8.9	5.3	3.3	5.1	5.1
20	1.4	1.6	3.2	1.9	2.7	7.1	6.7	8.8	5.0	3.4	5.3	5.2
21	1.4	2.0	2.8	1.9	2.8	7.0	8.9	8.5	4.7	3.3	7.6	5.3
22	1.3	1.7	14	2.7	2.7	6.5	6.8	8.5	4.3	4.0	7.3	5.3
23	1.4	1.7	4.0	2.4	2.7	6.3	7.4	8.8	4.2	3.3	6.2	5.3
24	1.4	1.7	2.0	2.6	2.7	9.8	7.2	9.0	4.1	3.2	6.3	5.1
25	1.4	1.7	2.0	1.9	2.7	7.6	6.9	8.9	4.0	3.1	5.9	5.0
26	1.6	2.0	2.0	1.9	2.8	7.4	7.4	9.3	4.2	3.3	5.9	5.0
27	1.5	1.9	2.1	20	19	8.0	7.2	9.2	3.8	3.2	5.9	5.2
28	1.5	1.8	2.1	2.9	9.2	8.1	6.8	8.6	3.9	3.1	5.7	5.4
29	1.5	1.9	2.1	25	---	8.2	13	7.8	4.3	3.1	5.4	5.5
30	1.5	12	2.3	2.7	---	8.5	10	7.4	4.5	3.1	5.5	8.7
31	1.4	---	2.1	2.3	---	8.5	---	7.8	---	3.1	5.6	---
TOTAL	45.0	60.8	83.4	109.2	102.6	673.5	224.4	273.6	159.7	116.9	152.7	162.6
MEAN	1.45	2.03	2.69	3.52	3.66	21.7	7.48	8.83	5.32	3.77	4.93	5.42
MAX	1.6	12	14	25	19	195	13	9.9	7.1	4.9	7.6	8.7
MIN	1.3	1.4	1.5	1.9	2.2	6.3	5.9	7.4	3.8	3.1	3.1	4.6
AC-FT	89	121	165	217	204	1340	445	543	317	232	303	323
CAL YR 1982	TOTAL	743.2	MEAN	2.04	MAX	52	MIN	1.1	AC-FT	1470		
WTR YR 1983	TOTAL	2164.4	MEAN	5.93	MAX	195	MIN	1.3	AC-FT	4290		

## 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 mi<sup>2</sup>.

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. Altitude of gage is 2,080 ft, 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.--Records poor. 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 furnished by city of San Bernardino.

AVERAGE DISCHARGE.--Creek only: 64 years (water years 1914, 1921-83), 2.35 ft<sup>3</sup>/s, 1,700 acre-ft/yr.  
Combined creek and diversion: 50 years (water years 1914, 1935-1983), 4.30 ft<sup>3</sup>/s, 3,120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1913-14 AND SINCE 1919).--Maximum discharge, 3,720 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 5.40 ft, site and datum then in use, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft<sup>3</sup>/s (revised), and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0945	*294	6.41	Feb. 27	1230	158	6.07
Dec. 22	2215	192	6.17	Apr. 8	1600	80	5.81
Jan. 24	1730	62	5.72	Apr. 21	0130	73	5.78
Jan. 27	Unknown	Unknown	Unknown	Apr. 29	1230	65	5.73
Feb. 8	0345	121	5.92	Aug. 17	Unknown	Unknown	Unknown

Minimum, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	7.0	1.5	15	85	15	37	8.4	2.5	1.0	.40
2	0	0	5.2	.90	5.6	111	29	36	7.5	2.5	.76	.40
3	0	0	2.0	.53	4.4	101	22	20	7.7	2.5	.91	.40
4	0	0	1.0	.44	1.2	82	16	24	6.8	2.5	.84	.30
5	0	0	.93	.72	.51	80	23	17	5.6	2.5	.71	.30
6	0	0	.67	.66	.34	75	27	12	4.5	2.5	.60	.20
7	0	0	1.2	.37	4.1	57	27	14	5.5	2.5	.74	.20
8	0	.15	3.2	.23	48	54	27	15	4.1	2.7	.66	.20
9	0	2.8	3.1	.18	23	50	17	14	5.1	2.6	1.5	.20
10	0	5.6	.31	.14	26	40	16	12	7.0	3.0	1.7	.20
11	0	2.2	.10	.15	33	32	14	12	5.2	2.6	1.3	.15
12	0	.08	.09	.10	29	29	13	13	4.9	2.7	.76	.14
13	0	.06	.08	.09	19	49	6.7	9.4	8.6	2.6	.80	.12
14	0	.04	.06	.08	12	6.9	9.0	9.5	9.5	2.6	.80	.10
15	0	.01	.05	.06	5.0	10	8.6	9.0	8.9	2.7	.80	0
16	0	0	.04	.05	1.1	16	8.5	8.3	6.3	3.3	6.0	0
17	0	0	.04	.03	.16	2.2	8.7	11	6.7	3.2	32	0
18	0	.94	.03	.37	.07	.17	13	11	6.1	2.6	12	0
19	0	19	.02	1.9	0	.09	9.8	19	6.5	2.0	7.0	0
20	0	3.7	.02	.14	0	.09	15	18	4.0	2.0	2.2	0
21	0	.19	.02	.12	0	.02	43	16	2.9	2.0	.80	0
22	0	2.2	45	5.0	.02	.22	34	14	3.3	1.7	.80	0
23	0	2.4	16	16	.06	3.4	35	13	3.6	1.7	.70	0
24	0	.17	9.4	20	.03	1.6	30	15	3.2	1.8	.70	0
25	0	.18	7.2	20	.03	.02	22	13	2.0	1.7	.70	0
26	2.6	.19	6.6	15	4.6	.05	18	13	3.2	1.7	.60	0
27	2.3	.16	6.3	70	50	.07	17	14	4.3	1.8	.50	0
28	0	.06	6.0	19	42	.11	20	11	3.0	1.5	.50	0
29	0	1.5	4.3	31	---	.10	42	10	2.5	1.3	.50	6.0
30	0	42	2.6	17	---	.07	40	19	2.5	1.1	.40	10
31	0	---	1.3	16	---	.07	---	12	---	1.1	.40	---
TOTAL	4.9	83.63	129.86	237.76	324.22	886.18	626.3	471.2	159.4	69.5	79.68	19.31
MEAN	.16	2.79	4.19	7.67	11.6	28.6	20.9	15.2	5.31	2.24	2.57	.64
MAX	2.6	42	45	70	50	111	43	37	9.5	3.3	32	10
MIN	0	0	.02	.03	0	.02	6.7	8.3	2.0	1.1	.40	0
AC-FT	9.7	166	258	472	643	1760	1240	935	316	138	158	38
a	162	321	434	658	794	1876	1439	1219	614	456	413	318

CAL YR 1982 TOTAL 549.82 MEAN 1.51 MAX 45 MIN 0 AC-FT 1090 a 3203  
WTR YR 1983 TOTAL 3091.94 MEAN 8.47 MAX 111 MIN 0 AC-FT 6130 a 8704

a Combined discharge, in acre-feet, of Devil Canyon Creek and city of San Bernardino diversion.

## 11065000 LITTLE 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 mi<sup>2</sup> (revised).

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

GAGE.--Water-stage recorder. Datum of gage is 974.67 ft Corps of Engineers datum.

REMARKS.--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 ft<sup>3</sup>/s Mar. 4, 1978, gage height, 14.8 ft, from rating curve extended above 4,200 ft<sup>3</sup>/s on basis of discharge for design flood at gage height 21.4 ft; no flow many days of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4000 ft<sup>3</sup>/s Mar. 1, gage height, 5.85 ft; minimum, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	27	0	0	1420	13	0	0	11	0	0
2	0	0	.02	0	7.6	2040	.49	0	.45	13	0	0
3	0	0	0	0	.32	535	.19	0	.39	13	0	0
4	0	0	0	0	0	180	0	0	.02	12	0	0
5	0	0	0	0	1.8	42	0	.13	.16	12	0	0
6	0	0	0	0	3.1	11	0	0	.37	12	0	0
7	0	0	0	0	6.2	24	.52	0	.48	12	.11	0
8	0	0	0	0	74	9.1	0	0	.06	11	0	0
9	0	82	0	0	37	.89	0	0	0	13	.79	0
10	0	179	0	0	43	0	0	0	.22	13	0	0
11	0	26	0	0	3.1	0	.20	0	2.9	14	0	0
12	0	0	0	0	0	0	5.5	0	3.1	12	0	0
13	0	0	.30	0	0	.34	1.2	0	5.7	11	0	0
14	0	0	0	0	0	11	2.7	0	2.1	0	0	0
15	0	0	0	0	0	2.6	6.2	0	.61	0	1.1	0
16	0	0	0	20	0	1.3	21	.67	.01	12	16	0
17	0	0	0	12	0	4.0	17	.41	0	11	249	0
18	0	0	0	0	0	4.8	3.5	0	0	9.0	5.1	0
19	0	94	0	19	0	.87	0	0	.44	3.0	11	0
20	0	1.1	0	0	0	.55	7.7	0	2.8	0	0	0
21	0	0	0	0	0	2.1	20	0	7.4	0	0	0
22	0	0	185	29	0	1.3	0	0	12	2.5	0	0
23	0	0	82	77	8.4	1.6	0	0	15	1.6	0	0
24	0	0	0	29	7.2	18	0	0	14	1.5	0	0
25	0	0	0	1.4	10	7.6	0	0	13	1.4	0	0
26	14	0	0	0	18	10	0	0	13	1.2	0	0
27	.68	0	0	113	331	36	0	0	13	1.0	0	0
28	.49	0	0	5.9	183	56	0	0	14	.80	0	0
29	.39	46	.53	119	---	39	39	0	14	.60	0	.59
30	.01	266	.04	0	---	46	17	0	12	.30	0	1.5
31	0	---	0	0	---	30	---	0	---	.10	0	---
TOTAL	15.57	694.12	294.89	425.3	733.72	4535.05	155.20	1.21	147.21	205.00	283.10	2.09
MEAN	.50	23.1	9.51	13.7	26.2	146	5.17	.039	4.91	6.61	9.13	.070
MAX	14	266	185	119	331	2040	39	.67	15	14	249	1.5
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	31	1380	585	844	1460	9000	308	2.4	292	407	562	4.1
CAL YR 1982	TOTAL	1516.50	MEAN	4.16	MAX	266	MIN	0	AC-FT	3010		
WTR YR 1983	TOTAL	7492.46	MEAN	20.5	MAX	2040	MIN	0	AC-FT	14860		

## SANTA ANA RIVER BASIN

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA

LOCATION.--Lat 33°58'04", long 117°26'46", in NE 1/4 NE 1/4 SW 1/4 sec.30, T.2 S., R.5 W., Riverside County, Hydrologic Unit 18070203, on left bank 300 ft upstream from MWD crossing, 0.7 mi downstream from Union Pacific Railroad bridge, 1.2 mi upstream from bridge on Van Buren Boulevard, and 3.3 mi north of Arlington.

DRAINAGE AREA.--852 mi<sup>2</sup> (revised).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 685 ft, from topographic map.

REMARKS.--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.--13 years, (water years 1971-83), 115 ft<sup>3</sup>/s, 83,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft<sup>3</sup>/s Mar. 2, 1983, gage height 15.38 ft, from rating curve extended above 5,100 ft<sup>3</sup>/s on basis of area-velocity study; maximum gage height, 20.23 ft Mar. 4, 1978; minimum daily discharge, 15 ft<sup>3</sup>/s Sept. 7, 8, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1927, 100,000 ft<sup>3</sup>/s Mar. 2, 1938, on basis of slope-area measurement at site 1.2 mi downstream. Flood of Jan. 22, 1862, 320,000 ft<sup>3</sup>/s, by slope-conveyance study at site 8.1 mi upstream. Stage at that site was 5 ft higher than Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0930	8,180	12.30	Feb. 8	0730	6,440	11.91
Dec. 23	Unknown	7,200	12.10	Mar. 2	2015	*26,200	15.38
Jan. 19	0930	2,530	10.63	Mar. 24	0530	2,090	10.72
Jan. 23	0345	5,110	11.57	Apr. 21	0700	1,690	10.55
Jan. 27	2115	7,010	12.07	Apr. 30	0900	1,850	10.62
Feb. 3	0130	1,830	10.12	Aug. 17	2015	19,600	14.27

Minimum daily discharge, 32 ft<sup>3</sup>/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	46	502	125	473	7730	514	1270	630	235	83	107
2	32	47	150	126	675	11500	495	973	622	238	80	110
3	34	49	81	120	633	3030	495	830	610	230	79	103
4	40	54	71	150	294	1920	513	718	600	210	79	87
5	39	57	67	149	240	1400	522	705	598	195	81	83
6	39	62	63	133	300	1000	497	709	590	185	82	80
7	40	64	61	145	230	706	500	640	555	175	85	77
8	35	73	59	149	1550	649	505	614	510	165	87	81
9	38	125	58	132	390	626	518	601	455	160	124	75
10	33	371	58	143	185	607	520	587	415	153	140	71
11	38	85	58	111	209	604	575	571	390	150	112	68
12	38	58	58	74	150	585	520	564	367	145	101	66
13	38	56	58	87	172	575	600	562	330	141	97	63
14	39	54	58	88	205	613	575	560	295	138	97	64
15	42	54	58	94	222	592	560	560	263	135	97	66
16	43	55	59	106	197	580	560	570	245	132	294	68
17	41	56	59	100	201	598	565	575	230	130	2420	71
18	42	62	59	97	190	921	575	583	220	128	791	74
19	44	121	60	320	212	718	600	590	210	128	457	78
20	35	78	60	93	225	580	671	600	211	127	300	85
21	40	65	64	97	240	644	1190	605	210	125	205	85
22	42	58	704	128	250	543	593	620	210	122	190	84
23	45	57	3840	1400	245	680	544	640	212	119	170	80
24	63	57	600	493	313	1430	525	660	215	116	155	79
25	57	56	400	400	305	685	519	675	218	113	138	83
26	66	58	240	343	781	652	519	690	218	108	126	92
27	83	61	145	2370	5790	572	509	703	220	104	119	85
28	62	66	158	1460	3000	532	502	695	222	102	112	82
29	58	135	146	2240	---	517	964	678	222	99	106	140
30	54	2240	131	901	---	508	1380	660	225	96	105	300
31	46	---	110	845	---	507	---	645	---	91	105	---
TOTAL	1384	4480	8295	13219	17877	42804	18125	20653	10518	4495	7217	2687
MEAN	44.6	149	268	426	638	1381	604	666	351	145	233	89.6
MAX	83	2240	3840	2370	5790	11500	1380	1270	630	238	2420	300
MIN	32	46	58	74	150	507	495	560	210	91	79	63
AC-FT	2750	8890	16450	26220	35460	84900	35950	40970	20860	8920	14310	5330

CAL YR 1982	TOTAL	52963	MEAN	145	MAX	3840	MIN	31	AC-FT	105060
WTR YR 1983	TOTAL	151754	MEAN	417	MAX	11500	MIN	32	AC-FT	301000

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 micromhos Nov. 4, 1969; minimum recorded, 95 micromhos Nov. 27, 1970.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAK- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT					
05...	1005	46	1020	20.5	648
21...	1040	38	1060	19.5	656
NOV					
01...	1140	45	1000	21.0	638
10...	1350	857	310	14.0	239
17...	1040	56	1120	16.5	661
30...	1325	2700	265	14.0	194
DEC					
03...	1320	81	1010	17.5	630
27...	1145	145	815	12.0	488
JAN					
07...	0930	143	875	12.0	516
19...	0940	586	450	13.5	294
21...	1455	77	1080	16.5	661
23...	1115	901	425	14.0	269
FEB					
01...	1245	435	440	14.5	287
18...	1125	135	915	17.0	570
MAR					
02...	1315	5090	275	12.0	161
07...	1340	706	405	16.5	245
14...	0930	620	395	15.5	243
APR					
06...	0945	572	520	14.0	295
22...	0930	611	440	16.0	270
MAY					
04...	1050	718	420	15.0	268
18...	1010	583	430	19.0	256
JUN					
02...	1025	622	390	18.0	257
20...	0915	211	635	18.5	396
JUL					
01...	0930	235	615	19.0	400
20...	0945	127	740	23.0	489
AUG					
02...	1020	80	785	26.0	529
15...	1415	97	725	34.5	511
SEP					
02...	1125	110	915	29.5	564
19...	0755	78	990	20.5	617

## SANTA ANA RIVER BASIN

11069000 LAKE HEMET NEAR IDYLLWILD, CA

LOCATION.--Lat 33°39'56", long 116°42'19", in SE 1/4 SW 1/4 NE 1/4 sec.7, T.6 S., R.3 E., Riverside County, Hydrologic Unit 18070202, on upstream face near right end of dam on South Fork San Jacinto River, 5 mi southeast of Idyllwild, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--65.6 mi<sup>2</sup>.

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

GAGE.--Nonrecording gage read once daily. Datum of gage is 4,201.5 ft National Geodetic Vertical Datum of 1929 (levels by Lake Hemet Municipal Water District).

REMARKS.--Lake is formed by single-arch dam. Dam was completed to a height of 110 ft in 1893; raised to 122.5 ft in 1895, and to 135 ft in 1923. Capacity table is dated February 1932 (furnished by Lake Hemet Municipal Water District). Capacity below spillway level with flashboards (usually in place except for emergency operations), elevation, 4,336.5 ft, 13,540 acre-ft. Capacity below spillway level (without flashboards), elevation, 4,330 ft, 12,170 acre-ft. Water is released from lake to South Fork San Jacinto River for domestic use and irrigation in the Hemet-San Jacinto Valley. See schematic diagram of Santa Ana River basin.

COOPERATION.--Elevations and contents furnished by Lake Hemet Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 14,690 acre-ft Feb. 21, 1980, elevation, 4,339.4 ft, from capacity table extended above 4,336.5 ft; minimum observed, 264 acre-ft Nov. 19, 1962, Nov. 19, 1963, elevation, 4,266.9 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 13,230 acre-ft, spilling, Apr. 21, elevation, 4,337.2; minimum observed, 9,800 acre-ft Nov. 8, elevation, 4,328.7 ft.

## MONTHEND ELEVATION, NGVD, AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	4,331.0	11,370	--
Oct. 31.....	4,329.3	10,590	-780
Nov. 30.....	4,329.5	10,660	+70
Dec. 31.....	4,334.5	12,750	+2,090
CAL YR 1982.....	--	--	+3,980
Jan. 31.....	4,336.5	13,550	+800
Feb. 28.....	4,336.5	13,550	--
Mar. 31.....	4,336.5	13,550	--
Apr. 30.....	4,336.5	13,550	--
May 31.....	4,336.6	13,590	+40
June 30.....	4,336.5	13,550	-40
July 31.....	4,336.0	13,350	-200
Aug. 31.....	4,335.5	13,140	-210
Sept. 30.....	4,333.7	12,450	-690
WTR YR 1983.....	--	--	+1,080

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA

LOCATION.--Lat 33°44'10", long 116°49'26", in NE 1/4 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, 8.3 mi southeast of San Jacinto, and 9 mi downstream from Lake Hemet.

DRAINAGE AREA.--141 mi<sup>2</sup>.

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 Corps of Engineers datum. 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.--Records poor. Flow partly regulated by Lake Hemet (station 11069000). Lake Hemet Municipal Water District's upper canal diverts 4.0 mi above 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: 51 years (water years 1921-26, 1928-69, 1981-83), 19.5 ft<sup>3</sup>/s, 14,130 acre-ft/yr; 11 years (water years 1970-80), 29.0 ft<sup>3</sup>/s, 21,010 acre-ft/yr.  
Combined river and diversion: 34 years (water years 1949-80, 1983), 27.0 ft<sup>3</sup>/s 19,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 45,000 ft<sup>3</sup>/s Feb. 16, 1927, on basis of slope-area measurement of maximum flow; no flow for several months in some years.  
Combined river and diversion: Maximum discharge, 17,300 ft<sup>3</sup>/s Feb. 21, 1980; no flow at times in 1951, 1952, 1957, 1976.

EXTREMES FOR CURRENT YEAR.--Combined river and diversion: Peak discharges above base of 500 ft<sup>3</sup>/s and maximum (\*) from rating curve extended above 1,220 ft<sup>3</sup>/s;

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1215	2,270	6.41	Feb. 8	1145	736	5.03
Dec. 23	0115	971	5.36	Mar. 1	2030	*2,420	6.22
Jan. 29	0730	582	4.77				

Minimum daily discharge, 0.61 ft<sup>3</sup>/s Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.47	54	15	138	800	150	500	120	10	5.6	17
2	1.1	.44	16	13	156	1160	140	430	123	8.4	2.1	17
3	1.1	.46	10	11	115	723	130	350	129	7.3	2.9	18
4	1.0	.46	8.2	9.0	114	579	125	357	136	6.5	4.8	22
5	.93	.48	6.7	7.8	118	419	115	286	138	5.8	2.6	21
6	.72	.47	7.1	7.1	157	386	110	264	109	5.3	5.8	24
7	.68	.49	5.8	6.7	329	328	105	256	99	4.9	13	32
8	.64	.50	3.8	6.4	539	287	96	262	96	4.5	11	34
9	.58	.83	26	6.1	283	251	93	267	93	4.2	16	34
10	.57	6.6	35	5.9	187	233	90	257	96	4.0	12	35
11	.57	2.1	39	5.8	144	220	93	234	93	3.7	10	34
12	.57	.73	38	5.7	116	201	94	223	84	3.5	11	33
13	.57	.65	34	5.6	95	188	86	214	86	3.3	8.9	33
14	.57	.69	28	5.7	92	178	82	206	92	3.2	9.9	33
15	.54	.75	21	6.0	82	178	77	217	84	3.1	16	32
16	.54	.79	16	5.9	65	174	73	229	99	2.9	33	35
17	.54	.87	14	5.8	74	168	72	224	99	2.8	34	36
18	.54	.78	13	5.9	66	460	105	204	91	2.7	34	27
19	.54	40	9.5	6.0	64	380	100	202	81	2.6	25	20
20	.52	22	7.3	5.9	56	240	170	201	76	2.6	16	20
21	.50	6.3	6.3	5.8	55	290	800	198	66	2.6	13	29
22	.50	3.3	17	6.1	54	260	500	201	66	2.2	8.2	25
23	.50	1.9	246	6.9	52	400	360	204	72	7.7	7.4	23
24	.50	.70	57	7.0	60	600	290	142	35	13	9.2	19
25	.50	.70	44	8.4	67	430	260	117	51	17	16	12
26	.47	.60	32	8.0	76	330	230	115	33	12	15	12
27	.52	.62	30	170	450	280	240	112	29	3.5	14	9.3
28	.59	.75	26	202	600	250	290	110	23	7.9	14	1.9
29	.47	4.4	23	411	---	220	350	116	18	5.7	15	1.2
30	.47	358	20	253	---	195	620	123	12	2.5	17	2.6
31	.49	---	17	168	---	170	---	125	---	2.2	19	---
TOTAL	19.53	457.83	910.7	1392.5	4404	10978	6046	6946	2429	167.6	421.4	692.0
MEAN	.63	15.3	29.4	44.9	157	354	202	224	81.0	5.41	13.6	23.1
MAX	1.2	358	246	411	600	1160	800	500	138	17	34	36
MIN	.47	.44	3.8	5.6	52	168	72	110	12	2.2	2.1	1.2
AC-FT	39	908	1810	2760	8740	21770	11990	13780	4820	332	836	1370
CAL YR 1982	TOTAL	11810.70	MEAN	32.4	MAX	907	MIN	.44	AC-FT	23430		
WTR YR 1983	TOTAL	34864.56	MEAN	95.8	MAX	1160	MIN	.44	AC-FT	69150		

## SANTA ANA RIVER BASIN

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 1982 TO SEPTEMBER 1983DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	6.4	57	19	143	805	153	507	124	14	11	17
2	11	6.7	20	17	161	1160	142	436	127	12	2.1	17
3	11	7.0	13	15	120	728	133	356	133	11	2.9	18
4	7.7	7.3	11	13	119	584	127	363	140	9.9	4.8	22
5	7.5	7.3	9.9	12	123	424	119	292	141	12	9.7	21
6	7.2	6.6	8.1	11	162	391	115	270	112	13	9.9	24
7	7.0	6.0	7.8	11	334	330	110	262	102	12	13	32
8	7.0	6.2	6.9	11	544	287	99	267	98	14	11	34
9	6.1	7.5	29	10	288	251	94	272	94	14	16	34
10	5.6	14	38	9.6	192	235	92	261	97	14	12	35
11	5.9	5.3	40	11	147	225	98	236	94	14	10	34
12	5.8	2.1	38	10	118	206	99	226	85	14	11	33
13	6.1	9.6	34	9.8	97	193	91	216	87	13	8.9	33
14	6.2	1.2	28	9.7	93	183	87	209	94	13	9.9	33
15	5.5	1.4	23	13	84	183	82	219	86	13	16	32
16	5.7	1.5	20	16	69	179	78	232	102	13	33	35
17	5.4	2.1	18	15	78	173	78	227	102	12	34	36
18	5.9	3.2	16	14	70	465	111	206	94	12	34	30
19	5.7	42	13	15	68	385	106	205	84	12	25	23
20	6.5	24	11	15	61	245	177	204	78	12	16	23
21	6.7	9.6	9.2	14	59	293	807	201	69	11	13	31
22	6.4	5.5	20	14	57	263	507	204	70	11	8.2	27
23	6.3	3.1	248	14	54	405	368	208	76	23	7.4	25
24	7.0	.84	59	10	63	605	298	147	39	29	9.2	21
25	7.0	.86	46	13	71	435	267	121	55	30	16	14
26	8.3	.61	34	13	81	335	236	119	37	20	15	14
27	10	1.2	32	173	455	285	245	116	32	17	14	14
28	5.2	2.9	28	207	605	255	294	114	26	21	14	9.7
29	7.4	6.7	25	415	---	224	356	120	21	20	15	10
30	6.8	359	24	258	---	199	627	127	15	18	17	12
31	6.7	---	22	173	---	174	---	129	---	17	19	---
TOTAL	216.0	549.07	988.9	1561.1	4516	11105	6196	7072	2514	470.9	438.0	743.7
MEAN	6.97	18.3	31.9	50.4	161	358	207	228	83.8	15.2	14.1	24.8
MAX	11	359	248	415	605	1160	807	507	141	30	34	36
MIN	5.2	.61	6.9	9.6	54	173	78	114	15	9.9	2.1	9.7
AC-FT	428	1090	1960	3100	8960	22030	12290	14030	4990	934	869	1480
CAL YR 1982	TOTAL	14989.60	MEAN	41.1	MAX	907	MIN	.61	AC-FT	29730		
WTR YR 1983	TOTAL	36370.67	MEAN	99.9	MAX	1160	MIN	.61	AC-FT	72140		



## 11070050 BAUTISTA CREEK AT VALLE VISTA, CA

LOCATION.--Lat 33°44'04", long 116°53'33", in SE 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 1,835 ft, from topographic map.

REMARKS.--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.--14 years, 2.75 ft<sup>3</sup>/s, 1,990 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,320 ft<sup>3</sup>/s (revised) Feb. 21, 1980, gage height, 6.40 ft, from rating curve extended above 80 ft<sup>3</sup>/s on basis of slope-conveyence study of maximum flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 260 ft<sup>3</sup>/s, estimated, Mar. 2; no flow many days.

REVISIONS.--The maximum discharge for period of record has been revised to 8,320 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 6.40 ft, superseding figures published in the reports for 1980-82.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.11	.46	0	0	50	0	5.0	0	.07	0	1.2
2	.03	0	0	0	18	260	0	2.0	0	.04	0	1.2
3	.35	0	0	0	4.9	160	0	0	0	.02	0	1.2
4	1.0	.14	0	0	.10	60	.23	0	0	.15	0	1.6
5	.32	.02	0	0	1.6	.29	.41	0	0	.01	0	1.5
6	.01	.04	0	0	8.0	.54	.46	0	0	0	.06	1.3
7	.10	.12	0	3.2	38	0	.11	0	.10	.20	3.3	1.4
8	.22	.11	0	18	120	0	0	0	.21	.11	1.2	1.2
9	.04	6.0	.25	14	4.1	0	.03	0	0	.30	1.9	1.2
10	0	11	0	23	.17	0	.08	.12	0	.03	2.4	1.2
11	0	.04	0	21	0	0	.14	.04	0	0	1.2	1.2
12	0	.22	0	19	0	0	.12	0	0	.15	1.2	1.2
13	0	2.1	0	8.9	0	0	0	0	0	.05	1.2	1.5
14	.14	2.9	0	3.0	0	.01	0	0	0	.06	1.2	1.7
15	0	3.3	0	3.5	0	0	.01	0	.04	.28	2.5	1.7
16	.01	4.6	0	10	0	0	0	0	0	.56	1.9	2.2
17	.05	4.8	0	13	0	.18	.06	0	0	.64	1.6	2.2
18	.15	2.8	0	3.4	0	25	.05	0	0	.56	2.0	2.1
19	.02	.64	0	7.3	0	3.4	.03	0	0	.16	2.0	1.6
20	.09	0	0	4.7	0	0	.11	0	.01	0	1.2	1.2
21	.01	0	0	1.8	0	16	.39	.17	0	0	1.8	2.1
22	0	0	21	2.1	0	1.6	0	.27	0	0	1.5	1.5
23	.02	0	58	2.2	0	.65	0	.17	0	0	1.2	1.2
24	.13	0	0	.22	1.9	34	0	0	0	0	1.2	1.9
25	.44	0	0	0	0	28	.03	0	0	0	1.2	1.8
26	.09	0	0	.17	14	.01	.05	0	.06	0	1.2	1.7
27	.09	2.1	0	40	67	0	.01	0	.01	0	1.3	2.2
28	0	7.6	4.2	6.2	11	0	0	0	0	0	1.4	1.7
29	.19	.12	2.6	80	---	0	.13	0	0	0	1.7	1.5
30	3.2	202	.05	.86	---	0	14	0	.10	0	1.2	1.3
31	1.9	---	1.8	0	---	0	---	0	---	0	1.5	---
TOTAL	8.62	250.76	88.36	285.55	288.77	639.68	16.45	7.77	0.53	3.39	40.06	46.5
MEAN	.28	8.36	2.85	9.21	10.3	20.6	.55	.25	.018	.11	1.29	1.55
MAX	3.2	202	58	80	120	260	14	5.0	.21	.64	3.3	2.2
MIN	0	0	0	0	0	0	0	0	0	0	0	1.2
AC-FT	17	497	175	566	573	1270	33	15	1.1	6.7	79	92

CAL YR 1982 TOTAL 895.01 MEAN 2.45 MAX 202 MIN 0 AC-FT 1780  
WTR YR 1983 TOTAL 1676.44 MEAN 4.61 MAX 260 MIN 0 AC-FT 3330

11070375 SAN JACINTO RIVER AT RAILROAD CANYON WEIR, NEAR ELSINORE, CA

LOCATION.--Lat 33°44'10", long 117°15'08", in SW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1951 to September 1982. Monthly discharge only prior to October 1971.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft, from topographic map. Prior to Sept. 28, 1960, at site 0.8 mi upstream at different datum.

REMARKS.--Flow partially regulated by Lake Hemet (station 11069000). Diversions for irrigation and domestic use above station. At times imported Colorado River water is discharged into channel above station by Temescal Water Co. or Elsinore Valley Municipal Water District.

COOPERATION.--Records are published as furnished by Riverside County Flood Control and Water Conservation District.

AVERAGE DISCHARGE.--River only: 31 years, 12.1 ft<sup>3</sup>/s, 8,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,700 ft<sup>3</sup>/s Feb. 22, 1980, gage height, 7.27 ft; no flow for long periods in each year.

NOTE.--Records for current year will not be published due to insufficient data furnished by cooperator.

## 11070500 SAN JACINTO RIVER NEAR ELSINORE, CA

LOCATION.--Lat 33°39'51", long 117°17'35", in SE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1916 to current year. Monthly figures 1927-50, adjusted for diversion, published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 1,270 ft, 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 at different datum.

REMARKS.--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 above station. Diversion for irrigation and domestic use above Railroad Canyon Reservoir. No diversion by Temescal Water Co. during current year from Railroad Canyon Reservoir for irrigation below station in vicinity of Corona.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft<sup>3</sup>/s Feb. 17, 1927, gage height, 11.8 ft, from rating curve extended above 2,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,170 ft<sup>3</sup>/s Mar. 2, gage height, 9.98 ft; minimum daily, 0.24 ft<sup>3</sup>/s Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.54	2.5	1.2	1.4	2300	261	316	8.9	1.2	.31	.38
2	.47	.52	1.4	1.1	3.3	4460	250	430	7.7	1.1	.30	.43
3	.42	.50	1.1	1.1	5.9	5350	230	490	7.0	1.1	.30	.37
4	.27	.48	1.0	1.2	1.9	2110	207	409	4.9	1.1	.29	.35
5	.28	.47	1.0	1.2	1.6	1330	188	313	3.0	.99	.26	.37
6	.27	.48	.99	1.3	1.8	870	163	259	1.8	.98	.28	.36
7	.29	.49	.98	1.3	1.7	613	139	221	1.3	.92	.33	.41
8	.32	.54	1.4	1.3	2.5	340	116	182	1.0	.84	.38	.38
9	.33	.71	1.1	1.2	2.3	319	101	156	.80	.81	.50	.79
10	.27	1.4	1.1	1.1	56	275	87	143	.76	.80	.52	.39
11	.24	1.3	1.0	1.2	399	227	78	136	.74	.72	.42	.36
12	.25	.69	1.1	1.2	254	195	88	121	.76	.69	.38	.38
13	.26	.69	1.1	1.3	107	165	110	107	.72	.62	.38	.37
14	.30	.67	1.1	1.3	53	139	119	95	.65	.57	.31	.45
15	.30	.64	1.1	1.2	30	129	107	83	.64	.64	.42	.45
16	.29	.71	1.0	1.3	20	139	90	76	.83	.68	.69	.45
17	.31	.69	1.1	1.3	14	128	76	72	.65	.73	.75	.42
18	.32	.69	1.1	1.3	10	145	75	64	.68	.64	.73	.44
19	.33	.70	1.1	1.4	8.1	281	94	56	.72	.52	.77	.53
20	.35	.70	1.1	1.3	5.2	401	145	43	.91	.44	.68	.63
21	.37	.73	1.0	1.4	3.3	407	175	38	.91	.40	.74	.74
22	.35	.76	1.3	1.4	2.4	359	245	31	.88	.48	.59	.70
23	.34	.73	2.6	2.1	1.6	371	365	30	.91	.58	.51	.63
24	.40	.74	1.4	1.7	1.8	507	310	33	1.0	.51	.48	.67
25	.46	.72	1.2	1.7	2.8	621	238	38	1.1	.49	.47	.58
26	.52	.73	1.2	1.6	8.4	756	192	37	1.3	.54	.45	.58
27	.54	.73	1.2	3.8	92	568	151	32	1.2	.64	.41	.63
28	.50	.74	1.2	2.4	915	422	127	28	1.2	.66	.35	.67
29	.52	.78	1.2	9.6	---	343	144	21	1.2	.48	.33	.84
30	.55	11	1.3	2.0	---	303	231	15	1.2	.29	.35	1.1
31	.57	---	1.3	1.5	---	276	---	11	---	.28	.31	---
TOTAL	11.33	31.27	38.27	54.0	2006.0	24849	4902	4086	55.36	21.44	13.99	15.85
MEAN	.37	1.04	1.23	1.74	71.6	802	163	132	1.85	.69	.45	.53
MAX	.57	11	2.6	9.6	915	5350	365	490	8.9	1.2	.77	1.1
MIN	.24	.47	.98	1.1	1.4	128	75	11	.64	.28	.26	.35
AC-FT	22	62	76	107	3980	49290	9720	8100	160	43	28	31
CAL YR 1982	TOTAL	1108.07	MEAN	3.04	MAX	280	MIN	0	AC-FT	2200		
WTR YR 1983	TOTAL	36084.51	MEAN	98.9	MAX	5350	MIN	.24	AC-FT	71570		

## SANTA ANA RIVER BASIN

11072100 TEMESCAL CREEK ABOVE MAIN STREET, AT CORONA, CA

LOCATION.--Lat 33°53'22", long 117°33'48", in La Sierra Grant, Riverside County, Hydrologic Unit 18070203, on left bank on upstream side of Main Street bridge, in Corona, 1.4 mi upstream from topographic boundary of Prado Flood control basin.

DRAINAGE AREA.--224 mi<sup>2</sup>, excludes 768 mi<sup>2</sup> above Lake Elsinore.

PERIOD OF RECORD.--December 1967 to September 1974, December 1980 to July 25, 1983 (temporarily discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 580 ft from topographic map. December 1967 to September 1974, water-stage recorder at site 1.1 mi downstream at different datum.

REMARKS.--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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,850 ft<sup>3</sup>/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 maximum flow; no flow for many days in some years.

EXTREMES FOR CURRENT YEAR.--Indeterminate due to missing gage-height record July 26 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	1.7	5.2	4.1	2.7	1720	31	85	19	69		
2	3.9	2.7	2.6	4.8	32	1700	29	60	13	78		
3	4.1	4.5	2.7	4.6	26	1540	29	54	13	78		
4	3.7	5.7	2.8	4.4	7.2	421	28	49	12	77		
5	3.8	4.3	2.9	4.5	7.5	200	32	49	12	47		
6	3.9	3.5	2.9	3.9	3.7	149	30	44	14	20		
7	4.6	3.0	3.0	3.5	3.8	114	27	40	14	19		
8	3.8	2.8	3.0	3.5	13	100	25	42	12	22		
9	4.5	29	3.4	3.8	4.1	82	28	43	14	55		
10	6.3	43	4.0	4.1	3.0	59	30	44	23	39		
11	5.4	2.1	3.7	3.6	2.3	39	30	43	35	31		
12	4.9	2.0	3.6	4.2	2.1	33	34	44	48	24		
13	3.8	3.4	3.0	4.8	2.0	28	33	52	50	19		
14	3.6	2.7	2.8	5.4	1.9	29	28	55	35	16		
15	4.6	2.8	2.8	4.3	1.8	27	23	54	18	17		
16	4.1	3.4	3.0	4.7	1.7	23	21	47	13	21		
17	4.3	4.8	3.0	4.3	2.0	37	23	42	13	26		
18	4.0	2.9	3.0	4.3	2.1	105	51	42	9.4	30		
19	3.4	2.9	2.8	5.8	2.4	73	39	34	19	32		
20	2.7	2.9	2.8	4.4	2.4	54	95	42	37	36		
21	3.1	2.8	2.9	4.2	2.2	76	118	40	32	65		
22	3.7	2.8	29	8.3	2.3	60	56	37	29	85		
23	3.1	2.8	10	74	2.3	54	37	34	19	82		
24	2.8	2.8	3.0	19	20	214	26	36	18	90		
25	2.7	2.8	3.3	5.1	2.5	107	20	36	54	61		
26	3.5	2.7	3.9	4.5	95	76	19	32	69	---		
27	2.3	2.7	3.5	89	259	62	17	38	74	---		
28	2.7	2.7	3.3	5.2	174	55	19	35	72	---		
29	3.0	3.5	3.6	171	---	44	119	40	55	---		
30	3.0	191	4.2	8.9	---	42	83	36	54	---		
31	2.7	---	4.5	4.4	---	38	---	27	---	---		
TOTAL	116.1	346.7	134.2	480.6	681.0	7361	1180	1356	899.4	---	---	---
MEAN	3.75	11.6	4.33	15.5	24.3	237	39.3	43.7	30.0	---	---	---
MAX	6.3	191	29	171	259	1720	119	85	74	---	---	---
MIN	2.3	1.7	2.6	3.5	1.7	23	17	27	9.4	---	---	---
AC-FT	230	688	266	953	1350	14600	2340	2690	1780	---	---	---

CAL YR 1982 TOTAL 2,615.09 MEAN 7.16 MAX 250 MIN .86 AC-FT 5,180

## 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Concrete dikes have formed low-water control since October 1975. Altitude of gage is 685 ft, from topographic map.

REMARKS.--Records fair. 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 releases of 6,900 acre-ft to the basin via San Antonio Creek from Rialto Pipeline below San Antonio Dam (station 11073210) at a site 10 mi upstream. Chino Basin Municipal Water District took all of the imported water for ground-water replenishment in the Montclair Spreading Grounds upstream of this site. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft<sup>3</sup>/s Feb. 27, 1983, gage height, 10.32 ft, from rating curve extended above 1,200 ft<sup>3</sup>/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 ft<sup>3</sup>/s, gage height, 9.23 ft, present datum, by contracted-opening measurement at site 6.1 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,100 ft<sup>3</sup>/s Feb. 27, gage height, 10.32 ft on basis of slope-conveyance study; minimum daily, 0.41 ft<sup>3</sup>/s Nov. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.84	1.3	.74	2.0	664	1.9	8.4	1.9	2.3	1.6	1.9
2	.84	.74	.94	.84	226	451	2.3	2.7	1.6	1.9	1.6	1.9
3	.84	.62	1.3	.74	9.8	359	1.9	3.1	1.6	2.3	1.6	2.3
4	.94	.62	.56	.56	2.5	196	1.3	2.3	1.3	1.9	1.6	2.3
5	.84	.68	.51	.56	58	68	1.6	1.6	1.1	2.3	2.3	3.1
6	.94	.62	1.5	.56	5.8	69	1.3	2.3	1.1	1.9	1.9	2.3
7	.94	.62	1.8	.51	44	44	1.3	2.3	1.1	1.3	3.9	1.9
8	1.1	5.7	2.0	.56	194	35	1.3	2.3	1.3	1.3	1.9	1.6
9	.74	213	1.6	.51	1.5	27	1.6	2.7	1.3	1.3	30	3.1
10	.74	134	1.5	.68	1.1	21	1.9	2.3	1.6	1.6	1.9	1.6
11	.74	.62	.62	.56	.94	14	2.7	1.9	1.6	1.3	1.6	1.6
12	1.8	.51	.56	.51	.94	9.5	5.3	1.6	1.9	1.3	1.6	1.6
13	2.1	.46	.51	.62	1.8	65	1.9	1.6	1.6	1.3	1.6	2.0
14	.74	.41	1.3	.84	1.6	12	1.9	1.3	1.6	1.6	3.1	1.6
15	1.1	.51	1.5	.84	1.1	1.6	1.6	1.3	1.6	1.9	3.5	1.6
16	.74	.46	1.3	.84	.94	1.6	1.6	1.3	1.6	1.6	33	1.9
17	.84	.51	.56	.84	1.1	62	18	1.3	1.3	1.6	134	1.9
18	1.3	1.8	.51	.68	.94	70	57	1.3	1.3	1.6	12	2.3
19	.84	92	.51	95	.84	3.1	1.6	1.3	1.3	1.6	13	1.9
20	.84	.56	1.5	.84	.84	1.6	169	1.3	1.3	1.6	1.9	2.3
21	1.1	.46	1.1	.84	1.5	76	100	1.3	1.3	1.9	2.3	3.1
22	1.1	.51	415	216	.84	56	1.9	1.3	28	1.6	1.6	2.3
23	1.1	.51	2.8	236	.84	24	1.9	1.6	2.3	1.6	1.6	2.3
24	1.1	.51	.84	189	78	124	1.9	1.6	3.1	1.6	1.9	2.7
25	1.2	.46	.56	2.5	1.5	3.5	1.9	1.6	2.7	1.6	1.6	1.9
26	28	.51	.62	1.3	152	2.7	1.9	1.6	1.9	1.6	1.9	1.9
27	.74	.51	.74	417	1140	2.3	1.9	1.6	1.6	1.3	2.3	1.6
28	.68	.51	.62	66	82	8.1	9.9	1.6	1.6	1.6	2.7	1.9
29	.68	23	4.6	237	---	1.9	257	1.6	1.6	1.6	2.7	55
30	2.8	868	.94	2.8	---	2.3	55	1.6	1.9	1.6	1.9	119
31	.94	---	.62	2.5	---	1.9	---	1.6	---	1.9	2.7	---
TOTAL	59.14	1350.26	450.32	1478.77	2012.42	2477.1	710.3	61.2	75.0	51.4	276.8	232.4
MEAN	1.91	45.0	14.5	47.7	71.9	79.9	23.7	1.97	2.50	1.66	8.93	7.75
MAX	28	868	415	417	1140	664	257	8.4	28	2.3	134	119
MIN	.68	.41	.51	.51	.84	1.6	1.3	1.3	1.1	1.3	1.6	1.6
AC-FT	117	2680	893	2930	3990	4910	1410	121	149	102	549	461
CAL YR 1982	TOTAL	4562.26	MEAN	12.5	MAX	868	MIN	.30	AC-FT	9050		
WTR YR 1983	TOTAL	9235.11	MEAN	25.3	MAX	1140	MIN	.41	AC-FT	18320		

## SANTA ANA RIVER BASIN

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA

LOCATION.--Lat 33°58'58", long 117°35'55", in SW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1968 to July 31, 1977, January 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 660 ft, from topographic map. Prior to July 1977 at site 100 ft downstream at different datum.

REMARKS.--Records poor. No regulation above station. See schematic diagram of Santa Ana River basin. 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.

AVERAGE DISCHARGE.--8 years (water years 1969-76) 2.74 ft<sup>3</sup>/s, 1,990 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft<sup>3</sup>/s Feb. 27, 1983, gage height, 7.85 ft, from floodmark, on basis of slope-conveyance study of maximum flow; no flow most of some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,100 ft<sup>3</sup>/s Feb. 27, gage height, 7.85 ft on basis of slope-conveyance study; minimum daily, 0.02 ft<sup>3</sup>/s Nov. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	.07	19	.50	27	2530	15	92	3.2	1.6	1.6	.70
2	.15	.02	5.5	.40	234	1470	16	71	2.7	1.6	1.2	.69
3	.16	.15	3.9	.30	92	569	15	64	2.7	1.6	1.2	.55
4	.18	.04	2.2	.30	21	298	16	57	2.7	1.6	1.2	.86
5	.17	.05	1.1	.25	47	110	15	54	2.7	1.6	1.2	.86
6	.15	.09	.56	.23	29	66	14	50	2.7	1.6	1.2	.86
7	.15	.12	.46	.23	56	45	15	47	2.6	1.6	2.7	.86
8	.15	.41	.46	.17	581	31	14	44	2.6	1.2	1.6	.86
9	.06	66	.36	.16	75	24	14	39	2.5	1.2	26	.86
10	.07	151	.28	.16	23	21	13	8.7	2.5	.86	1.2	.86
11	.07	1.8	.05	.16	18	23	14	.80	2.5	.86	.55	.86
12	.07	.29	.04	.19	6.8	21	14	6.0	2.4	.86	.55	.86
13	.08	.24	.21	.24	6.0	45	13	5.2	2.3	.86	.86	.86
14	.08	.16	.46	.24	3.8	107	12	5.2	2.3	1.2	.86	.86
15	.08	.95	.28	.24	3.2	31	12	5.2	2.3	1.2	.86	.86
16	.08	1.8	.21	.26	2.7	30	12	5.2	2.2	1.2	60	.86
17	.05	1.8	.28	.26	.55	112	27	3.8	2.2	.86	91	.86
18	.07	1.7	.09	66	.55	218	60	3.8	2.1	.86	10	.86
19	.08	78	.89	647	.55	37	18	5.2	2.1	1.2	1.2	.86
20	.08	.97	.89	67	.55	16	406	5.2	2.1	1.2	1.2	.86
21	.07	.32	.91	27	.55	161	241	5.2	2.1	1.2	1.2	.55
22	.07	.19	218	449	.55	56	65	4.5	2.0	1.2	1.2	.55
23	.05	.43	23	591	.33	25	40	3.8	2.0	1.2	1.1	.55
24	.05	.23	9.0	502	14	183	37	3.8	2.0	1.2	1.1	.55
25	.05	.22	5.5	69	11	27	34	3.8	2.0	.86	1.0	.55
26	.49	.17	1.5	8.9	233	21	36	3.8	2.0	1.2	1.0	.55
27	.09	.19	1.3	1120	2420	17	37	3.8	1.9	1.6	.90	.55
28	.07	.22	1.1	233	520	15	36	3.2	1.9	1.6	.80	.55
29	.05	3.9	1.0	664	---	14	488	3.2	1.9	1.2	.80	.55
30	.09	525	.81	92	---	12	153	3.2	1.8	.86	.80	82
31	.10	---	.68	75	---	14	---	3.2	---	.86	.70	---
TOTAL	3.35	836.53	300.02	4615.19	4427.13	6349	1902	613.80	69.0	37.74	216.78	103.51
MEAN	.11	27.9	9.68	149	158	205	63.4	19.8	2.30	1.22	6.99	3.45
MAX	.49	525	218	1120	2420	2530	488	92	3.2	1.6	91	82
MIN	.05	.02	.04	.16	.33	12	12	.80	1.8	.86	.55	.55
AC-FT	6.6	1660	595	9150	8780	12590	3770	1220	137	75	430	205

CAL YR 1982 TOTAL 1951.80 MEAN 5.34 MAX 525 MIN .02 AC-FT 3870  
WTR YR 1983 TOTAL 19474.05 MEAN 53.4 MAX 2530 MIN .02 AC-FT 38630

NOTE.--No gage-height record Nov. 30 to Jan. 7.

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 mi<sup>2</sup>, excludes 768 mi<sup>2</sup> 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 National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Mar. 18, 1940, at about same site at various datums.

REMARKS.--Records good. Flow regulated since 1941 by Prado Reservoir, capacity, 201,200 acre-ft. Natural stream-flow affected by extensive ground-water withdrawals, diversion for irrigation, and return flow from irrigated areas. California Water Project released 6,900 acre-ft to basin. Chino Basin Municipal Water District used all the imported water for ground-water replenishment in the Montclair spreading grounds. (See station 11073360). See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft<sup>3</sup>/s Feb. 21, 1980, gage height, 6.88 ft; minimum daily, 2.4 ft<sup>3</sup>/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 ft<sup>3</sup>/s, by slope-area measurement at site 2.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,050 ft<sup>3</sup>/s Mar. 2, gage height, 6.74 ft; minimum daily, 15 ft<sup>3</sup>/s Mar. 30 (result of gate closure).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	117	303	341	632	3040	1420	1610	887	327	228	192
2	112	114	339	340	749	4520	1620	1600	886	385	224	195
3	106	110	337	338	908	5050	1590	1590	1180	390	223	180
4	105	111	335	337	434	5510	1270	1570	1510	380	218	173
5	108	112	334	335	277	5590	1140	1560	1490	346	195	164
6	103	114	332	334	274	5560	1130	1540	1500	309	186	184
7	105	121	330	332	387	4580	1110	1520	1510	288	207	189
8	101	122	198	330	1180	1510	556	1500	1470	270	222	194
9	87	75	333	325	812	656	247	1540	1430	285	250	203
10	71	114	331	323	527	1950	248	1550	1390	292	306	195
11	68	227	328	328	380	1580	247	714	1320	253	295	196
12	64	246	326	335	285	869	272	122	1220	236	263	195
13	63	262	323	337	282	862	291	192	698	232	247	193
14	62	259	336	334	280	1140	378	255	464	228	253	179
15	72	308	347	332	428	1570	452	259	384	220	256	158
16	125	333	344	330	526	2050	452	299	333	213	317	148
17	99	325	341	330	383	1030	456	347	342	207	820	166
18	101	318	339	272	474	242	462	370	333	206	891	182
19	99	313	336	323	487	797	467	414	322	237	899	196
20	96	315	332	436	482	1080	472	446	327	230	886	206
21	74	307	336	335	480	1060	1130	463	326	218	836	185
22	86	207	235	147	488	860	1550	465	332	225	521	170
23	77	227	219	214	794	728	1530	437	302	225	307	168
24	75	303	364	419	736	1380	1510	413	282	221	291	187
25	81	285	361	480	536	1470	783	475	302	231	274	200
26	91	254	361	490	1440	1120	271	551	308	240	247	208
27	111	173	359	1060	3090	1110	297	719	329	229	232	206
28	106	154	354	2090	4470	1230	361	910	317	238	217	187
29	107	168	349	2760	---	790	1150	908	309	238	209	217
30	108	178	344	1110	---	15	1620	894	286	241	206	197
31	113	---	342	837	---	502	---	891	---	239	187	---
TOTAL	2884	6272	10148	16634	22221	59451	24482	26124	22089	8079	10913	5613
MEAN	93.0	209	327	537	794	1918	816	843	736	261	352	187
MAX	125	333	364	2760	4470	5590	1620	1610	1510	390	899	217
MIN	62	75	198	147	274	15	247	122	282	206	186	148
AC-FT	5720	12440	20130	32990	44080	117900	48560	51820	43810	16020	21650	11130
CAL YR 1982	TOTAL	79658	MEAN	218	MAX	2250	MIN	10	AC-FT	158000		
WTR YR 1983	TOTAL	214910	MEAN	590	MAX	5590	MIN	15	AC-FT	426300		

## SANTA ANA RIVER BASIN

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 1975-81.  
 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.--Periods of missing conductivity and temperature data due to equipment malfunction or fouled probe.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,830 micromhos Apr. 30, 1971; minimum recorded, 220 micromhos Feb. 20, 1978.

WATER TEMPERATURES: Maximum recorded, 36.0°C Sept. 4, 1972; 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 DISCHARGE: Maximum daily, 18,900 tons Mar. 5, 1978; minimum daily, 0.58 tons Sept. 20, 1978.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,230 micromhos July 26; minimum recorded, 433 micromhos Aug. 18.

WATER TEMPERATURES: Maximum recorded, 30.5°C August 6, 13; minimum recorded, 16.0°C Sept. 30.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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											
01...	1200	120	960	--	20.0	--	--	--	--	--	--
06...	1300	111	1210	--	19.5	--	--	--	--	--	--
NOV											
02...	1400	110	1110	--	17.5	--	--	--	--	--	--
17...	1415	321	990	7.8	13.0	745	7.0	7.7	75	470	1100
DEC											
09...	1400	326	700	--	12.0	--	--	--	--	--	--
27...	1505	351	700	--	10.5	--	--	--	--	--	--
JAN											
07...	1450	324	800	--	10.0	--	--	--	--	--	--
20...	1400	413	1030	--	13.0	--	--	--	--	--	--
28...	1400	2220	555	7.5	13.5	745	40	9.1	89	320	1100
FEB											
07...	1205	350	670	--	11.0	--	--	--	--	--	--
10...	1430	435	660	7.7	12.0	745	14	9.4	89	--	--
22...	1200	456	750	--	15.0	--	--	--	--	--	--
MAR											
08...	1300	1060	470	--	13.5	--	--	--	--	--	--
30...	1500	13	940	7.7	18.5	750	16	7.1	77	300	310
30...	1615	13	940	--	18.5	--	--	--	--	--	--
APR											
06...	1550	1130	680	--	15.5	--	--	--	--	--	--
20...	1205	432	825	--	16.5	--	--	--	--	--	--
MAY											
05...	1110	1610	595	--	18.0	--	--	--	--	--	--
25...	1230	354	630	7.8	19.5	740	5.2	8.5	96	120	K21
JUN											
03...	1030	1010	590	--	20.5	--	--	--	--	--	--
20...	1155	316	900	--	19.5	--	--	--	--	--	--
JUL											
05...	1415	313	935	--	25.5	--	--	--	--	--	--
26...	1000	275	1060	8.0	19.0	745	65	8.1	90	>3500	--
AUG											
05...	0745	214	1120	--	20.5	--	--	--	--	--	--
15...	0725	292	1050	--	23.5	--	--	--	--	--	--
SEP											
09...	0815	231	1160	--	20.5	--	--	--	--	--	--
27...	0945	226	1190	8.1	22.0	745	27	7.9	93	1000	5400
27...	1030	226	1200	--	21.0	--	--	--	--	--	--

See footnotes at end of table.



11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT											
01...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
02...	--	--	--	--	--	--	--	--	--	--	--
17...	280	62	79	19	82	38	2	14	214	120	98
DEC											
09...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
JAN											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
28...	160	31	47	10	40	34	1	9.4	128	59	44
FEB											
07...	--	--	--	--	--	--	--	--	--	--	--
10...	190	32	55	13	48	34	2	12	160	72	53
22...	--	--	--	--	--	--	--	--	--	--	--
MAR											
08...	--	--	--	--	--	--	--	--	--	--	--
30...	290	85	78	23	77	36	2	8.6	205	140	88
30...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
25...	210	54	61	15	49	33	2	5.1	160	86	53
JUN											
03...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUL											
05...	--	--	--	--	--	--	--	--	--	--	--
26...	320	110	88	23	95	39	2	6.6	204	150	110
AUG											
05...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
SEP											
09...	--	--	--	--	--	--	--	--	--	--	--
27...	340	120	95	25	110	41	3	7.1	220	160	140
27...	--	--	--	--	--	--	--	--	--	--	--

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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- 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 SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)
OCT										
01...	--	--	714	--	--	--	--	--	--	--
06...	--	--	721	--	--	--	--	--	--	--
NOV										
02...	--	--	770	--	--	--	--	--	--	--
17...	.60	22	592	570	3.3	3.3	2.3	2.2	.90	1.0
DEC										
09...	--	--	403	--	--	--	--	--	--	--
27...	--	--	411	--	--	--	--	--	--	--
JAN										
07...	--	--	476	--	--	--	--	--	--	--
20...	--	--	606	--	--	--	--	--	--	--
28...	.40	13	313	310	2.4	2.4	1.8	1.9	2.5	.80
FEB										
07...	--	--	379	--	--	--	--	--	--	--
10...	.40	17	375	370	2.2	2.2	1.8	1.7	2.0	1.6
22...	--	--	448	--	--	--	--	--	--	--
MAR										
08...	--	--	293	--	--	--	--	--	--	--
30...	.50	23	559	560	2.8	2.8	.92	.97	2.1	1.4
30...	--	--	552	--	--	--	--	--	--	--
APR										
06...	--	--	400	--	--	--	--	--	--	--
20...	--	--	484	--	--	--	--	--	--	--
MAY										
05...	--	--	363	--	--	--	--	--	--	--
25...	.70	21	386	390	2.5	2.6	.46	.46	1.3	1.0
JUN										
03...	--	--	364	--	--	--	--	--	--	--
20...	--	--	559	--	--	--	--	--	--	--
JUL										
05...	--	--	609	--	--	--	--	--	--	--
26...	.50	25	649	630	5.8	5.0	.15	.17	2.1	1.5
AUG										
05...	--	--	697	--	--	--	--	--	--	--
15...	--	--	647	--	--	--	--	--	--	--
SEP										
09...	--	--	699	--	--	--	--	--	--	--
27...	.50	25	716	700	6.3	6.5	.26	.21	1.8	1.4
27...	--	--	714	--	--	--	--	--	--	--

## SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS- (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- PENDE TOTAL (MG/L AS C)
OCT										
01...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
NOV										
02...	--	--	--	--	--	--	--	--	--	--
17...	3.2	3.2	6.5	6.5	2.3	2.3	2.3	10	--	--
DEC										
09...	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--
JAN										
07...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
28...	4.3	2.7	6.7	5.1	1.6	1.4	1.1	10	9.8	2.6
FEB										
07...	--	--	--	--	--	--	--	--	--	--
10...	3.8	3.3	6.0	5.5	1.3	1.3	1.2	10	9.3	--
22...	--	--	--	--	--	--	--	--	--	--
MAR										
08...	--	--	--	--	--	--	--	--	--	--
30...	3.0	2.4	5.8	5.2	.84	.76	.61	6.7	--	--
30...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
MAY										
05...	--	--	--	--	--	--	--	--	--	--
25...	1.8	1.5	4.3	4.1	.83	.77	.77	3.9	--	--
JUN										
03...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
JUL										
05...	--	--	--	--	--	--	--	--	--	--
26...	2.2	1.7	8.0	6.7	2.1	1.7	1.4	6.8	5.7	1.1
AUG										
05...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
SEP										
09...	--	--	--	--	--	--	--	--	--	--
27...	2.1	1.6	8.4	8.1	2.1	1.7	1.6	7.7	--	--
27...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	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)
NOV										
17...	1415	--	20	--	4	--	53	--	.8	<1
JAN										
28...	1400	3500	--	4	--	100	--	<10	--	--
FEB										
10...	1430	700	40	3	3	100	52	<10	<.5	<1
MAR										
30...	1500	--	10	--	4	--	67	--	.5	<1
JUL										
26...	1000	8000	10	2	3	<100	59	<10	.5	<1
SEP										
27...	0945	--	20	--	3	--	66	--	<.5	<1

See footnotes at end of table.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	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)	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)
NOV 17...	--	--	<1	--	<3	--	5	--	25
JAN 28...	<1	<10	--	3	--	14	--	4600	--
FEB 10...	<1	<10	<1	1	<3	6	4	800	43
MAR 30...	--	--	<1	--	<3	--	5	--	9
JUL 26...	1	10	<1	4	<3	35	3	9800	5
SEP 27...	--	--	<1	--	<3	--	4	--	7

DATE	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)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)
NOV 17...	--	1	--	17	--	49	--	<.1	--
JAN 28...	10	--	10	--	170	--	.5	--	12
FEB 10...	4	3	10	17	120	79	.3	.2	6
MAR 30...	--	1	--	19	--	--	--	.1	--
JUL 26...	<1	<1	20	18	310	85	.3	<.1	13
SEP 27...	--	<1	--	21	--	70	--	<.1	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (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 17...	12	--	1	<1	1	520	<6	--	21
JAN 28...	--	1	--	<1	--	--	--	40	--
FEB 10...	<1	<1	1	<1	<1	360	<6	30	17
MAR 30...	3	--	1	1	<1	500	6	--	16
JUL 26...	5	<1	1	<1	<1	580	7	110	36
SEP 27...	6	--	1	--	<1	620	6	--	12

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)
JAN 28...	1400	<.1	<.010	<.1	<.010	<.010	<.010	.19	<.010	<.010
FEB 10...	1430	<.1	<.010	<.1	<.010	<.010	<.010	.14	<.010	<.010
JUL 26...	1000	<.1	<.010	<.1	<.010	<.010	<.010	.05	<.010	<.010

See footnotes at end of table.

## SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)
JAN 28...	<.010	<.01	<.010	<.010	.020	.04	<.01	<.01	<.01	.01
FEB 10...	<.010	<.01	<.010	<.010	.010	.01	<.01	<.01	<.01	<.01
JUL 26...	<.010	<.01	<.010	<.010	.010	<.01	<.01	<.01	<.01	<.01

DATE	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	MIREX, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JAN 28...	<.1	<1	<.01	.14	<.01	<.01	<.01	<.10	<.01
FEB 10...	<.1	<1	<.01	.08	<.01	<.01	<.01	<.10	<.01
JUL 26...	<.1	<1	<.01	.06	<.01	<.01	<.01	<.10	<.01

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

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										---	---	---
19										680	600	646
20										640	600	620
21										670	610	638
22										660	610	635
23										660	620	641
24										680	610	641
25										660	610	630
26										661	591	621
27										652	572	607
28										613	563	593
29										614	534	582
30										585	535	566
31										606	536	572
MONTH										---	---	---



11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												
DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1									---	---	26.5	20.5
2									---	---	29.0	21.5
3									---	---	28.5	21.5
4									---	---	27.5	20.5
5									---	---	27.0	21.0
6									30.5	23.0	28.0	20.5
7									30.0	23.5	27.0	21.0
8									30.0	23.5	27.5	20.5
9									29.0	23.5	27.0	21.0
10									29.5	23.5	27.5	22.5
11									29.5	22.5	29.0	22.0
12									28.5	22.0	28.0	22.0
13									30.5	23.5	27.5	21.5
14									30.0	23.5	28.0	21.5
15									29.0	24.0	27.5	21.0
16									29.0	25.0	27.5	21.5
17									29.0	24.5	27.5	21.5
18									25.5	24.0	28.0	21.0
19									24.0	23.0	26.0	22.5
20									23.5	23.0	24.5	21.5
21									24.5	23.0	28.0	22.0
22									27.0	21.5	27.0	23.0
23									27.0	19.5	27.0	22.5
24									27.0	20.0	26.0	20.5
25									27.5	20.5	25.5	19.5
26									28.0	20.5	25.5	21.0
27									28.5	21.0	25.0	20.5
28									28.0	20.5	23.0	19.5
29									28.0	20.0	22.5	19.5
30									27.0	20.0	20.5	16.0
31									27.5	20.0	---	---
MONTH									---	---	29.0	16.0

## SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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						
02...	1400	110	17.5	82	24	96
17...	1415	321	13.0	36	31	52
DEC						
09...	1400	326	12.0	46	40	--
27...	1505	351	10.5	76	72	100
JAN						
07...	1450	324	10.0	12	10	94
20...	1400	413	13.0	25	28	53
28...	1400	2220	13.5	28	168	74
FEB						
07...	1205	350	11.0	18	17	92
10...	1430	435	12.0	18	21	79
22...	1200	456	15.0	9	11	84
MAR						
08...	1300	1060	13.5	295	843	--
30...	1500	13	18.5	23	.81	83
APR						
06...	1550	1130	15.5	16	49	72
20...	1205	432	16.5	11	13	70
MAY						
05...	1110	1610	18.0	26	113	72
25...	1230	354	19.5	12	11	88
JUN						
03...	1030	1010	20.5	141	385	68
20...	1155	316	19.5	293	250	96
JUL						
26...	1000	275	19.0	433	322	61
AUG						
05...	0745	214	20.5	318	184	68
15...	0725	292	23.5	402	317	64
SEP						
09...	0815	231	20.5	467	291	52
27...	0945	226	22.0	336	205	52



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. Altitude of gage is 262 ft, from topographic map.

REMARKS.--Records poor. Records for February through September not available because of vandalism at gage, indefinite stage-discharge relation due to backwater from sand in downstream percolation ponds, and sand in the throat and approach to the flume. 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 ft<sup>3</sup>/s Jan. 14, 1978; no flow for some periods in each year.

EXTREMES FOR PERIOD (OCT. 1, 1982 TO JAN. 31, 1983).--Maximum daily discharge, 319 ft<sup>3</sup>/s Jan. 26; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1982 to JANUARY 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	235	303								
2		0	294	301								
3		0	307	300								
4		0	313	290								
5		0	312	281								
6		0	312	279								
7		0	310	278								
8		0	197	278								
9		0	298	281								
10		39	284	282								
11		176	282	283								
12		188	281	284								
13		207	280	284								
14		206	286	283								
15		221	303	281								
16		248	301	280								
17		246	300	279								
18		243	299	264								
19		243	298	208								
20		238	297	315								
21		237	297	295								
22		210	311	168								
23		136	116	182								
24		217	283	305								
25		211	286	306								
26		196	287	319								
27		148	301	230								
28		128	314	163								
29		132	310	143								
30		123	307	59								
31		---	303	83								
TOTAL	0	3993	8904	7887								
MEAN	0	133	287	254								
MAX	0	248	314	319								
MIN	0	0	116	59								
AC-FT	0	7920	17660	15640								

CAL YR 1982 TOTAL 52576.00 MEAN 144 MAX 352 MIN 0 AC-FT 104300

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 current year.

INSTRUMENTATION.--Specific-conductance recorder since July 1974.

REMARKS.--Missing specific-conductance data due to probe or battery malfunction and vandalism at gage.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 micromhos Sept. 21, 1978; minimum recorded, 143 micromhos Mar. 10, 1980.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
MAR					
25...	1300	100	625	22.5	394
MAY					
05...	1045	170	520	18.5	351
JUN					
27...	1500	309	980	22.5	610

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. Altitude of gage is 262 ft, from topographic map.

REMARKS.--Records poor. Records for February through September not available because of vandalism at gage, indefinite stage-discharge relation due to backwater from sand in downstream percolation ponds, and sand in the throat and approach to the flume. 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 ft<sup>3</sup>/s Jan. 14, 1978; no flow for some periods in each year.

EXTREMES FOR PERIOD (OCT. 1, 1982 TO JAN. 31, 1983).--Maximum daily discharge, 319 ft<sup>3</sup>/s Jan. 26; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1982 to JANUARY 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	235	303								
2		0	294	301								
3		0	307	300								
4		0	313	290								
5		0	312	281								
6		0	312	279								
7		0	310	278								
8		0	197	278								
9		0	298	281								
10		39	284	282								
11		176	282	283								
12		188	281	284								
13		207	280	284								
14		206	286	283								
15		221	303	281								
16		248	301	280								
17		246	300	279								
18		243	299	264								
19		243	298	208								
20		238	297	315								
21		237	297	295								
22		210	311	168								
23		136	116	182								
24		217	283	305								
25		211	286	306								
26		196	287	319								
27		148	301	230								
28		128	314	163								
29		132	310	143								
30		123	307	59								
31		---	303	83								
TOTAL	0	3993	8904	7887								
MEAN	0	133	287	254								
MAX	0	248	314	319								
MIN	0	0	116	59								
AC-FT	0	7920	17660	15640								
CAL YR 1982	TOTAL	52576.00	MEAN 144	MAX	352	MIN 0	AC-FT	104300				

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 current year.

INSTRUMENTATION.--Specific-conductance recorder since July 1974.

REMARKS.--Missing specific-conductance data due to probe or battery malfunction and vandalism at gage.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 micromhos Sept. 21, 1978; minimum recorded, 143 micromhos Mar. 10, 1980.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
MAR 25...	1300	100	625	22.5	394
MAY 05...	1045	170	520	18.5	351
JUN 27...	1500	309	980	22.5	610

## 11075720 CARBON CREEK BELOW CARBON CANYON DAM, CA

LOCATION.--Lat 33°54'40", long 117°50'29", in SW 1/4 NE 1/4 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 mi<sup>2</sup>.

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.--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.--22 years, 1.23 ft<sup>3</sup>/s, 891 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 554 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 5.11 ft, present datum, from rating curve extended above 110 ft<sup>3</sup>/s on basis of optical current meter measurement at 241 ft<sup>3</sup>/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, 554 ft<sup>3</sup>/s Mar. 1, gage height, 5.11 ft; from rating curve extended as explained above; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.17	0	.10	276	3.3	6.4	.94	.79	.82	.04
2		0	0	0	12	322	3.2	3.6	.71	.79	1.1	.04
3		0	0	0	10	197	3.0	2.3	.90	.79	.65	.04
4		0	0	0	1.0	66	2.9	2.0	.98	.66	.63	0
5		0	0	0	2.9	18	2.8	1.6	.05	.63	.52	0
6		0	0	0	6.8	12	2.7	1.6	.79	.63	.48	0
7		0	0	0	3.3	11	2.6	1.6	.79	.63	.48	0
8		0	0	0	4.0	4.0	2.6	1.6	.79	.63	.48	0
9		.76	0	0	2.8	.04	2.5	1.7	.79	.63	.48	0
10		10	0	0	2.0	.04	2.4	1.8	.79	.52	.48	0
11		.18	0	0	1.7	.23	2.3	1.3	.79	.48	.43	0
12		.12	0	0	1.5	.63	3.7	1.4	.79	.48	.36	0
13		.11	0	0	1.3	.59	2.9	1.5	.63	.48	.25	0
14		.09	0	0	1.2	32	2.6	1.3	.63	.48	.25	0
15		.06	0	0	1.1	6.5	2.3	1.1	.63	.48	.17	0
16		.06	0	0	1.0	4.7	1.9	1.3	.63	.68	.16	0
17		.06	0	0	.98	6.1	1.6	.79	.51	.68	.15	0
18		.04	0	0	.94	7.2	8.1	.91	.48	.66	.14	0
19		.05	0	0	.90	7.3	2.9	1.5	.48	.60	.13	0
20		.06	0	0	.86	6.8	14	.98	.48	.63	.12	0
21		.06	0	0	.82	12	9.7	.91	.48	.63	.12	0
22		.06	5.8	.22	.80	6.8	8.1	.96	.48	.75	.11	0
23		.06	14	6.6	.78	7.7	2.7	.96	.48	.75	.11	0
24		.06	0	1.8	.76	78	2.5	1.1	.36	.90	.10	0
25		.06	0	3.6	.73	11	1.9	1.1	.36	.98	.06	0
26		.05	0	.63	.72	7.3	1.8	.96	.36	.92	.06	0
27		.04	0	33	103	5.6	1.6	.88	.36	.98	.06	0
28		.04	0	4.3	222	4.8	1.4	.79	.36	.80	.06	0
29		.04	0	30	---	4.2	27	.79	.49	.68	.06	0
30		28	0	.17	---	3.8	7.7	.81	.83	.54	.06	1.2
31		---	0	.10	---	3.6	---	.90	---	.48	.04	---
TOTAL	0	40.06	19.97	80.42	385.99	1122.93	134.7	46.44	18.94	20.80	9.12	1.32
MEAN	0	1.34	.64	2.59	13.0	36.2	4.49	1.50	.63	.67	.29	.044
MAX	0	28	14	33	222	322	27	6.4	.98	.98	1.1	1.2
MIN	0	0	0	0	.10	.04	1.4	.79	.36	.48	.04	0
AC-FT	0	79	40	160	766	2230	267	92	38	41	18	2.6
CAL YR 1982	TOTAL	290.65	MEAN	.80	MAX	79	MIN	0	AC-FT	577		
WTR YR 1983	TOTAL	1880.69	MEAN	5.15	MAX	322	MIN	0	AC-FT	3730		

## SANTA ANA RIVER BASIN

11075755 SANTA ANA RIVER AT BALL ROAD, AT ANAHEIM, CA

LOCATION.--Lat 33°49'00", long 117°52'17", in SE 1/4 SW 1/4 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 mi<sup>2</sup>, excludes 768 mi<sup>2</sup> above Lake Elsinore.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder with concrete cut-off wall. Altitude of gage is 170 ft, from topographic map.

REMARKS.--Records poor. River flow is regulated by Prado Dam, infiltration ponds and diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 6.17 ft from rating curve extended above 7,000 ft<sup>3</sup>/s; no flow for many months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,500 ft<sup>3</sup>/s Mar. 1, gage height, 6.17 ft from rating curve as explained above; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	6.6	530	6280	832	1540	776	.04	25	.10
2		0	0	0	436	5570	1440	1610	734	.01	9.0	.08
3		0	0	2.7	860	6180	1500	1610	803	3.0	1.5	.06
4		0	0	11	403	6500	1300	1440	1500	34	.80	.05
5		0	0	.26	174	4570	888	1440	1500	66	.30	.04
6		0	0	0	135	4560	864	1540	1500	37	.10	.02
7		0	0	0	64	4640	911	1540	1500	3.4	.08	0
8		0	11	0	738	2600	563	1540	1420	.36	.05	0
9		0	0	.11	890	298	7.2	1390	1250	.42	.02	0
10		285	0	.18	392	2250	1.3	1460	1100	.18	0	0
11		0	0	.18	128	2280	.75	1070	1000	.18	0	0
12		0	0	1.7	13	1060	0	2.7	860	.14	0	0
13		0	0	3.0	4.5	977	0	1.3	780	.10	0	0
14		0	0	.02	1.5	1250	0	.57	111	.07	0	0
15		0	0	.02	3.4	2060	6.3	0	3.1	.04	0	0
16		0	.60	.02	158	2220	15	0	.26	.02	15	0
17		0	.69	.02	128	1750	23	0	.18	0	130	0
18		0	.03	.02	108	119	73	1.5	.22	0	301	2.4
19		0	0	.02	183	354	37	1.4	.10	0	403	2.7
20		0	0	.02	192	1160	102	.05	.06	0	510	.91
21		0	.12	.53	192	1190	716	.10	1.3	0	371	1.2
22		0	260	30	174	911	1440	.36	1.9	0	220	1.4
23		0	193	52	514	550	1440	1.7	2.2	0	66	1.9
24		0	2.6	115	727	2130	1350	3.0	.67	0	35	2.7
25		0	35	192	205	1660	940	5.5	.77	1.0	1.9	1.5
26		0	62	166	1380	911	76	126	.98	10	.30	1.5
27		0	66	963	3180	888	1.9	183	.42	26	.26	1.4
28		0	86	1410	3880	988	.46	231	.30	21	.67	60
29		0	102	2710	---	806	870	430	.24	26	.26	35
30		409	66	1080	---	4.4	1570	820	0	40	.18	340
31		---	43	714	---	32	---	694	---	62	.10	---
TOTAL	0	694	928.04	7458.40	15793.4	66748.4	16967.91	18682.18	14846.60	330.96	2091.52	452.96
MEAN	0	23.1	29.9	241	564	2153	566	603	495	10.7	67.5	15.1
MAX	0	409	260	2710	3880	6500	1570	1610	1500	66	510	340
MIN	0	0	0	0	1.5	4.4	0	0	0	0	0	0
AC-FT	0	1380	1840	14790	31330	132400	33660	37060	29450	656	4150	898
CAL YR 1982	TOTAL	19296.89	MEAN	52.9	MAX	3960	MIN	0	AC-FT	38280		
HTR YR 1983	TOTAL	144994.37	MEAN	397	MAX	6500	MIN	0	AC-FT	287600		

## 11075800 SANTIAGO CREEK AT MODJESKA, CA

LOCATION.--Lat 33°42'32", long 117°38'05", in SE 1/4 NW 1/4 sec.29, T.5 S., R.7 W., Orange County, Hydrologic Unit 18070203, on right bank at Modjeska road bridge, 0.3 mi west of Modjeska, and 0.4 mi downstream from Harding Creek.

DRAINAGE AREA.--12.5 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 1,254.35 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1969, at datum 4.42 ft higher.

REMARKS.--Records poor. Slight regulation by Modjeska Reservoir on Harding Creek. No diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--22 years, 8.82 ft<sup>3</sup>/s, 6,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 10.50 ft, present datum, at site then in use, from rating curve extended above 840 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1115	448	3.25	Mar. 2	Unknown	*3,400	3.90
Dec. 22	2330	498	3.36	Mar. 24	0400	494	2.76
Jan. 27	1330	262	2.77	Apr. 21	0330	108	4.20
Feb. 8	0600	146	2.32	Apr. 29	0700	115	4.22
Feb. 27	Unknown	570	3.50				

Minimum daily discharge, 0.12 ft<sup>3</sup>/s Oct. 6-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.16	13	4.1	46	287	42	73	12	4.8	1.7	1.0
2	.14	.16	4.6	3.9	24	570	38	57	12	5.1	1.7	.97
3	.14	.16	4.4	3.4	22	800	34	54	12	5.1	1.7	.92
4	.14	.16	4.1	3.4	17	398	32	53	12	5.1	1.7	.89
5	.14	.17	3.9	2.6	16	222	30	47	11	4.8	1.7	.87
6	.12	.17	3.6	2.6	15	125	28	43	11	4.5	1.6	.85
7	.12	.17	3.6	2.6	16	92	26	39	11	4.2	1.6	.82
8	.12	.17	4.1	13	99	78	25	36	10	4.5	1.5	.80
9	.12	.56	4.4	12	74	66	24	32	10	4.5	1.4	.78
10	.12	1.9	4.1	11	58	60	23	32	10	4.2	1.5	.76
11	.14	1.4	3.9	10	49	53	22	29	10	3.9	1.5	.75
12	.14	.89	3.9	11	42	51	21	25	11	3.7	1.5	.73
13	.14	.66	3.9	13	38	47	20	24	8.9	3.5	1.5	.72
14	.14	.56	3.9	11	34	47	19	23	7.6	3.3	1.1	.71
15	.14	.48	3.6	12	31	46	19	22	7.6	3.3	1.1	.71
16	.14	.40	4.1	11	29	44	20	21	6.2	3.3	1.1	.71
17	.14	.40	4.4	9.8	28	44	20	19	6.2	3.3	1.7	.71
18	.14	.40	4.4	9.1	26	51	27	18	5.9	2.9	1.8	.71
19	.14	1.0	4.1	12	25	60	23	17	5.9	2.7	2.9	.71
20	.14	1.0	3.9	8.4	24	58	43	16	5.6	2.5	2.9	.71
21	.14	.89	3.6	7.8	23	55	80	16	5.6	2.2	2.7	.71
22	.14	.66	66	9.8	22	53	43	16	5.4	2.2	2.5	.79
23	.14	.66	101	24	22	58	36	15	5.1	2.2	2.2	.79
24	.14	.66	22	33	21	228	32	15	4.8	2.2	2.0	.79
25	.14	.56	10	34	21	140	29	15	4.8	2.2	1.8	.79
26	.14	.48	5.2	18	20	106	27	14	4.5	2.2	1.6	.71
27	.14	.48	4.4	126	291	80	26	14	4.5	2.0	1.4	.71
28	.16	.40	4.1	100	120	68	24	13	4.5	2.0	1.3	.71
29	.16	.56	4.1	139	---	58	76	13	4.8	2.0	1.2	.71
30	.16	122	3.9	78	---	52	102	13	4.8	1.7	1.1	9.7
31	.16	---	4.1	55	---	47	---	12	---	1.7	1.0	---
TOTAL	4.32	138.42	318.3	790.5	1253	4144	1011	836	234.7	101.8	52.0	32.24
MEAN	.14	4.61	10.3	25.5	44.8	134	33.7	27.0	7.82	3.28	1.68	1.07
MAX	.16	122	101	139	291	800	102	73	12	5.1	2.9	9.7
MIN	.12	.16	3.6	2.6	15	44	19	12	4.5	1.7	1.0	.71
AC-FT	8.6	275	631	1570	2490	8220	2010	1660	466	202	103	64
CAL YR 1982	TOTAL	2533.91	MEAN	6.94	MAX	167	MIN	.04	AC-FT	5030		
WTR YR 1983	TOTAL	8916.28	MEAN	24.4	MAX	800	MIN	.12	AC-FT	17690		

## SANTA ANA RIVER BASIN

11077500 SANTIAGO CREEK AT SANTA ANA, CA

LOCATION.--Lat 33°46'13", long 117°53'01", in SW 1/4 NW 1/4 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 mi<sup>2</sup>.

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.--Records good. 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.--55 years, 5.15 ft<sup>3</sup>/s, 3,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,600 ft<sup>3</sup>/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, 2,030 ft<sup>3</sup>/s Mar. 1, gage height, 6.94 ft; no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	0	0	379	0	13				0
2		0	0	0	.44	92	0	0				0
3		0	0	0	3.6	4.6	0	0				0
4		0	0	0	.18	37	0	0				0
5		0	0	0	.55	279	0	0				0
6		0	0	0	0	8.4	0	0				0
7		0	0	0	0	0	0	0				0
8		0	0	0	7.8	0	0	0				0
9		18	0	0	0	0	0	0				0
10		61	0	0	0	0	0	0				0
11		0	0	0	0	0	0	0				0
12		0	0	0	0	0	0	0				0
13		0	0	0	0	0	0	0				0
14		0	0	0	0	0	0	0				0
15		0	0	0	0	0	0	0				0
16		0	0	0	0	0	0	0				0
17		0	0	0	0	21	0	0				0
18		.01	0	0	0	40	8.8	0				0
19		.05	0	0	0	1.2	0	0				0
20		0	0	0	0	0	24	0				0
21		0	0	0	0	50	0	0				0
22		0	64	10	0	37	0	0				0
23		0	2.6	62	0	23	0	0				0
24		0	0	11	3.1	148	0	0				0
25		0	0	.08	0	8.9	0	0				0
26		0	0	0	118	0	0	0				0
27		0	0	128	78	0	0	0				0
28		0	0	.25	1.3	0	0	0				0
29		.06	0	28	---	0	53	0				0
30		155	0	0	---	0	0	0				8.6
31		---	0	0	---	0	---	0	---			---
TOTAL	0	234.12	66.6	239.33	212.97	1129.1	85.8	13	0	0	0	8.6
MEAN	0	7.80	2.15	7.72	7.61	36.4	2.86	.42	0	0	0	.29
MAX	0	155	64	128	118	379	53	13	0	0	0	8.6
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	464	132	475	422	2240	170	26	0	0	0	17
CAL YR 1982	TOTAL	633.02	MEAN	1.73	MAX	155	MIN	0	AC-FT	1260		
WTR YR 1983	TOTAL	1999.52	MEAN	5.45	MAX	379	MIN	0	AC-FT	3950		



11078000 SANTA ANA RIVER AT SANTA ANA, CA

LOCATION.--Lat 33°44'56", long 117°54'30", in SW 1/4 SE 1/4 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 mi<sup>2</sup>, excludes 768 mi<sup>2</sup> 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 and datum 20.00 ft higher. Apr. 21, 1980, to Aug. 14, 1981, no gage due to rebuilding of channel.

REMARKS.--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 ft<sup>3</sup>/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 ft<sup>3</sup>/s, 16,940 acre-ft/yr; 43 years (unadjusted for storage since 1940), 54.3 ft<sup>3</sup>/s 39,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,300 ft<sup>3</sup>/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, 20,100 ft<sup>3</sup>/s Mar. 1, gage height, 10.66 ft; no flow many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.42	6.3	8.0	473	7380	669	1790	558	0	0	.10
2	0	.24	1.4	.70	388	7160	1520	1610	544	0	0	.05
3	0	.15	.86	7.0	698	5660	1500	1580	607	0	0	0
4	0	.15	.66	16	272	5230	1210	1520	1320	0	0	0
5	0	.21	.60	1.0	112	5520	853	1470	1360	9.5	0	0
6	0	.20	.42	.70	67	4500	816	1410	1330	12	.01	0
7	0	.20	.42	.60	53	420	806	1400	1340	6.3	0	0
8	0	.20	.42	.55	513	2300	537	1380	1230	.02	0	0
9	0	.20	.42	.50	844	300	16	1400	1150	0	0	0
10	0	172	.48	.50	348	1950	5.9	1510	1110	0	0	0
11	0	5.3	.48	.50	74	1970	3.1	932	942	0	0	0
12	0	1.8	.54	.50	33	806	1.1	11	863	0	0	0
13	0	1.1	.48	1.8	20	753	.54	3.7	558	0	0	0
14	0	.93	.42	2.8	15	872	.37	2.4	70	0	0	0
15	0	.86	.42	1.0	10	1650	.54	1.4	4.0	0	.12	0
16	.03	.78	.37	.40	54	1970	19	1.1	.55	0	.44	0
17	.03	.78	.37	.30	100	1800	45	.92	.02	0	233	0
18	.04	.72	.37	.24	54	100	243	.85	0	0	537	0
19	.04	4.8	.50	.22	108	180	83	.85	0	0	685	0
20	.05	1.8	.80	.20	124	1000	199	.85	0	0	646	.02
21	.05	1.0	1.1	.24	124	1060	382	.85	0	0	579	.83
22	.05	.86	360	50	104	840	1500	1.2	0	0	450	1.4
23	.05	.78	300	90	352	600	1450	22	0	0	10	1.6
24	.05	.72	3.7	130	669	2400	1440	22	.04	0	2.0	2.0
25	.06	.72	70	190	148	1500	984	60	0	0	.90	2.5
26	.10	.66	94	170	1570	963	86	192	.01	0	.90	2.6
27	.08	.60	100	1220	3900	942	3.9	267	.17	0	1.1	5.0
28	.10	.60	120	1270	4210	1090	1.0	565	.01	0	1.4	57
29	.12	3.4	140	3120	---	963	822	607	0	0	.60	34
30	.18	868	85	1160	---	25	1630	622	0	0	.30	541
31	.66	---	60	727	---	2	---	607	---	0	.20	---
TOTAL	1.69	1070.18	1350.53	8170.75	15637	61906	16826.45	18991.12	12986.80	27.82	3147.97	648.10
MEAN	.055	35.7	43.6	264	558	1997	561	613	433	.90	102	21.6
MAX	.66	868	360	3120	4210	7380	1630	1790	1360	12	685	541
MIN	0	.15	.37	.20	10	2.0	.37	.85	0	0	0	0
AC-FT	3.4	2120	2680	16210	31020	122800	33380	37670	25760	55	6240	1290
CAL YR 1982	TOTAL	11189.77	MEAN	30.7	MAX	2810	MIN	0	AC-FT	22190		
WTR YR 1983	TOTAL	140764.41	MEAN	387	MAX	7380	MIN	0	AC-FT	279200		

## 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.

SEDIMENT RECORDS: October 1967 to September 1971, October 1972 to September 1980, October 1981 to current year.

REMARKS.--Sediment discharge values were estimated for those days that have no daily concentration values.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 78,000 mg/L Feb. 25, 1969; minimum daily mean, no flow for many days each year.

SEDIMENT DISCHARGE: Maximum daily, 2,670,000 tons Feb. 25, 1969; minimum daily, 0 ton on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 8,120 mg/L Mar. 2; minimum daily mean, no flow for many days.

SEDIMENT DISCHARGE: Maximum daily, 203,000 tons Mar. 1; minimum daily, 0 tons many days.

REVISIONS.--The following summary table of water and sediment discharge is a revision to that published in the report for 1982:

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1981	9.41	0.43	0	0
NOVEMBER ...	257.70	198.16	318	516
DECEMBER ...	29.26	5.87	6	12
JANUARY 1982	247.18	155.11	161	316
FEBRUARY ...	282.05	659.46	313	972
MARCH .....	3812.82	18326.42	7590	25900
APRIL .....	4412.29	52733.29	12400	65100
MAY .....	4.94	0.0	0	0
JUNE .....	4.51	.13	0	0
JULY .....	1.01	0.0	0	0
AUGUST .....	0.0	0.0	0	0
SEPTEMBER ..	2.57	6.29	0	6
TOTAL .....	9063.74	72085.16	20788	92816

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
ONCE-DAILY

[illegible]

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	.42	7	.01	6.3	497	13
2	0	0	0	.24	5	0	1.4	130	.49
3	0	0	0	.15	5	0	.86	66	.15
4	0	0	0	.15	5	0	.66	40	.07
5	0	0	0	.21	5	0	.60	11	.02
6	0	0	0	.20	5	0	.42	10	.01
7	0	0	0	.20	5	0	.42	10	.01
8	0	0	0	.20	5	0	.42	10	.01
9	0	0	0	.20	5	0	.42	9	.01
10	0	0	0	172	807	1220	.48	10	.01
11	0	0	0	5.3	580	8.3	.48	10	.01
12	0	0	0	1.8	350	1.7	.54	10	.01
13	0	0	0	1.1	200	.59	.48	10	.01
14	0	0	0	.93	110	.28	.42	9	.01
15	0	0	0	.86	50	.12	.42	9	.01
16	.03	2	0	.78	30	.06	.37	9	.01
17	.03	2	0	.78	15	.03	.37	9	.01
18	.04	3	0	.72	9	.02	.37	8	.01
19	.04	3	0	4.8	40	.52	.50	8	.01
20	.05	3	0	1.8	20	.10	.80	8	.02
21	.05	3	0	1.0	15	.04	1.1	---	.04
22	.05	3	0	.86	10	.02	360	---	1360
23	.05	3	0	.78	9	.02	300	---	1020
24	.05	3	0	.72	9	.02	3.7	---	.35
25	.06	3	0	.72	9	.02	70	---	88
26	.10	4	0	.66	8	.01	94	---	145
27	.08	4	0	.60	8	.01	100	---	165
28	.10	4	0	.60	8	.01	120	---	215
29	.12	4	0	3.4	25	.23	140	---	280
30	.18	5	0	868	4470	16900	85	---	125
31	.66	8	.01	---	---	---	60	---	68
TOTAL	1.69	---	.01	1070.18	---	18132.11	1350.53	---	3480.28

DAY	JANUARY			FEBRUARY			MARCH		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	8.0	---	1.1	473	575	734	7380	7780	203000
2	.70	---	.02	388	575	529	7160	8120	164000
3	7.0	---	.92	898	1490	4560	5660	5050	77700
4	16	---	3.2	272	800	588	5230	4200	59300
5	1.0	---	.04	112	160	48	5520	4300	64100
6	.70	---	.02	67	120	22	4500	---	50000
7	.60	---	.01	53	90	13	420	---	210
8	.55	---	.01	513	707	1410	2300	---	10500
9	.50	---	.01	844	400	912	300	---	100
10	.50	---	.01	348	260	244	1950	1600	8420
11	.50	---	.01	74	120	24	1970	1600	8510
12	.50	---	.01	33	98	8.7	806	540	1180
13	1.8	---	.12	20	80	4.3	753	490	996
14	2.8	---	.23	15	45	1.8	872	700	1650
15	1.0	---	.04	10	10	.27	1650	1300	5790
16	.40	---	.01	54	135	20	1970	---	8510
17	.30	---	0	100	185	50	1800	---	6200
18	.24	---	0	54	105	15	100	---	51
19	.22	---	0	108	200	58	180	---	120
20	.20	---	0	124	199	67	1000	---	1550
21	.24	---	0	124	240	80	1060	---	1800
22	50	---	50	104	235	66	840	---	1160
23	90	---	135	352	280	266	600	---	710
24	130	---	250	669	365	659	2400	---	12000
25	190	---	470	148	200	80	1500	---	4000
26	170	---	390	1570	5140	49000	963	680	1770
27	1220	3910	19400	3900	9870	133000	942	650	1650
28	1270	3310	13000	4210	7100	87400	1090	780	2300
29	3120	5320	50100	---	---	---	963	680	1770
30	1160	1300	4070	---	---	---	25	125	8.4
31	727	710	1390	---	---	---	2.0	30	.16
TOTAL	8170.75	---	89260.76	15637	---	279860.1	61906.0	---	699055.6

## SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	669	420	759	1790	1270	6220	558	583	878
2	1520	1200	4920	1610	970	4220	544	576	846
3	1500	1180	4780	1580	965	4120	607	575	942
4	1210	900	2940	1520	960	3940	1320	860	3070
5	853	400	921	1470	955	3790	1360	890	3270
6	816	390	859	1410	945	3600	1330	870	3120
7	806	380	827	1400	940	3550	1340	888	3210
8	537	145	210	1380	935	3480	1230	850	2820
9	16	60	2.6	1400	930	3520	1150	927	2570
10	5.9	33	.53	1510	955	3890	1110	830	2490
11	3.1	24	.20	932	810	2040	942	733	1860
12	1.1	12	.04	11	95	2.8	863	712	1660
13	.54	8	.01	3.7	47	.47	558	584	880
14	.37	5	0	2.4	34	.22	70	162	31
15	.54	5	.01	1.4	26	.10	4.0	48	.52
16	19	54	2.8	1.1	22	.07	.55	19	.03
17	45	89	11	.92	18	.04	.02	5	0
18	243	183	157	.85	17	.04	0	0	0
19	83	132	30	.85	18	.04	0	0	0
20	199	198	168	.85	18	.04	0	0	0
21	382	389	457	.85	17	.04	0	0	0
22	1500	1180	4780	1.2	16	.05	0	0	0
23	1450	1120	4380	22	103	6.1	0	0	0
24	1440	1110	4320	22	103	6.1	.04	3	0
25	984	690	1830	60	160	26	0	0	0
26	86	171	40	192	335	174	.01	1	0
27	3.9	28	.29	267	210	151	.17	10	0
28	1.0	5	.01	565	555	847	.01	4	0
29	822	620	2230	607	595	975	0	0	0
30	1630	1050	4620	622	594	998	0	0	0
31	---	---	---	607	592	970	---	---	---
TOTAL	16826.45	---	39245.49	18991.12	---	46527.11	12986.80	---	27647.55
DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	0	0	0	0	0	0	.10	---	0
2	0	0	0	0	0	0	.05	---	0
3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	9.5	55	1.4	0	0	0	0	0	0
6	12	84	2.7	.01	3	0	0	0	0
7	6.3	57	.97	0	0	0	0	0	0
8	.02	3	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0
15	0	0	0	.12	1	0	0	0	0
16	0	0	0	.44	16	.02	0	0	0
17	0	0	0	233	220	138	0	0	0
18	0	0	0	537	310	449	0	0	0
19	0	0	0	685	430	795	0	0	0
20	0	0	0	646	400	698	.02	2	0
21	0	0	0	579	340	532	.83	22	.05
22	0	0	0	450	240	292	1.4	28	.11
23	0	0	0	10	---	1.6	1.6	31	.13
24	0	0	0	2.0	---	.14	2.0	34	.18
25	0	0	0	.90	---	.03	2.5	37	.25
26	0	0	0	.90	---	.03	2.6	38	.27
27	0	0	0	1.1	---	.04	5.0	47	.63
28	0	0	0	1.4	---	.07	57	183	28
29	0	0	0	.60	---	.01	34	131	12
30	0	0	0	.30	---	0	541	729	2390
31	0	0	0	.20	---	0	---	---	---
TOTAL	27.82	---	5.07	3147.97	---	2905.94	648.10	---	2431.62
YEAR 140764.4			1208552						

## 11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1982	1.69	.01	0	0
NOVEMBER ...	1070.18	18132.11	1010	19100
DECEMBER ...	1350.53	3480.28	118	3600
JANUARY 1983	8170.75	89260.76	10600	99900
FEBRUARY ...	15637.00	279860.07	34600	315000
MARCH .....	61906.00	699055.56	173000	872000
APRIL .....	16826.45	39245.49	11400	50600
MAY .....	18991.12	46527.11	14400	60900
JUNE .....	12986.80	27647.55	7770	35400
JULY .....	27.82	5.07	0	5
AUGUST .....	3147.97	2905.94	843	3750
SEPTEMBER ..	648.10	2431.62	590	3020
TOTAL .....	140764.41	1208551.57	254331	1463275

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
NOV										
10...	1300	403	15.5	3860	4200	--	47	58	64	65
11...	1045	4.6	13.5	584	7.3	80	91	92	93	94
30...	1000	1520	15.0	6860	28200	--	30	37	47	53
JAN										
27...	1400	1900	14.0	4640	23800	--	39	45	57	65
29...	1140	2760	14.5	3310	24700	--	26	29	38	47
31...	1005	806	13.0	736	1600	27	33	36	41	46
FEB										
27...	1635	4560	16.0	13400	164981	--	43	47	60	70
28...	1645	4560	16.0	13600	167443	--	37	41	56	66
DATE		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. 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. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
NOV										
10...		65	--	65	--	65	--	78	--	100
11...		--	95	--	96	--	97	--	98	--
30...		--	57	--	61	--	66	--	71	--
JAN										
27...		73	--	81	--	96	--	100	--	--
29...		60	--	74	--	89	--	99	--	100
31...		--	52	--	67	--	93	--	100	--
FEB										
27...		80	--	85	--	93	--	100	--	--
28...		--	74	--	79	--	86	--	94	--

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 4.00 MM
NOV			
10...	--	--	--
11...	100	--	--
30...	91	99	100
JAN			
27...	--	--	--
29...	--	--	--
31...	--	--	--
FEB			
27...	--	--	--
28...	96	98	100

## SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
			% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM
JUL 26...	1145	0	7	64	92	99	100



## 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", in NE 1/4 SW 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--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; 36,100 acre-ft were diverted during current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversions to Rio Hondo were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,900 ft<sup>3</sup>/s Jan. 26, 1969, gage height, 22.20 ft; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,100 ft<sup>3</sup>/s Mar. 3, gage height, 20.90 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	.15	119	3420	121	1330	193	0		0
2		0	0	0	59	15900	64	998	193	0		0
3		0	0	0	47	13800	63	830	193	0		0
4		0	0	0	25	8270	60	693	193	0		0
5		0	0	0	5.8	3460	63	614	192	0		0
6		0	0	0	41	1490	64	561	211	0		0
7		0	0	0	48	583	66	478	226	0		0
8		0	0	0	48	907	71	468	220	0		0
9		0	0	0	48	1290	74	484	215	0		0
10		0	0	0	41	1170	74	507	210	0		0
11		0	0	0	4.9	882	78	483	217	0		0
12		0	0	0	3.8	738	79	399	221	0		0
13		.51	0	0	37	739	103	340	204	.06		0
14		.53	0	0	41	452	125	148	168	0		0
15		.53	0	0	46	159	125	0	132	0		0
16		.22	0	0	44	959	125	0	86	0		0
17		0	0	0	42	864	125	14	86	0		0
18		0	0	0	42	447	122	29	86	0		0
19		0	0	8.1	40	667	119	66	86	0		0
20		0	0	2.0	35	679	114	94	64	0		0
21		0	0	.60	33	497	116	95	17	0		0
22		0	9.5	1.2	32	249	122	95	0	0		0
23		0	57	19	32	154	125	123	0	0		0
24		15	55	19	34	100	128	174	0	0		0
25		37	49	22	37	95	125	185	0	0		0
26		35	15	49	37	91	125	188	0	0		0
27		34	1.0	74	38	86	122	193	0	0		0
28		33	.78	74	193	81	117	188	0	0		0
29		33	.62	64	---	76	360	188	0	0		0
30		19	.45	64	---	72	1910	189	0	0		7.3
31		---	.31	116	---	113	---	192	---	0		---
TOTAL	0	207.79	188.66	513.05	1253.5	58490	5085	10346	3413	.06	0	7.3
MEAN	0	6.93	6.09	16.6	44.8	1887	170	334	114	.002	0	.24
MAX	0	37	57	116	193	15900	1910	1330	226	.06	0	7.3
MIN	0	0	0	0	3.8	72	60	0	0	0	0	0
AC-FT	0	412	374	1020	2490	116000	10090	20520	6770	.1	0	14
CAL YR 1982	TOTAL	1109.20	MEAN	3.04	MAX	137	MIN	0	AC-FT	2200		
WTR YR 1983	TOTAL	79504.36	MEAN	218	MAX	15900	MIN	0	AC-FT	157700		



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.

PERIOD OF RECORD.--October 1955 to September 1957, October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 220 ft, from topographic map.

REMARKS.--Records 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 36,100 acre-ft from San Gabriel River below Santa Fe Dam to Rio Hondo, and released 15,200 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 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 10.90 ft; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,800 ft<sup>3</sup>/s Feb. 27, gage height, 10.50 ft; minimum daily, 8.3 ft<sup>3</sup>/s Dec. 19.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	98	41	32	176	11600	290	1570	32	25	22	22
2	129	82	33	29	1040	23600	450	928	31	27	20	22
3	127	80	30	26	180	20600	300	715	31	24	22	22
4	129	81	29	26	87	700	200	596	32	28	20	22
5	130	85	28	27	237	1400	100	467	33	29	18	22
6	129	87	27	36	91	800	66	446	40	29	20	23
7	131	89	34	48	156	610	55	348	58	28	21	22
8	131	83	39	48	1010	520	52	347	53	26	22	22
9	128	1150	28	47	93	450	46	343	50	26	38	22
10	129	702	37	47	87	390	42	363	50	26	23	22
11	128	60	33	48	84	350	39	348	54	26	21	22
12	115	42	35	60	81	315	37	314	76	20	20	22
13	103	48	36	71	82	290	36	300	67	19	22	22
14	102	48	36	85	80	265	35	200	33	20	22	22
15	104	45	35	111	77	250	34	180	27	19	142	22
16	103	39	35	110	76	240	34	150	25	21	1100	21
17	111	17	35	111	76	350	33	120	23	22	150	22
18	100	21	12	103	76	1400	60	100	21	21	25	23
19	88	422	8.3	507	76	300	38	90	21	20	1000	22
20	103	19	8.7	38	76	200	970	80	21	20	100	31
21	104	16	9.0	34	75	1700	1100	68	19	18	30	31
22	108	12	2400	1020	73	600	500	60	18	20	28	24
23	107	12	138	1710	73	300	170	54	18	20	24	24
24	107	11	18	1440	364	1650	110	50	19	22	24	22
25	107	10	16	73	97	250	45	45	20	21	23	22
26	315	11	16	64	1610	150	33	42	23	21	23	26
27	109	12	16	2250	5320	150	148	39	23	22	23	24
28	100	11	16	372	1260	260	30	37	22	20	22	25
29	110	101	21	1810	---	120	1960	35	23	21	22	744
30	138	4170	39	207	---	130	2120	34	24	23	22	1160
31	115	---	28	195	---	120	---	33	---	23	22	---
TOTAL	3747	7664	3317.0	10785	12813	70060	9133	8502	987	707	3091	2552
MEAN	121	255	107	348	458	2260	304	274	32.9	22.8	99.7	85.1
MAX	315	4170	2400	2250	5320	23600	2120	1570	76	29	1100	1160
MIN	88	10	8.3	26	73	120	30	33	18	18	18	21
AC-FT	7430	15200	6580	21390	25410	139000	18120	16860	1960	1400	6130	5060
CAL YR 1982	TOTAL	46401.0	MEAN	127	MAX	4470	MIN	3.3	AC-FT	92040		
WTR YR 1983	TOTAL	133358.0	MEAN	365	MAX	23600	MIN	8.3	AC-FT	264500		

## SAN GABRIEL RIVER BASIN

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA

LOCATION.--Lat 33°53'16", long 117°55'32", in NE 1/4 NE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 196.67 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Dec. 4, 1964, at datum 1.03 ft higher.

REMARKS.--Records fair. 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.--41 years, 2.87 ft<sup>3</sup>/s, 2,080 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft<sup>3</sup>/s Jan. 31, 1979, gage height unknown, from release records of Brea Dam as furnished by Corps of Engineers; no flow for parts of some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 641 ft<sup>3</sup>/s Mar. 2; minimum daily, 0.46 ft<sup>3</sup>/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	1.1	5.9	1.8	5.2	431	22	15	2.0	1.1	.73	.58
2	.69	.73	3.8	2.0	98	641	30	3.3	2.0	1.2	.73	.58
3	1.0	.73	3.0	1.8	50	259	41	2.0	1.8	1.6	.83	.58
4	3.5	1.1	1.8	2.0	12	79	50	1.6	1.8	1.4	1.2	.58
5	.87	.90	1.6	1.6	25	32	58	1.0	2.1	1.3	1.0	.58
6	.80	.90	1.8	1.6	12	28	58	2.0	1.8	.98	4.6	.66
7	.82	.90	1.6	1.6	12	15	64	3.1	1.6	1.1	5.9	.84
8	.74	1.6	1.4	1.8	176	15	74	3.4	1.8	1.1	4.5	.46
9	.73	52	1.4	1.4	14	10	74	2.9	1.7	1.2	2.5	.76
10	.80	39	2.4	1.4	6.9	9.0	77	3.5	1.7	1.1	2.0	1.1
11	.90	3.0	1.6	1.4	5.5	8.4	76	2.6	1.6	.95	1.2	.74
12	.80	2.0	1.4	1.4	3.9	8.1	81	2.9	1.6	1.1	1.2	.92
13	.83	1.4	1.4	1.4	4.5	7.8	52	2.6	1.5	1.3	1.4	.64
14	.76	1.3	1.3	1.4	3.8	17	50	2.6	1.5	1.3	1.4	.48
15	.90	.69	1.1	1.8	3.3	6.7	48	2.3	1.4	.96	5.3	.73
16	.90	.88	1.1	1.4	2.8	5.7	50	2.6	.90	.90	49	1.2
17	.73	.88	1.1	1.3	2.6	32	68	2.2	.80	.95	20	.90
18	.73	1.3	1.3	1.3	2.0	53	59	2.4	.76	1.1	4.3	.47
19	.73	9.1	2.0	9.4	1.7	5.8	5.8	2.1	.91	1.1	11	.46
20	.90	1.4	1.4	2.7	2.2	5.5	83	2.1	.96	.79	13	1.6
21	.73	.69	1.3	1.7	2.3	42	93	1.9	.91	.67	2.0	2.1
22	.73	.69	135	45	2.2	17	16	1.8	.90	1.8	2.4	.90
23	2.4	.69	19	102	2.4	6.4	9.6	2.0	.99	.90	2.0	.90
24	2.0	.88	3.8	84	7.1	185	6.8	1.9	.97	.90	.81	.90
25	.90	.88	2.6	19	5.2	27	5.6	1.8	1.1	1.0	.90	.90
26	13	.88	2.2	4.1	136	15	5.8	1.9	1.1	1.4	.90	1.0
27	2.8	.69	2.0	124	466	14	5.7	1.8	1.1	1.4	.90	1.4
28	.90	.88	1.8	25	88	17	6.2	1.8	1.1	1.3	.90	1.4
29	.73	7.2	1.6	97	---	13	202	1.8	1.3	.73	.90	1.4
30	3.3	223	2.2	31	---	15	37	1.8	1.2	.73	.90	79
31	2.8	---	2.0	12	---	15	---	2.0	---	.73	.79	---
TOTAL	49.12	357.39	211.9	585.3	1152.6	2035.4	1508.5	82.7	40.90	34.09	145.19	104.76
MEAN	1.58	11.9	6.84	18.9	41.2	65.7	50.3	2.67	1.36	1.10	4.68	3.49
MAX	13	223	135	124	466	641	202	15	2.1	1.8	49	79
MIN	.69	.69	1.1	1.3	1.7	5.5	5.6	1.0	.76	.67	.73	.46
AC-FT	97	709	420	1160	2290	4040	2990	164	81	68	288	208
CAL YR 1982	TOTAL	2385.45	MEAN	6.54	MAX	315	MIN	.05	AC-FT	4730		
HTR YR 1983	TOTAL	6307.85	MEAN	17.3	MAX	641	MIN	.46	AC-FT	12510		

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA

LOCATION.--Lat 33°53'45", long 117°53'07", in NW 1/4 SW 1/4 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 mi<sup>2</sup>.

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.--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 ft<sup>3</sup>/s, 135 acre-ft/yr; 29 years (water years 1955-83), 1.13 ft<sup>3</sup>/s, 819 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 8.25 ft, present datum; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 392 ft<sup>3</sup>/s Mar. 1, gage height, 8.25 ft; minimum daily, 0.07 ft<sup>3</sup>/s June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.51	.85	.41	.64	221	.66	8.4	.57	.16	.60	.70
2	.30	.47	.45	.50	35	179	.70	.70	.56	.25	.70	.39
3	.30	.43	.43	.51	2.2	42	.69	.57	.56	.30	.59	.09
4	.30	.47	.43	.39	.75	2.0	.60	1.0	.55	.31	.54	.09
5	.36	.50	.43	.36	6.0	1.5	.65	.97	.49	.38	.51	.24
6	.36	.62	.51	.52	1.2	1.7	.74	.92	.53	.71	.98	.35
7	.43	.60	.45	.43	6.4	.92	.60	.90	1.1	.69	.94	.31
8	.43	.68	.32	.60	35	.73	.51	.84	.56	.60	.82	.39
9	.36	25	2.5	1.1	.84	.68	.51	.80	.76	.60	.98	.50
10	.36	25	4.4	.40	.75	.56	.51	.77	.47	.60	1.3	.51
11	.36	.82	.49	.57	.90	.62	.73	.75	.07	.59	1.4	.51
12	.36	.72	.43	.45	.83	.54	2.6	.73	.10	.52	.81	.51
13	.70	.50	.43	.51	.92	1.9	.70	.72	1.7	1.1	.36	.46
14	.95	.47	.43	.44	.73	1.8	.66	.71	.97	1.5	.29	.43
15	.17	.47	.43	.47	.62	.58	.67	.70	.60	1.3	1.6	.47
16	.25	.43	.43	.37	.60	.55	.67	.69	.66	1.4	.86	.51
17	.30	.43	.43	.40	.61	12	2.6	.68	.75	1.2	.92	.55
18	.36	1.0	.43	.41	.70	9.0	17	.66	.10	1.2	1.0	.65
19	.43	7.6	.41	5.4	.69	.64	.66	.66	.11	1.6	1.7	.80
20	.43	.58	.48	.44	.60	.51	26	.65	1.9	1.4	1.6	1.4
21	.43	.45	.48	.43	.53	13	28	.64	.45	.93	1.4	1.5
22	.43	.52	44	15	.51	11	.73	.64	.08	.86	1.2	.70
23	.43	.43	32	37	.51	3.0	.70	.63	.11	.82	.95	.70
24	.43	.43	.86	40	.69	63	.51	.63	.31	.77	.94	.60
25	.48	.49	.85	1.5	1.0	.95	.56	.62	.94	.70	.82	.52
26	6.5	.58	.62	.61	81	.60	.59	.62	.65	.70	.82	.80
27	.63	.61	.57	75	123	.60	.51	.61	.67	.69	.82	.64
28	.46	.53	.45	5.1	9.3	3.2	1.3	.60	.41	.60	.82	.52
29	.48	5.0	.49	46	---	.60	80	.59	.11	.60	.82	1.7
30	1.2	93	.43	.90	---	.60	2.6	.58	.13	.60	.84	15
31	.74	---	.43	.75	---	.65	---	.57	---	.60	.70	---
TOTAL	20.08	169.34	96.34	236.97	312.52	575.33	173.96	29.55	16.97	24.28	28.63	32.54
MEAN	.65	5.64	3.11	7.64	11.2	18.6	5.80	.95	.57	.78	.92	1.08
MAX	6.5	93	44	75	123	221	80	8.4	1.9	1.6	1.7	15
MIN	.17	.43	.32	.36	.51	.51	.51	.57	.07	.16	.29	.09
AC-FT	40	336	191	470	620	1140	345	59	34	48	57	65
CAL YR 1982	TOTAL	922.09	MEAN	2.53	MAX	111	MIN	.17	AC-FT	1830		
WTR YR 1983	TOTAL	1716.51	MEAN	4.70	MAX	221	MIN	.07	AC-FT	3400		

## 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, and 0.1 mi upstream from Glen Oaks Boulevard, and 3 mi southeast of San Fernando.

DRAINAGE AREA.--153 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1932 to February 1938, August 1940 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

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.--Records good. 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 furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft<sup>3</sup>/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 ft<sup>3</sup>/s, estimated, Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,200 ft<sup>3</sup>/s Mar. 2, gage height, 7.64 ft; no flow many days.

REVISIONS.--The maximum discharge for the water year 1978 has been revised to 15,200 ft<sup>3</sup>/s Feb. 10, 1978, gage height 7.63 ft, superseding the figure published in the report for 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	82	0	27	2760	412	560	54		0	22
2		0	0	0	127	11400	257	655	3.5		0	38
3		0	0	0	327	7510	249	423	5.3		0	38
4		0	0	0	185	2970	279	187	41		0	38
5		0	0	0	139	2290	227	235	49		0	38
6		0	0	0	99	1170	220	209	57		0	34
7		0	0	0	90	1390	190	174	79		0	34
8		0	0	0	545	1170	172	181	90		0	34
9		.10	0	0	406	887	171	189	50		0	34
10		21	0	0	321	862	151	156	4.0		0	36
11		38	0	0	236	801	135	205	0		0	38
12		27	0	0	19	761	248	162	0		0	38
13		21	0	0	0	741	142	230	0		0	38
14		26	0	0	200	740	223	299	0		0	38
15		10	0	0	170	458	139	289	0		0	39
16		0	0	0	0	480	145	366	0		15	41
17		0	0	0	0	164	123	365	0		58	44
18		0	0	0	0	266	302	364	0		2.0	45
19		59	0	93	0	375	119	383	0		1.0	38
20		39	0	43	0	345	455	357	0		.20	45
21		24	0	37	0	503	626	344	0		0	45
22		7.2	163	105	17	336	519	336	0		0	45
23		0	170	291	4.0	302	403	318	0		0	45
24		0	0	34	4.0	633	404	305	0		0	45
25		0	0	1.1	30	792	335	297	0		0	45
26		0	0	1.1	96	500	238	251	0		0	42
27		0	0	142	350	451	118	204	0		0	49
28		0	0	241	696	439	111	204	0		0	49
29		0	0	640	---	446	71	198	0		0	51
30		377	0	505	---	397	384	198	0		0	58
31		---	0	310	---	650	---	198	---		0	---
TOTAL	0	649.30	415	2443.2	4088.0	42989	7568	8842	432.8	0	76.20	1224
MEAN	0	21.6	13.4	78.8	146	1387	252	285	14.4	0	2.46	40.8
MAX	0	377	170	640	696	11400	626	655	90	0	58	58
MIN	0	0	0	0	0	164	71	156	0	0	0	22
AC-FT	0	1290	823	4850	8110	85270	15010	17540	858	0	151	2430
a	508	1822	2391	8215	13500	125275	22850	21839	6520	4335	3490	2478
CAL YR 1982 TOTAL	5861.96	MEAN	16.1	MAX	655	MIN	0	AC-FT	11630			
WTR YR 1983 TOTAL	68727.50	MEAN	188	MAX	11400	MIN	0	AC-FT	136300			

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 NW 1/4 NE 1/4 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 mi<sup>2</sup>.

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 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.--Records 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.--69 years (water years 1914-15, 1917-83), 10.2 ft<sup>3</sup>/s, 7,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,620 ft<sup>3</sup>/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 above base of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0930	1,160	4.63	Mar. 2	1530	*2,640	6.09
Dec. 22	2100	1,530	5.06	Apr. 20	2400	358	3.39
Jan. 27	0800	315	3.30	Apr. 30	0215	217	3.06
Feb. 8	0345	416	3.50				

Peaks also may have occurred on Mar. 17, 21, 24.  
Minimum daily discharge, 0.88 ft<sup>3</sup>/s Oct. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.5	31	12	57	1100	52	90	28	16	7.8	5.8
2	1.5	2.2	16	11	61	1530	50	80	26	16	7.5	5.9
3	1.4	2.1	12	10	64	632	48	75	26	16	7.5	5.7
4	1.3	2.0	11	10	56	351	46	72	25	15	7.2	5.5
5	1.3	1.6	9.6	10	52	253	44	70	23	14	6.8	5.4
6	1.2	1.3	8.6	10	47	195	42	67	22	14	6.6	5.2
7	1.2	1.4	8.0	10	57	150	40	64	21	13	6.9	5.1
8	1.1	1.5	7.0	9.6	174	123	38	61	21	13	6.6	5.1
9	1.0	25	6.9	8.9	88	110	37	60	21	12	7.1	5.1
10	1.0	27	7.7	8.1	79	105	37	58	20	11	7.0	4.8
11	.95	11	8.3	7.9	70	97	36	55	20	10	6.6	4.7
12	.92	7.4	8.0	8.1	62	88	34	53	20	10	6.4	4.6
13	.90	5.4	7.8	8.3	58	88	32	52	19	9.9	6.1	4.5
14	.88	4.3	7.4	8.2	52	105	32	50	18	9.4	6.1	4.6
15	.88	3.7	7.0	7.7	46	78	30	48	18	9.8	7.2	4.6
16	.89	3.4	6.0	7.1	41	84	29	45	17	9.8	5.8	4.6
17	.90	3.2	4.9	7.2	37	110	29	42	17	9.6	7.7	4.6
18	.91	3.4	4.7	7.2	34	80	75	40	17	9.2	13	4.4
19	.96	19	4.5	20	31	72	45	39	17	8.8	21	4.5
20	.99	9.8	4.4	8.8	28	70	136	37	17	8.3	11	5.0
21	1.0	7.6	4.4	7.3	27	200	182	34	17	7.9	9.9	5.3
22	1.0	4.4	226	21	25	80	89	33	16	7.6	8.8	5.2
23	.93	4.0	122	71	24	160	75	33	16	7.8	7.7	5.0
24	.94	3.6	37	53	25	190	68	31	16	7.9	7.0	5.0
25	1.0	3.3	22	46	23	100	63	31	16	7.9	6.6	4.8
26	1.8	3.0	17	29	34	80	60	30	16	8.3	6.3	5.0
27	1.7	2.9	15	133	198	68	58	29	17	8.3	6.2	5.1
28	1.7	2.9	15	82	159	62	57	28	16	8.1	6.3	5.7
29	1.5	3.5	15	125	---	60	95	27	16	7.5	6.2	8.4
30	1.6	213	14	63	---	57	125	26	16	7.6	6.0	53
31	1.9	---	13	62	---	54	---	27	---	7.9	5.9	---
TOTAL	36.85	385.4	681.2	882.4	1709	6532	1784	1487	575	321.6	238.8	202.1
MEAN	1.19	12.8	22.0	28.5	61.0	211	59.5	48.0	19.2	10.4	7.70	6.74
MAX	1.9	213	226	133	198	1530	182	90	28	16	21	53
MIN	.88	1.3	4.4	7.1	23	54	29	26	16	7.5	5.8	4.4
AC-FT	73	764	1350	1750	3390	12960	3540	2950	1140	638	474	401

CAL YR 1982	TOTAL	3907.92	MEAN 10.7	MAX 292	MIN .29	AC-FT 7750
WTR YR 1983	TOTAL	14835.35	MEAN 40.6	MAX 1530	MIN .88	AC-FT 29430

## 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 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 217.8 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent. 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 36,100 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 furnished by the Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--27 years, 43.4 ft<sup>3</sup>/s, 31,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,200 ft<sup>3</sup>/s Feb. 16, 1980, gage height, 7.35 ft; no flow in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,000 ft<sup>3</sup>/s Mar. 2, (1430 hrs), gage height, 7.03 ft; minimum daily discharge, 0.65 ft<sup>3</sup>/s Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	129	5.5	.65	27	5140	140	133	77	118	30	15
2	165	133	7.4	.69	519	5960	209	91	72	68	29	14
3	162	136	6.4	20	27	2930	152	96	71	68	28	14
4	165	136	6.5	36	15	1850	102	96	68	71	26	12
5	161	136	6.4	25	128	1620	34	94	66	102	24	10
6	161	136	6.6	18	22	989	35	88	71	144	23	11
7	160	136	61	14	118	322	27	85	76	144	22	10
8	152	136	129	10	364	61	20	83	77	144	28	8.9
9	152	1180	124	8.7	22	61	20	81	77	145	25	7.6
10	145	339	121	6.9	21	76	19	80	76	152	25	7.3
11	136	18	118	3.8	20	89	24	79	64	153	24	7.1
12	135	14	115	2.1	21	93	24	50	62	152	24	8.2
13	131	8.5	115	3.0	30	439	24	30	63	152	23	8.0
14	134	8.0	115	3.4	20	503	26	28	77	140	22	8.8
15	111	7.7	113	5.3	13	499	25	580	111	376	21	7.7
16	75	6.6	96	4.7	20	428	24	244	133	348	21	6.1
17	57	69	75	4.5	39	408	67	264	136	359	21	5.9
18	46	287	55	1.1	35	679	979	178	136	467	30	6.6
19	34	462	33	455	29	123	46	142	136	570	674	6.3
20	21	148	24	5.2	31	91	1560	38	145	549	31	64
21	15	144	24	1.9	35	707	773	31	144	555	12	5.2
22	9.9	98	641	725	39	220	181	24	148	421	7.9	2.4
23	6.7	6.2	10	492	35	114	159	38	155	57	8.7	1.8
24	4.0	66	5.4	704	134	766	141	105	161	52	8.9	1.3
25	3.0	108	2.2	5.1	15	77	79	12	161	50	37	1.2
26	68	106	1.8	2.0	646	66	46	9.4	161	48	23	3.4
27	43	102	2.2	1430	1260	66	39	9.9	161	46	21	3.1
28	72	96	3.1	507	1010	124	180	71	157	38	20	1.7
29	94	146	6.9	910	---	51	1370	71	152	35	19	360
30	111	1450	3.5	105	---	64	562	72	152	33	18	792
31	117	---	.71	49	---	50	---	76	---	32	16	---
TOTAL	3146.6	5948.0	2033.61	5559.04	4695	24666	7087	3079.3	3346	5789	1342.5	1410.6
MEAN	102	198	65.6	179	168	796	236	99.3	112	187	43.3	47.0
MAX	300	1450	641	1430	1260	5960	1560	580	161	570	674	792
MIN	3.0	6.2	.71	.65	13	50	19	9.4	62	32	7.9	1.2
AC-FT	6240	11800	4030	11030	9310	48920	14060	6110	6640	11480	2660	2800
CAL YR 1982	TOTAL	23168.86	MEAN	63.5	MAX	1450	MIN	.25	AC-FT	45960		
WTR YR 1983	TOTAL	68102.65	MEAN	187	MAX	5960	MIN	.65	AC-FT	135100		

## 11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°02'00", 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 175 ft, from topographic map.

REMARKS.--Records fair above 100 ft<sup>3</sup>/s and poor below. 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 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 13.82 ft, from rating curve extended above 15,000 ft<sup>3</sup>/s on basis of gate openings at dam at gage heights 12.32 ft and 13.82 ft; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,500 ft<sup>3</sup>/s Feb. 27, gage height 12.72 ft; minimum daily, 0.80 ft<sup>3</sup>/s May 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	50	250	16	124	10800	129	1680	70	120	32	16
2	170	50	264	16	119	21200	140	840	68	90	30	14
3	150	35	24	24	139	15600	151	315	67	67	28	13
4	150	40	5.8	66	119	9160	113	522	66	70	27	12
5	150	56	4.8	50	124	2280	42	760	67	85	26	11
6	150	67	4.8	43	109	1120	35	494	70	110	24	10
7	150	79	24	40	95	948	35	270	74	135	23	9.6
8	145	96	95	70	129	458	31	277	74	140	26	9.0
9	135	573	95	66	134	771	31	270	73	142	25	8.6
10	130	556	91	62	124	782	31	263	72	145	24	8.3
11	125	391	91	62	119	651	31	181	68	150	24	8.0
12	120	185	86	62	114	407	21	140	62	150	23	7.7
13	120	47	86	70	100	348	46	103	62	145	22	7.4
14	120	43	86	78	62	924	66	175	74	140	21	7.2
15	120	43	86	91	58	600	49	449	92	380	21	7.0
16	105	40	82	95	54	381	27	339	125	340	458	6.8
17	100	54	70	95	62	221	49	194	130	360	74	6.6
18	100	205	62	74	54	580	441	187	130	440	108	6.5
19	108	686	43	556	47	458	256	187	135	520	308	6.4
20	108	174	31	37	47	124	2000	46	138	550	169	57
21	102	162	24	24	58	570	1380	11	140	520	35	24
22	96	119	1170	271	37	235	348	1.1	142	450	38	14
23	96	21	510	1870	50	221	242	5.9	145	80	21	9.0
24	67	47	174	1150	174	315	221	70	150	58	1.1	8.6
25	40	109	150	307	47	221	163	1.5	150	50	35	8.2
26	102	109	82	162	784	140	53	.80	150	48	28	7.8
27	2.1	104	82	2510	4710	140	15	35	150	46	24	7.6
28	40	104	40	784	390	140	35	66	145	42	21	7.5
29	35	129	18	2170	---	135	2380	68	145	38	19	381
30	26	3690	21	124	---	140	2580	70	140	35	18	960
31	22	---	16	134	---	135	---	70	---	33	17	---
TOTAL	3344.1	8064	3868.4	11179	8183	70205	11141	8091.30	3174	5679	1750.1	1659.8
MEAN	108	269	125	361	292	2265	371	261	106	183	56.5	55.3
MAX	260	3690	1170	2510	4710	21200	2580	1680	150	550	458	960
MIN	2.1	21	4.8	16	37	124	15	.80	62	33	1.1	6.4
AC-FT	6630	15990	7670	22170	16230	139300	22100	16050	6300	11260	3470	3290
CAL YR 1982	TOTAL	48517.44	MEAN 133	MAX 5100	MIN 0	AC-FT 96230						
WTR YR 1983	TOTAL	136338.70	MEAN 374	MAX 21200	MIN .80	AC-FT 270400						

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 mi<sup>2</sup>.

#### 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 1735 for history of changes prior to Jan. 19, 1956.

REMARKS.--Flow regulated since September 1940 by Hansen flood-control reservoir, since December 1941 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 furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--54 years (water years 1930-83), 215 ft<sup>3</sup>/s, 155,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 129,000 ft<sup>3</sup>/s Feb. 16, 1980, gage height, 17.99 ft; no flow at times in 1929-30, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 52,000 ft<sup>3</sup>/s Mar. 2; minimum daily, 38 ft<sup>3</sup>/s Oct. 29.

#### DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	54	603	71	782	43300	746	2780	310	73	67	68
2	55	48	133	67	3490	52000	436	1520	116	73	75	68
3	55	41	73	65	1460	32300	422	895	102	73	71	68
4	65	39	60	62	535	14200	436	656	98	73	70	65
5	57	48	55	50	953	6590	975	1010	95	73	71	64
6	55	48	65	45	569	4170	586	876	91	67	75	64
7	53	51	68	42	799	3160	436	603	100	64	71	60
8	54	54	65	44	3410	1970	422	674	89	61	64	57
9	58	6030	64	45	728	1900	366	586	83	61	64	50
10	61	3380	67	42	638	1530	408	586	77	57	60	51
11	58	255	61	46	552	1600	352	638	78	55	55	50
12	57	131	64	60	394	1640	408	692	80	60	60	53
13	51	124	57	61	394	1720	436	710	70	61	55	60
14	45	108	57	60	299	2020	380	746	67	64	55	60
15	45	98	57	58	518	1400	484	800	65	65	260	61
16	49	85	45	53	200	1010	324	800	68	64	878	64
17	46	80	42	54	1110	1700	374	638	71	62	672	64
18	51	93	60	54	112	1980	5310	569	77	61	775	65
19	49	2520	64	3440	157	1180	638	586	78	68	1310	67
20	40	162	64	158	95	518	5530	467	70	60	142	76
21	42	98	67	65	80	3650	2860	408	71	60	99	169
22	45	71	3750	2420	80	1260	933	394	71	60	87	67
23	46	62	2070	6960	96	931	620	380	75	60	85	67
24	48	65	162	3700	652	4990	586	394	78	60	87	65
25	57	65	110	721	380	1070	620	380	75	61	65	65
26	245	65	98	184	4810	710	692	366	70	73	62	77
27	87	68	101	12400	11100	586	569	324	75	61	65	75
28	40	62	67	1190	2730	890	742	310	82	65	67	71
29	38	355	64	9270	---	603	4910	310	78	67	71	1670
30	143	12800	89	746	---	552	3920	310	78	68	71	3030
31	191	---	57	895	---	710	---	324	---	65	68	---
TOTAL	2034	27160	8459	43128	37123	191840	35921	20732	2638	1995	5777	6591
MEAN	65.6	905	273	1391	1326	6188	1197	669	87.9	64.4	186	220
MAX	245	12800	3750	12400	11100	52000	5530	2780	310	73	1310	3030
MIN	38	39	42	42	80	518	324	310	65	55	55	50
AC-FT	4030	53870	16780	85540	73630	380500	71250	41120	5230	3960	11460	13070
CAL YR 1982	TOTAL	111365	MEAN	305	MAX	52000	MIN	32	AC-FT	220900		
WTR YR 1983	TOTAL	383398	MEAN	1053	MAX	52000	MIN	38	AC-FT	760500		



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 (discontinued).  
 WATER TEMPERATURES: October 1973 to September 1975, January 1980 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor recording specific conductance and water temperature October 1973 to September 1983.

REMARKS.--Periods of missing specific conductance data Jan. 20 to July 21. Observer samples taken during this period are shown in table below.

## EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,010 micromhos June 30, 1975; minimum recorded, 40 micromhos Nov. 30, 1982.  
 WATER TEMPERATURES: Maximum recorded, 38.0°C June 24, 1981; minimum recorded, 2.0°C Jan. 31, 1975.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,390 micromhos Aug. 16; minimum recorded, 40 micromhos Nov. 30.  
 WATER TEMPERATURES: Maximum recorded, 37.0°C Aug. 7; minimum recorded, 3.5°C Dec. 31.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UNHOS)	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 UN-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 14...	1600	32	1000	9.4	16.0	765	2.5	14.0	142	1500	2500
MAR 08...	1100	1580	576	8.2	15.5	760	500	10.1	102	860	8300
JUN 14...	1330	76	1080	9.4	31.0	755	4.4	>20.0	--	680	460
SEP 14...	1200	57	1250	8.9	27.0	755	3.3	17.2	219	2200	960

DATE	HARD- NESS (MG/L AS CAC03)	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)	ALKA- LINITY FIELD (MG/L CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 14...	310	150	80	26	92	39	2	7.7	159	200	94
MAR 08...	220	89	59	18	28	21	.8	3.6	133	120	24
JUN 14...	370	210	85	37	98	36	2	6.0	151	280	97
SEP 14...	420	220	97	42	110	36	2	6.4	199	310	110

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L SI02)	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)	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 TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC 14...	.50	17	660	620	.90	4.4	.99	2.5	.95	.79	.62
MAR 08...	.40	25	376	360	.51	1.9	.26	2.3	4.7	.18	.15
JUN 14...	.50	24	751	720	1.0	.62	<.06	2.3	.32	.09	.12
SEP 14...	.50	28	847	820	1.2	.14	.03	2.5	.48	.28	.22

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

## LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 14...	1600	20	3	43	<.5	<1	2	<3	4	4	1
MAR 08...	1100	30	2	59	<.5	<1	<1	<3	4	11	<1
JUN 14...	1330	10	4	74	<.5	<1	<1	<3	7	26	2
SEP 14...	1200	10	3	78	.5	<1	1	<3	5	<3	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 14...	46	7	.1	20	11	3	<1	540	<6	42
MAR 08...	21	120	<.1	10	2	3	<1	440	<6	3
JUN 14...	54	8	<.1	20	6	4	<1	710	6	17
SEP 14...	41	4	<.1	20	6	4	<1	830	<6	8

&lt; Actual value is known to be less than the value shown.

SPECIFIC CONDUCTANCE (micromhos/cm at 25°C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
INSTANTANEOUS OBSERVATIONS

Date	Time	Conductance	Date	Time	Conductance	Date	Time	Conductance
Jan 20	1000	620	Apr 1	1630	560	June 6	2000	1020
Jan 31	1600	460	Apr 10	1500	542	June 8	1930	1070
Feb 7	1730	330	Apr 17	0930	800	June 11	1730	1070
Feb 14	1600	160	Apr 23	1130	585	June 13	0730	1200
Feb 21	1000	1230	May 4	1430	572	June 15	1830	1080
Mar 6	----	350	May 12	1230	570	June 17	1730	1080
Mar 8	1000	600	May 14	0900	535	June 18	1100	1070
Mar 13	1000	530	May 18	1615	605	June 21	1200	1090
Mar 15	1800	540	May 24	1830	542	June 26	1630	1080
Mar 17	1830	330	May 26	1800	573	June 27	1830	1130
Mar 20	1000	640	May 28	0900	700	July 2	1600	1160
Mar 22	1100	570	May 30	1300	493	July 3	1400	1140
Mar 25	1230	560	June 2	1600	1010	July 4	1900	1120
Mar 26	1000	600	June 3	1700	910	July 12	1830	1160
Mar 29	1200	540	June 4	0930	1020	July 17	1930	1150
Mar 31	1030	600	June 5	1730	1070	July 20	2000	1160

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	100	40	75						
2	---	---	---	100	80	89						
3	---	---	---	---	---	---						
4	---	---	---	---	---	---						
5	---	---	---	---	---	---						
6	---	---	---	---	---	---						
7	---	---	---	---	---	---						
8	---	---	---	---	---	---						
9	---	---	---	---	---	---						
10	---	---	---	---	---	---						
11	---	---	---	---	---	---						
12	---	---	---	---	---	---						
13	---	---	---	---	---	---						
14	---	---	---	---	---	---						
15	---	---	---	---	---	---						
16	---	---	---	---	---	---						
17	---	---	---	---	---	---						
18	---	---	---	---	---	---						
19	---	---	---	---	---	---						
20	---	---	---	---	---	---						
21	---	---	---	---	---	---						
22	1150	870	1030	---	---	---						
23	1130	730	892	---	---	---						
24	890	430	556	---	---	---						
25	650	410	508	---	---	---						
26	690	120	305	---	---	---						
27	210	50	123	---	---	---						
28	170	70	124	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	---	---	---	---	---	---						

## LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	1200	1070	1140	1190	1090	1150
2				---	---	---	1210	1070	1150	1200	1080	1140
3				---	---	---	1300	1100	1190	1200	1040	1120
4				---	---	---	1330	1060	1180	1200	1030	1110
5				---	---	---	1280	973	1140	1180	1040	1090
6				---	---	---	1200	891	1070	1170	993	1070
7				---	---	---	1210	1030	1110	1180	1010	1080
8				---	---	---	1220	1060	1130	1220	1030	1110
9				---	---	---	1290	1100	1190	1210	977	1090
10				---	---	---	1270	1150	1230	1190	952	1070
11				---	---	---	1280	1140	1210	1160	926	1040
12				---	---	---	1310	1190	1240	1230	971	1120
13				---	---	---	1310	1230	1270	1160	1030	1110
14				---	---	---	1350	1230	1280	1200	1040	1130
15				---	---	---	1290	970	1140	1150	980	1060
16				---	---	---	1390	530	1110	1180	1050	1120
17				---	---	---	560	410	510	1170	1080	1130
18				---	---	---	550	390	466	1190	1070	1140
19				---	---	---	460	320	364	1170	1090	1130
20				---	---	---	---	---	---	1220	1070	1140
21				1230	1150	1190	---	---	---	1120	662	783
22				1340	1160	1260	960	660	810	1190	988	1120
23				1310	880	1120	820	520	683	1370	1180	1270
24				1100	910	994	960	710	820	1200	1060	1130
25				1100	910	997	1090	830	972	1180	1080	1140
26				1210	990	1120	1140	930	1060	1210	1100	1170
27				1240	1080	1180	1140	1080	1110	1100	985	1040
28				1210	1110	1160	1120	1040	1090	1170	600	1070
29				1260	1120	1190	1160	1040	1090	1270	180	615
30				1250	1120	1180	1140	1060	1100	370	170	253
31				1240	1090	1170	1220	1090	1150	---	---	---
MONTH				---	---	---	1390	320	1030	1370	170	1060
YEAR	1390	40	931									

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	30.0	14.5	26.0	14.0	15.5	8.0	18.5	4.0	17.5	9.0	15.5	13.0
2	31.0	15.0	24.5	14.0	18.0	6.0	18.0	4.5	11.0	8.5	13.0	12.0
3	27.5	15.0	22.0	11.0	18.5	7.5	20.0	5.5	14.0	8.0	---	---
4	29.0	17.5	20.5	11.0	20.0	8.5	19.5	6.0	17.0	9.0	---	---
5	28.5	16.5	23.0	12.5	19.5	9.0	20.5	8.0	14.5	9.5	---	---
6	28.0	16.5	21.0	13.5	18.0	9.5	20.5	9.5	14.0	11.5	---	---
7	26.5	18.0	18.0	14.0	16.0	11.0	20.5	11.5	14.5	12.5	---	---
8	28.0	15.0	19.5	14.5	13.0	8.5	22.0	9.0	15.5	12.0	---	---
9	29.5	15.5	15.0	9.0	14.5	10.5	23.5	9.0	17.0	11.5	---	---
10	29.5	14.5	14.5	9.0	21.0	12.0	23.0	9.0	17.0	11.5	---	---
11	27.0	13.5	19.5	8.5	21.0	11.5	23.5	9.0	18.5	11.5	---	---
12	27.0	13.5	19.5	8.5	21.5	10.5	23.0	8.5	22.0	12.5	---	---
13	25.5	15.0	19.0	8.5	21.0	11.5	24.0	10.0	22.5	14.0	---	---
14	25.5	15.0	23.0	8.0	14.0	6.5	23.0	10.5	21.5	11.0	---	---
15	25.0	17.0	22.5	9.5	18.5	8.0	22.0	10.0	18.5	12.5	---	---
16	27.0	15.5	19.5	12.5	17.5	8.0	22.0	13.5	22.0	11.5	---	---
17	26.5	18.0	22.0	13.5	16.0	7.5	19.0	10.5	24.0	13.0	---	---
18	27.5	18.0	19.0	13.0	18.5	9.5	20.0	10.5	22.0	14.0	---	---
19	26.5	17.5	19.5	14.0	19.0	9.0	16.0	9.5	23.0	10.5	---	---
20	25.5	16.5	22.5	11.5	19.0	10.5	18.5	6.0	25.0	11.0	---	---
21	24.5	17.0	19.5	10.5	14.0	11.5	15.0	6.5	27.0	11.5	---	---
22	25.0	18.0	16.5	11.0	14.5	13.0	13.5	10.5	26.0	12.0	---	---
23	27.0	19.0	18.5	10.0	14.0	7.5	16.0	12.0	20.5	13.5	---	---
24	26.0	19.5	20.5	10.5	13.5	5.5	14.5	12.5	18.5	12.5	---	---
25	23.5	18.5	22.0	10.0	14.5	4.0	19.5	12.5	21.0	12.0	---	---
26	24.0	16.5	22.0	9.5	16.5	4.5	20.5	11.5	16.0	12.5	---	---
27	27.0	12.5	20.5	9.0	15.5	7.0	14.0	12.0	16.0	14.5	---	---
28	22.5	12.5	19.0	12.5	18.0	9.0	15.0	12.0	17.0	13.5	---	---
29	21.5	13.5	18.5	14.5	13.0	7.5	14.5	11.0	---	---	---	---
30	19.0	14.5	15.5	12.0	14.5	5.0	16.0	10.0	---	---	---	---
31	25.5	16.0	---	---	17.0	3.5	16.0	9.5	---	---	---	---
MONTH	31.0	12.5	26.0	8.0	21.5	3.5	24.0	4.0	27.0	8.0	---	---

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	25.5	17.0	29.0	18.5	32.0	22.0	33.0	20.0
2			22.5	13.5	25.5	15.5	26.0	18.5	34.0	22.5	35.0	21.0
3			26.0	14.5	25.0	14.5	30.5	19.0	33.0	22.0	34.5	20.5
4			23.5	15.5	29.5	15.0	30.5	20.0	33.0	21.5	32.0	20.0
5			23.0	15.0	30.0	17.0	31.5	20.5	33.5	21.0	31.5	21.0
6			23.5	14.5	30.5	18.5	33.5	20.5	35.5	22.5	33.0	21.0
7			27.5	14.5	25.5	19.5	34.0	19.0	37.0	23.0	32.5	20.0
8			28.0	16.0	28.5	18.0	34.0	18.5	35.0	22.5	32.0	20.0
9			27.0	16.5	28.5	18.0	34.5	19.0	31.5	23.0	29.5	21.0
10			23.5	15.5	31.5	17.0	34.0	19.5	33.5	22.0	31.5	22.0
11			24.5	12.5	22.5	18.0	34.0	20.5	35.0	22.5	33.0	22.0
12			---	---	26.5	16.5	34.5	20.0	36.0	21.0	31.0	22.0
13			---	---	32.0	16.0	35.0	20.5	33.5	22.5	31.5	22.5
14			---	---	33.5	18.5	34.5	21.0	33.0	23.0	32.0	22.5
15			---	---	31.0	19.5	32.0	21.0	35.5	23.5	31.5	21.0
16			---	---	32.0	19.5	30.5	20.0	35.5	24.5	31.0	22.0
17			---	---	33.0	19.0	32.5	20.5	33.0	24.5	32.0	22.5
18			---	---	32.0	20.0	32.0	20.0	25.5	23.0	32.0	21.5
19			---	---	30.5	19.5	34.0	19.0	25.0	22.0	30.5	22.5
20			---	---	29.0	19.0	32.5	18.5	34.0	21.0	26.5	22.0
21			---	---	30.5	18.5	32.5	19.5	30.5	19.5	34.0	24.0
22			---	---	31.5	19.0	31.5	19.0	31.0	18.5	28.5	22.5
23			---	---	32.5	19.0	32.5	18.5	32.0	18.0	32.5	21.5
24			29.5	19.0	31.0	19.5	30.5	20.0	32.5	18.5	30.5	20.0
25			28.0	19.5	29.5	19.5	30.0	20.5	34.5	18.5	31.5	19.0
26			29.0	19.0	27.5	19.5	32.0	19.0	34.5	18.5	30.0	20.0
27			31.5	20.5	23.5	19.0	31.5	20.0	35.0	19.0	29.0	18.0
28			30.5	20.0	28.0	17.5	32.5	19.5	35.0	19.5	26.5	18.0
29			31.0	19.5	28.0	18.5	32.5	19.5	35.0	19.5	21.0	19.0
30			27.5	18.5	26.5	19.0	32.0	19.5	33.5	20.0	20.0	17.5
31			23.0	18.5	---	---	33.5	21.0	35.0	20.0	---	---
MONTH			---	---	33.5	14.5	35.0	18.5	37.0	18.0	35.0	17.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC 14...	1600	32	16.0	8	.68	--	--
MAR 08...	1100	1580	15.5	4530	19300	9	12
JUN 14...	1330	76	31.0	30	6.2	--	--
SEP 14...	1200	57	27.0	38	5.8	--	--

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. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
DEC 14...	--	--	--	70	--	--
MAR 08...	22	36	60	--	94	100
JUN 14...	--	--	--	59	--	--
SEP 14...	--	--	--	53	--	--

## CALLEGUAS CREEK BASIN

11105850 ARROYO SIMI NEAR SIMI, CA

LOCATION.--Lat 34°16'41", long 118°47'43", on line between secs.7 and 8, T.2 N., R.18 W., Ventura County, Hydrologic Unit 18070103, on left bank on downstream side of Madera Avenue bridge, 30 ft upstream from steel-lipped concrete stabilizer, 0.5 mi upstream from Brea Canyon, and 1.1 mi northwest of Simi.

DRAINAGE AREA.--70.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1933 to September 1951, October 1952 to current year. Monthly discharge, in acre-ft only, for October 1933 to September 1951, October 1952 to October 1968, published in WSP 2128.

GAGE.--Water-stage recorder with concrete control since Nov. 16, 1976. Datum of gage is 699.06 ft National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Nov. 16, 1976, at same site but at datum 1.53 ft higher and Nov. 16, 1976, to Oct. 29, 1979, at site 0.6 mi upstream at different datum.

REMARKS.--Records good. No regulation above station. Pumping from wells for irrigation. City of Simi Valley intermittently discharged ground water into channel from extraction wells this year.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by Geological Survey.

AVERAGE DISCHARGE.--15 years (water years 1969-83) 11.4 ft<sup>3</sup>/s, 8,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 8.50 ft, from rating curve extended above 500 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; maximum gage height, 8.80 ft Feb. 16, 1980; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 9	1045	1,180	4.73	Feb. 8	0200	1,530	4.41
Nov. 30	0115	969	4.53	Mar. 1	0600	*10,700	8.50
Dec. 22	2015	860	4.40	Mar. 21	0145	1,410	3.17
Jan. 19	0300	652	4.13	Mar. 24	0015	2,170	3.85
Jan. 22	1915	1,820	4.97	Apr. 18	0200	1,670	3.42
Jan. 28	2330	3,650	5.90	Sept. 30	0800	2,610	4.19
Feb. 2	1730	635	3.45				

Minimum daily discharge, 1.0 ft<sup>3</sup>/s Dec. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.9	3.0	2.1	5.8	3610	4.4	4.8	3.0	3.1	3.0	3.6
2	2.3	3.6	3.6	2.1	185	1490	4.4	4.8	3.1	2.8	2.9	3.3
3	2.3	3.3	3.3	2.1	42	443	4.3	4.8	3.2	2.7	2.6	3.1
4	2.8	3.3	3.6	2.1	5.8	103	4.3	4.7	3.3	2.8	2.3	2.9
5	2.8	3.6	3.0	1.9	28	68	4.3	4.6	3.4	2.7	2.2	3.0
6	2.8	3.6	3.0	1.9	18	42	4.3	4.5	3.4	2.8	2.5	3.6
7	3.0	3.0	2.5	1.9	25	10	4.2	4.4	3.2	2.9	2.8	3.0
8	2.8	3.0	1.0	1.9	261	9.0	4.1	4.3	2.9	3.0	2.8	2.8
9	2.8	200	1.7	1.7	9.6	8.0	4.0	4.2	3.1	2.3	2.7	2.5
10	2.8	71	2.3	1.4	5.0	7.0	4.0	4.1	3.3	2.6	2.7	2.5
11	2.8	3.9	2.1	1.4	3.6	6.0	4.0	4.0	3.4	2.4	2.5	2.6
12	3.0	3.0	2.5	1.4	3.3	6.0	4.0	3.9	3.5	2.4	2.4	2.7
13	3.3	3.0	2.1	1.4	7.9	8.0	4.0	3.8	3.6	2.6	2.1	2.8
14	3.6	2.8	1.9	1.4	3.6	8.0	4.0	3.7	3.6	2.8	3.3	2.8
15	4.3	2.8	1.9	1.6	3.9	6.0	4.0	3.6	3.7	2.8	4.6	2.8
16	3.9	2.8	1.9	1.7	3.9	9.4	4.0	3.5	3.8	2.8	2.7	2.8
17	3.6	3.3	2.1	1.9	3.9	11	4.0	3.5	3.5	2.8	3.2	2.7
18	3.6	25	2.3	3.5	3.3	57	169	3.5	3.3	2.7	5.0	2.7
19	3.9	47	2.3	67	2.8	8.0	14	3.5	3.5	2.6	17	2.7
20	3.9	3.6	2.3	3.9	2.5	4.0	80	3.5	3.8	2.3	6.0	2.7
21	4.7	3.3	2.8	3.3	2.5	124	31	3.5	3.6	2.3	3.0	2.7
22	4.3	3.6	153	356	2.8	23	5.0	3.5	3.2	2.4	2.9	2.7
23	4.3	3.3	10	94	3.3	47	4.8	3.5	3.2	2.5	2.8	2.6
24	4.3	3.3	3.6	152	28	261	4.6	3.4	3.3	2.7	2.7	2.6
25	4.3	3.3	3.3	12	4.6	9.0	4.4	3.4	3.4	2.8	2.6	2.6
26	9.8	2.8	2.5	3.6	310	7.0	4.2	3.4	3.6	2.7	2.6	2.6
27	4.3	3.0	2.5	619	332	5.0	4.2	3.4	3.5	2.7	2.6	2.6
28	4.3	3.3	2.1	248	113	8.0	4.2	3.4	3.6	2.6	2.6	3.0
29	4.3	19	6.0	366	---	4.4	11	3.4	3.6	2.5	2.7	42
30	15	204	2.5	30	---	4.4	32	3.4	3.4	2.4	2.9	197
31	4.8	---	2.3	9.6	---	4.4	---	3.3	---	2.6	3.6	---
TOTAL	127.0	644.4	239.0	1997.8	1420.1	6410.6	438.7	119.3	102.0	82.1	106.3	318.0
MEAN	4.10	21.5	7.71	64.4	50.7	207	14.6	3.85	3.40	2.65	3.43	10.6
MAX	15	204	153	619	332	3610	169	4.8	3.8	3.1	17	197
MIN	2.3	2.8	1.0	1.4	2.5	4.0	3.3	2.9	2.3	2.3	2.1	2.5
AC-FT	252	1280	474	3960	2820	12720	870	237	202	163	211	631

CAL YR 1982	TOTAL	3028.0	MEAN	8.30	MAX	241	MIN	1.0	AC-FT	6010
WTR YR 1983	TOTAL	12005.3	MEAN	32.9	MAX	3610	MIN	1.0	AC-FT	23810

11106400 CONEJO CREEK ABOVE HIGHWAY 101, NEAR CAMARILLO, CA

LOCATION.--Lat 34°14'12", long 118°57'50", T.2 N., R.20 W., Ventura County, Hydrologic Unit 18070103, on left bank 2.6 mi upstream from U.S. Highway 101, and 4.4 mi northeast of Camarillo.

DRAINAGE AREA.--64.2 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 180 ft, from topographic map. Mar. 4 to Oct. 25, 1978, at same site at datum 10.00 ft lower.

REMARKS.--No regulation or diversion above station.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--11 years, 28.8 ft<sup>3</sup>/s, 20,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 23.23 ft, from rating curve extended above 1,670 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 0.13 ft<sup>3</sup>/s May 31, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft<sup>3</sup>/s and maximum (\*), rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1000	4,170	17.92	Feb. 26	0400	3,450	17.36
Dec. 22	2115	1,320	15.20	Mar. 1	0600	*13,300	23.23
Jan. 23	0015	3,140	17.09	Mar. 24	0045	2,020	15.72
Jan. 28	2400	8,210	20.40	Sept. 30	2330	2,850	16.55
Feb. 8	0315	2,830	16.80				

Minimum daily discharge, 9.7 ft<sup>3</sup>/s Oct. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	17	32	16	50	3980	47	46	25	23	21	18
2	16	16	19	21	163	1450	46	36	23	19	21	17
3	15	15	18	24	59	365	44	34	24	20	19	16
4	15	15	17	20	42	234	41	33	24	21	17	16
5	15	15	17	17	58	143	38	31	25	20	16	15
6	15	15	17	17	50	98	37	31	25	21	20	17
7	14	17	17	17	52	81	34	31	22	21	21	16
8	13	16	17	17	319	77	33	31	21	22	21	15
9	9.7	177	17	16	163	73	33	30	23	17	20	15
10	12	120	17	17	43	71	29	29	25	20	20	16
11	12	25	17	18	34	66	28	29	25	18	19	16
12	15	22	17	18	32	63	27	30	26	18	18	17
13	14	19	17	16	34	71	26	29	26	21	15	17
14	14	20	17	16	32	60	26	29	27	21	29	18
15	14	20	17	17	33	53	26	29	28	21	34	18
16	14	19	17	17	32	58	26	29	28	21	19	18
17	13	19	17	17	31	64	26	28	27	21	20	18
18	13	21	17	17	29	121	185	29	24	21	32	16
19	12	82	17	125	27	54	60	29	26	18	101	16
20	13	21	17	17	29	47	176	28	28	17	26	17
21	14	18	18	15	29	172	88	28	26	17	22	17
22	15	19	193	515	28	60	40	28	24	18	21	17
23	15	19	61	324	28	77	37	29	24	19	19	16
24	16	19	21	142	35	362	37	30	24	20	18	14
25	16	19	20	19	30	71	33	30	25	21	18	15
26	18	19	17	17	930	63	37	30	27	20	17	15
27	16	19	17	939	392	60	36	30	26	20	17	16
28	15	16	16	331	232	72	47	29	26	19	16	17
29	14	55	19	835	---	56	57	29	27	18	16	29
30	28	563	19	62	---	54	79	28	25	18	18	484
31	24	---	17	54	---	51	---	27	---	18	19	---
TOTAL	465.7	1457	776	3713	3016	8327	1479	939	756	609	710	972
MEAN	15.0	48.6	25.0	120	108	269	49.3	30.3	25.2	19.6	22.9	32.4
MAX	28	563	193	939	930	3980	185	46	28	23	101	484
MIN	9.7	15	16	15	27	47	26	27	21	17	15	14
AC-FT	924	2890	1540	7360	5980	16520	2930	1860	1500	1210	1410	1930
CAL YR 1982	TOTAL	8329.5	MEAN	22.8	MAX	563	MIN	9.7	AC-FT	16520		
WTR YR 1983	TOTAL	23219.7	MEAN	63.6	MAX	3980	MIN	9.7	AC-FT	46060		

## CALLEGUAS CREEK BASIN

11106550 CALLEGUAS CREEK AT CAMARILLO STATE HOSPITAL, CA

LOCATION.--Lat 34°10'46", long 119°02'20", in Guadalupe Grant, Ventura County, Hydrologic Unit 18070103, on downstream side of county road bridge, 1.0 mi northeast of Camarillo State Hospital, and 1.4 mi downstream from Conejo Creek.

DRAINAGE AREA.--248 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 58.42 ft National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--No regulation above station. Pumping for irrigation in valley 1.0 mi above station. Sustained flow from city of Thousand Oaks reclamation plant.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by Geological Survey.

AVERAGE DISCHARGE.--15 years, 41.2 ft<sup>3</sup>/s, 29,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,900 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 10.08 ft; maximum gage height, 10.54 ft Feb. 16, 1980, from rating curve extended above 4,600 ft<sup>3</sup>/s on basis of slope-conveyance study of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft<sup>3</sup>/s, and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 9	1830	1,340	2.98	Feb. 8	0515	3,060	4.33
Nov. 30	1315	1,430	3.04	Feb. 26	0800	5,820	5.50
Dec. 22	2100	1,150	2.85	Mar. 1	0800	*25,900	10.08
Jan. 23	0015	5,890	5.50	Mar. 21	0600	1,480	2.58
Jan. 29	0230	7,650	6.13	Mar. 24	0315	4,190	4.22
Feb. 2	1830	1,390	3.26	Apr. 20	Unknown	Unknown	Unknown

Minimum daily discharge, 8.9 ft<sup>3</sup>/s Oct. 17, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	21	52	21	56	9690	55	50	27	21	18	20
2	27	18	33	23	362	5440	50	46	27	24	17	20
3	25	13	27	27	169	1710	50	42	27	27	16	20
4	23	13	25	27	58	506	47	38	27	30	16	20
5	21	13	25	21	70	176	50	35	27	31	17	20
6	19	13	23	20	66	148	50	34	27	32	18	20
7	16	16	23	18	72	106	50	34	27	31	18	19
8	18	18	20	16	796	101	50	33	27	29	19	19
9	15	272	23	18	82	96	50	32	27	28	20	19
10	10	275	21	18	58	92	50	31	27	27	20	19
11	16	40	20	18	54	87	51	30	27	26	20	19
12	14	31	19	21	49	82	50	29	27	25	21	19
13	11	25	19	20	49	77	50	29	27	24	22	19
14	11	23	19	19	44	85	50	30	27	23	22	19
15	13	23	20	21	44	60	50	30	27	23	23	20
16	11	23	20	23	44	60	50	31	27	23	24	20
17	8.9	23	19	23	42	143	50	31	27	23	24	20
18	11	23	16	20	42	184	282	32	27	23	24	20
19	10	105	15	179	40	60	50	33	28	24	133	20
20	8.9	29	16	27	33	60	381	34	28	24	20	20
21	11	23	18	23	33	404	132	34	29	24	20	21
22	11	21	225	1020	33	86	50	33	29	25	20	21
23	13	21	197	1150	33	132	48	32	29	25	20	21
24	13	21	29	425	47	939	46	32	27	24	20	21
25	16	20	25	78	40	100	44	31	26	23	20	21
26	11	19	21	44	1590	60	43	31	25	22	20	21
27	14	19	21	1950	907	60	43	30	24	21	20	21
28	15	19	21	233	237	80	48	30	23	20	20	22
29	15	54	21	2120	---	60	48	29	22	19	20	22
30	16	649	23	110	---	55	105	29	22	19	20	510
31	42	---	23	72	---	55	---	28	---	19	20	---
TOTAL	496.8	1883	1079	7805	5150	20994	2173	1023	798	759	732	1093
MEAN	16.0	62.8	34.8	252	184	677	72.4	33.0	26.6	24.5	23.6	36.4
MAX	42	649	225	2120	1590	9690	381	50	29	32	133	510
MIN	8.9	13	15	16	33	55	43	28	22	19	16	19
AC-FT	985	3730	2140	15480	10220	41640	4310	2030	1580	1510	1450	2170
CAL YR 1982	TOTAL	10272.9	MEAN	28.1	MAX	649	MIN	7.5	AC-FT	20380		
WTR YR 1983	TOTAL	43985.8	MEAN	121	MAX	9690	MIN	8.9	AC-FT	87250		



11108500 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 794.93 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records 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.--31 years, 48.8 ft<sup>3</sup>/s, 35,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,800 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 19.01 ft, from rating curve extended above 9,200 ft<sup>3</sup>/s on basis of field estimate of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 750 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 3,650 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 11.78 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 23	0245	2,360	7.48	Mar. 1	0700	*30,600	11.78
Jan. 27	0845	3,780	8.29	Mar. 6	Unknown	Unknown	Unknown
Feb. 8	0445	984	6.09	Mar. 11	Unknown	Unknown	Unknown
Feb. 27	1145	3,750	8.38				

Minimum daily discharge, 21 ft<sup>3</sup>/s Oct. 9, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	35	52	49	66	6000	165	196	62	49	33	43
2	22	33	46	48	120	7900	167	214	64	50	32	37
3	22	31	43	48	117	7800	163	212	67	52	31	35
4	22	32	35	47	70	2200	160	221	66	49	30	32
5	22	32	34	46	65	500	146	218	68	45	31	34
6	22	34	34	45	63	1300	146	222	70	43	32	35
7	22	37	35	45	69	900	147	222	64	41	32	37
8	24	39	37	44	448	1200	144	215	60	35	33	33
9	21	46	39	43	219	400	147	190	60	33	34	30
10	21	272	39	43	172	800	152	163	62	33	34	29
11	22	39	39	44	151	1000	146	181	72	34	34	29
12	23	35	38	45	136	800	130	162	79	34	33	29
13	22	36	39	45	133	225	120	153	84	33	34	29
14	24	38	38	45	116	220	115	148	84	31	33	29
15	24	40	37	46	109	220	110	245	71	30	35	28
16	24	43	37	48	103	210	110	239	67	30	40	28
17	26	46	39	46	93	230	108	186	63	29	55	28
18	28	50	39	47	89	190	180	187	64	28	54	28
19	29	63	39	112	82	131	170	210	67	28	83	28
20	29	47	39	67	77	161	180	238	63	28	67	28
21	29	46	42	68	74	200	250	181	62	28	59	28
22	29	51	60	297	71	194	400	150	64	29	57	28
23	28	52	250	522	68	182	600	130	62	29	56	28
24	28	48	120	330	68	113	500	117	56	29	53	29
25	31	47	60	71	65	117	120	107	53	29	51	29
26	31	46	54	55	248	121	120	100	56	29	50	33
27	29	46	52	679	1110	154	165	96	56	28	48	39
28	32	48	51	127	397	175	210	87	60	30	47	43
29	33	51	51	596	---	159	198	79	54	31	48	63
30	37	276	60	105	---	168	198	71	50	31	47	86
31	39	---	50	73	---	168	---	63	---	32	44	---
TOTAL	817	1739	1628	3926	4599	34138	5667	5203	1930	1060	1350	1035
MEAN	26.4	58.0	52.5	127	164	1101	189	168	64.3	34.2	43.5	34.5
MAX	39	276	250	679	1110	7900	600	245	84	52	83	86
MIN	21	31	34	43	63	113	108	63	50	28	30	28
AC-FT	1620	3450	3230	7790	9120	67710	11240	10320	3830	2100	2680	2050
CAL YR 1982	TOTAL	18396	MEAN	50.4	MAX	621	MIN	18	AC-FT	36490		
WTR YR 1983	TOTAL	63092	MEAN	173	MAX	7900	MIN	21	AC-FT	125100		

## SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

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 micromhos Mar. 31, 1971; minimum recorded, 160 micromhos Mar. 17, 1979.

SEDIMENT CONCENTRATION: Maximum daily mean, 48,500 mg/L Feb. 10, 1978; minimum daily mean, 4 mg/L Sept. 9, 1976.

SEDIMENT DISCHARGE: Maximum daily, 3,300,000 tons, estimated, Feb. 25, 1969; minimum daily, 0.03 tons Sept. 9, 1976.

WATER TEMPERATURES: Maximum recorded, 32.0°C Aug. 9, 1980; minimum recorded, 6.0°C Feb. 10, 1980.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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, SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 14...	1115	35	1530	8.5	15.5	745	3.5	9.2	95	K27	140
MAR 15...	1300	217	1150	8.3	21.5	740	320	8.6	100	80	110
JUN 29...	1245	52	1300	8.2	28.0	740	80	8.0	106	130	440
SEP 29...	1030	47	1310	8.3	18.5	740	38	8.9	98	720	1900

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)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 14...	520	260	130	48	140	37	3	5.5	262	420	88
MAR 15...	410	180	100	39	94	33	2	5.2	233	300	59
JUN 29...	440	180	110	39	120	37	3	5.5	254	320	78
SEP 29...	440	180	110	39	120	37	3	5.3	258	330	83

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)	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 14...	.60	22	1080	1000	1.5	4.3	.29	1.0	.91	.82	.80
MAR 15...	.60	22	791	760	1.1	2.4	.39	2.2	1.8	.35	.26
JUN 29...	.60	23	874	850	1.2	4.7	.06	1.2	1.0	.53	.50
SEP 29...	.50	22	895	870	1.2	4.0	.03	1.7	1.1	.66	.65

See footnotes at end of table.

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 14...	1115	50	2	63	<.5	<1	<1	<3	3	31	2
MAR 15...	1300	20	3	81	<.5	<1	<1	<3	3	4	<1
JUN 29...	1245	20	3	81	<.5	<1	<1	<3	2	<3	<1
SEP 29...	1030	20	2	71	<.5	<1	<1	<3	3	6	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 14...	44	43	.1	<10	3	3	<1	1100	<6	10
MAR 15...	31	43	.1	<10	<1	1	<1	930	<6	10
JUN 29...	28	6	<.1	<10	1	2	<1	960	<6	7
SEP 29...	34	14	.7	<10	3	3	1	930	<6	8

X 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 1981 TO SEPTEMBER 1982

(NOT PREVIOUSLY PUBLISHED)

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 19...	1030	25	15.0	77	5.2	--
JAN 27...	1300	45	17.5	257	31	26
MAR 08...	1220	48	20.0	212	27	16
MAY 26...	1100	29	19.5	111	8.7	34
JUL 27...	1110	22	25.0	126	7.5	29
SEP 28...	1115	24	20.0	205	13	4

## SANTA CLARA RIVER BASIN

11109600 PIRU CREEK ABOVE LAKE PIRU, CA

LOCATION.--Lat 34°31'23", long 118°45'22", in SW 1/4 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, and 8.0 mi northeast of Piru.

DRAINAGE AREA.--372 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,058.55 ft 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.--Records poor. Flow regulated beginning December 1971 by Pyramid Dam, capacity, 173,500 acre-ft 15 mi upstream. Imported water from the California Water Project stored and released from Pyramid Dam.

AVERAGE DISCHARGE.--16 years (water years 1956-71), 55.1 ft<sup>3</sup>/s, 39,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 18.6 ft, site and datum then in use, from floodmark, from rating curve extended above 4,000 ft<sup>3</sup>/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 ft<sup>3</sup>/s, is the greatest since that date.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,850 ft<sup>3</sup>/s Mar. 1, gage height, 11.36 ft, from floodmarks, from rating curve extended above 7,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; minimum daily, 4.8 ft<sup>3</sup>/s many days during October and November.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	5.4	24	32	174	14000	283	471	66	32	21	20
2	11	5.4	14	29	185	6000	278	448	68	30	21	21
3	6.2	5.1	12	27	177	1500	278	455	61	30	21	20
4	5.9	5.1	11	27	164	600	272	455	58	30	21	22
5	4.8	5.1	9.4	28	156	400	262	322	45	30	21	20
6	5.1	4.8	9.4	19	139	350	203	311	32	30	21	20
7	4.8	4.8	9.4	16	142	350	187	299	32	30	21	19
8	4.8	4.8	9.4	15	311	650	187	288	32	30	21	19
9	4.8	4.5	8.6	14	390	650	164	278	32	30	20	18
10	4.8	31	9.4	14	368	650	94	267	32	30	20	16
11	4.8	12	9.4	14	364	650	92	257	32	30	19	17
12	4.8	8.6	9.4	14	356	740	97	257	32	35	19	18
13	4.8	7.6	9.0	14	352	740	81	242	32	30	20	18
14	5.1	7.2	9.0	14	286	570	75	183	32	30	21	19
15	4.8	6.6	9.0	14	139	420	32	183	32	30	21	18
16	4.8	6.6	8.6	14	139	570	32	179	32	25	22	19
17	4.8	6.6	8.6	14	134	490	32	179	32	20	22	19
18	4.8	6.2	8.6	14	132	450	167	176	32	20	21	19
19	4.8	7.9	9.0	19	130	450	185	176	32	20	44	17
20	4.8	7.6	9.4	15	127	550	663	135	32	20	32	17
21	4.8	6.9	9.4	14	127	520	567	74	32	19	26	16
22	4.8	6.9	200	106	123	450	528	74	32	21	22	16
23	4.8	6.9	100	150	123	580	503	72	32	19	22	17
24	4.8	6.9	116	262	125	520	495	72	32	19	21	16
25	4.8	6.6	110	154	123	299	479	70	32	19	21	16
26	5.1	6.6	104	159	166	288	479	70	32	19	19	15
27	5.6	6.2	98	809	581	299	471	70	32	18	19	15
28	5.4	6.2	37	491	476	299	463	70	32	19	22	15
29	5.1	6.2	33	871	---	299	487	68	32	18	22	18
30	5.1	104	32	416	---	288	528	68	32	19	22	209
31	5.4	---	33	190	---	288	---	66	---	21	22	---
TOTAL	175.2	356.8	1079.0	3989	6209	34910	8664	6335	1098	773	687	729
MEAN	5.65	11.9	34.8	129	222	1126	289	204	36.6	24.9	22.2	24.3
MAX	19	104	200	871	581	14000	663	471	68	35	44	209
MIN	4.8	4.8	8.6	14	123	288	32	66	32	18	19	15
AC-FT	348	708	2140	7910	12320	69240	17190	12570	2180	1530	1360	1450
CAL YR 1982	TOTAL	13769.7	MEAN	37.7	MAX	348	MIN	4.8	AC-FT	27310		
WTR YR 1983	TOTAL	65005.0	MEAN	178	MAX	14000	MIN	4.8	AC-FT	128900		

## 11109700 LAKE PIRU NEAR PIRU, CA

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 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is to 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 20 mi upstream, 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, 93,600 acre-ft Mar. 2, elevation, 1,057.10 ft; minimum, 19,420 acre-ft Nov. 8, elevation, 977.23 ft.

## MONTH-END ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	977.65	19,660	--
Oct. 31.....	977.32	19,470	-190
Nov. 30.....	978.54	20,180	+710
Dec. 31.....	982.35	22,500	+2,320
CAL YR 1982.....	--	--	-2,760
Jan. 31.....	994.70	31,300	+8,800
Feb. 28.....	1,013.71	47,240	+15,940
Mar. 31.....	1,055.33	91,420	+44,180
Apr. 30.....	1,055.46	91,570	+150
May 31.....	1,054.97	90,960	-610
June 30.....	1,055.05	91,080	+120
July 31.....	1,054.95	90,950	-130
Aug. 31.....	1,054.95	90,950	0
Sept. 30.....	1,052.60	88,130	-2,820
WTR YR 1983.....	--	--	+68,470

## SANTA CLARA RIVER BASIN

## 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929 (levels by United Water Conservation District).

REMARKS.--Records fair. 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, 544 ft<sup>3</sup>/s Aug. 18, 1958, gage height, 3.66 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 263 ft<sup>3</sup>/s Sept. 27; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.3	6.0	6.0	.08	.84	.11	0	0	2.9	5.0	5.0
2	6.6	6.2	6.0	6.0	.10	.41	.12	0	0	2.9	5.0	5.0
3	6.6	6.0	6.0	6.0	.08	.16	.14	0	0	2.9	5.0	5.0
4	6.6	5.7	6.0	6.0	.06	.14	.14	0	0	2.9	5.0	5.0
5	6.6	5.7	6.0	6.0	.05	.13	.14	0	0	2.8	5.0	5.0
6	6.6	5.7	6.0	6.0	.05	.12	.15	0	0	2.8	5.0	5.0
7	6.6	5.7	6.0	6.0	.06	.12	.13	0	0	2.5	5.0	5.0
8	6.8	5.7	5.9	6.0	.09	.12	.11	0	0	2.3	5.0	5.0
9	6.9	5.8	6.0	6.1	.04	.12	.10	0	0	2.3	5.0	5.0
10	6.9	5.7	6.0	6.2	.04	.12	.11	0	0	2.3	5.0	5.0
11	6.9	5.8	6.0	6.1	.04	.12	.11	0	0	3.4	5.0	5.0
12	8.0	5.9	6.0	6.0	.03	.13	.11	0	0	4.8	5.0	5.0
13	7.8	6.0	6.0	6.0	.03	.14	.12	0	0	4.8	5.0	5.0
14	6.3	6.0	6.0	6.0	.03	.14	.12	0	.42	4.8	5.0	5.0
15	6.3	6.0	6.0	6.0	.02	.14	.12	0	2.6	4.8	5.0	5.0
16	6.3	6.0	6.0	6.0	.01	.14	.13	0	2.6	4.8	5.0	5.0
17	6.3	6.0	6.0	6.0	.01	.15	.14	0	2.6	4.8	5.0	5.0
18	6.1	6.0	6.0	6.0	0	.15	.16	.13	2.8	4.8	5.0	5.1
19	5.0	6.0	6.0	6.3	.01	.13	.15	0	2.8	4.8	5.0	5.1
20	2.7	6.0	5.9	6.3	0	.13	.24	0	2.8	4.8	5.0	43
21	2.7	6.0	5.9	6.3	.01	.13	0	0	2.8	4.8	5.0	60
22	4.1	6.0	6.2	6.7	.01	.11	0	0	2.8	4.8	5.0	60
23	6.3	6.0	6.0	4.2	0	.13	0	0	2.8	4.8	5.0	68
24	5.6	6.0	6.0	.22	.01	.14	0	0	2.8	4.8	5.0	72
25	5.8	6.0	5.8	.10	.02	.11	0	0	2.8	4.8	5.0	71
26	6.0	6.0	5.8	.08	.10	.11	0	0	2.8	4.8	5.0	176
27	6.2	6.0	5.7	.21	.34	.10	0	0	2.8	4.9	5.0	263
28	6.2	6.0	5.8	.14	.04	.09	0	0	2.8	5.0	5.0	260
29	6.3	6.0	5.8	.18	---	.09	0	0	2.8	5.0	5.0	260
30	6.3	6.2	5.8	.09	---	.10	0	0	2.8	5.0	5.0	110
31	6.3	---	5.9	.08	---	.11	---	0	---	5.0	5.0	---
TOTAL	190.3	178.4	184.5	139.30	1.36	4.87	2.65	0.13	44.62	126.9	155	1538.2
MEAN	6.14	5.95	5.95	4.49	.049	.16	.088	.004	1.49	4.09	5.00	51.3
MAX	8.0	6.3	6.2	6.7	.34	.84	.24	.13	2.8	5.0	5.0	263
MIN	2.7	5.7	5.7	.08	0	.09	0	0	0	2.3	5.0	5.0
AC-FT	377	354	366	276	2.7	9.7	5.3	.3	89	252	307	3050
a	377	354	366	276	2.7	33860	17250	12030	1960	623	942	3050
CAL YR 1982	TOTAL	15135.3	MEAN	41.5	MAX	425	MIN	2.3	AC-FT	30020	AC-FT a	30020
WTR YR 1983	TOTAL	2566.23	MEAN	7.03	MAX	263	MIN	0	AC-FT	5090	AC-FT a	71090

a Combined discharge, in acre-feet, of Piru Creek below Santa Felicia Dam and spill from Santa Felicia Dam.

## 11110500 HOPPER CREEK NEAR PIRU, CA

LOCATION.--Lat 34°24'03", long 118°49'32", in NE 1/4 NE 1/4 SW 1/4 sec.25, T.4 N., R.19 W., Ventura County, Hydrologic Unit 18070102, on downstream end of center pier of bridge on State Highway 126, 1 mi upstream from mouth, and 2.1 mi southwest of Piru.

DRAINAGE AREA.--23.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to September 1932, October 1933 to September 1936, October 1937 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 590 ft, from topographic map.

REMARKS.--No regulation above station. Some pumping along stream for irrigation.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--51 years (water years 1931-32, 1934-36, 1938-83) 6.23 ft<sup>3</sup>/s, 4,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 12.72 ft, from floodmarks, from rating curve extended above 850 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0830	836	5.73	Feb. 27	0830	2,520	8.15
Dec. 22	1900	2,300	7.98	Mar. 1	0600	*4,410	9.50
Jan. 23	0030	925	6.67	Mar. 24	0130	387	5.87
Jan. 27	0600	1,960	7.69	Sep. 30	0930	491	6.05
Feb. 8	0200	826	6.55				

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	7.1	0	19	1610	20	26	9.8	4.6	1.8	1.4
2		0	2.0	0	40	1120	20	23	9.8	4.4	1.8	1.6
3		0	.79	0	31	348	18	19	9.5	4.4	1.7	1.5
4		0	.38	0	25	171	17	18	8.7	4.2	1.7	1.6
5		0	.38	0	25	100	14	17	8.4	3.8	1.6	1.5
6		0	.27	0	24	65	15	17	6.9	3.6	1.6	1.4
7		0	.27	0	34	64	15	16	6.7	3.6	1.6	1.3
8		0	.38	0	205	62	15	16	6.9	3.5	1.7	1.1
9		12	.38	0	38	57	15	15	6.9	3.3	1.6	1.2
10		6.8	.48	0	25	52	15	15	6.7	2.5	1.7	1.1
11		1.0	.27	0	20	45	15	14	6.7	2.1	1.5	1.1
12		.27	.12	0	18	38	15	14	6.4	2.6	1.4	1.0
13		.27	.10	0	18	43	15	14	5.8	2.6	1.2	1.0
14		1.5	.10	0	16	41	14	13	5.5	2.5	1.4	1.1
15		.10	.08	0	14	27	11	13	5.8	2.6	2.1	1.0
16		.10	.10	0	13	27	10	13	6.0	3.0	1.7	1.0
17		.10	.06	0	12	45	9.8	12	6.0	3.0	1.9	1.1
18		.29	.06	0	11	32	71	11	6.0	3.0	1.9	1.1
19		11	.04	13	10	25	41	11	6.0	2.6	1.5	1.1
20		1.5	.02	.74	9.5	22	149	11	6.0	2.3	5.5	1.1
21		.55	.02	.15	8.7	69	98	11	6.0	2.2	3.5	1.1
22		.55	308	172	8.4	27	19	11	5.5	2.2	2.8	1.3
23		.55	58	122	9.1	31	19	11	5.3	2.1	2.3	1.4
24		.46	2.0	207	11	130	20	11	5.1	2.3	2.0	1.4
25		.34	1.0	33	12	48	20	11	5.1	2.1	2.0	1.4
26		.34	.50	16	84	32	20	10	5.1	1.9	1.8	1.4
27		.34	.26	368	596	28	19	10	4.9	2.1	1.6	1.5
28		.46	0	57	221	27	35	9.8	4.9	2.1	1.4	1.6
29		1.3	0	235	---	24	36	9.5	4.9	2.0	1.4	2.5
30		97	0	42	---	23	49	9.8	4.9	2.0	1.5	53
31		---	0	22	---	22	---	9.8	---	1.9	1.5	---
TOTAL	0	136.82	383.16	1287.89	1557.7	4455	849.8	421.9	192.2	87.1	72.2	90.9
MEAN	0	4.56	12.4	41.5	55.6	144	28.3	13.6	6.41	2.81	2.33	3.03
MAX	0	97	308	368	596	1610	149	26	9.8	4.6	1.5	53
MIN	0	0	0	0	8.4	22	9.8	9.5	4.9	1.9	1.2	1.0
AC-FT	0	271	760	2550	3090	8840	1690	837	381	173	143	180
CAL YR 1982	TOTAL	1371.07	MEAN	3.76	MAX	308	MIN	0	AC-FT	2720		
WTR YR 1983	TOTAL	9534.67	MEAN	26.1	MAX	1610	MIN	0	AC-FT	18910		

## SANTA CLARA RIVER BASIN

11111500 SESPE CREEK NEAR WHEELER SPRINGS, CA

LOCATION.--Lat 34°34'40", long 119°15'25", in SE 1/4 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--36 years, 14.3 ft<sup>3</sup>/s, 10,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,600 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 15.02 ft, from rating curve extended above 3,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1245	130	4.23	Feb. 8	Unknown	267	4.29
Dec. 22	Unknown	436	5.30	Mar. 1	0530	*11,600	15.02
Jan. 22	2315	474	5.35	Mar. 24	0400	258	2.83
Jan. 27	0530	2,200	8.11	Apr. 20	0200	487	3.37

Minimum daily discharge, 0.62 ft<sup>3</sup>/s Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.84	.90	11	3.7	82	6430	71	155	23	10	4.7	3.3
2	.76	.84	5.3	3.5	68	3300	67	135	23	9.9	4.4	3.2
3	.71	.85	5.2	3.4	57	1720	65	121	22	9.6	5.5	3.2
4	.72	.85	3.3	3.3	48	1150	62	111	22	9.2	6.8	3.1
5	.64	.85	2.7	3.1	44	770	60	103	22	8.6	6.6	3.3
6	.64	.85	2.5	3.1	40	516	57	94	22	8.4	6.4	3.4
7	.63	.89	2.4	3.0	40	402	53	86	21	8.5	6.4	3.3
8	.63	.92	2.2	2.9	87	334	50	79	21	8.4	6.2	3.3
9	.63	4.6	2.3	2.9	60	200	48	72	21	8.5	5.9	3.3
10	.62	4.6	2.2	2.9	50	124	47	66	23	8.9	5.7	3.6
11	.63	3.3	2.2	2.8	45	119	46	62	26	8.5	5.5	3.1
12	.63	2.5	2.1	2.8	41	112	44	59	26	8.3	4.6	2.8
13	.64	2.3	2.1	2.7	38	113	42	56	24	8.1	4.3	2.8
14	.64	2.1	2.0	2.7	35	110	39	53	23	7.9	4.5	2.9
15	.64	1.8	2.0	2.7	32	96	38	50	23	8.0	4.8	2.9
16	.65	1.6	1.9	2.7	29	91	36	48	22	8.4	5.7	2.8
17	.66	1.5	1.9	2.7	27	86	36	45	19	8.2	7.4	2.8
18	.67	1.8	1.8	2.8	25	88	193	44	16	7.9	6.8	2.8
19	.68	5.0	1.8	4.3	24	82	231	42	16	7.8	9.3	3.0
20	.69	2.0	1.7	2.9	23	76	452	40	16	8.3	6.4	3.1
21	.71	1.6	1.8	2.8	22	112	500	38	15	8.2	5.1	3.1
22	.69	1.3	96	74	21	106	308	36	13	8.1	4.1	3.1
23	.69	1.4	32	142	21	110	232	34	13	7.8	3.9	3.1
24	.83	1.3	12	175	20	200	206	32	14	7.2	3.8	3.3
25	.84	1.2	10	76	20	142	180	30	14	7.1	3.6	3.3
26	1.8	1.2	9.0	44	59	117	154	28	13	7.1	3.5	3.7
27	.70	1.2	7.5	683	342	104	137	27	12	7.2	3.4	3.5
28	.72	1.2	6.0	192	818	96	162	26	12	6.8	3.3	3.4
29	.72	1.4	4.6	286	---	88	161	25	11	7.0	3.2	3.4
30	1.0	48	4.3	160	---	82	189	24	11	6.9	3.2	17
31	.94	---	3.9	111	---	77	---	24	---	5.8	3.3	---
TOTAL	22.99	99.85	245.7	2006.7	2218	17153	3966	1845	559	250.6	158.3	108.9
MEAN	.74	3.33	7.93	64.7	79.2	553	132	59.5	18.6	8.08	5.11	3.63
MAX	1.8	48	96	683	818	6430	500	155	26	10	9.3	17
MIN	.62	.84	1.7	2.7	20	76	36	24	11	5.8	3.2	2.8
AC-FT	46	198	487	3980	4400	34020	7870	3660	1110	497	314	216
CAL YR 1982	TOTAL	1768.87	MEAN	4.85	MAX	188	MIN	.13	AC-FT	3510		
WTR YR 1983	TOTAL	28634.04	MEAN	78.4	MAX	6430	MIN	.62	AC-FT	56800		



## 11113000 SESPE CREEK NEAR FILLMORE, CA

LOCATION.--Lat 34°27'03", long 118°55'30", in NE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1911 to September 1913, October 1927 to current year; combined records of creek and canal, October 1927 to current year. Prior to 1935, published as "at Sespe."

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on canal. Altitude of creek gage is 580 ft, from topographic map. Canal gage is at different datum. See WSP 1315-B for history of changes prior to Jan. 17, 1946.

REMARKS.--Records fair. 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: 58 years, 116 ft<sup>3</sup>/s, 84,040 acre-ft/yr.  
Combined creek and canal: 56 years, 122 ft<sup>3</sup>/s, 88,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 73,000 ft<sup>3</sup>/s Feb. 10, 1978, gage height, 22.40 ft, from rating curve extended above 17,000 ft<sup>3</sup>/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 ft<sup>3</sup>/s Feb. 10, 1978; minimum daily, 1.1 ft<sup>3</sup>/s July 31, Aug. 2, 1951.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges above base of 1,300 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 10,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 20.41 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0845	4,190	13.32	Feb. 8	0130	3,740	12.66
Dec. 22	1815	14,710	16.06	Mar. 1	0615	*56,000	20.41
Jan. 27	0815	11,200	15.37	Apr. 20	1930	2,660	12.00

Minimum daily discharge, 0.47 ft<sup>3</sup>/s Oct. 29.

Combined creek and canal: Maximum discharge, 56,000 ft<sup>3</sup>/s Mar. 1; minimum daily, 5.0 ft<sup>3</sup>/s Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.70	.54	230	80	680	25500	446	717	149	56	37	24
2	.68	.54	66	70	475	15200	420	649	146	54	35	24
3	.68	.54	39	58	493	5000	395	596	143	57	34	22
4	.68	.54	30	55	391	2800	382	553	138	65	33	21
5	.68	.54	27	52	341	2130	365	515	131	61	31	20
6	.68	.54	23	50	338	1800	359	484	124	57	31	20
7	.68	.56	21	47	426	1300	339	450	118	56	30	19
8	.74	.61	21	46	2150	800	324	418	114	54	30	18
9	.68	34	20	45	960	700	310	394	111	52	29	18
10	.68	39	19	43	660	675	305	374	106	51	30	20
11	.62	37	18	42	512	645	301	353	102	49	29	19
12	.61	23	17	41	422	591	297	337	101	48	28	18
13	.57	18	16	40	413	540	277	326	96	47	27	17
14	.54	15	15	40	350	527	262	313	90	46	28	17
15	.58	14	15	39	300	461	246	296	85	47	30	17
16	.55	13	14	39	269	423	231	281	83	52	35	16
17	.54	13	13	39	242	463	221	264	80	55	71	16
18	.54	16	13	39	227	473	957	255	78	54	45	16
19	.54	56	12	51	214	459	955	246	77	54	73	16
20	.49	52	12	51	199	433	1900	236	75	53	65	16
21	.48	31	12	48	190	774	1980	227	73	48	56	16
22	.50	24	3240	1340	181	685	1210	219	70	43	49	17
23	.54	21	1850	2470	177	800	906	211	69	43	45	17
24	.54	19	603	3180	181	1020	746	203	68	41	44	17
25	.54	18	360	1180	181	825	642	195	66	41	40	17
26	.54	18	270	555	555	685	569	187	64	41	33	17
27	.48	17	200	6000	5580	613	517	181	62	40	32	17
28	.48	16	160	1840	3920	571	593	170	61	40	32	17
29	.47	17	130	3630	---	530	782	162	59	40	29	20
30	.49	858	110	1300	---	505	876	157	57	39	25	141
31	.54	---	92	907	---	480	---	152	---	38	25	---
TOTAL	18.06	1373.41	7668	23417	21027	68408	18113	10121	2796	1522	1161	670
MEAN	.58	45.8	247	755	751	2207	604	326	93.2	49.1	37.5	22.3
MAX	.74	858	3240	6000	5580	25500	1980	717	149	65	73	141
MIN	.47	.54	12	39	177	423	221	152	57	38	25	16
AC-FT	36	2720	15210	46450	41710	135700	35930	20080	5550	3020	2300	1330
CAL YR 1982	TOTAL	28695.20	MEAN	78.6	MAX	3240	MIN	.47	AC-FT	56920		
WTR YR 1983	TOTAL	156294.47	MEAN	428	MAX	25500	MIN	.47	AC-FT	310000		

## SANTA CLARA RIVER BASIN

11113000 SESPE CREEK NEAR FILLMORE, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SESPE CREEK AND FILLMORE  
IRRIGATION CO.'S CANAL NEAR FILLMORE, CA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

## MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	6.1	230	80	680	25500	446	717	155	65	46	31
2	5.9	6.1	66	70	475	15200	420	649	154	62	44	31
3	5.8	6.9	39	58	493	5000	395	596	151	64	43	29
4	5.7	6.8	30	55	391	2800	382	553	145	70	42	29
5	5.7	6.8	27	52	341	2130	365	515	139	67	40	28
6	5.6	6.8	23	50	338	1800	359	484	133	65	40	27
7	5.6	6.9	21	47	426	1300	339	450	128	64	38	26
8	5.4	6.9	21	46	2150	800	324	418	123	62	39	25
9	5.3	36	20	45	960	700	310	394	120	61	39	25
10	5.3	39	19	43	660	675	305	374	115	59	39	27
11	5.2	37	18	42	512	645	301	353	111	58	38	26
12	5.2	23	17	41	422	591	297	337	111	58	37	25
13	5.1	18	16	40	413	540	277	326	105	57	36	24
14	5.0	15	15	40	350	527	262	313	99	55	37	24
15	5.2	14	15	39	300	461	246	296	95	56	40	24
16	5.2	13	14	39	269	423	231	281	92	56	46	23
17	5.1	13	13	39	242	463	221	264	88	56	82	23
18	5.2	16	13	39	227	473	957	255	86	55	53	23
19	5.2	58	12	51	214	459	955	246	85	55	77	23
20	5.3	54	12	51	199	433	1900	236	82	54	66	22
21	5.3	32	12	48	190	774	1980	227	81	52	57	23
22	5.2	24	3240	1340	181	685	1210	219	78	52	50	24
23	5.1	21	1850	2470	177	800	906	211	76	52	46	24
24	5.2	19	603	3180	181	1020	746	203	75	51	45	24
25	5.4	18	360	1180	181	825	642	195	74	51	43	24
26	6.3	18	270	555	555	685	569	187	73	51	40	24
27	5.8	17	200	6000	5580	613	517	181	70	50	38	24
28	5.5	16	160	1840	3920	571	593	170	69	50	36	24
29	5.3	17	130	3630	---	530	782	162	67	49	35	28
30	6.2	859	110	1300	---	505	876	159	66	48	33	145
31	6.6	---	92	907	---	480	---	156	---	47	33	---
TOTAL	170.0	1430.3	7668	23417	21027	68408	18113	10127	3046	1752	1378	879
MEAN	5.48	47.7	247	755	751	2207	604	327	102	56.5	44.5	29.3
MAX	6.6	859	3240	6000	5580	25500	1980	717	155	70	82	145
MIN	5.0	6.1	12	39	177	423	221	156	66	47	33	22
AC-FT	337	2840	15210	46450	41710	135700	35930	20090	6040	3480	2730	1740
CAL YR 1982	TOTAL	29882.8	MEAN	81.9	MAX	3240	MIN	4.6	AC-FT	59270		
WTR YR 1983	TOTAL	157415.3	MEAN	431	MAX	25500	MIN	5.0	AC-FT	312200		

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA

LOCATION .--Lat 34°24'48", long 119°04'53", in NE 1/4 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 mi<sup>2</sup>.

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, 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.--Records poor. No regulation above station.

AVERAGE DISCHARGE.--56 years, 24.3 ft<sup>3</sup>/s, 17,610 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 18.18 ft, from floodmark, site and datum then in use, from rating curve extended above 2,300 ft<sup>3</sup>/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 above base of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0915	1,040	5.00	Mar. 1	0600	*4,750	7.44
Dec. 22	1815	3,900	7.83	Mar. 21	0045	449	4.20
Jan. 24	1545	Unknown	Unknown	Apr. 21	0030	1,570	5.13
Jan. 27	0500	Unknown	Unknown	Apr. 29	2230	442	2.32
Feb. 8	0015	Unknown	Unknown				

Minimum daily discharge, 2.2 ft<sup>3</sup>/s Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.5	30	16	133	2870	109	160	51	37	18	14
2	3.7	3.2	18	15	183	2680	99	152	51	39	18	14
3	3.6	2.6	14	15	126	1790	96	134	51	33	17	14
4	3.6	2.5	13	14	102	655	112	120	51	22	17	13
5	3.5	2.5	11	14	105	498	105	110	51	24	16	13
6	3.3	2.5	11	14	96	390	101	104	50	29	16	13
7	3.2	2.4	10	14	122	330	94	90	50	29	15	13
8	2.9	2.4	9.6	13	478	290	91	87	50	30	15	13
9	2.6	9.0	10	13	197	265	86	90	50	30	15	12
10	2.6	14	9.8	12	130	242	82	87	51	31	15	12
11	2.8	11	9.6	11	103	223	77	79	51	31	14	12
12	2.5	9.4	9.3	12	90	204	73	76	51	30	14	12
13	2.5	8.9	9.0	12	80	197	69	72	49	30	14	11
14	2.5	8.4	8.9	12	150	182	67	70	48	30	15	11
15	2.6	8.2	8.5	12	110	160	64	69	47	30	16	11
16	2.5	8.0	8.2	12	92	145	62	67	46	30	17	11
17	2.6	7.8	8.2	12	85	132	60	66	45	29	18	11
18	2.7	9.9	8.3	12	77	153	252	65	44	28	18	11
19	2.8	21	8.2	20	72	141	262	64	44	27	24	11
20	2.8	11	8.0	14	67	136	472	63	47	26	20	11
21	2.7	11	8.1	14	64	210	617	61	46	25	19	11
22	2.4	11	852	217	60	150	306	60	45	24	18	11
23	2.2	12	144	250	58	161	220	59	43	24	18	10
24	2.6	11	95	542	56	294	170	58	42	23	17	10
25	3.0	11	60	204	55	228	140	57	39	23	17	10
26	3.4	10	42	309	59	194	130	56	37	22	16	10
27	3.1	10	36	1150	909	172	132	55	40	21	15	10
28	2.9	9.8	28	435	642	159	146	54	41	20	15	10
29	2.8	11	24	905	---	146	163	53	41	20	15	10
30	3.4	228	21	257	---	132	173	52	40	19	14	400
31	4.2	---	18	181	---	120	---	51	---	19	14	---
TOTAL	92.1	473.0	1550.7	4733	4501	13649	4630	2441	1392	835	510	735
MEAN	2.97	15.8	50.0	153	161	440	154	78.7	46.4	26.9	16.5	24.5
MAX	4.2	228	852	1150	909	2870	617	160	51	39	24	400
MIN	2.2	2.4	8.0	11	55	120	60	51	37	19	14	10
AC-FT	183	938	3080	9390	8930	27070	9180	4840	2760	1660	1010	1460
CAL YR 1982	TOTAL	6409.7	MEAN	17.6	MAX	852	MIN	2.1	AC-FT	12710		
WTR YR 1983	TOTAL	35541.8	MEAN	97.4	MAX	2870	MIN	2.2	AC-FT	70500		

## 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. October 1928 to April 1969 in files of United Water Conservation District.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft, 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 furnished by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 437 ft<sup>3</sup>/s Dec. 10, 1978; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982  
MEAN VALUES

## NOT PREVIOUSLY PUBLISHED

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	36	90	89	114	91	87	153	93	37	31	153
2	134	35	82	90	108	157	0	150	91	32	31	158
3	140	32	78	85	104	131	0	152	86	36	102	159
4	137	31	77	84	103	110	0	146	76	39	137	159
5	137	28	77	119	112	114	0	141	70	42	143	159
6	116	27	76	183	88	108	0	135	70	42	121	162
7	103	28	75	129	104	97	0	120	83	33	125	194
8	101	28	75	11	102	97	0	126	70	33	123	315
9	106	26	68	59	105	96	78	138	60	34	129	271
10	109	26	62	102	117	98	253	141	69	34	129	253
11	121	25	66	101	157	98	119	140	61	33	129	235
12	122	23	68	100	138	0	172	136	55	34	123	72
13	117	25	69	100	130	0	208	143	54	32	135	46
14	115	34	69	95	129	0	274	157	57	30	132	33
15	113	40	77	89	125	204	272	145	60	30	138	28
16	71	43	68	83	129	126	223	122	41	30	142	33
17	50	53	66	88	131	0	246	120	41	31	142	32
18	41	54	66	91	122	191	233	138	39	32	167	31
19	37	52	67	96	118	234	230	168	44	32	216	32
20	34	54	71	89	113	254	228	130	44	31	198	31
21	30	55	71	134	108	197	198	122	41	30	204	32
22	26	60	72	194	108	292	182	137	38	27	212	30
23	27	61	70	136	111	349	182	144	38	25	215	30
24	32	55	67	139	116	334	179	119	38	26	211	28
25	35	29	68	127	120	321	166	101	38	26	209	33
26	32	28	70	128	105	267	171	96	37	28	209	46
27	32	28	66	121	112	254	172	92	38	11	207	38
28	36	96	67	105	107	240	163	91	38	20	215	36
29	36	115	63	120	---	121	159	92	38	29	224	34
30	36	95	70	121	---	181	156	92	38	28	224	33
31	36	---	75	116	---	281	---	95	---	28	206	---
TOTAL	2397	1322	2206	3324	3236	5043	4351	3982	1646	955	4929	2896
MEAN	77.3	44.1	71.2	107	116	163	145	128	54.9	30.8	159	96.5
MAX	140	115	90	194	157	349	274	168	93	42	224	315
MIN	26	23	62	11	88	0	0	91	37	11	31	28
AC-FT	4750	2620	4380	6590	6420	10000	8630	7900	3260	1890	9780	5740
CAL YR 1981	TOTAL	36518.9	MEAN	100	MAX	324	MIN	0	AC-FT	72440		
WTR YR 1982	TOTAL	36287	MEAN	99.4	MAX	349	MIN	0	AC-FT	71980		

## 11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	33	238	155	0		0	144	196	134	135	96
2	31	32	242	140	0		0	244	182	153	130	95
3	30	30	144	136	0		0	265	183	131	124	95
4	28	28	136	135	0		0	262	198	125	111	98
5	28	28	137	132	0		0	221	215	136	108	99
6	29	28	128	122	0		0	196	185	118	104	98
7	29	30	121	118	0		0	214	185	143	104	90
8	28	31	71	114	0		0	198	208	140	103	86
9	29	37	0	112	0		0	135	202	156	104	86
10	30	94	71	108	0		31	198	190	145	104	96
11	30	85	102	111	0		177	276	178	160	106	105
12	28	70	101	103	0		232	296	123	148	108	83
13	26	61	97	99	0		268	298	106	150	114	64
14	25	58	97	98	0		290	296	128	142	123	61
15	24	58	82	103	0		262	295	140	145	130	59
16	24	56	75	116	0		257	290	126	156	121	61
17	25	53	101	119	0		254	280	125	176	151	65
18	27	53	96	98	169		0	265	118	176	105	69
19	25	61	98	102	337		104	261	118	167	0	75
20	25	106	83	146	262		10	245	126	145	117	66
21	25	97	72	137	233		0	250	121	133	154	64
22	26	83	68	144	243		0	302	128	126	126	66
23	27	79	0	0	295		196	268	182	126	132	20
24	27	85	0	0	301		219	265	210	129	133	76
25	28	77	0	94	261		190	266	191	136	133	78
26	30	77	0	256	284		135	271	134	131	126	81
27	30	72	0	36	42		204	286	179	129	123	122
28	28	73	0	0	0		168	290	178	122	125	156
29	25	79	82	0	---		67	216	150	120	105	188
30	33	29	171	0	---		36	153	156	122	106	67
31	36	---	168	0	---		---	184	---	131	101	---
TOTAL	868	1783	2781	3034	2427	0	3100	7630	4861	4351	3566	2565
MEAN	28.0	59.4	89.7	97.9	86.7	0	103	246	162	140	115	85.5
MAX	36	106	242	256	337	0	290	302	215	176	154	188
MIN	24	28	0	0	0	0	0	135	106	118	0	20
AC-FT	1720	3540	5520	6020	4810	0	6150	15130	9640	8630	7070	5090
CAL YR 1982	TOTAL	35794	MEAN	98.1	MAX	349	MIN	0	AC-FT	71000		
WTR YR 1983	TOTAL	36966	MEAN	101	MAX	337	MIN	0	AC-FT	73320		

## SANTA CLARA RIVER BASIN

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

PERIOD OF RECORD.--August 1982 to September 1983 (records for August and September 1982 in files of USGS).

SPECIFIC CONDUCTANCE: August 1982 to September 1983.

pH: April 1982 to current year.

WATER TEMPERATURES: August 1982 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1982 to September 1983.

pH: April 1982 to current year.

WATER TEMPERATURES: August 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,810 micromhos Nov. 7; minimum recorded, 590 micromhos Nov. 30.

pH: Maximum, 8.7 units July 10, Aug. 17, 18; minimum, 7.2 units Aug. 24.

WATER TEMPERATURES: Maximum recorded, 31.5°C Aug. 13, 16; minimum recorded, 4.5°C Dec. 17.

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1740	1680	1710	1770	1740	1750	1080	830	940	1460	1430	1440
2	1730	1670	1710	1790	1760	1770	1320	1090	1220	1480	1450	1460
3	1730	1660	1700	1810	1760	1790	1420	1360	1390	1500	1470	1480
4	1720	1650	1690	1790	1750	1780	1480	1420	1450	1520	1490	1510
5	1720	1660	1690	1790	1750	1770	1500	1480	1490	1530	1500	1520
6	1740	1680	1710	1790	1740	1770	1550	1500	1510	1540	1520	1530
7	1740	1680	1710	1810	1750	1770	1540	1500	1530	1540	1530	1540
8	1740	1700	1720	1780	1720	1750	---	---	---	1560	1540	1540
9	1780	1720	1750	1790	950	1510	---	---	---	1570	1540	1560
10	1780	1730	1750	1780	1490	1610	---	---	---	1570	1560	1560
11	1770	1720	1750	1660	1580	1630	---	---	---	1590	1560	1570
12	1760	1710	1740	1700	1630	1670	---	---	---	1580	1550	1570
13	1760	1720	1740	1720	1700	1710	---	---	---	1580	1550	1570
14	1760	1710	1750	1730	1710	1720	---	---	---	1600	1550	1570
15	1770	1720	1750	1740	1710	1730	---	---	---	1590	1550	1570
16	1770	1710	1740	1750	1720	1730	---	---	---	1600	1550	1570
17	1770	1720	1750	1740	1720	1730	---	---	---	1590	1560	1570
18	1760	1730	1750	1740	1340	1680	---	---	---	1590	1540	1570
19	1770	1720	1750	1680	1080	1430	---	---	---	1530	800	1340
20	1770	1530	1720	1580	1490	1530	---	---	---	1530	1470	1500
21	1780	1630	1730	1610	1500	1570	---	---	---	1510	1500	1510
22	1780	1590	1720	1630	1610	1620	---	---	---	1520	640	1190
23	1800	1670	1730	1630	1610	1620	---	---	---	---	---	---
24	1770	1630	1710	1640	1620	1630	---	---	---	---	---	---
25	1770	1650	1740	1640	1620	1630	---	---	---	---	---	---
26	1750	1600	1700	1650	1620	1640	---	---	---	---	---	---
27	1770	1650	1740	1660	1630	1650	---	---	---	---	---	---
28	1800	1640	1750	1660	1640	1650	---	---	---	---	---	---
29	1790	1750	1770	1650	1540	1620	---	---	---	---	---	---
30	1780	1400	1680	1700	590	945	1420	1390	1400	---	---	---
31	1750	1530	1690	---	---	---	1450	1410	1430	---	---	---
MONTH	1800	1400	1730	1810	590	1650	---	---	---	---	---	---

SPECIFIC CONDUCTANCE (MICRONHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

[illegible]

## SANTA CLARA RIVER BASIN

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
MONTH												

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	8.2	7.8	8.0
2							---	---	---	8.2	8.1	8.1
3							---	---	---	8.3	8.2	8.2
4							---	---	---	8.3	8.2	8.2
5							---	---	---	8.3	8.2	8.3
6							---	---	---	8.4	8.3	8.3
7							---	---	---	8.4	8.4	8.4
8							---	---	---	8.4	8.1	8.4
9							---	---	---	8.4	7.7	8.1
10							---	---	---	8.4	7.9	8.3
11							---	---	---	8.4	8.3	8.4
12							---	---	---	8.4	8.3	8.4
13							---	---	---	8.4	8.4	8.4
14							8.3	8.2	8.3	8.4	8.4	8.4
15							8.4	8.3	8.3	8.3	8.2	8.3
16							8.4	8.3	8.4	8.3	8.3	8.3
17							8.4	8.4	8.4	8.3	8.3	8.3
18							8.4	8.2	8.2	8.3	8.2	8.3
19							8.4	8.3	8.3	8.3	7.8	8.2
20							8.4	8.3	8.3	8.3	7.5	8.0
21							8.4	8.3	8.3	8.3	7.9	8.2
22							8.3	8.3	8.3	8.3	8.2	8.3
23							8.4	8.3	8.3	8.2	8.2	8.2
24							8.4	8.3	8.3	8.2	8.2	8.2
25							8.4	8.3	8.4	8.2	8.2	8.2
26							8.4	8.3	8.4	8.2	8.2	8.2
27							8.4	8.4	8.4	8.2	8.2	8.2
28							8.4	8.1	8.4	8.2	8.2	8.2
29							8.3	7.9	8.1	8.2	7.5	8.1
30							8.2	7.8	8.0	7.4	7.3	7.4
31							---	---	---	---	---	---
MONTH							---	---	---	8.4	7.3	8.2



## 11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	8.3	7.8	8.0			
2				---	---	---	8.3	7.7	7.9			
3				---	---	---	8.3	7.8	8.0			
4				---	---	---	8.5	7.7	8.1			
5				---	---	---	8.5	7.9	8.0			
6				---	---	---	8.6	7.8	8.1			
7				---	---	---	8.5	7.9	8.1			
8				8.4	8.1	8.2	8.6	7.6	8.1			
9				8.4	8.1	8.3	8.6	7.9	8.1			
10				8.7	8.2	8.3	8.6	7.5	8.0			
11				8.6	8.2	8.3	8.5	7.4	7.9			
12				8.6	8.2	8.3	8.4	7.4	7.8			
13				8.5	8.1	8.2	8.4	7.4	7.8			
14				8.4	8.1	8.2	8.3	7.5	7.9			
15				8.3	8.0	8.2	8.0	7.4	7.7			
16				8.3	8.0	8.2	8.4	7.5	7.9			
17				8.3	8.2	8.2	8.7	8.1	8.5			
18				8.2	8.0	8.1	8.7	8.2	8.5			
19				8.2	7.9	8.0	8.6	7.9	8.3			
20				8.3	7.9	8.0	8.4	8.0	8.2			
21				8.3	7.9	8.0	8.4	7.5	8.0			
22				8.3	7.9	8.0	8.3	7.3	7.7			
23				8.2	7.9	8.0	8.3	7.2	7.5			
24				8.2	7.9	8.0	8.4	7.1	7.5			
25				8.2	7.9	8.0	8.6	7.2	7.6			
26				8.2	7.7	7.9	---	---	---			
27				8.2	7.9	8.0	---	---	---			
28				8.3	7.8	8.0	---	---	---			
29				8.3	7.9	8.0	---	---	---			
30				8.3	7.9	8.0	---	---	---			
31				8.4	7.8	8.1	---	---	---			
MONTH				---	---	---	---	---	---			

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	23.0	15.0	20.5	14.0	13.5	10.5	14.0	8.0				
2	23.0	15.5	17.5	13.0	14.0	9.5	14.0	8.5				
3	23.0	15.5	18.0	10.5	15.0	10.5	15.5	9.5				
4	23.0	16.0	18.0	11.0	15.5	11.0	15.5	9.5				
5	22.5	16.0	18.0	11.5	16.5	11.0	16.0	10.5				
6	22.5	15.5	18.0	12.5	16.0	12.0	16.5	11.0				
7	22.5	16.0	16.5	12.0	15.0	11.5	17.0	11.0				
8	21.0	15.0	17.5	14.0	17.0	8.5	18.0	12.0				
9	20.5	14.5	14.0	12.5	19.5	15.0	17.0	11.5				
10	21.5	14.5	16.5	12.0	18.5	11.0	16.5	11.5				
11	22.0	14.5	16.5	10.5	17.0	9.0	16.0	11.0				
12	22.0	14.0	16.0	10.5	18.0	10.0	17.0	11.0				
13	21.5	14.5	15.5	10.5	16.0	8.5	17.0	10.5				
14	21.5	15.0	16.5	10.5	14.5	6.0	17.0	11.5				
15	22.0	15.0	17.0	11.0	14.5	6.5	17.0	11.0				
16	22.0	15.0	17.0	13.0	14.0	5.0	17.5	14.0				
17	21.5	15.5	17.5	13.0	14.0	4.5	17.0	11.5				
18	21.0	15.0	16.0	14.0	16.5	7.5	16.5	11.0				
19	22.0	17.0	17.0	14.5	18.5	9.5	15.5	12.0				
20	22.0	16.0	16.0	13.0	15.5	7.5	15.0	9.5				
21	21.0	16.0	14.5	12.0	14.0	8.0	13.5	9.0				
22	22.0	16.5	14.5	12.5	14.5	12.5	13.0	11.5				
23	23.5	17.5	15.5	13.0	---	---	---	---				
24	23.0	18.5	16.0	12.5	---	---	---	---				
25	20.5	18.0	17.5	11.5	---	---	14.0	8.5				
26	22.0	18.5	15.5	12.0	---	---	15.0	11.0				
27	19.5	14.0	15.5	10.5	---	---	13.5	10.5				
28	19.0	13.0	16.0	13.5	---	---	---	---				
29	19.0	14.0	17.5	15.0	14.0	8.5	---	---				
30	16.5	14.5	15.5	12.0	14.0	8.0	---	---				
31	20.0	14.0	---	---	13.0	8.0	---	---				
MONTH	23.5	13.0	20.5	10.5	19.5	4.5	18.0	8.0				

## SANTA CLARA RIVER BASIN

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.0	13.0	23.0	15.5	24.5	17.5	30.0	19.5	28.0	18.0
2	---	---	22.5	12.5	19.5	15.0	24.5	16.5	30.0	20.0	29.5	19.0
3	---	---	23.0	13.5	24.5	13.5	27.0	19.0	30.0	19.5	28.0	18.0
4	---	---	21.5	15.0	25.5	13.5	28.0	17.0	30.5	19.0	26.0	17.5
5	---	---	20.5	14.0	25.5	16.5	28.5	19.5	26.5	18.0	26.5	18.5
6	---	---	22.5	13.0	25.5	16.5	26.0	19.5	29.5	20.0	26.5	18.0
7	---	---	23.5	13.5	24.0	17.0	29.5	16.5	27.0	21.0	26.5	16.5
8	---	---	24.5	14.5	21.5	17.0	29.0	17.5	30.0	20.5	27.5	16.5
9	---	---	23.5	14.5	24.5	17.5	28.5	17.0	27.0	20.0	29.0	18.0
10	---	---	23.0	11.5	26.5	14.5	29.0	16.5	28.5	19.5	29.0	20.0
11	---	---	23.0	13.0	20.5	16.5	29.5	17.5	29.5	18.0	31.0	20.0
12	---	---	22.5	13.0	22.0	13.5	30.5	18.0	30.5	18.5	30.5	19.5
13	---	---	23.0	14.0	23.5	14.5	31.0	19.5	31.5	20.0	30.5	18.5
14	21.0	15.0	24.0	14.0	28.0	16.5	30.5	20.0	28.5	21.5	30.0	19.5
15	21.5	11.5	24.5	15.5	27.5	18.0	29.0	20.0	31.0	21.5	29.5	20.0
16	23.0	12.0	25.0	16.0	24.5	18.0	25.5	19.5	31.5	22.0	29.5	19.5
17	18.0	12.5	24.5	14.5	25.0	19.0	28.5	17.5	31.0	21.5	29.5	20.0
18	17.0	13.5	24.5	14.5	22.5	18.0	27.0	17.0	25.0	21.5	29.5	19.5
19	17.5	13.5	25.5	15.0	23.5	18.0	29.5	17.0	23.0	20.5	30.5	20.0
20	15.0	13.0	25.5	17.0	22.5	16.5	29.5	17.0	26.5	20.0	27.0	19.5
21	18.0	12.5	25.5	16.0	25.0	18.0	29.5	17.0	28.0	20.0	30.5	22.5
22	18.0	14.0	25.5	17.5	27.0	16.5	28.0	15.5	28.0	18.5	26.0	21.5
23	19.5	13.0	25.5	18.0	27.5	17.0	27.0	17.0	28.5	18.0	29.0	20.5
24	20.0	14.0	25.5	18.0	27.0	19.5	29.0	17.0	28.5	18.0	27.5	17.5
25	21.0	12.5	25.0	18.0	26.0	19.5	28.5	17.0	28.5	17.5	28.0	17.5
26	19.5	12.5	26.0	18.5	23.0	19.0	28.5	16.5	29.0	17.5	26.5	19.0
27	21.5	13.0	26.5	18.5	26.5	19.0	29.0	18.5	29.5	17.0	25.5	17.5
28	16.5	14.0	26.0	18.5	25.5	18.0	27.5	16.0	29.0	16.5	22.5	17.5
29	21.5	15.0	27.0	18.5	27.5	17.0	27.0	16.0	28.5	16.5	22.5	17.5
30	19.5	15.0	26.5	17.0	23.5	18.0	28.5	17.5	25.0	17.0	19.5	16.0
31	---	---	20.5	18.0	---	---	30.0	19.0	26.5	17.5	---	---
MONTH	---	---	27.0	11.5	28.0	13.5	31.0	15.5	31.5	16.5	31.0	16.0

## 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 mi<sup>2</sup>.

## 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 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.--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.--Seven discharge measurements were furnished by Ventura County Flood Control District.

AVERAGE DISCHARGE.--39 years, 162 ft<sup>3</sup>/s, 117,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165,000 ft<sup>3</sup>/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 ft<sup>3</sup>/s, estimated by Ventura County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 100,000 ft<sup>3</sup>/s Mar. 1, gage height, 9.95 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	590	180	948	52840	1000	1800	120	80	.30	0
2		0	2.0	140	1040	46150	900	1750	130	70	.30	0
3		0	1.5	100	1080	23050	800	1700	95	75	.20	0
4		0	1.5	60	901	13500	800	1680	80	80	.20	0
5		0	1.5	20	795	7000	750	1410	60	75	.20	0
6		0	1.5	10	723	3000	700	1200	80	70	3.0	0
7		0	1.5	5.0	737	2100	650	1030	60	65	.20	0
8		0	1.5	1.0	2940	1600	600	996	40	55	.20	0
9		4.0	1.5	.50	2090	1500	500	1220	45	50	.15	0
10		2.0	2.0	.30	1660	1400	450	1360	40	45	.15	0
11		2.0	2.0	.30	1180	1350	400	1340	50	45	.15	0
12		2.0	2.0	.30	980	1300	450	1220	120	50	.15	0
13		2.0	2.0	.30	1030	1300	350	1220	160	40	.15	0
14		2.0	2.0	.30	854	1500	300	885	110	30	.10	0
15		2.0	2.0	.30	795	1300	250	515	80	20	.10	0
16		2.0	2.0	.20	602	1300	200	445	90	15	.10	0
17		2.0	2.0	.20	480	1500	180	400	95	10	.10	0
18		10	2.0	.20	290	1700	1200	390	95	5.0	.10	0
19		152	2.0	2.0	98	1600	1300	370	100	3.0	1.5	0
20		3.0	2.0	.20	86	1500	3200	350	80	3.0	.50	0
21		2.0	2.0	.20	98	2200	3800	300	90	2.0	.30	0
22		2.0	4700	1170	86	2000	3200	200	80	1.5	.10	0
23		2.0	5450	3470	71	2100	2500	150	60	1.0	0	0
24		2.0	1000	3230	62	2300	2000	130	30	.50	0	0
25		2.0	600	2350	71	1900	1800	110	20	.40	0	0
26		2.0	500	723	1250	1700	1400	100	30	.40	0	0
27		2.0	400	8170	8610	1500	1400	80	50	.40	0	0
28		4.0	300	1910	3050	1500	1600	60	20	.30	0	0
29		15	250	3920	---	1400	1800	120	100	.30	0	0
30		2590	230	1180	---	1300	1800	150	90	.30	0	950
31		---	200	996	---	1100	---	120	---	.30	0	---
TOTAL	0	2808	14256.5	27640.30	32607	185490	36280	22801	2300	893.40	8.25	950
MEAN	0	93.6	460	892	1165	5984	1209	736	76.7	28.8	.27	31.7
MAX	0	2590	5450	8170	8610	52840	3800	1800	160	80	3.0	950
MIN	0	0	1.5	.20	62	1100	180	60	20	.30	0	0
AC-FT	0	5570	28280	54820	64680	367900	71960	45230	4560	1770	16	1880
CAL YR 1982	TOTAL	33133.40	MEAN	90.8	MAX	5450	MIN	0	AC-FT	65720		
WTR YR 1983	TOTAL	326034.45	MEAN	893	MAX	52840	MIN	0	AC-FT	646700		

## SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

WATER TEMPERATURES: Water years 1968, 1969, 1971-81, October 1982 to September 1983.

SEDIMENT RECORDS: Water years 1968 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to September 1969, October 1970 to September 1981, October 1982 to September 1983.

SEDIMENT RECORDS: October 1967 to September 1981, October 1982 to September 1983.

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 DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 108,000 mg/L Mar. 4, 1978; minimum daily mean, no flow for many days most years.

SEDIMENT DISCHARGE: 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, 44,100 mg/L Mar. 1; minimum daily mean, no flow for many days.

SEDIMENT DISCHARGE: Maximum daily, 7,080,000 tons Mar. 1; minimum daily, 0 tons many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	---	14.0	14.0	21.0	17.5	---	---	---	
2		---	---	---	9.0	14.0	16.5	21.5	---	27.0	---	
3		---	15.5	---	---	14.0	---	22.0	---	23.0	---	
4		---	---	---	14.5	12.0	16.0	19.5	22.5	---	---	
5		---	---	---	12.0	---	15.5	20.5	---	---	---	
6		---	---	---	12.5	---	18.5	---	22.0	---	---	
7		---	---	---	14.5	16.5	19.0	---	23.0	---	---	
8		---	---	---	14.0	20.0	21.0	---	23.0	28.0	---	
9		---	---	---	15.5	19.5	18.5	23.0	---	---	---	
10		14.0	---	---	17.0	18.5	---	22.0	20.5	---	---	
11		---	---	---	16.5	20.0	14.5	23.0	---	---	21.0	
12		---	---	---	---	18.0	15.0	---	23.0	---	---	
13		---	---	---	17.0	---	---	---	21.0	---	---	
14		---	---	---	16.5	11.0	---	---	---	---	---	
15		---	---	---	16.5	19.5	15.5	23.5	---	---	---	
16		---	---	---	18.0	17.5	---	24.5	---	---	---	
17		---	---	---	18.5	18.0	13.5	---	---	---	---	
18		---	---	---	18.0	16.5	---	24.0	26.0	---	22.0	
19		---	---	---	17.5	17.0	---	25.0	---	---	23.5	
20		---	---	13.0	17.0	---	15.5	23.0	---	---	28.5	
21		---	---	14.0	17.0	16.0	17.5	23.0	---	---	---	
22		---	---	12.0	18.0	---	---	18.0	---	---	24.0	
23		---	---	14.0	20.0	16.0	---	23.5	---	---	---	
24		---	---	14.0	17.0	16.0	17.0	23.0	22.0	---	---	
25		---	---	15.0	18.0	18.0	18.5	24.0	19.0	---	---	
26		---	---	15.0	---	9.0	19.5	---	---	---	---	
27		---	---	13.5	14.5	---	18.5	23.5	22.0	---	---	
28		---	---	12.0	14.0	18.0	---	23.5	21.0	---	---	
29		---	---	12.5	---	18.0	21.0	---	---	---	---	
30		---	---	14.0	---	22.0	---	---	---	---	---	
31		---	---	15.0	---	22.5	---	---	---	---	---	
MONTH		---	---	---	16.0	17.0	---	---	---	---	---	

## 11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	0	0	0	0	0	0	590	---	1800
2	0	0	0	0	0	0	2.0	---	.11
3	0	0	0	0	0	0	1.5	---	.07
4	0	0	0	0	0	0	1.5	---	.07
5	0	0	0	0	0	0	1.5	---	.07
6	0	0	0	0	0	0	1.5	---	.07
7	0	0	0	0	0	0	1.5	---	.07
8	0	0	0	0	0	0	1.5	---	.07
9	0	0	0	4.0	---	.35	1.5	---	.07
10	0	0	0	2.0	50	.27	2.0	---	.11
11	0	0	0	2.0	---	.11	2.0	---	.11
12	0	0	0	2.0	---	.11	2.0	---	.11
13	0	0	0	2.0	---	.11	2.0	---	.11
14	0	0	0	2.0	---	.11	2.0	---	.11
15	0	0	0	2.0	---	.11	2.0	---	.11
16	0	0	0	2.0	---	.11	2.0	---	.11
17	0	0	0	2.0	---	.11	2.0	---	.11
18	0	0	0	10	---	1.6	2.0	---	.11
19	0	0	0	152	---	170	2.0	---	.11
20	0	0	0	3.0	---	.22	2.0	---	.11
21	0	0	0	2.0	---	.11	2.0	---	.11
22	0	0	0	2.0	---	.11	4700	10500	457000
23	0	0	0	2.0	---	.11	5450	10500	240000
24	0	0	0	2.0	---	.11	1000	---	4400
25	0	0	0	2.0	---	.11	600	---	1900
26	0	0	0	2.0	---	.11	500	---	1350
27	0	0	0	2.0	---	.11	400	---	910
28	0	0	0	4.0	---	.35	300	---	550
29	0	0	0	15	---	3.2	250	---	400
30	0	0	0	2590	---	50000	230	---	350
31	0	0	0	---	---	---	200	---	270
TOTAL	0	0	0	2808.0	---	50177.53	14256.5	---	708931.92

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	180	---	230	948	1130	2890	52840	44100	7080000
2	140	---	145	1040	1740	5210	46150	33900	4250000
3	100	---	80	1080	1340	3910	23050	25800	1650000
4	60	---	33	901	1200	2920	13500	---	870000
5	20	---	5.2	795	1540	3310	7000	---	345000
6	10	---	1.6	723	1180	2300	3000	---	73000
7	5.0	---	.52	737	1120	2230	2100	---	30000
8	1.0	---	.03	2940	6190	50400	1600	4800	20700
9	.50	---	.01	2090	2500	14100	1500	3780	15300
10	.30	---	0	1660	1530	6860	1400	3020	11400
11	.30	---	0	1180	1520	4840	1350	3370	12300
12	.30	---	0	980	1700	4500	1300	3650	12800
13	.30	---	0	1030	2470	6870	1300	3300	11600
14	.30	---	0	854	1240	2860	1500	3000	12200
15	.30	---	0	795	970	2080	1300	2450	8600
16	.20	---	0	602	830	1350	1300	2330	8200
17	.20	---	0	480	900	1170	1500	3050	12400
18	.20	---	0	290	700	548	1700	3730	17200
19	2.0	---	.11	98	260	69	1600	3330	14400
20	.20	12	.01	86	165	38	1500	---	12700
21	.20	3	0	98	156	41	2200	---	33500
22	1170	4250	63300	86	145	34	2000	3700	20000
23	3470	9540	127000	71	112	21	2100	---	30000
24	3230	9780	123000	62	67	11	2300	---	37500
25	2350	3440	25200	71	182	35	1900	---	23000
26	723	1100	2160	1250	7800	32300	1700	3760	17300
27	8170	16300	471000	8610	19000	668000	1500	3700	15000
28	1910	5000	28000	3050	10800	130000	1500	3300	13400
29	3920	10700	147000	---	---	---	1400	2820	10700
30	1180	2700	8600	---	---	---	1300	2160	7580
31	996	1580	4250	---	---	---	1100	2400	7130
TOTAL	27640.30	---	1000005.48	32607	---	948897	185490	---	14682910

## SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	1000	2480	6700	1800	2350	11400	120	430	139
2	900	1620	3940	1750	2160	10200	130	500	176
3	800	1520	3280	1700	1850	8490	95	---	73
4	800	1940	4190	1680	1810	8210	80	---	53
5	750	1900	3850	1410	1630	6210	60	---	33
6	700	1460	2760	1200	1620	5250	80	---	53
7	650	1500	2630	1030	1500	4170	60	---	33
8	600	1940	3140	996	1610	4330	40	---	16
9	500	1500	2020	1220	1800	5930	45	---	20
10	450	940	1140	1360	1750	6430	40	---	16
11	400	1200	1300	1340	1510	5460	50	---	24
12	450	1100	1340	1220	1220	4020	120	---	110
13	350	760	718	1220	1160	3820	160	---	185
14	300	570	462	885	1280	3060	110	---	95
15	250	470	317	515	1310	1820	80	---	53
16	200	580	313	445	1110	1330	90	---	66
17	180	700	340	400	720	778	95	---	73
18	1200	---	7200	390	710	748	95	---	73
19	1300	---	8800	370	730	729	100	---	80
20	3200	---	87000	350	610	576	80	---	53
21	3800	---	135000	300	1070	867	90	---	66
22	3200	4180	36100	200	675	364	80	---	53
23	2500	2780	18800	150	750	304	60	---	33
24	2000	1880	10200	130	660	232	30	---	10
25	1800	2110	10300	110	500	148	20	---	5.2
26	1400	1860	7030	100	620	167	30	---	10
27	1400	1390	5250	80	640	138	50	---	24
28	1600	---	15000	60	500	81	20	---	5.2
29	1800	---	20000	120	310	100	100	---	80
30	1800	2670	13000	150	260	105	90	---	66
31	---	---	---	120	325	105	---	---	---
TOTAL	36280	---	412120	22801	---	95572	2300	---	1776.4

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	80	---	53	.30	---	.01	0	0	0
2	70	---	42	.30	---	.01	0	0	0
3	75	---	48	.20	---	.01	0	0	0
4	80	---	53	.20	---	.01	0	0	0
5	75	---	48	.20	---	.01	0	0	0
6	70	---	42	3.0	---	.22	0	0	0
7	65	---	38	.20	---	.01	0	0	0
8	55	---	28	.20	---	.01	0	0	0
9	50	---	24	.15	---	0	0	0	0
10	45	---	20	.15	---	0	0	0	0
11	45	---	20	.15	---	0	0	0	0
12	50	---	24	.15	---	0	0	0	0
13	40	---	16	.15	---	0	0	0	0
14	30	---	10	.10	---	0	0	0	0
15	20	---	5.2	.10	---	0	0	0	0
16	15	---	3.2	.10	---	0	0	0	0
17	10	---	1.6	.10	---	0	0	0	0
18	5.0	---	.50	.10	---	0	0	0	0
19	3.0	---	.22	1.5	---	.07	0	0	0
20	3.0	---	.22	.50	---	.01	0	0	0
21	2.0	---	.11	.30	---	.01	0	0	0
22	1.5	---	.07	.10	---	0	0	0	0
23	1.0	---	.04	0	0	0	0	0	0
24	.50	---	.01	0	0	0	0	0	0
25	.40	---	.01	0	0	0	0	0	0
26	.40	---	.01	0	0	0	0	0	0
27	.40	---	.01	0	0	0	0	0	0
28	.30	---	.01	0	0	0	0	0	0
29	.30	---	.01	0	0	0	0	0	0
30	.30	---	.01	0	0	0	950	---	4200
31	.30	---	.01	0	0	0	---	---	---
TOTAL	893.40	---	477.24	8.25	---	.38	950	---	4200

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1982	0.0	0.0	0	0
NOVEMBER....	2808.00	50177.53	19300	69500
DECEMBER....	14256.50	708931.92	104000	813000
JANUARY 1983	27640.30	1000005.48	212000	1210000
FEBRUARY.....	32607.00	948897.00	230000	1180000
MARCH.....	185490.00	14682910.00	1800000	16500000
APRIL.....	36280.00	412120.00	239000	651000
MAY.....	22801.00	95572.00	135000	231000
JUNE.....	2300.00	1776.40	4460	6240
JULY.....	893.40	477.24	1730	2210
AUGUST.....	8.25	0.38	1	1
SEPTEMBER....	950.00	4200.00	5620	9820
TOTAL.....	326034.45	17905067.95	2751111	20672771

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
DEC											
23...	1210	2820	--	8410	64000	--	24	29	37	44	--
JAN											
24...	1500	6900	14.5	16500	307000	--	40	47	62	75	86
25...	1700	1700	15.0	2790	12800	--	29	31	40	50	60
27...	0700	14700	13.0	39800	1580000	--	36	40	55	68	--
27...	0900	17100	13.0	28400	1310000	--	29	33	45	59	--
28...	1100	1790	12.0	2820	13600	--	28	33	42	52	65
29...	1100	4030	11.5	8100	88100	--	30	36	48	59	--
FEB											
10...	1600	1530	17.0	1510	6240	--	16	18	24	30	37
27...	1100	21200	14.5	40400	2310000	25	33	38	52	68	--
27...	1700	9020	14.5	18700	455000	--	19	27	37	48	--
28...	1300	2050	15.0	5860	32400	--	17	23	30	37	48
MAR											
01...	1400	59800	14.0	44000	7100000	--	18	24	36	48	--
02...	1630	37800	14.0	33500	3420000	--	19	27	40	52	--
07...	0600	2100	14.0	3920	22200	--	31	35	51	73	84
APR											
12...	1045	450	15.0	864	1050	13	15	19	23	27	--

## SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

	SED. SUSP. SIEVE DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. SIEVE DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. SIEVE DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. SIEVE DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN	SED. SUSP. SIEVE DIAM. % FINER THAN	SED. SUSP. FALL DIAM. % FINER THAN
DATE	.062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM	1.00 MM	2.00 MM
DEC 23...	49	--	54	--	67	--	85	--	96	100
JAN 24...	--	91	--	95	--	100	--	--	--	--
25...	--	67	--	80	--	98	--	100	--	--
27...	81	--	89	--	93	--	99	--	100	--
27...	71	--	82	--	90	--	98	--	100	--
28...	--	76	--	87	--	97	--	100	--	--
29...	68	--	80	--	89	--	97	--	100	--
FEB 10...	--	45	--	72	--	91	--	100	--	--
27...	78	--	87	--	95	--	99	--	100	--
27...	58	--	72	--	80	--	94	--	99	100
28...	--	60	--	74	--	94	--	100	--	--
MAR 01...	62	--	73	--	88	--	95	--	98	100
02...	73	--	88	--	97	--	100	--	--	--
07...	--	97	--	99	--	100	--	--	--	--
APR 12...	31	--	43	--	73	--	97	--	100	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

		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
DATE	TIME						
AUG 05...	1225	20	.18	5	12	34	64

	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
DATE						
AUG 05...	83	90	94	97	99	100



## 11115000 MATILIJA RESERVOIR AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'08", long 119°18'25", in NE 1/4 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 mi<sup>2</sup>.

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 June 1978 was furnished by Ventura County Flood Control District. Lowest sluice gate silted, elevation, 1,000 ft. Usable capacity, 1,475 acre-ft between elevations 1,064 ft, lowest usable outlet and 1,095 ft, crest of spillway. Dead storage below lowest usable outlet, 218 acre-ft. Capacity below spillway, 1,693 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, 2,090 acre-ft Mar. 1, elevation, 1,100.57 ft; minimum, 312 acre-ft, Nov. 22, elevation, 1,067.19 ft.

## MONTH-END ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,085.51	1,110	--
Oct. 31.....	1,085.65	1,120	+10
Nov. 30.....	1,075.18	602	-518
Dec. 31.....	1,071.78	468	-134
CAL YR 1982.....	--	--	-672
Jan. 31.....	1,086.96	1,200	+732
Feb. 28.....	1,098.00	1,900	+700
Mar. 31.....	1,095.40	1,720	-180
Apr. 30.....	1,095.26	1,710	-10
May 31.....	1,077.04	681	-1,029
June 30.....	1,086.36	1,160	+479
July 31.....	1,085.09	1,090	-70
Aug. 31.....	1,084.37	1,050	-40
Sept. 30.....	1,077.21	690	-360
WTR YR 1983.....	--	--	-420

## 11115500 MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°28'58", long 119°18'03", in SW 1/4 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 mi<sup>2</sup>.

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. Altitude of gage is 900 ft, from topographic map. Prior to Feb. 11, 1939, at site 0.6 mi upstream at different datum.

REMARKS.--Records 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, 1,693 acre-ft, capacity table dated June 23, 1978.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 16.5 ft, from rating curve extended above 4,200 ft<sup>3</sup>/s on basis of computation of maximum flow over dam; minimum daily, 0.10 ft<sup>3</sup>/s for several days in some years of regulated flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,200 ft<sup>3</sup>/s Mar. 1, gage height, 11.79 ft; minimum daily, 0.48 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.5	2.1	3.3	269	7740	199	226	70	48	2.5	11
2	1.8	2.5	2.1	3.3	207	5430	191	216	69	48	2.5	11
3	1.7	2.5	2.1	3.3	172	2020	184	215	67	47	13	11
4	1.7	2.5	2.1	3.3	147	1100	175	215	65	46	25	11
5	1.7	2.5	2.1	3.3	128	775	164	212	63	46	14	12
6	1.7	2.5	2.1	3.3	116	608	154	208	62	46	3.0	12
7	1.6	2.5	2.1	3.3	109	504	142	202	60	45	3.0	12
8	1.6	2.5	2.1	3.3	165	429	133	195	57	44	3.0	11
9	1.5	3.0	2.1	3.3	179	374	127	187	58	44	3.0	11
10	1.6	2.6	2.1	3.3	171	332	122	179	56	44	3.0	10
11	1.6	2.5	2.1	3.3	153	298	118	165	56	44	3.0	9.2
12	1.6	2.5	2.1	3.3	134	269	114	154	55	44	3.0	8.9
13	1.7	2.5	61	3.3	119	250	111	143	53	44	3.0	8.7
14	1.7	2.5	147	3.3	110	232	108	135	51	43	3.0	8.5
15	1.7	2.5	32	3.3	103	218	105	129	50	42	50	8.6
16	1.6	2.5	3.1	3.3	96	215	102	123	49	39	55	8.5
17	1.7	126	3.1	3.4	90	215	100	117	48	35	50	8.5
18	1.7	164	3.1	3.6	83	214	150	113	47	25	22	8.4
19	1.7	70	3.1	3.6	78	212	201	44	45	2.5	15	12
20	1.7	35	3.1	3.7	75	207	374	4.2	25	2.5	19	19
21	1.7	17	3.1	3.9	72	211	624	4.2	5.0	2.5	22	19
22	1.7	6.4	23	6.5	69	212	403	4.2	5.0	2.5	23	19
23	1.6	2.7	192	375	66	212	318	148	4.9	2.5	23	19
24	1.7	2.7	211	505	64	214	276	197	8.1	2.5	23	30
25	1.7	2.3	198	472	62	241	245	183	14	2.5	23	53
26	1.9	2.0	176	297	79	231	225	148	16	2.5	22	52
27	2.1	2.0	115	1100	517	218	219	104	41	2.5	22	51
28	2.1	2.0	68	540	1190	215	219	85	69	2.5	22	47
29	2.1	2.1	48	651	---	215	223	77	62	2.5	22	.54
30	2.3	3.0	16	497	---	213	241	73	48	2.5	21	.48
31	2.5	---	3.3	358	---	206	---	70	---	2.5	16	---
TOTAL	54.8	477.8	1334.1	4872.5	4823	24030	6067	4275.6	1379.0	806.5	534.0	503.32
MEAN	1.77	15.9	43.0	157	172	775	202	138	46.0	26.0	17.2	16.8
MAX	2.5	164	211	1100	1190	7740	624	226	70	48	55	53
MIN	1.5	2.0	2.1	3.3	62	206	100	4.2	4.9	2.5	2.5	.48
AC-FT	109	948	2650	9660	9570	47660	12030	8480	2740	1600	1060	998
CAL YR 1982	TOTAL	5273.6	MEAN	14.4	MAX	245	MIN	.51	AC-FT	10460		
WTR YR 1983	TOTAL	49157.62	MEAN	135	MAX	7740	MIN	.48	AC-FT	97500		

## 11116000 NORTH FORK MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'33", long 119°18'20", in NE 1/4 NW 1/4 NE 1/4 sec.29, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on right bank at bridge on State Highway 33, 0.7 mi north of Matilija Hot Springs, and 0.8 mi upstream from mouth.

DRAINAGE AREA.--15.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1928 to September 1932, October 1933 to current year. Prior to October 1953, published as "at Matilija."

GAGE.--Water-stage recorder. Concrete control since September 1966. Datum of gage is 1,141.62 ft National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Nov. 12, 1948, at site 0.3 mi downstream at different datum.

REMARKS.--Records good. No regulation or diversion above station.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--54 years, 10.9 ft<sup>3</sup>/s, 7,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft<sup>3</sup>/s Feb. 24, 1969, gage height, 11.0 ft, from floodmark, from rating curve extended above 1,700 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 10.0 ft; minimum daily, 0.10 ft<sup>3</sup>/s for several days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1800	1,150	5.29	Feb. 27	0720	1230	5.39
Jan. 24	0930	636	4.37	Mar. 1	0415	*2,660	6.95
Jan. 27	0400	872	4.82				

Minimum daily discharge, 0.75 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.1	6.8	4.8	37	1350	40	44	19	12	6.0	4.1
2	.90	1.1	4.8	4.4	35	868	38	41	19	11	6.0	4.1
3	.90	.98	4.1	4.1	31	416	36	41	18	11	6.0	3.8
4	.90	.98	3.5	3.8	28	277	35	40	18	10	5.6	3.8
5	.90	.98	3.0	3.8	27	201	35	38	17	10	5.6	3.8
6	.90	.98	2.7	3.5	25	157	33	37	15	9.7	5.2	3.5
7	.82	.98	2.5	3.2	27	131	31	36	15	9.1	5.2	3.5
8	.82	1.1	2.2	3.2	93	90	30	35	15	9.1	5.2	3.5
9	.82	4.0	2.2	3.2	37	75	29	34	16	8.6	5.2	3.5
10	.82	4.0	2.2	3.0	37	68	28	33	15	8.6	5.2	3.5
11	.82	2.0	2.2	3.0	35	61	26	31	15	8.6	5.2	3.2
12	.75	1.6	2.2	3.0	31	54	25	30	15	8.6	4.8	3.2
13	.75	1.5	2.2	2.7	28	51	24	30	14	8.6	4.4	3.2
14	.75	1.4	2.2	2.7	25	50	24	29	13	8.2	4.8	3.2
15	.75	1.3	2.2	2.7	24	48	23	29	13	8.6	5.2	3.2
16	.75	1.3	2.2	2.7	22	47	22	28	13	9.1	5.2	3.2
17	.75	1.3	2.0	2.7	21	48	23	26	13	9.1	4.8	3.2
18	.75	1.6	2.0	2.7	20	47	58	25	13	8.6	5.6	3.2
19	.75	3.0	2.0	4.4	19	44	52	24	13	8.2	7.7	3.2
20	.82	1.8	2.0	3.0	18	51	94	24	13	7.7	7.2	3.2
21	.82	1.6	2.2	2.7	17	87	89	24	13	7.7	6.8	3.2
22	.82	1.5	221	92	15	51	55	24	12	7.2	6.0	3.2
23	.82	1.5	52	76	15	65	45	23	12	6.8	6.0	3.5
24	.90	1.4	17	192	15	110	42	23	12	7.2	5.6	3.5
25	.98	1.4	12	56	15	66	41	22	12	7.2	5.6	3.5
26	1.2	1.4	9.1	33	23	57	40	22	12	7.2	5.2	3.5
27	1.1	1.4	7.7	307	380	53	37	21	12	7.2	4.8	3.5
28	.98	1.4	6.8	85	390	45	43	20	12	6.8	4.8	3.5
29	.98	1.6	6.0	153	---	44	45	20	12	6.8	4.4	4.1
30	1.1	23	5.6	64	---	42	46	19	12	6.4	4.4	7.3
31	1.2	---	5.2	45	---	41	---	20	---	6.0	4.1	---
TOTAL	27.22	69.20	399.8	1172.3	1490	4795	1189	893	423	260.9	167.8	107.9
MEAN	.88	2.31	12.9	37.8	53.2	155	39.6	28.8	14.1	8.42	5.41	3.60
MAX	1.2	23	221	307	390	1350	94	44	19	12	7.7	7.3
MIN	.75	.98	2.0	2.7	15	41	22	19	12	6.0	4.1	3.2
AC-FT	54	137	793	2330	2960	9510	2360	1770	839	517	333	214
CAL YR 1982	TOTAL	1712.45	MEAN	4.69	MAX	221	MIN	.48	AC-FT	3400		
WTR YR 1983	TOTAL	10995.12	MEAN	30.1	MAX	1350	MIN	.75	AC-FT	21810		

## VENTURA RIVER BASIN

11116550 VENTURA RIVER NEAR MEINERS OAKS, CA

LOCATION.--Lat 34°27'49", long 119°17'22", in NE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1959 to September 1978, December 1980 to February 1983 (discontinued).

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.--Records fair. Flow regulated by Matilija Reservoir, capacity, 1,690 acre-ft. Flow up to 500 ft<sup>3</sup>/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. Station destroyed by flood Mar. 1, 1983.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft<sup>3</sup>/s estimated, Jan. 25, 1969, gage height unknown; no flow for several months in most years.

EXTREMES FOR PERIOD.--Maximum discharge, not determined; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1982 TO FEBRUARY 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	12	6.5	3.0							
2		0	4.2	5.1	0							
3		0	2.7	4.0	0							
4		0	2.0	2.8	0							
5		0	1.6	5.7	0							
6		0	1.4	5.2	0							
7		0	.76	4.5	0							
8		0	.28	3.9	0							
9		1.6	.26	3.6	0							
10		4.1	.32	3.6	0							
11		1.2	.36	3.2	0							
12		.82	.26	3.1	0							
13		.64	2.3	2.9	0							
14		.43	4.1	2.7	0							
15		.26	2.4	2.6	0							
16		.20	2.0	2.5	0							
17		.28	1.8	2.5	0							
18		.01	1.5	2.5	0							
19		0	1.4	5.1	0							
20		0	1.2	5.4	0							
21		0	.96	3.9	0							
22		.99	89	14	0							
23		1.2	16	50	0							
24		0	12	237	0							
25		0	11	69	0							
26		0	11	18	0							
27		0	11	560	518							
28		0	10	131	1500							
29		0	10	241	---							
30		12	9.4	57	---							
31		---	8.1	9.3	---							
TOTAL	0	23.73	231.30	1467.6	2021							
MEAN	0	.79	7.46	47.3	72.2							
MAX	0	12	89	560	1500							
MIN	0	0	.26	2.5	0							
AC-FT	0	47	459	2910	4010							

CAL YR 1982 TOTAL 1084.93 MEAN 2.97 MAX 89 MIN 0 AC-FT 2150

## 11117500 SAN ANTONIO CREEK AT CASITAS SPRINGS, CA

LOCATION.--Lat 34°22'49", long 119°18'13", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on left bank at downstream side of bridge on State Highway 33, 0.2 mi upstream from mouth, and 0.9 mi north of Casitas Springs.

DRAINAGE AREA.--51.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 306.72 ft National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Jan. 30, 1962, at datum 0.83 ft higher.

REMARKS.--Records fair. No regulation above station; pumping from wells 100 ft upstream for irrigation during summer months.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--34 years, 14.9 ft<sup>3</sup>/s, 10,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,200 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 14.30 ft, from inside gage, from rating curve extended above 2,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 280 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 11.46 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	0315	239	5.14	Feb. 8	0300	884	6.27
Nov. 30	0845	444	5.67	Mar. 1	0415	*8,730	11.46
Dec. 22	1845	1,940	7.82	Mar. 21	0115	1,160	7.10
Jan. 24	1000	2,630	8.44	Mar. 23	2345	904	6.80
Jan. 27	0515	2,570	8.40	Apr. 20	1245	1,020	6.93
Feb. 2	1700	272	5.23				

Minimum daily discharge, 0.64 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.0	12	5.7	57	2930	92	100	39	22	14	10
2	1.2	1.0	6.0	5.7	78	2300	90	90	39	22	14	9.8
3	1.0	.89	4.6	5.0	52	1070	88	86	37	21	14	9.8
4	1.0	1.0	3.6	4.6	37	551	84	86	37	21	14	9.3
5	1.0	1.0	3.0	4.2	35	352	84	84	36	21	14	9.3
6	1.0	1.0	2.8	4.2	32	254	81	79	37	20	15	8.8
7	.89	1.0	2.6	4.2	33	218	77	75	36	20	15	8.8
8	.76	1.0	2.3	3.9	237	170	75	72	34	20	15	8.3
9	.76	17	2.3	3.9	81	150	74	68	33	20	15	7.8
10	.76	7.7	2.1	3.9	61	135	72	67	32	19	15	7.3
11	.76	3.3	1.9	3.9	51	128	68	65	32	18	15	6.9
12	.76	1.9	1.9	3.6	41	119	67	64	31	18	15	6.9
13	.64	1.7	1.9	3.6	40	137	64	60	29	18	15	6.9
14	.64	1.7	1.9	3.6	33	135	60	57	28	18	15	6.9
15	.64	1.7	1.9	3.6	31	100	56	57	28	18	15	6.9
16	.64	1.7	1.9	3.6	28	100	53	56	28	18	14	6.9
17	.64	1.7	1.9	3.6	26	100	51	54	28	20	14	6.9
18	.76	1.7	1.7	3.6	26	157	123	53	28	16	15	6.9
19	.76	28	1.7	22	26	128	89	51	27	15	26	6.9
20	.76	3.2	1.7	6.5	26	118	255	51	27	15	15	6.9
21	.76	2.6	1.8	5.7	26	262	255	50	27	17	14	6.9
22	.76	2.1	381	340	26	113	135	49	26	15	13	6.9
23	.64	2.1	119	246	25	140	126	48	25	15	13	6.9
24	.76	1.9	26	549	27	255	112	48	25	15	12	6.5
25	.89	1.9	14	123	27	132	106	46	25	15	12	6.5
26	.89	1.9	13	62	142	115	98	45	24	14	12	6.5
27	.89	1.9	8.8	724	1400	108	94	44	23	14	11	6.5
28	.89	1.7	7.8	270	702	108	96	42	23	14	11	7.3
29	.89	2.7	6.9	534	---	106	100	42	23	14	11	7.8
30	1.4	117	6.5	136	---	100	98	41	22	14	10	19
31	1.3	---	6.1	85	---	100	---	42	---	14	10	---
TOTAL	26.64	214.99	650.6	3177.6	3406	10891	2923	1872	889	541	433	239.0
MEAN	.86	7.17	21.0	103	122	351	97.4	60.4	29.6	17.5	14.0	7.97
MAX	1.4	117	381	724	1400	2930	255	100	39	22	26	19
MIN	.64	.89	1.7	3.6	25	100	51	41	22	14	10	6.5
AC-FT	53	426	1290	6300	6760	21600	5800	3710	1760	1070	859	474
CAL YR 1982	TOTAL	2402.2	MEAN	6.58	MAX	381	MIN	.64	AC-FT	4760		
WTR YR 1983	TOTAL	25263.83	MEAN	69.2	MAX	2930	MIN	.64	AC-FT	50110		

## VENTURA RIVER BASIN

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 mi<sup>2</sup>.

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.--Records fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--25 years, 8.60 ft<sup>3</sup>/s, 6,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 12.00 ft site and datum then in use, from floodmarks, from rating curve extended above 2,100 ft<sup>3</sup>/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 above base of 150 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 82 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 4.57 ft and 7.53 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0715	812	5.16	Jan. 27	Unknown	Unknown	Unknown
Dec. 22	1730	*2,110	7.53	Feb. 8	0100	930	5.41
Jan. 24	Unknown	Unknown	Unknown	Mar. 1	0415	1,990	7.39

Minimum daily discharge, 0.10 ft<sup>3</sup>/s Oct. 7-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.22	29	4.2	37	718	21	28	8.5	4.4	2.3	1.5
2	.11	.20	15	4.0	34	331	19	24	8.5	4.2	2.3	1.5
3	.11	.17	8.9	3.6	28	151	18	22	8.2	4.2	2.1	1.4
4	.13	.20	5.9	3.1	23	107	17	21	7.8	4.0	1.9	1.4
5	.16	.13	3.4	2.6	22	80	15	19	7.4	3.6	1.9	1.3
6	.14	.11	1.6	2.4	21	66	14	18	6.8	3.2	1.7	1.3
7	.10	.11	.88	2.3	27	57	13	17	6.8	2.9	1.7	1.2
8	.10	.15	1.0	2.1	189	50	13	16	6.8	2.8	1.7	1.1
9	.10	4.2	1.8	2.1	53	42	12	15	6.9	2.7	1.7	1.1
10	.11	4.8	2.3	1.9	37	36	11	14	6.8	2.5	1.7	1.1
11	.11	1.8	1.6	1.8	29	33	10	14	6.7	2.5	1.7	1.0
12	.12	1.7	1.0	1.7	25	31	9.6	13	6.8	2.5	1.6	1.1
13	.12	1.7	.79	1.6	26	31	9.0	13	6.3	2.4	1.5	1.1
14	.13	2.1	.62	1.4	20	29	8.6	13	5.6	2.4	1.4	1.1
15	.13	2.4	.62	1.4	18	25	8.0	12	5.4	2.5	1.7	1.1
16	.14	2.6	.62	1.4	16	23	7.4	12	5.4	3.1	1.5	1.2
17	.15	2.6	.51	1.4	15	25	7.0	12	5.3	3.3	1.5	1.2
18	.20	3.8	.34	1.4	14	39	12	11	5.3	3.0	3.2	1.2
19	.20	22	.34	1.9	12	34	23	11	5.4	2.6	13	1.2
20	.19	8.0	.34	1.2	12	28	72	11	5.3	2.6	7.5	1.2
21	.15	6.5	.39	1.2	11	66	90	10	5.4	2.5	5.1	1.3
22	.11	6.1	417	160	10	39	54	10	5.0	2.4	4.2	1.2
23	.11	7.0	108	100	9.4	41	38	10	4.7	2.4	3.5	1.2
24	.14	7.4	39	330	9.5	80	27	10	4.6	2.5	3.2	1.4
25	.16	6.2	24	110	9.5	52	24	9.7	4.7	2.6	2.9	1.3
26	.21	5.0	20	45	67	43	22	9.3	4.8	2.6	2.3	1.2
27	.16	4.8	14	440	539	36	20	9.1	4.8	2.6	1.9	1.3
28	.14	4.3	8.1	119	319	31	33	8.8	4.7	2.7	1.6	1.6
29	.14	9.5	6.5	207	---	29	33	8.6	4.5	2.7	1.5	2.9
30	.53	187	4.9	76	---	26	30	8.7	4.5	2.6	1.5	13
31	.36	---	5.0	50	---	23	---	8.4	---	2.4	1.5	---
TOTAL	4.87	302.79	723.45	1681.7	1632.4	2402	690.6	418.6	179.7	89.4	82.8	50.7
MEAN	.16	10.1	23.3	54.2	58.3	77.5	23.0	13.5	5.99	2.88	2.67	1.69
MAX	.53	187	417	440	539	718	90	28	8.5	4.4	13	13
MIN	.10	.11	.34	1.2	9.4	23	7.0	8.4	4.5	2.4	1.4	1.0
AC-FT	9.7	601	1430	3340	3240	4760	1370	830	356	177	164	101
CAL YR 1982	TOTAL	2038.53	MEAN	5.59	MAX	417	MIN	.10	AC-FT	4040		
WTR YR 1983	TOTAL	8259.01	MEAN	22.6	MAX	718	MIN	.10	AC-FT	16380		

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 mi<sup>2</sup>.

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.--Records fair. Low flow slightly regulated by one small reservoir upstream. Some small diversions above station.

AVERAGE DISCHARGE.--25 years, 6.34 ft<sup>3</sup>/s, 4,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,330 ft<sup>3</sup>/s Mar. 4, 1978, gage height, 10.01 ft, from rating curve extended above 1,000 ft<sup>3</sup>/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 ft<sup>3</sup>/s, by slope-area measurement at site 2.0 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0730	520	6.24	Jan. 27	0400	1,120	7.25
Dec. 22	1730	1,880	8.11	Feb. 8	0115	472	6.13
Jan. 24	0845	1,540	7.76	Mar. 1	0415	*2,120	8.33

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	5.9	4.4	33	808	17	18	6.8	2.8	.98	.67
2		0	3.1	4.0	30	436	16	16	6.7	2.6	.93	.66
3		0	2.1	3.7	24	228	15	15	6.4	2.6	.85	.57
4		0	1.8	3.4	19	151	14	14	6.1	2.2	.84	.56
5		0	1.5	3.1	17	101	13	14	5.8	2.4	.76	.63
6		0	1.4	2.8	16	68	12	13	5.4	2.2	.73	.57
7		0	1.4	2.6	24	53	12	12	5.1	1.9	.63	.52
8		0	1.3	2.4	133	44	11	12	5.2	1.8	.65	.27
9		0	1.3	2.3	50	35	11	12	5.0	1.5	.60	.42
10		0	1.2	2.1	33	29	10	12	4.9	1.5	.59	.48
11		0	1.1	1.9	26	25	9.9	11	5.0	1.4	.61	.46
12		0	1.1	1.8	21	22	9.5	11	4.9	1.3	.34	.45
13		0	1.0	1.7	21	22	9.0	11	4.4	1.1	.33	.44
14		0	.95	1.5	17	20	8.6	11	3.7	.93	.53	.47
15		0	.89	1.4	15	18	8.3	11	3.6	1.2	.66	.51
16		0	.84	1.3	13	17	7.9	11	3.8	1.5	.56	.49
17		0	.85	1.2	12	18	7.6	11	3.7	1.5	.53	.28
18		0	.80	1.2	11	24	14	10	3.7	1.0	.93	.24
19		.50	.73	2.3	9.9	21	23	10	3.7	1.3	3.2	.24
20		0	.72	1.3	9.2	21	66	10	3.6	1.0	1.8	.34
21		0	.82	1.1	8.5	51	76	9.8	3.5	.99	1.6	.46
22		0	365	194	8.0	29	34	9.8	3.3	1.0	1.5	.58
23		0	89	126	7.7	31	23	9.4	3.2	1.0	1.3	.59
24		0	23	327	7.6	61	18	9.3	2.8	.65	.74	.54
25		0	14	81	7.7	37	15	8.9	2.9	1.0	1.1	.55
26		0	10	39	39	30	14	8.5	2.8	1.1	1.0	.58
27		0	8.1	376	424	25	12	8.1	3.0	1.1	.86	.57
28		0	6.8	144	273	23	21	7.8	2.9	1.1	.77	.34
29		.24	6.1	210	---	20	21	7.2	2.7	.82	.75	.86
30		90	5.5	82	---	20	19	7.4	2.8	1.0	.69	4.4
31		---	4.9	49	---	18	---	7.2	---	1.0	.63	---
TOTAL	0	90.74	563.20	1675.5	1309.6	2506	547.8	338.4	127.4	44.49	27.99	18.74
MEAN	0	3.02	18.2	54.0	46.8	80.8	18.3	10.9	4.25	1.44	.90	.62
MAX	0	90	365	376	424	808	76	18	6.8	2.8	3.2	4.4
MIN	0	0	.72	1.1	7.6	17	7.6	7.2	2.7	.65	.33	.24
AC-FT	0	180	1120	3320	2600	4970	1090	671	253	88	56	37
CAL YR 1982	TOTAL	1200.05	MEAN	3.29	MAX	365	MIN	0	AC-FT	2380		
WTR YR 1983	TOTAL	7249.86	MEAN	19.9	MAX	808	MIN	0	AC-FT	14380		

## VENTURA RIVER BASIN

## 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 mi<sup>2</sup>.

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, 206,500 acre-ft Nov. 8, 1982, elevation, 548.44 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 259,300 acre-ft Mar. 3, elevation, 568.95 ft; minimum, 206,500 acre-ft Nov. 8, elevation, 548.44 ft.

## MONTH-END ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	549.80	209,800	--
Oct. 31.....	548.70	207,100	-2,700
Nov. 30.....	549.23	208,400	+1,300
Dec. 31.....	551.54	214,000	+5,600
CAL YR 1982.....	--	--	-2,400
Jan. 31.....	559.63	234,500	+20,500
Feb. 28.....	566.70	253,200	+18,700
Mar. 31.....	567.67	255,800	+2,600
Apr. 30.....	567.65	255,800	0
May 31.....	566.97	253,900	-1,900
June 30.....	566.68	253,100	-800
July 31.....	566.07	251,500	-1,600
Aug. 31.....	565.07	248,800	-2,700
Sept. 30.....	564.20	246,500	-2,300
WTR YR 1983.....	--	--	+36,700



## 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 mi<sup>2</sup>.

## 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.--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: 56 years (water years 1912-13, 1930-83), 62.6 ft<sup>3</sup>/s, 45,350 acre-ft/yr. Combined river and diversion: 51 years, 72.5 ft<sup>3</sup>/s, 52,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 63,600 ft<sup>3</sup>/s Feb. 10, 1978, gage height, 19.14 ft, from rating curve extended above 34,000 ft<sup>3</sup>/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 ft<sup>3</sup>/s Feb. 10, 1978; no flow Nov. 28, 29, 1977.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 27,000 ft<sup>3</sup>/s Mar. 1, gage height, 14.46 ft; minimum daily, 0.03 ft<sup>3</sup>/s Nov. 3-6.

Combined river and diversion: Maximum discharge, 27,000 ft<sup>3</sup>/s Mar. 1; minimum daily, 7.2 ft<sup>3</sup>/s Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.06	15	8.0	208	14400	715	457	71	30	23	18
2	.16	.05	5.0	6.8	236	9070	700	437	68	24	23	19
3	.16	.03	1.6	5.6	188	3340	675	418	68	27	23	19
4	.19	.03	1.3	4.4	158	3010	635	396	64	31	19	20
5	.26	.03	1.7	3.0	154	2390	612	382	58	31	16	21
6	.24	.03	2.0	3.0	149	2020	595	362	57	31	13	20
7	.20	.05	1.4	3.0	152	1720	578	362	49	34	13	18
8	.17	.05	1.2	4.6	520	1480	562	360	40	48	12	17
9	.16	.14	1.2	7.6	185	1270	542	348	35	56	12	17
10	.16	.11	1.1	4.8	130	1100	522	330	33	56	12	16
11	.15	.08	1.0	3.1	99	950	511	315	33	52	12	16
12	.15	.08	1.2	3.0	84	847	502	290	33	50	12	15
13	.13	.08	1.4	3.0	86	768	489	265	31	51	11	15
14	.10	.08	1.3	3.0	66	703	476	245	30	46	12	14
15	.10	.08	1.1	4.1	57	621	460	233	32	45	13	13
16	.09	.08	1.0	6.6	52	551	448	219	29	46	12	12
17	.08	.08	1.0	5.4	50	512	436	198	31	46	12	12
18	.09	.11	1.0	3.2	46	568	545	180	33	39	13	12
19	.10	12	1.0	32	46	635	611	160	36	35	17	13
20	.08	.09	1.1	10	47	704	897	135	34	38	15	12
21	.07	.08	1.1	6.8	46	874	1240	137	32	43	13	12
22	.07	.08	780	931	41	829	1840	131	32	40	12	12
23	.06	.08	206	772	37	830	1830	137	29	40	11	13
24	.06	.08	39	1850	37	903	1620	155	26	47	12	13
25	.06	.08	23	468	42	874	1450	134	27	48	13	13
26	.08	.08	16	208	490	843	1310	125	22	35	14	13
27	.06	.08	14	2080	3200	818	649	111	14	18	15	13
28	.06	.08	13	718	2100	806	398	99	24	19	16	13
29	.05	.19	12	1320	---	779	441	85	32	20	16	13
30	.09	183	10	426	---	756	461	82	36	21	16	21
31	.07	---	9.2	268	---	737	---	75	---	24	16	---
TOTAL	3.66	197.17	1165.9	9172.0	8706	55708	22750	7363	1139	1171	449	455
MEAN	.12	6.57	37.6	296	311	1797	758	238	38.0	37.8	14.5	15.2
MAX	.26	183	780	2080	3200	14400	1840	457	71	56	23	21
MIN	.05	.03	1.0	3.0	37	512	398	75	14	18	11	12
AC-FT	7.3	391	2310	18190	17270	110500	45120	14600	2260	2320	891	902
CAL YR 1982	TOTAL	3281.46	MEAN	8.99	MAX	780	MIN	.03	AC-FT	6510		
WTR YR 1983	TOTAL	108279.73	MEAN	297	MAX	14400	MIN	.03	AC-FT	214800		

## VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF VENTURA RIVER AND VENTURA CITY DIVERSION NEAR VENTURA, CA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

## MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.1	8.2	24	11	217	14400	725	461	84	41	36	31
2	8.3	8.9	15	9.8	245	9080	704	444	79	32	36	32
3	8.3	8.6	14	16	197	3340	675	429	76	34	36	29
4	8.0	8.3	12	17	167	3010	645	406	73	38	31	26
5	9.7	7.9	9.2	16	160	2390	622	392	67	41	29	29
6	10	8.5	11	13	150	2020	605	372	69	42	20	31
7	7.6	8.4	11	17	161	1730	588	369	63	48	22	32
8	10	8.2	11	11	530	1490	571	362	50	63	25	30
9	10	8.4	11	11	195	1280	549	359	47	66	26	24
10	8.9	8.8	11	16	140	1110	524	340	42	65	26	26
11	8.9	8.0	11	13	112	958	521	325	41	65	25	24
12	10	8.0	9.5	15	90	850	510	304	42	62	23	26
13	10	9.3	9.4	15	91	776	497	280	45	66	19	26
14	10	9.2	10	15	76	712	484	250	41	60	21	27
15	9.9	8.6	11	9.9	69	631	468	236	44	58	24	29
16	9.0	8.0	11	10	65	561	455	231	37	54	26	28
17	7.5	8.7	11	16	59	522	437	215	40	54	27	21
18	8.0	9.0	11	17	56	577	553	196	44	52	29	17
19	9.9	22	9.5	42	50	640	620	170	45	49	28	26
20	9.8	9.9	7.2	18	51	706	907	145	46	50	22	25
21	9.6	9.8	10	17	52	884	1250	149	44	56	19	25
22	9.5	7.8	789	939	52	839	1850	141	43	54	23	23
23	9.2	9.9	213	774	49	840	1840	144	40	48	22	22
24	9.1	9.8	41	1860	49	913	1620	166	37	55	23	24
25	9.3	9.4	24	479	51	884	1460	149	38	61	23	20
26	9.3	7.9	19	218	495	847	1320	137	31	48	25	26
27	9.7	9.0	23	2090	3200	820	659	123	25	32	23	26
28	9.9	9.1	28	728	2110	816	408	107	36	32	23	26
29	8.3	8.9	23	1330	---	789	451	93	42	34	31	24
30	9.0	192	20	434	---	766	471	90	47	30	30	31
31	8.5	---	12	277	---	747	---	89	---	33	29	---
TOTAL	284.3	458.5	1431.8	9454.7	8939	55928	22989	7674	1458	1523	802	786
MEAN	9.17	15.3	46.2	305	319	1804	766	248	48.6	49.1	25.9	26.2
MAX	10	192	789	2090	3200	14400	1850	461	84	66	36	32
MIN	7.5	7.8	7.2	9.8	49	522	408	89	25	30	19	17
AC-FT	564	909	2840	18750	17730	110900	45600	15220	2890	3020	1590	1560
CAL YR 1982	TOTAL	6618.6	MEAN	18.1	MAX	789	MIN	.62	AC-FT	13128		
WTR YR 1983	TOTAL	111728.3	MEAN	306	MAX	14400	MIN	7.2	AC-FT	221600		

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.

REVISIONS.--The following table is a revision to that published in the report for 1982:

## PERIODIC DETERMINATIONS OF SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	TEMPER- ATURE (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
FEB					
03...	1430	12.0	4.9	28	.37
19...	1330	--	.40	15	.02
MAR					
02...	1410	12.0	.27	29	.02
19...	1330	--	24	12	.79
31...	1100	16.0	9.4	20	.51
APR					
22...	1510	--	9.3	6	.15
MAY					
04...	0920	18.0	6.7	6	.11
25...	1330	21.0	59	16	2.5
JUN					
03...	0930	17.5	2.7	11	.08
16...	1230	19.0	3.3	1	0
JUL					
02...	1000	19.5	3.1	17	.14
22...	1230	22.5	1.3	11	.04
AUG					
03	1020	22.0	1.2	9	.03
SEP					
02...	1100	21.5	.45	19	.02

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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								
12...	1135	.13	19.0	27	.00	--	--	--
NOV								
09...	1045	.34	11.0	77	.07	--	--	--
FEB								
08...	1145	415	--	374	419	41	55	65
15...	1005	58	--	49	7.7	--	--	--
MAR								
07...	1035	1300	--	217	762	--	--	--
11...	1025	973	--	118	310	--	--	--
17...	1430	499	--	92	124	--	--	--
JUN								
22...	0945	33	--	6	.53	--	--	--
JUL								
07...	1115	29	--	7	.55	--	--	--
AUG								
05...	1220	15	23.0	6	.24	--	--	--
17...	1140	14	--	17	.64	--	--	--

## VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .016 MM	SED. SUSP. SIEVE 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						
12...	--	--	45	--	--	--
NOV						
09...	--	--	37	--	--	--
FEB						
08...	75	83	90	97	99	100
15...	--	--	73	--	--	--
MAR						
07...	--	--	56	80	99	100
11...	--	--	35	--	--	--
17...	--	--	22	--	--	--
JUN						
22...	--	--	35	--	--	--
JUL						
07...	--	--	44	--	--	--
AUG						
05...	--	--	51	--	--	--
17...	--	--	13	--	--	--

## 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to September 1977, October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 130 ft, 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.--Records fair. 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.--42 years (water years 1941-77, 1979-83), 3.23 ft<sup>3</sup>/s, 2,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,880 ft<sup>3</sup>/s Dec. 27, 1971, gage height, 14.10 ft, from floodmark, from rating curve extended above 130 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges, above base of 125 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1330	215	4.82	Jan. 28	2400	777	6.08
Nov. 30	0830	258	4.94	Feb. 8	1330	642	5.87
Dec. 22	unknown	953	6.32	Mar. 1	0415	1,710	7.09
Jan. 24	0900	*2,750	7.86	Mar. 21	0115	160	4.62

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	11	1.2	30	518	18	19	6.0	3.5	1.3	.78
2		0	4.1	1.0	26	293	17	17	5.8	3.3	1.3	.73
3		0	1.7	.88	22	164	15	16	5.7	3.3	1.1	.70
4		0	1.1	.66	19	90	16	15	5.4	3.2	1.1	.75
5		0	.76	.44	18	76	15	14	5.2	3.0	.99	.76
6		0	.46	.31	16	67	12	13	5.0	3.0	.92	.80
7		0	.27	.19	20	56	12	13	4.8	2.7	.86	.71
8		0	.11	.08	174	48	11	12	5.1	2.5	.90	.67
9		6.6	.01	.01	43	44	11	11	5.2	2.2	.91	.64
10		19	.02	0	30	41	11	11	4.9	2.1	.92	.53
11		3.8	0	0	26	38	10	10	4.7	2.0	.92	.50
12		0	0	0	24	36	10	10	4.8	2.0	.89	.44
13		0	0	0	29	36	9.7	10	4.3	1.9	.78	.46
14		0	0	0	20	32	9.3	10	4.0	1.8	.77	.50
15		0	0	0	16	30	9.0	9.6	3.9	2.0	.89	.54
16		0	0	0	13	28	8.8	9.4	3.9	2.2	.81	.57
17		0	0	0	12	27	8.8	8.7	3.9	2.2	.75	.59
18		.23	0	.06	11	33	14	8.4	4.0	2.1	1.5	.59
19		7.8	0	3.1	9.7	31	15	8.1	4.1	1.9	5.4	.55
20		.94	0	.19	9.2	29	30	7.8	3.9	1.7	2.1	.55
21		0	.50	.04	8.6	60	44	7.8	3.9	1.5	1.8	.64
22		0	200	162	8.2	34	24	7.7	3.6	1.6	1.6	.79
23		0	128	109	8.0	32	19	7.5	3.6	1.6	1.4	.80
24		0	68	427	7.8	44	16	7.2	3.6	1.5	1.3	.71
25		0	38	77	8.9	33	14	6.9	3.7	1.6	1.2	.69
26		0	21	38	39	30	13	6.9	3.9	1.7	1.1	.68
27		0	12	228	398	27	12	6.4	3.8	1.7	.95	.67
28		.02	3.5	117	153	25	22	6.4	3.7	1.6	.82	.73
29		.70	2.2	175	---	23	21	6.0	3.5	1.6	.81	1.1
30		71	1.8	84	---	22	20	5.9	3.5	1.5	.76	5.6
31		---	1.5	45	---	19	---	6.0	---	1.4	.77	---
TOTAL	0	110.09	496.03	1470.16	1199.4	2066	467.6	307.7	131.4	65.9	37.62	24.77
MEAN	0	3.67	16.0	47.4	42.8	66.6	15.6	9.93	4.38	2.13	1.21	.83
MAX	0	71	200	427	398	518	44	19	6.0	3.5	5.4	5.6
MIN	0	0	0	0	7.8	19	8.8	5.9	3.5	1.4	.75	.44
AC-FT	0	218	984	2920	2380	4100	927	610	261	131	75	49
CAL YR 1982	TOTAL	797.20	MEAN	2.18	MAX	200	MIN	0	AC-FT	1580		
WTR YR 1983	TOTAL	6376.67	MEAN	17.5	MAX	518	MIN	0	AC-FT	12650		

## CARPINTERIA CREEK BASIN

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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
NOV												
30...	1510	51	--	7.7	14.0	--	--	--	--	--	--	--
DEC												
29...	1200	2.3	662	8.4	11.5	--	--	--	--	--	--	--
FEB												
22...	1330	8.8	--	8.6	16.0	--	--	--	--	--	--	--
MAR												
21...	1015	47	450	8.2	12.0	--	--	--	--	--	--	--
APR												
27...	1030	12	--	8.1	14.0	--	--	--	--	--	--	--
MAY												
26...	1115	7.2	620	8.5	17.0	270	78	66	25	29	19	.8
JUN												
08...	0950	5.2	630	8.1	14.5	--	--	--	--	--	--	--
JUL												
07...	1030	2.9	645	8.1	19.0	--	--	--	--	--	--	--
AUG												
10...	0900	.98	640	8.3	19.5	--	--	--	--	--	--	--
SEP												
06...	0900	.98	690	7.7	18.5	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (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 CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
NOV												
30...	--	--	--	--	--	--	259	--	--	--	--	--
DEC												
29...	--	--	--	--	--	--	388	--	--	--	--	--
FEB												
22...	--	--	--	--	--	--	408	--	--	--	--	--
MAR												
21...	--	--	--	--	--	--	293	--	--	--	--	--
APR												
27...	--	--	--	--	--	--	409	--	--	--	--	--
MAY												
26...	1.2	186	130	17	<.10	19	--	1400	<.10	.03	70	24
JUN												
08...	--	--	--	--	--	--	418	--	--	--	--	--
JUL												
07...	--	--	--	--	--	--	393	--	--	--	--	--
AUG												
10...	--	--	--	--	--	--	415	--	--	--	--	--
SEP												
06...	--	--	--	--	--	--	423	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

&lt; Actual value is known to be less than the value shown.

## 11119660 SAN YSIDRO CREEK AT MONTECITO, CA

LOCATION.--Lat 34°27'00", long 119°37'19", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank 150 ft downstream from debris basin, and 0.8 mi north-northeast of intersection of San Ysidro and East Valley Roads, in Montecito.

DRAINAGE AREA.--3.07 mi<sup>2</sup>.

PERIOD OF RECORD.--1969, 1972-79 (yearly maximum discharge only), October 1979 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 570 ft, from topographic map.

REMARKS.--Records fair. Debris basin may at times affect peak flows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft<sup>3</sup>/s, Jan. 25, 1969, from slope-area measurement of maximum flow; minimum daily, 0.07 ft<sup>3</sup>/s Oct. 22-25, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1830	186	2.15	Feb. 27	0730	167	2.13
Jan. 24	0815	*228	2.34	Mar. 20	2330	60	1.58
Jan. 27	0245	221	2.31	Apr. 20	2330	40	1.43
Feb. 8	0015	80	1.71				

Minimum daily discharge, 0.07 ft<sup>3</sup>/s Oct. 22-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.17	4.1	1.5	16	97	8.5	10	3.6	2.2	1.1	.95
2	.12	.17	1.7	1.4	14	93	8.0	9.6	3.3	2.2	1.1	.95
3	.12	.17	1.2	1.3	12	63	7.7	9.2	3.3	2.2	1.1	.95
4	.12	.17	.87	1.2	10	44	7.3	8.8	3.3	2.1	1.1	.95
5	.12	.17	.70	1.2	9.7	34	6.9	8.4	3.2	2.0	1.1	.95
6	.12	.17	.57	1.1	9.1	29	6.6	8.1	3.1	1.9	1.0	.95
7	.12	.17	.57	1.0	12	26	6.2	7.6	3.1	1.8	1.0	.95
8	.12	.17	.55	1.0	34	22	5.9	7.0	3.1	1.6	1.0	.95
9	.12	.79	.47	1.0	20	20	5.6	6.5	3.1	1.5	1.0	.95
10	.12	1.3	.45	.97	16	19	5.3	6.1	3.0	1.5	1.0	.95
11	.11	.63	.42	.87	14	17	5.0	5.9	2.8	1.4	1.1	.83
12	.10	.48	.46	.87	13	16	4.9	5.8	2.8	1.4	1.0	.73
13	.10	.39	.43	.87	13	15	4.7	5.9	2.8	1.3	.95	.73
14	.10	.37	.37	.84	11	14	4.5	5.8	2.5	1.3	1.0	.73
15	.10	.37	.39	.75	9.5	13	4.3	5.6	2.4	1.3	1.0	.79
16	.10	.37	.46	.75	8.7	12	4.0	5.5	2.4	1.3	.98	.83
17	.10	.37	.45	.75	7.9	11	4.0	5.1	2.4	1.3	.95	.83
18	.10	.61	.37	.86	7.2	12	5.8	5.0	2.4	1.3	1.3	.83
19	.10	3.2	.37	1.5	6.7	11	7.5	4.8	2.4	1.3	3.0	.83
20	.10	.50	.44	.87	6.1	12	20	4.7	2.4	1.3	1.5	.78
21	.10	.40	.51	.76	5.7	17	27	4.6	2.4	1.3	1.4	.77
22	.07	.38	40	32	5.4	13	18	4.6	2.4	1.2	1.3	.83
23	.07	.35	18	27	5.1	13	14	4.5	2.2	1.2	1.2	.82
24	.07	.35	7.0	82	4.9	14	12	4.4	2.2	1.2	1.2	.73
25	.07	.35	4.7	33	5.3	13	11	4.3	2.2	1.2	1.2	.73
26	.11	.35	3.3	18	11	12	10	4.1	2.2	1.2	1.1	.73
27	.12	.33	2.6	108	65	12	9.6	4.1	2.2	1.2	1.1	.73
28	.12	.32	2.2	56	53	11	11	4.0	2.2	1.2	1.0	.73
29	.12	.70	2.0	53	---	10	10	3.8	2.2	1.2	.95	.76
30	.14	12	1.7	30	---	9.6	9.9	3.7	2.2	1.1	.95	2.6
31	.17	---	1.7	21	---	9.0	---	3.6	---	1.2	.95	---
TOTAL	3.37	26.27	99.05	481.36	405.3	713.6	265.2	181.1	79.8	45.4	35.63	26.84
MEAN	.11	.88	3.20	15.5	14.5	23.0	8.84	5.84	2.66	1.46	1.15	.89
MAX	.17	12	40	108	65	97	27	10	3.6	2.2	3.0	2.6
MIN	.07	.17	.37	.75	4.9	9.0	4.0	3.6	2.2	1.1	.95	.73
AC-FT	6.7	52	196	955	804	1420	526	359	158	90	71	53
CAL YR 1982	TOTAL	314.85	MEAN	8.86	MAX	40	MIN	.07	AC-FT	625		
WTR YR 1983	TOTAL	2362.92	MEAN	6.47	MAX	108	MIN	.07	AC-FT	4690		

## MISSION CREEK BASIN

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 just south of end of Los Olivos Street in Santa Barbara.

DRAINAGE AREA.--8.38 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Concrete-lined channel. Altitude of gage is 105 ft, from topographic map.

REMARKS.--Records fair. No regulation or diversion above station. Water at times released to creek for ground-water recharge from Gibraltar tunnel, several miles upstream.

AVERAGE DISCHARGE.--13 years, 3.62 ft<sup>3</sup>/s, 2,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft<sup>3</sup>/s Jan. 18, 1973, gage height, 4.97 ft, from rating curve extended above 41 ft<sup>3</sup>/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 above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 110 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 5.20 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1800	317	3.07	Feb. 7	2345	469	3.37
Jan. 24	0745	963	4.07	Feb. 27	0630	673	3.70
Jan. 27	0200	*2,300	5.20	Mar. 2	0145	708	3.75

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	6.8	0	12	120	6.7	14	3.2	.34	.21	.13
2	0	0	1.4	0	11	160	6.3	11	2.9	.24	.15	.07
3	0	0	.42	0	9.4	82	5.8	18	2.9	.17	.57	.03
4	0	0	.13	0	7.4	50	6.2	31	2.8	.11	.48	.01
5	0	0	.03	0	9.3	35	7.3	22	2.4	.06	.48	0
6	0	0	0	.48	7.9	24	6.4	9.8	2.0	.03	.45	0
7	0	0	0	.01	26	18	5.4	7.4	2.0	.01	.41	0
8	0	0	0	0	71	15	5.1	6.9	2.0	0	.55	0
9	0	12	0	0	23	13	5.2	6.1	2.0	0	.29	0
10	0	3.7	0	0	15	12	5.2	5.6	1.7	0	.18	0
11	0	.02	0	0	11	11	5.8	5.2	1.4	0	0	0
12	0	0	0	0	12	10	5.3	5.0	1.2	0	0	0
13	0	0	0	0	15	10	4.2	5.3	.93	0	0	0
14	0	0	0	0	8.8	8.9	3.8	4.8	.71	0	0	0
15	0	0	0	0	7.5	7.9	3.6	6.1	.62	0	0	0
16	0	0	0	2.3	6.4	8.5	3.4	6.2	.61	0	0	0
17	0	0	0	3.1	5.4	7.7	5.5	6.0	.59	0	.57	0
18	0	3.0	0	4.3	4.5	24	32	5.8	.64	0	2.2	0
19	0	6.2	0	4.2	3.8	12	44	6.4	.69	0	9.4	0
20	0	0	0	.05	3.5	16	94	6.4	.67	0	2.9	0
21	0	0	.16	0	3.3	26	83	6.8	.61	0	2.7	0
22	0	0	71	76	2.9	13	40	7.4	.60	0	2.6	0
23	0	0	24	44	2.7	16	24	8.0	.58	0	2.0	0
24	0	0	6.0	151	6.0	26	18	8.5	.56	0	.50	0
25	0	0	2.8	28	8.7	14	15	8.7	.54	0	.67	0
26	.02	0	1.5	18	35	11	13	9.0	.53	1.2	1.5	0
27	0	0	.78	316	146	10	11	9.1	.52	5.8	1.4	0
28	0	0	.09	85	91	10	20	9.2	.51	2.6	1.4	0
29	0	12	0	79	---	9.0	15	8.7	.50	2.5	1.3	0
30	.77	59	0	31	---	8.4	15	7.2	.49	1.8	.34	41
31	0	---	0	17	---	7.4	---	3.7	---	.35	.23	---
TOTAL	0.79	95.92	115.11	859.44	565.5	795.8	515.2	275.3	37.40	15.21	33.48	41.24
MEAN	.025	3.20	3.71	27.7	20.2	25.7	17.2	8.88	1.25	.49	1.08	1.37
MAX	.77	59	71	316	146	160	94	31	3.2	5.8	9.4	41
MIN	0	0	0	0	2.7	7.4	3.4	3.7	.49	0	0	0
AC-FT	1.6	190	228	1700	1120	1580	1020	546	74	30	66	82
CAL YR 1982	TOTAL	451.11	MEAN	1.24	MAX	71	MIN	0	AC-FT	895		
WTR YR 1983	TOTAL	3350.39	MEAN	9.18	MAX	316	MIN	0	AC-FT	6650		



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 mi<sup>2</sup>.

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. Altitude of gage is 160 ft, from topographic map.

REMARKS.--Records fair except those below 1.0 ft<sup>3</sup>/s, which are poor. 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.--13 years, 2.81 ft<sup>3</sup>/s, 2,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft<sup>3</sup>/s Mar. 4, 1978, Feb. 16, 1980, from rating curve extended above 50 ft<sup>3</sup>/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 above base of 300 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 9	0730	521	3.72	Feb. 7	2330	566	3.83
Dec. 22	1630	335	3.26	Feb. 27	0345	788	4.34
Jan. 22	2100	893	4.56	Mar. 1	2400	1,090	4.95
Jan. 27	0130	*1,410	5.53				

Minimum daily discharge, 0.01 ft<sup>3</sup>/s several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.03	3.2	.28	11	144	4.0	7.1	1.7	.35	.04	.02
2	.08	.03	.67	.28	12	184	3.6	6.1	1.3	.30	.04	.02
3	.07	.03	.38	.27	7.3	57	3.2	5.6	1.3	.38	.04	.02
4	.37	.03	.28	.26	5.4	32	3.5	4.9	1.3	.37	.03	.02
5	.02	.04	.24	.20	8.2	22	3.8	5.7	1.3	.89	.03	.02
6	.02	.04	.18	.19	6.7	16	3.7	3.9	1.2	1.3	.03	.02
7	.02	.04	.73	.15	25	13	2.9	3.3	1.0	.69	.18	.02
8	.03	.05	1.1	.15	43	11	2.3	3.6	.92	.18	.24	.02
9	.03	21	.09	.11	16	9.5	2.6	2.7	.71	.13	.18	.02
10	.03	4.8	.06	.11	12	8.2	2.2	2.4	.64	.08	.06	.02
11	.02	.04	.05	.51	9.5	7.2	2.1	2.2	.64	.26	.05	.02
12	.02	.03	.05	1.2	13	6.3	2.0	2.2	.57	.12	.04	.01
13	.02	.03	.05	1.1	14	8.1	2.0	2.2	.34	.41	.14	.01
14	.02	.03	.03	.59	7.1	5.1	2.0	2.1	.63	.71	.23	.01
15	.02	.03	.03	.06	6.0	4.5	2.1	2.1	.45	.06	.19	.01
16	.04	.10	.04	.06	5.2	7.2	2.1	2.8	.02	.16	.18	.01
17	.04	.03	.04	.06	4.6	5.5	8.9	3.2	.05	.14	.14	.01
18	.03	5.4	.05	6.8	4.3	24	26	2.7	.09	.07	1.9	.01
19	.03	3.7	.04	3.4	4.1	7.4	26	2.5	.40	.06	9.2	.01
20	.05	.05	.04	.27	3.7	12	69	2.4	.58	.03	.95	.01
21	.06	.05	1.3	.26	3.5	14	44	2.3	.54	.03	1.6	.01
22	.10	.04	59	111	3.3	8.6	21	2.3	.48	.03	.04	.01
23	.06	.08	9.8	25	3.3	14	15	2.8	.55	.04	.04	.01
24	.07	.04	2.6	106	8.5	16	12	2.9	.65	.04	.04	.01
25	.07	.04	1.5	18	13	9.5	9.0	2.5	.73	.31	.03	.01
26	.99	.04	.81	19	30	8.2	7.5	2.2	.86	.24	.03	.01
27	.07	.04	.63	244	138	7.7	6.3	2.1	.94	.24	.03	.01
28	.06	.15	.55	79	74	6.8	15	2.0	1.1	.23	.03	.01
29	.07	21	.47	64	---	6.0	10	2.1	.86	.18	.03	.68
30	2.1	30	.43	23	---	5.4	10	1.9	.47	.04	.03	97
31	.04	---	.35	15	---	4.8	---	1.9	---	.04	.03	---
TOTAL	4.73	87.01	84.79	720.31	491.7	685.0	323.8	94.7	22.32	8.11	15.82	98.07
MEAN	.15	2.90	2.74	23.2	17.6	22.1	10.8	3.05	.74	.26	.51	3.27
MAX	2.1	30	59	244	138	184	69	7.1	1.7	1.3	9.2	97
MIN	.02	.03	.03	.06	3.3	4.5	2.0	1.9	.02	.03	.03	.01
AC-FT	9.4	173	168	1430	975	1360	642	188	44	16	31	195
CAL YR 1982	TOTAL	408.54	MEAN	1.12	MAX	59	MIN	0	AC-FT	810		
WTR YR 1983	TOTAL	2636.36	MEAN	7.22	MAX	244	MIN	.01	AC-FT	5230		

## ATASCADERO CREEK BASIN

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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 60 ft, from topographic map.

REMARKS.--Records good except those below 1.0 ft<sup>3</sup>/s, which are fair. No regulation above station. Some pumping for irrigation.

AVERAGE DISCHARGE.--13 years, 2.11 ft<sup>3</sup>/s, 1,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft<sup>3</sup>/s Jan. 16, 1978, gage height, 5.87 ft, from rating curve extended above 290 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 75 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 35 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 3.69 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0715	238	2.55	Mar. 2	0100	890	3.92
Dec. 22	1800	618	3.40	Mar. 20	2245	301	2.70
Jan. 24	0815	864	3.89	Apr. 20	1000	106	2.18
Jan. 27	0200	*1,230	4.61	Apr. 29	2130	140	2.29
Feb. 7	2400	416	2.97				

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	5.1	.16	6.5	237	4.3	9.1	.98	.92	.12	.08
2	0	0	1.0	.15	6.2	215	3.9	7.5	1.3	.94	.15	.04
3	0	0	.60	.14	4.9	78	3.8	6.2	1.4	1.0	.09	0
4	0	0	.50	.13	3.5	43	3.6	5.7	1.2	.98	.20	.03
5	0	0	.40	.10	3.9	22	3.3	5.2	.87	1.1	.04	.06
6	0	0	.32	.08	4.6	17	3.2	4.8	.91	.93	.05	.14
7	0	0	.22	.09	26	14	2.9	4.4	1.3	1.0	0	.05
8	0	0	.13	.06	65	11	2.8	3.9	1.5	1.2	.09	.11
9	0	3.1	.13	.03	11	9.6	2.7	3.7	1.3	.96	.05	0
10	0	1.7	.09	.02	6.1	8.5	2.7	3.7	1.3	.69	.08	0
11	0	.13	.08	.01	4.5	7.4	2.6	3.3	1.2	.37	.11	0
12	0	0	.09	0	5.1	6.6	2.5	3.3	1.1	.54	.06	0
13	0	0	.06	0	9.1	7.0	2.4	3.2	1.1	.41	.07	0
14	0	0	.05	0	3.7	6.4	2.3	3.2	1.1	.22	.04	0
15	0	0	.05	0	3.0	5.5	2.2	3.0	1.0	.37	.20	.01
16	0	0	.06	0	2.4	5.6	2.1	2.8	1.0	.58	.06	.02
17	0	0	.04	0	2.2	5.7	3.0	2.5	1.2	.51	.03	0
18	0	4.1	.04	.15	2.1	27	25	2.4	1.3	.44	.90	.02
19	0	5.6	.05	2.0	1.8	10	25	2.4	1.3	.26	4.0	0
20	0	.22	.04	.70	1.5	21	42	2.4	1.4	.15	.70	0
21	0	.07	.12	.30	1.3	22	19	2.5	1.4	.25	.07	0
22	0	.04	106	80	1.3	7.2	8.9	2.5	1.2	.17	.06	.07
23	0	.08	14	17	1.2	15	6.6	2.4	1.0	.23	.06	.05
24	0	.03	1.7	155	2.4	25	5.1	2.5	1.0	.22	.07	0
25	0	0	.79	12	3.2	14	4.8	2.4	1.1	.22	.08	0
26	0	0	.55	8.4	12	10	2.9	2.4	1.1	.28	.15	0
27	0	0	.43	271	144	8.3	2.4	2.3	1.0	.17	.25	0
28	0	0	.37	81	94	7.5	7.1	2.3	.98	.26	.17	0
29	0	7.4	.28	64	---	6.2	15	1.7	1.0	.23	.21	.18
30	.10	48	.22	15	---	5.4	15	1.2	.96	.29	.08	14
31	0	---	.20	9.0	---	4.8	---	1.2	---	.35	.09	---
TOTAL	0.10	70.47	133.71	716.52	432.5	882.7	229.1	106.1	34.50	16.24	8.33	14.86
MEAN	.003	2.35	4.31	23.1	15.4	28.5	7.64	3.42	1.15	.52	.27	.50
MAX	.10	48	106	271	144	237	42	9.1	1.5	1.2	4.0	14
MIN	0	0	.04	0	1.2	4.8	2.1	1.2	.87	.15	0	0
AC-FT	.2	140	265	1420	858	1750	454	210	68	32	17	29
CAL YR 1982	TOTAL	374.23	MEAN	1.03	MAX	106	MIN	0	AC-FT	742		
WTR YR 1983	TOTAL	2645.13	MEAN	7.25	MAX	271	MIN	0	AC-FT	5250		

## 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 mi<sup>2</sup>.

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.--Records fair except those below 1.0 ft<sup>3</sup>/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.--42 years, 4.99 ft<sup>3</sup>/s, 3,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,380 ft<sup>3</sup>/s Jan. 18, 1973, gage height, 13.1 ft datum then in use, from rating curve extended above 2,300 ft<sup>3</sup>/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 above base of 225 ft<sup>3</sup>/s, and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1815	826	5.49	Mar. 2	0045	2,010	7.51
Jan. 22	2145	2,080	7.61	Mar. 20	2315	457	4.47
Jan. 27	0215	*3,390	9.13	Apr. 20	1015	338	4.09
Feb. 8	0215	1,020	5.90				

Minimum daily discharge, 0.01 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.05	10	.10	17	504	12	27	4.2	1.1	.03	.03
2	.02	.03	1.5	.09	18	375	11	17	4.0	1.0	.03	.02
3	.02	.02	1.0	.18	14	149	10	15	3.1	1.1	.04	.02
4	.02	.02	.70	.11	10	107	9.8	13	3.0	1.1	.04	.03
5	.02	.02	.40	.11	16	62	9.2	13	3.0	1.2	.06	.03
6	.02	.02	.25	.09	16	48	8.7	12	3.2	.86	.03	.03
7	.01	.02	.22	.09	19	38	8.2	11	2.5	.54	.02	.08
8	.01	.02	.11	.11	173	30	7.8	11	2.5	.31	.02	.03
9	.01	2.7	.09	.09	31	25	7.8	10	2.5	.39	.02	.02
10	.01	1.8	.08	.08	22	22	7.5	9.4	2.5	.21	.06	.02
11	.01	.25	.08	.06	17	20	7.3	10	2.3	.09	.09	.02
12	.01	.02	.09	.04	25	18	6.9	8.7	2.3	.04	.03	.27
13	.01	.02	.42	.02	41	23	6.7	8.2	2.0	.03	.03	.32
14	.14	.02	.07	.02	14	17	6.4	8.0	1.9	.04	.05	1.4
15	.01	.02	.05	.08	11	14	6.1	7.5	1.8	.03	.05	.11
16	.01	.02	.06	.10	9.7	17	6.0	7.0	1.8	.06	.03	.06
17	.02	.02	.07	.08	8.5	16	8.3	6.4	1.8	.17	.02	.61
18	.02	3.0	.05	10	8.2	74	85	6.1	1.8	.12	4.8	.15
19	.03	5.0	.04	28	6.9	31	73	5.9	1.9	.09	36	.05
20	.04	.55	.07	.40	6.6	43	130	5.7	1.8	.05	1.4	.04
21	.02	.15	1.7	.19	6.9	66	67	5.7	1.8	.02	.32	.03
22	.01	.10	198	301	6.5	30	33	5.7	1.7	.02	.19	.14
23	.02	.17	39	100	5.2	47	25	5.6	1.7	.03	.09	.09
24	.01	.05	8.5	350	25	75	21	5.5	1.8	.03	.06	.06
25	.03	.02	4.0	49	30	31	18	5.4	1.8	.02	.04	.10
26	1.7	.02	2.5	44	104	24	16	5.3	1.9	.02	.03	.07
27	.06	.02	1.7	620	478	21	15	5.5	1.8	.03	.03	.06
28	.03	.02	1.1	180	321	20	42	5.0	1.4	.03	.03	.04
29	.02	13	.61	140	---	16	34	4.8	1.1	.02	.03	1.1
30	6.0	15	.36	37	---	14	36	4.6	1.2	.03	.03	85
31	.58	---	.18	23	---	13	---	4.5	---	.03	.04	---
TOTAL	8.94	42.17	273.00	1884.04	1460.5	1990	734.7	269.5	66.1	8.81	43.74	90.03
MEAN	.29	1.41	8.81	60.8	52.2	64.2	24.5	8.69	2.20	.28	1.41	3.00
MAX	6.0	15	198	620	478	504	130	27	4.2	1.2	36	85
MIN	.01	.02	.04	.02	5.2	13	6.0	4.5	1.1	.02	.02	.02
AC-FT	18	84	541	3740	2900	3950	1460	535	131	17	87	179
CAL YR 1982	TOTAL	1050.77	MEAN	2.88	MAX	198	MIN	.01	AC-FT	2080		
WTR YR 1983	TOTAL	6871.53	MEAN	18.8	MAX	620	MIN	.01	AC-FT	13630		

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 mi<sup>2</sup>.

## 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.--Records fair except those below 1.0 ft<sup>3</sup>/s, which are poor. No regulation above station. Many small diversions for irrigation above station.

AVERAGE DISCHARGE.--42 years, 2.15 ft<sup>3</sup>/s, 1,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 10.10 ft, from rating curve extended above 400 ft<sup>3</sup>/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 above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 270 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 7.50 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1815	558	5.68	Feb. 27	0500	681	5.98
Jan. 24	0815	*1,440	7.50	Mar. 20	2215	488	5.49
Jan. 27	0145	1,280	7.22	Apr. 20	1815	215	4.55
Feb. 7	2400	281	4.82	Apr. 29	2100	236	4.65

Minimum daily discharge, 0.03 ft<sup>3</sup>/s Oct. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.05	17	1.8	13	195	5.9	18	1.9	1.5	.77	.59
2	.06	.05	4.9	1.8	11	151	5.9	13	1.9	1.4	.78	.65
3	.05	.05	3.4	1.6	9.2	106	5.3	10	1.9	1.4	.71	.71
4	.04	.05	2.5	1.6	7.2	58	4.8	9.0	2.3	1.6	.71	.67
5	.04	.05	1.9	1.3	6.0	33	4.5	7.7	2.2	1.6	.64	.57
6	.04	.05	1.7	1.2	8.6	23	4.3	6.9	2.1	1.4	.60	.58
7	.04	.05	1.6	1.1	31	18	4.2	6.4	2.0	1.2	.53	.54
8	.04	.06	1.1	1.1	69	14	4.1	5.5	1.9	1.1	.64	.49
9	.04	16	1.0	1.1	20	12	3.9	5.2	1.9	.98	.59	.49
10	.04	7.8	1.0	.98	13	11	3.9	5.1	1.8	1.0	.59	.39
11	.04	3.4	.94	.98	10	9.0	3.4	4.8	1.7	1.4	.69	.22
12	.05	2.3	.88	.98	9.3	8.3	3.0	4.5	1.6	.92	.84	.23
13	.05	1.5	.82	.98	17	8.0	2.9	4.5	1.5	.84	.84	.35
14	.04	1.2	.76	.96	9.0	7.7	2.6	4.4	1.3	.91	.77	.33
15	.03	1.1	.72	.84	7.2	6.6	2.5	4.2	1.2	.93	.84	.44
16	.03	1.1	.68	.84	6.5	6.4	2.5	3.6	1.2	.84	.79	.26
17	.04	1.1	.67	.84	5.4	6.8	2.5	3.5	1.3	.96	.63	.26
18	.05	4.2	.84	1.1	5.0	18	22	3.1	1.5	1.1	.84	.26
19	.06	31	.77	5.1	4.7	14	31	2.8	1.5	.94	2.6	.38
20	.04	2.5	.71	1.7	4.3	20	91	2.8	1.4	.84	1.6	.46
21	.04	1.2	.75	1.1	4.0	34	42	2.8	1.5	.84	1.4	.24
22	.04	1.3	120	113	3.3	16	19	2.8	1.6	.82	1.0	.31
23	.04	1.4	34	46	3.4	19	14	2.8	1.8	.59	.84	.32
24	.05	1.7	11	220	5.7	36	11	2.7	1.7	.59	.84	.30
25	.06	2.0	7.6	30	6.2	18	9.3	2.5	1.8	.82	.81	.26
26	.06	1.5	6.3	21	52	13	7.9	2.5	1.8	.75	.71	.55
27	.04	1.3	4.9	290	181	11	6.9	2.5	1.7	.65	.71	.59
28	.04	1.2	3.6	73	103	9.9	18	2.4	1.5	.60	.71	.55
29	.05	10	2.5	82	---	8.0	37	2.1	1.5	.59	.62	.51
30	.05	76	2.0	27	---	7.2	33	2.1	1.6	.59	.65	7.5
31	.06	---	1.9	17	---	6.5	---	2.0	---	.65	.59	---
TOTAL	1.42	171.21	238.44	948.00	625.0	904.4	408.3	152.2	50.6	30.35	25.88	20.00
MEAN	.046	5.71	7.69	30.6	22.3	29.2	13.6	4.91	1.69	.98	.83	.67
MAX	.07	76	120	290	181	195	91	18	2.3	1.6	2.6	7.5
MIN	.03	.05	.67	.84	3.3	6.4	2.5	2.0	1.2	.59	.53	.22
AC-FT	2.8	340	473	1880	1240	1790	810	302	100	60	51	40
CAL YR 1982	TOTAL	818.06	MEAN	2.24	MAX	120	MIN	.03	AC-FT	1620		
WTR YR 1983	TOTAL	3575.80	MEAN	9.80	MAX	290	MIN	.03	AC-FT	7090		

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 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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 06...	1355	.04	1900	7.8	17.5	--	--	--	--	--	--	--
NOV 03...	1440	.05	1950	7.9	14.5	--	--	--	--	--	--	--
DEC 17...	1250	.67	1100	8.2	12.0	--	--	--	--	--	--	--
JAN 20...	1330	1.8	725	8.1	11.5	--	--	--	--	--	--	--
FEB 10...	1345	13	485	7.8	13.0	--	--	--	--	--	--	--
28...	1330	58	240	8.4	12.0	--	--	--	--	--	--	--
MAR 29...	1300	8.5	728*	8.0	14.5	--	--	--	--	--	--	--
APR 28...	1145	39	450	7.7	13.5	--	--	--	--	--	--	--
MAY 26...	1500	2.5	990	8.3	19.5	460	230	120	38	58	22	1
JUN 30...	1440	1.5	1040*	8.0	18.5	--	--	--	--	--	--	--
JUL 28...	1020	.71	1350	7.8	18.0	--	--	--	--	--	--	--
SEP 07...	0900	.48	1280	7.9	18.5	--	--	--	--	--	--	--
28...	1200	.64	1220	8.1	18.0	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (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 SI02)	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- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 06...	--	--	--	--	--	--	1380	--	--	--	--	--
NOV 03...	--	--	--	--	--	--	1460	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	744	--	--	--	--	--
JAN 20...	--	--	--	--	--	--	490	--	--	--	--	--
FEB 10...	--	--	--	--	--	--	323	--	--	--	--	--
28...	--	--	--	--	--	--	203	--	--	--	--	--
MAR 29...	--	--	--	--	--	--	469	--	--	--	--	--
APR 28...	--	--	--	--	--	--	291	--	--	--	--	--
MAY 26...	1.3	223	280	47	<.10	20	--	1700	1.2	.06	90	18
JUN 30...	--	--	--	--	--	--	780	--	--	--	--	--
JUL 28...	--	--	--	--	--	--	965	--	--	--	--	--
SEP 07...	--	--	--	--	--	--	975	--	--	--	--	--
28...	--	--	--	--	--	--	889	--	--	--	--	--

&lt; Actual value is known to be less than the value shown.

1 Results based on Laboratory Alkalinity value.

\* Laboratory value

## SAN JOSE CREEK BASIN

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, 0.5 mi southeast of Goleta.

DRAINAGE AREA.--9.42 mi<sup>2</sup>.

## 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. Altitude of gage is 10 ft, from topographic map.

REMARKS.--Records fair. No regulation above station. Diversions for irrigation and domestic use above station.

AVERAGE DISCHARGE.--13 years, 3.58 ft<sup>3</sup>/s, 2,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,330 ft<sup>3</sup>/s Mar. 4, 1978, gage height, 5.65 ft, from rating curve extended above 400 ft<sup>3</sup>/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 above base of 250 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0715	291	2.48	Feb. 7	2330	660	3.25
Dec. 22	1830	734	3.38	Feb. 27	0400	1,020	3.85
Jan. 24	0830	1,320	4.27	Mar. 20	2230	810	3.51
Jan. 27	0215	*1,420	4.41	Apr. 17	2345	252	2.36

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	15	1.5	13	239	8.4	20	2.6	5.2	1.2	.80
2	0	0	6.1	1.5	13	190	7.4	15	2.6	4.0	1.2	.84
3	0	0	3.4	1.4	10	96	7.0	12	2.6	1.6	1.1	.96
4	0	0	2.6	1.2	7.7	24	6.7	10	3.4	1.5	1.0	.71
5	0	0	2.1	1.1	9.8	42	6.4	9.2	3.0	1.6	.87	.60
6	0	0	1.9	1.0	12	25	6.3	8.4	2.9	1.4	.84	.54
7	0	0	1.9	.92	48	21	6.5	7.7	2.8	1.4	.72	.48
8	0	0	1.8	.85	73	17	5.3	7.2	2.6	1.3	.72	.45
9	0	25	1.6	.78	20	15	5.2	7.1	2.6	1.1	.72	.93
10	0	8.2	1.5	.62	14	13	5.5	6.8	2.3	1.1	.66	.72
11	0	2.0	1.4	.63	11	11	5.1	6.4	2.3	1.4	.60	.65
12	0	1.4	1.4	.60	14	10	4.8	7.6	2.1	1.3	.56	.59
13	0	1.2	1.4	.60	20	11	4.5	7.2	1.9	1.1	.52	.54
14	0	1.1	1.3	.58	9.2	10	4.3	5.4	1.6	1.1	.85	.52
15	0	1.0	1.2	.55	8.3	8.6	4.3	5.3	1.7	1.1	1.1	.46
16	.01	.90	1.1	.60	7.5	10	4.4	5.1	1.7	1.1	.99	.41
17	.01	.80	1.0	.58	7.3	10	15	4.8	2.0	1.1	.94	.38
18	0	12	.88	5.4	6.6	33	47	4.5	2.1	1.3	5.1	.36
19	0	14	.75	8.4	5.9	17	35	4.4	2.0	1.1	23	.32
20	0	2.9	.77	1.5	5.5	43	91	4.0	1.9	1.1	1.2	.79
21	0	1.3	1.5	.98	5.1	37	27	4.0	3.6	1.0	.87	.72
22	0	.95	168	216	4.9	20	22	4.0	3.6	1.2	1.6	.63
23	.01	1.0	21	49	5.3	35	20	3.7	3.3	4.5	3.7	.56
24	0	1.8	11	263	15	33	16	3.6	5.5	5.1	1.5	.48
25	0	3.5	3.2	25	25	20	9.6	3.6	5.7	5.0	.90	.44
26	.23	1.2	2.7	30	64	17	9.0	3.6	5.6	1.1	.80	.39
27	0	1.1	2.8	386	256	17	8.5	3.5	5.3	.87	.80	.90
28	0	1.0	2.5	116	97	15	24	2.9	5.3	.83	.84	.72
29	0	26	2.1	93	---	11	42	2.9	5.2	.88	.90	1.2
30	1.4	98	1.8	28	---	9.2	26	2.9	5.3	1.0	.90	32
31	0	---	1.7	18	---	8.4	---	2.8	---	.92	.80	---
TOTAL	1.66	206.35	267.40	1255.29	788.1	1068.2	484.2	195.6	95.1	54.30	57.50	50.09
MEAN	.054	6.88	8.63	40.5	28.1	34.5	16.1	6.31	3.17	1.75	1.85	1.67
MAX	1.4	98	168	386	256	239	91	20	5.7	5.2	23	32
MIN	0	0	.75	.55	4.9	8.4	4.3	2.8	1.6	.83	.52	.32
AC-FT	3.3	409	530	2490	1560	2120	960	388	189	108	114	99
CAL YR 1982	TOTAL	903.23	MEAN	2.47	MAX	168	MIN	0	AC-FT	1790		
WTR YR 1983	TOTAL	4523.79	MEAN	12.4	MAX	386	MIN	0	AC-FT	8970		

## 11120510 SAN JOSE CREEK AT GOLETA, CA--Continued

PERIOD OF RECORD.--Water years 1982 to current year.

WATER TEMPERATURES: Water years 1982 to current year (storm season only).

SEDIMENT RECORDS: Water years 1982 to current year (storm season only).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: January 1982 to current year (storm season only).

SEDIMENT RECORDS: December 1981 to current year (storm season only).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 9,050 mg/L Mar. 1, 1983; minimum daily mean, 2 mg/L many days during 1982 water year.

SEDIMENT DISCHARGE: Maximum daily, 15,700 tons Jan. 27, 1983; minimum daily, 0 ton many days during 1982 water year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 9,050 mg/L Mar. 1; minimum daily mean, 3 mg/L Jan. 12-17.

SEDIMENT DISCHARGE: Maximum daily, 15,700 tons Jan. 27; minimum daily, 0 ton Jan. 12-17.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	---	13.0	13.5	---					
2			---	---	12.0	13.0	---					
3			---	---	12.0	12.5	---					
4			---	---	13.0	---	---					
5			---	---	12.0	14.0	14.5					
6			---	---	12.5	16.0	15.0					
7			---	---	13.5	13.5	---					
8			---	---	13.0	18.0	---					
9			13.5	---	13.5	---	---					
10			---	---	---	16.5	---					
11			---	---	14.5	---	---					
12			---	---	---	---	---					
13			---	---	---	16.0	16.0					
14			---	---	14.0	---	---					
15			---	---	---	---	---					
16			---	---	17.0	14.0	---					
17			---	---	---	---	---					
18			---	---	---	13.0	14.5					
19			---	12.0	---	---	---					
20			---	8.0	---	---	---					
21			---	11.0	16.0	---	---					
22			13.0	12.0	---	---	14.0					
23			11.0	13.0	---	---	---					
24			---	13.5	14.5	---	---					
25			---	13.0	---	---	---					
26			---	13.5	14.5	---	---					
27			---	12.5	14.0	---	---					
28			---	13.0	13.5	16.5	14.5					
29			---	12.0	---	---	---					
30			11.5	12.0	---	17.0	---					
31			---	---	---	---	---					
MONTH			---	---	---	---	---					

## SAN JOSE CREEK BASIN

11120510 SAN JOSE CREEK AT GOLETA, CA--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
DECEMBER			JANUARY			FEBRUARY			
1	15	500	20	1.5	15	.06	13	51	1.8
2	6.1	145	2.4	1.5	12	.05	13	63	2.2
3	3.4	70	.64	1.4	10	.04	10	30	.81
4	2.6	50	.35	1.2	7	.02	7.7	14	.29
5	2.1	40	.23	1.1	5	.01	9.8	65	2.3
6	1.9	38	.19	1.0	4	.01	12	85	3.0
7	1.9	37	.19	.92	4	.01	48	1160	1290
8	1.8	35	.17	.85	4	.01	73	1850	1170
9	1.6	34	.15	.78	4	.01	20	55	3.0
10	1.5	28	.11	.62	4	.01	14	36	1.4
11	1.4	22	.08	.63	4	.01	11	34	1.0
12	1.4	20	.08	.60	3	0	14	290	28
13	1.4	18	.07	.60	3	0	20	684	46
14	1.3	14	.05	.58	3	0	9.2	100	2.5
15	1.2	12	.04	.55	3	0	8.3	22	.49
16	1.1	10	.03	.60	3	0	7.5	19	.38
17	1.0	8	.02	.58	3	0	7.3	19	.37
18	.88	7	.02	5.4	187	20	6.6	18	.32
19	.75	5	.01	8.4	293	13	5.9	18	.29
20	.77	4	.01	1.5	13	.05	5.5	17	.25
21	1.5	65	.61	.98	12	.03	5.1	20	.28
22	168	4600	4800	216	5910	9370	4.9	25	.38
23	21	300	20	49	1410	505	5.3	50	.72
24	11	200	6.2	263	4750	10200	15	573	54
25	3.2	66	.57	25	877	70	25	549	175
26	2.7	52	.38	30	682	148	64	1670	586
27	2.8	42	.32	386	7180	15700	256	5960	9190
28	2.5	34	.23	116	2540	3270	97	2040	752
29	2.1	27	.15	93	2200	1460	---	---	---
30	1.8	23	.11	28	181	17	---	---	---
31	1.7	18	.08	18	67	3.3	---	---	---
TOTAL	267.4	---	4853.49	1255.29	---	40776.62	788.1	---	13312.78

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
MARCH			APRIL			
1	239	9050	7300	8.4	80	1.8
2	190	6170	4660	7.4	78	1.6
3	96	3310	1330	7.0	78	1.5
4	24	613	51	6.7	77	1.4
5	42	626	80	6.4	58	1.0
6	25	135	9.1	6.3	32	.54
7	21	100	5.7	6.5	15	.26
8	17	100	4.6	5.3	13	.19
9	15	100	4.1	5.2	11	.15
10	13	85	3.0	5.5	9	.13
11	11	70	2.1	5.1	8	.11
12	10	63	1.7	4.8	8	.10
13	11	57	1.7	4.5	7	.09
14	10	52	1.4	4.3	7	.08
15	8.6	45	1.0	4.3	6	.07
16	10	75	2.8	4.4	5	.06
17	10	147	4.0	15	1050	530
18	33	3820	683	47	4290	966
19	17	1620	92	35	2270	307
20	43	3670	4140	91	5720	2220
21	37	2860	612	27	2080	187
22	20	300	16	22	80	30
23	35	740	70	20	56	3.5
24	33	700	62	16	40	1.7
25	20	290	16	9.6	30	.78
26	17	140	6.4	9.0	23	.56
27	17	72	3.3	8.5	19	.44
28	15	63	2.6	24	1270	123
29	11	63	1.9	42	2270	907
30	9.2	94	2.3	26	1380	122
31	8.4	80	1.8	---	---	---
TOTAL	1068.2	---	19171.5	484.2	---	5408.06



11120510 SAN JOSE CREEK AT GOLETA, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, DECEMBER 1982 TO APRIL 1983

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
DECEMBER 1982	267.40	4853.49	975	5830
JANUARY 1983	1255.29	40776.62	5570	46300
FEBRUARY ....	788.10	13312.78	3190	16500
MARCH .....	1068.20	19171.50	4780	24000
APRIL .....	484.20	5408.06	1710	7120
TOTAL .....	3863.19	83522.45	16225	99750

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 22...	1315	302	13.0	8780	7160	--	21	23
JAN 22...	1715	682	--	20000	36800	--	38	42
JAN 27...	1700	120	13.0	1070	347	19	23	28
MAR 18...	1810	28	12.5	8280	626	--	64	75
APR 19...	0815	26	--	4050	284	--	68	77
APR 28...	1100	46	14.5	4680	581	--	65	78

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
DEC 22...	30	39	55	83	98	100	--
JAN 22...	50	60	74	89	98	100	--
JAN 27...	33	39	47	62	85	99	100
MAR 18...	88	95	99	100	--	--	--
APR 19...	89	95	98	99	100	--	--
APR 28...	89	95	97	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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 100 ft, from topographic map.

REMARKS.--Records fair. No regulation. Small pumping for domestic use.

AVERAGE DISCHARGE.--17 years, 7.05 ft<sup>3</sup>/s, 5,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,270 ft<sup>3</sup>/s Jan. 28, 1983, gage height, 9.44 ft, from rating curve extended above 250 ft<sup>3</sup>/s on basis of slope-conveyance measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 250 ft<sup>3</sup>/s on basis of slope-conveyance measurement at gage height 9.44 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1815	512	5.54	Feb. 27	0345	2,570	7.83
Jan. 22	2015	2,460	7.74	Mar. 20	2215	705	5.85
Jan. 28	2145	*5,270	9.44	Apr. 19	1915	1,040	6.35
Feb. 7	2345	741	5.91				

Minimum daily discharge, 0.07 ft<sup>3</sup>/s Oct. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.18	4.4	.63	25	263	24	58	9.4	4.2	4.3	1.1
2	.12	.16	.61	.62	34	246	23	48	9.4	4.1	4.2	1.1
3	.11	.15	.47	.62	25	196	21	40	8.9	4.0	4.0	1.1
4	.11	.13	.43	.60	21	105	20	32	8.7	4.0	3.8	1.2
5	.12	.13	.40	.60	34	77	19	26	8.4	4.1	3.4	1.3
6	.12	.14	.40	.60	31	64	19	23	8.2	4.0	3.1	1.4
7	.11	.16	.38	.59	78	55	18	20	8.2	3.6	2.9	1.1
8	.08	.16	.37	.57	116	48	17	19	8.2	3.5	2.8	.75
9	.09	1.4	.38	.55	48	43	17	18	7.8	3.1	2.6	.68
10	.09	.79	.38	.56	37	37	16	18	7.4	2.9	2.6	.61
11	.08	.31	.38	.56	31	34	15	17	6.9	2.9	2.5	.52
12	.08	.24	.38	.56	39	31	16	16	6.8	2.9	2.5	.53
13	.09	.23	.37	.56	50	28	14	15	6.6	3.0	2.1	.53
14	.09	.22	.36	.56	30	26	14	15	6.2	3.3	2.1	.56
15	.09	.21	.38	.56	26	25	14	13	6.0	3.7	2.3	.58
16	.08	.21	.38	.57	24	34	13	14	6.0	4.2	1.9	.59
17	.09	.21	.38	.57	22	50	16	14	6.0	4.4	1.6	.60
18	.10	1.1	.38	3.4	20	39	42	13	5.8	4.6	2.8	.61
19	.11	1.9	.38	13	18	24	168	13	5.7	4.5	4.2	.64
20	.09	.33	.39	1.4	17	72	212	13	5.6	4.5	2.5	.66
21	.10	.27	.52	1.0	16	57	93	12	5.4	4.4	2.4	.78
22	.09	.28	73	487	15	49	56	12	5.2	4.6	2.1	.85
23	.07	.33	14	91	15	54	45	12	5.1	4.7	1.9	.78
24	.09	.29	3.2	345	22	75	41	11	5.0	4.7	1.8	.77
25	.11	.26	1.5	39	50	49	37	11	5.1	4.7	1.7	.82
26	.52	.25	1.1	258	76	40	36	11	5.0	4.7	1.6	.83
27	.20	.25	.89	825	555	37	35	11	4.7	4.8	1.4	.86
28	.13	.27	.78	482	295	34	39	10	4.6	4.7	1.3	.92
29	.12	2.0	.73	253	---	30	59	9.9	4.5	4.6	1.3	.96
30	.42	14	.68	80	---	28	49	9.7	4.3	4.4	1.3	11
31	.28	---	.65	45	---	26	---	9.3	---	4.3	1.3	---
TOTAL	4.11	26.56	109.05	2933.68	1770	1976	1208	563.9	195.1	126.1	76.3	34.73
MEAN	.13	.89	3.52	94.6	63.2	63.7	40.3	18.2	6.50	4.07	2.46	1.16
MAX	.52	14	73	825	555	263	212	58	9.4	4.8	4.3	11
MIN	.07	.13	.36	.55	15	24	13	9.3	4.3	2.9	1.3	.52
AC-FT	8.2	53	216	5820	3510	3920	2400	1120	387	250	151	69

CAL YR 1982	TOTAL	509.91	MEAN	1.40	MAX	73	MIN	.06	AC-FT	1010
WTR YR 1983	TOTAL	9023.53	MEAN	24.7	MAX	825	MIN	.07	AC-FT	17900

11120600 JALAMA CREEK NEAR LOMPOC, CA

LOCATION.--Lat 34°30'50", long 120°29'02", in San Julian Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of right bridge pier on Jalama Road, 0.6 mi downstream from Gasper Creek, 1.4 mi upstream from mouth, and 8.9 mi southwest of Lompoc.

DRAINAGE AREA.--20.5 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1982 to September 1983 (discontinued).

pH: Water years 1982 to September 1983 (discontinued).

WATER TEMPERATURES: Water years 1982 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--

pH: October 1981 to September 1983 (discontinued).

WATER TEMPERATURES: October 1981 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

pH: Maximum, 8.8 units Apr. 13, 1983; minimum, 7.4 units Mar. 20, 1982.

WATER TEMPERATURES: Maximum recorded, 28.5°C Aug. 16, 1983; minimum recorded, 3.5°C Jan. 8, 1982.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 8.8 units Apr. 13; minimum 7.8 units Nov. 9, 10, Apr. 28.

WATER TEMPERATURES: Maximum recorded, 28.5°C Aug. 16; minimum recorded, 5.0°C Dec. 25, Jan. 1.

## DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Time	Discharge (ft <sup>3</sup> /s)	Date	Time	Discharge (ft <sup>3</sup> /s)
Oct. 5	1000	0.02	Feb. 2	1300	22.8
Oct. 13	1025	0.01	Feb. 17	1420	12.4
Nov. 2	1015	0.14	Mar. 18	1310	51.2
Nov. 10	1430	0.47	Apr. 12	1420	10.2
Dec. 2	1010	0.97	Apr. 26	1130	17.1
Dec. 15	1505	0.26	May 26	1130	6.0
Jan. 4	0950	0.34	July 25	1110	1.54
Jan. 17	1300	0.39	Sept. 8	1310	1.23

## PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	8.5	8.6	8.3	8.2	8.2	8.3	8.2	8.3	8.5	8.5	8.5
2	8.6	8.5	8.6	8.3	8.2	8.3	8.3	8.1	8.3	8.5	8.5	8.5
3	8.6	8.5	8.6	8.3	8.2	8.3	8.4	8.3	8.3	8.5	8.5	8.5
4	8.6	8.5	8.6	8.3	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.5
5	8.6	8.2	8.4	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.4	8.5
6	8.4	8.3	8.3	8.3	8.3	8.3	8.4	8.3	8.4	8.5	8.4	8.5
7	8.4	8.3	8.4	8.3	8.2	8.3	8.5	8.4	8.4	8.5	8.4	8.4
8	8.4	8.3	8.4	8.4	8.3	8.3	8.5	8.4	8.4	8.5	8.4	8.4
9	8.4	8.3	8.4	8.3	7.8	8.1	8.4	8.4	8.4	8.5	8.4	8.4
10	8.3	8.3	8.3	8.2	7.8	8.1	8.4	8.4	8.4	8.4	8.3	8.4
11	8.3	8.2	8.3	8.3	8.2	8.3	8.4	8.4	8.4	8.4	8.3	8.4
12	8.3	8.3	8.3	8.3	8.2	8.3	8.5	8.4	8.4	8.4	8.4	8.4
13	8.3	8.3	8.3	8.4	8.3	8.3	8.5	8.4	8.4	8.5	8.4	8.4
14	8.4	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.4	8.5	8.4	8.4
15	8.3	8.2	8.3	8.4	8.4	8.4	8.5	8.4	8.4	8.5	8.3	8.4
16	8.3	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.5	8.5	8.3	8.4
17	8.3	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.4	8.5	8.3	8.4
18	8.3	8.2	8.3	8.4	8.3	8.3	8.4	8.4	8.4	8.5	8.3	8.4
19	8.3	8.1	8.2	8.6	8.3	8.4	8.5	8.4	8.4	8.4	8.2	8.3
20	8.3	8.2	8.2	8.5	8.4	8.4	8.5	8.4	8.4	8.3	8.2	8.3
21	8.3	8.2	8.2	8.5	8.3	8.4	8.4	8.3	8.4	8.4	8.3	8.3
22	8.2	8.1	8.2	8.6	8.3	8.4	8.4	8.0	8.3	---	---	---
23	8.3	8.2	8.2	8.7	8.2	8.4	8.3	8.0	8.2	---	---	---
24	8.2	8.1	8.2	8.6	8.3	8.5	8.4	8.3	8.3	---	---	---
25	8.2	8.1	8.1	8.5	8.4	8.4	8.4	8.3	8.4	---	---	---
26	8.3	8.0	8.2	8.5	8.4	8.4	8.4	8.4	8.4	---	---	---
27	8.3	8.2	8.3	8.6	8.4	8.4	8.5	8.4	8.4	---	---	---
28	8.3	8.2	8.3	8.6	8.3	8.4	8.5	8.4	8.4	---	---	---
29	8.3	8.2	8.2	8.7	8.3	8.4	8.5	8.4	8.4	---	---	---
30	8.3	8.0	8.1	8.4	8.2	8.3	8.5	8.4	8.5	---	---	---
31	8.3	8.1	8.2	---	---	---	8.5	8.5	8.5	---	---	---
MONTH	8.6	8.0	8.3	8.7	7.8	8.3	8.5	8.0	8.4	---	---	---

## JALAMA CREEK BASIN

11120600 JALAMA CREEK NEAR LOMPOC, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---				---	---	---	---	---	---
2	---	---	---				---	---	---	---	---	---
3	8.4	8.3	8.3				---	---	---	---	---	---
4	8.4	8.3	8.3				---	---	---	---	---	---
5	8.4	7.9	8.2				---	---	---	---	---	---
6	8.3	8.1	8.2				---	---	---	---	---	---
7	8.3	7.9	8.2				---	---	---	---	---	---
8	---	---	---				---	---	---	---	---	---
9	---	---	---				---	---	---	---	---	---
10	---	---	---				---	---	---	---	---	---
11	---	---	---				---	---	---	---	---	---
12	---	---	---				8.8	8.5	8.6	---	---	---
13	---	---	---				8.7	8.5	8.6	---	---	---
14	---	---	---				8.6	8.4	8.5	---	---	---
15	---	---	---				8.6	8.4	8.5	---	---	---
16	---	---	---				8.6	8.4	8.5	---	---	---
17	---	---	---				8.6	8.4	8.5	---	---	---
18	8.5	8.5	8.5				8.5	8.3	8.4	---	---	---
19	8.5	8.5	8.5				---	---	---	---	---	---
20	8.5	8.5	8.5				---	---	---	---	---	---
21	8.5	8.5	8.5				---	---	---	---	---	---
22	8.5	8.4	8.5				---	---	---	---	---	---
23	8.5	8.4	8.5				---	---	---	---	---	---
24	8.6	8.4	8.5				---	---	---	---	---	---
25	---	---	---				---	---	---	---	---	---
26	---	---	---				---	---	---	---	---	---
27	---	---	---				8.6	8.5	8.5	8.4	8.2	8.3
28	---	---	---				8.5	7.8	8.0	8.3	8.2	8.2
29	---	---	---				---	---	---	8.3	8.1	8.2
30	---	---	---				---	---	---	8.2	8.1	8.2
31	---	---	---				---	---	---	8.2	8.1	8.2
MONTH	---	---	---				---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.2	8.3
2	8.2	8.1	8.2	8.3	8.1	8.2	8.4	8.2	8.3	8.3	8.2	8.3
3	8.2	8.1	8.1	8.3	8.1	8.2	8.4	8.2	8.3	8.3	8.2	8.3
4	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.2	8.3
5	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.2	8.3
6	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.1	8.3	8.3	8.2	8.3
7	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.3	8.3
8	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.4	8.3	8.3
9	8.2	8.1	8.1	8.2	8.1	8.1	8.4	8.2	8.3	8.3	8.3	8.3
10	8.2	8.0	8.1	8.3	8.1	8.1	8.3	8.2	8.2	8.3	8.3	8.3
11	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.3	8.3
12	8.3	8.1	8.1	8.3	8.0	8.1	8.3	8.2	8.2	8.3	8.2	8.3
13	8.3	8.1	8.1	8.3	8.0	8.1	8.3	8.2	8.2	8.3	8.3	8.3
14	8.3	8.1	8.1	8.3	8.1	8.2	8.3	8.2	8.2	8.3	8.3	8.3
15	8.3	8.1	8.2	8.3	8.1	8.2	8.3	8.2	8.2	8.4	8.3	8.3
16	8.3	8.1	8.2	8.3	8.0	8.2	8.3	8.2	8.2	8.3	8.3	8.3
17	8.3	8.1	8.2	8.3	8.0	8.2	8.3	8.2	8.3	8.3	8.3	8.3
18	8.3	8.1	8.2	8.3	8.0	8.2	8.3	8.2	8.2	8.4	8.3	8.3
19	8.3	8.1	8.2	8.2	8.0	8.1	8.4	8.2	8.3	8.4	8.3	8.3
20	8.3	8.1	8.2	8.2	8.0	8.1	8.4	8.2	8.3	8.3	8.2	8.3
21	8.3	8.1	8.2	8.2	8.0	8.1	8.4	8.2	8.3	8.4	8.3	8.3
22	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.2	8.3	8.4	8.3	8.3
23	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.2	8.3	8.4	8.3	8.3
24	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.2	8.2	8.4	8.3	8.3
25	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.2	8.3	8.4	8.3	8.3
26	8.3	8.1	8.2	8.4	8.1	8.3	8.3	8.2	8.3	8.4	8.3	8.3
27	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.2	8.3	8.4	8.3	8.3
28	8.3	8.1	8.2	8.3	8.1	8.2	8.3	8.2	8.3	8.4	8.2	8.3
29	8.3	8.1	8.2	8.3	8.1	8.2	8.3	8.2	8.3	8.4	8.2	8.3
30	8.3	8.1	8.2	8.3	8.2	8.2	8.4	8.2	8.3	8.3	8.2	8.3
31	---	---	---	8.4	8.1	8.2	8.3	8.2	8.3	---	---	---
MONTH	8.3	8.0	8.2	8.4	8.0	8.2	8.4	8.1	8.3	8.4	8.2	8.3
YEAR	8.8	7.8	8.3									

11120600 JALAMA CREEK NEAR LOMPOC, CA

LOCATION.--Lat 34°30'50", long 120°29'02", in San Julian Grant, Santa Barbara County, Hydrologic Unit 18060013, on downstream side of right bridge pier on Jalama Road, 0.6 mi downstream from Gasper Creek, 1.4 mi upstream from mouth, and 8.9 mi southwest of Lompoc.

DRAINAGE AREA.--20.5 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1982 to September 1983 (discontinued).

pH: Water years 1982 to September 1983 (discontinued).

WATER TEMPERATURES: Water years 1982 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--

pH: October 1981 to September 1983 (discontinued).

WATER TEMPERATURES: October 1981 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--

pH: Maximum, 8.8 units Apr. 13, 1983; minimum, 7.4 units Mar. 20, 1982.

WATER TEMPERATURES: Maximum recorded, 28.5°C Aug. 16, 1983; minimum recorded, 3.5°C Jan. 8, 1982.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 8.8 units Apr. 13; minimum 7.8 units Nov. 9, 10, Apr. 28.

WATER TEMPERATURES: Maximum recorded, 28.5°C Aug. 16; minimum recorded, 5.0°C Dec. 25, Jan. 1.

## DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Time	Discharge (ft <sup>3</sup> /s)	Date	Time	Discharge (ft <sup>3</sup> /s)
Oct. 5	1000	0.02	Feb. 2	1300	22.8
Oct. 13	1025	0.01	Feb. 17	1420	12.4
Nov. 2	1015	0.14	Mar. 18	1310	51.2
Nov. 10	1430	0.47	Apr. 12	1420	10.2
Dec. 2	1010	0.97	Apr. 26	1130	17.1
Dec. 15	1505	0.26	May 26	1130	6.0
Jan. 4	0950	0.34	July 25	1110	1.54
Jan. 17	1300	0.39	Sept. 8	1310	1.23

## PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	8.5	8.6	8.3	8.2	8.2	8.3	8.2	8.3	8.5	8.5	8.5
2	8.6	8.5	8.6	8.3	8.2	8.3	8.3	8.1	8.3	8.5	8.5	8.5
3	8.6	8.5	8.6	8.3	8.2	8.3	8.4	8.3	8.3	8.5	8.5	8.5
4	8.6	8.5	8.6	8.3	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.5
5	8.6	8.2	8.4	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.4	8.5
6	8.4	8.3	8.3	8.3	8.3	8.3	8.4	8.3	8.4	8.5	8.4	8.5
7	8.4	8.3	8.4	8.3	8.2	8.3	8.5	8.4	8.4	8.5	8.4	8.4
8	8.4	8.3	8.4	8.4	8.3	8.3	8.5	8.4	8.4	8.5	8.4	8.4
9	8.4	8.3	8.4	8.3	7.8	8.1	8.4	8.4	8.4	8.5	8.4	8.4
10	8.3	8.3	8.3	8.2	7.8	8.1	8.4	8.4	8.4	8.4	8.3	8.4
11	8.3	8.2	8.3	8.3	8.2	8.3	8.4	8.4	8.4	8.4	8.3	8.4
12	8.3	8.3	8.3	8.3	8.2	8.3	8.5	8.4	8.4	8.4	8.4	8.4
13	8.3	8.3	8.3	8.4	8.3	8.3	8.5	8.4	8.4	8.5	8.4	8.4
14	8.4	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.4	8.5	8.4	8.4
15	8.3	8.2	8.3	8.4	8.4	8.4	8.5	8.4	8.4	8.5	8.3	8.4
16	8.3	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.5	8.5	8.3	8.4
17	8.3	8.2	8.3	8.4	8.3	8.4	8.5	8.4	8.4	8.5	8.3	8.4
18	8.3	8.2	8.3	8.4	8.3	8.3	8.4	8.4	8.4	8.5	8.3	8.4
19	8.3	8.1	8.2	8.6	8.3	8.4	8.5	8.4	8.4	8.4	8.2	8.3
20	8.3	8.2	8.2	8.5	8.4	8.4	8.5	8.4	8.4	8.3	8.2	8.3
21	8.3	8.2	8.2	8.5	8.3	8.4	8.4	8.3	8.4	8.4	8.3	8.3
22	8.2	8.1	8.2	8.6	8.3	8.4	8.4	8.0	8.3	---	---	---
23	8.3	8.2	8.2	8.7	8.2	8.4	8.3	8.0	8.2	---	---	---
24	8.2	8.1	8.2	8.6	8.3	8.5	8.4	8.3	8.3	---	---	---
25	8.2	8.1	8.1	8.5	8.4	8.4	8.4	8.3	8.4	---	---	---
26	8.3	8.0	8.2	8.5	8.4	8.4	8.4	8.4	8.4	---	---	---
27	8.3	8.2	8.3	8.6	8.4	8.4	8.5	8.4	8.4	---	---	---
28	8.3	8.2	8.3	8.6	8.3	8.4	8.5	8.4	8.4	---	---	---
29	8.3	8.2	8.2	8.7	8.3	8.4	8.5	8.4	8.4	---	---	---
30	8.3	8.0	8.1	8.4	8.2	8.3	8.5	8.4	8.5	---	---	---
31	8.3	8.1	8.2	---	---	---	8.5	8.5	8.5	---	---	---
MONTH	8.6	8.0	8.3	8.7	7.8	8.3	8.5	8.0	8.4	---	---	---

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---				---	---	---	---	---	---
2	---	---	---				---	---	---	---	---	---
3	8.4	8.3	8.3				---	---	---	---	---	---
4	8.4	8.3	8.3				---	---	---	---	---	---
5	8.4	7.9	8.2				---	---	---	---	---	---
6	8.3	8.1	8.2				---	---	---	---	---	---
7	8.3	7.9	8.2				---	---	---	---	---	---
8	---	---	---				---	---	---	---	---	---
9	---	---	---				---	---	---	---	---	---
10	---	---	---				---	---	---	---	---	---
11	---	---	---				---	---	---	---	---	---
12	---	---	---				---	---	---	---	---	---
13	---	---	---				8.8	8.5	8.6	---	---	---
14	---	---	---				8.7	8.5	8.6	---	---	---
15	---	---	---				8.6	8.4	8.5	---	---	---
16	---	---	---				8.6	8.4	8.5	---	---	---
17	---	---	---				8.6	8.4	8.5	---	---	---
18	8.5	8.5	8.5				8.5	8.3	8.4	---	---	---
19	8.5	8.5	8.5				---	---	---	---	---	---
20	8.5	8.5	8.5				---	---	---	---	---	---
21	8.5	8.5	8.5				---	---	---	---	---	---
22	8.5	8.4	8.5				---	---	---	---	---	---
23	8.5	8.4	8.5				---	---	---	---	---	---
24	8.6	8.4	8.5				---	---	---	---	---	---
25	---	---	---				---	---	---	---	---	---
26	---	---	---				---	---	---	---	---	---
27	---	---	---				8.6	8.5	8.5	8.4	8.2	8.3
28	---	---	---				8.5	7.8	8.0	8.3	8.2	8.2
29	---	---	---				---	---	---	8.3	8.1	8.2
30	---	---	---				---	---	---	8.2	8.1	8.2
31	---	---	---				---	---	---	8.2	8.1	8.2
MONTH	---	---	---				---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	8.1	8.2	8.3	8.1	8.2	8.4	8.1	8.2	8.3	8.2	8.3
2	8.2	8.1	8.2	8.3	8.1	8.2	8.4	8.2	8.3	8.3	8.2	8.3
3	8.2	8.1	8.1	8.3	8.1	8.2	8.4	8.2	8.3	8.3	8.2	8.3
4	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.2	8.3
5	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.2	8.3
6	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.1	8.3	8.3	8.2	8.3
7	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.3	8.3	8.3
8	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.2	8.3	8.4	8.3	8.3
9	8.2	8.1	8.1	8.2	8.1	8.1	8.4	8.2	8.3	8.3	8.3	8.3
10	8.2	8.0	8.1	8.3	8.1	8.1	8.3	8.2	8.2	8.3	8.3	8.3
11	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2	8.3	8.3	8.3
12	8.3	8.1	8.1	8.3	8.0	8.1	8.3	8.2	8.2	8.3	8.2	8.3
13	8.3	8.1	8.1	8.3	8.0	8.1	8.3	8.2	8.2	8.3	8.3	8.3
14	8.3	8.1	8.1	8.3								

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

OCTOBER			NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.5	12.5	17.0	14.0	11.5	10.0	7.5	5.0	12.0	11.5	13.5	13.0
2	16.0	13.0	16.0	13.0	10.5	8.5	8.0	5.5	12.0	9.0	13.5	13.0
3	16.0	14.0	16.0	11.0	11.5	9.0	9.0	6.5	11.5	8.0	13.5	13.0
4	16.5	14.5	14.5	10.0	11.5	9.5	9.5	7.0	12.0	8.0	13.5	13.0
5	16.5	13.5	15.5	9.5	12.5	10.5	10.0	7.0	11.0	9.0	13.5	13.0
6	16.0	13.5	15.5	10.0	13.0	11.5	10.5	7.5	11.5	10.0	13.5	13.5
7	16.5	14.0	14.5	11.5	12.0	8.5	11.5	9.0	12.5	11.5	14.0	13.5
8	16.0	12.5	15.0	11.0	9.5	7.0	12.5	9.5	12.5	12.0	14.5	14.0
9	15.5	12.5	13.0	10.5	11.0	8.5	12.0	9.5	12.5	11.5	14.5	14.5
10	15.5	12.5	13.0	10.0	11.0	9.0	11.0	8.5	13.0	12.0	14.5	14.5
11	15.5	13.0	11.5	8.5	10.5	8.0	11.0	8.0	13.0	12.5	15.0	14.5
12	16.0	13.5	12.0	8.5	11.5	9.5	10.5	7.5	13.0	12.5	15.0	14.5
13	15.5	13.0	12.5	8.5	11.5	9.5	10.5	7.5	13.5	13.0	15.0	15.0
14	16.0	13.5	12.0	8.0	9.5	7.0	11.0	8.0	13.0	12.5	15.0	14.5
15	16.0	14.0	12.5	8.5	10.0	7.5	11.5	8.5	13.0	12.5	14.5	14.5
16	16.5	14.0	12.5	10.5	10.0	7.5	13.5	11.0	13.0	12.5	14.5	14.0
17	17.0	15.0	14.0	10.0	11.5	8.5	12.0	9.5	16.0	14.5	14.5	13.5
18	16.5	14.5	14.0	11.5	11.5	9.5	12.5	9.5	14.5	12.0	14.0	13.0
19	17.0	15.5	14.5	12.5	10.5	8.5	12.0	9.0	14.5	10.0	15.0	11.5
20	18.0	15.5	13.0	10.5	10.5	8.0	9.5	7.0	14.5	9.5	14.0	12.5
21	17.5	16.0	12.0	9.5	11.5	9.5	10.0	7.0	15.0	11.0	14.0	13.0
22	18.0	16.0	12.0	10.0	13.5	11.5	11.5	10.0	16.0	11.5	13.5	13.0
23	19.0	16.5	13.5	12.5	11.5	8.5	12.0	11.5	15.0	12.0	13.5	12.5
24	19.5	17.5	14.5	12.0	8.5	6.5	12.5	12.0	13.5	11.5	13.5	12.0
25	18.5	17.5	13.0	10.0	7.5	5.0	12.5	12.5	13.0	9.5	13.5	13.0
26	18.5	15.5	12.5	10.0	9.0	6.0	13.0	12.5	13.0	12.0	14.0	13.0
27	16.5	13.5	12.0	9.0	9.5	7.0	12.5	12.5	13.0	12.0	14.5	13.5
28	16.0	13.0	14.0	12.0	10.5	8.5	12.5	11.5	13.0	13.0	14.5	14.0
29	16.0	13.5	15.0	13.5	10.0	8.5	12.0	12.0	---	---	15.0	14.0
30	15.5	14.5	15.0	11.0	9.0	6.5	12.0	12.0	---	---	15.5	14.5
31	16.5	14.5	---	---	8.0	5.5	12.0	11.5	---	---	16.0	15.0
MONTH	19.5	12.5	17.0	8.0	13.5	5.0	13.5	5.0	16.0	8.0	16.0	11.5
APRIL			MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.0	15.0	15.5	14.5	17.0	14.5	24.0	16.0	25.5	17.0	25.5	17.5
2	16.0	15.0	16.0	14.5	18.5	14.0	23.5	17.0	25.5	17.0	26.0	17.5
3	15.5	14.5	16.5	15.0	22.0	13.5	23.5	16.0	25.0	16.5	25.0	17.5
4	15.0	14.5	16.5	15.5	23.5	14.0	23.5	16.5	26.0	16.5	24.5	17.0
5	15.0	14.0	16.0	15.0	24.0	14.5	21.5	18.0	27.5	16.5	23.5	18.0
6	15.0	14.0	16.5	15.0	21.5	16.5	23.5	18.0	26.0	18.0	24.0	18.0
7	15.0	14.5	16.5	15.0	19.0	16.5	23.5	16.5	26.5	19.0	23.5	17.0
8	15.5	14.5	16.5	15.5	20.5	16.0	22.5	16.0	27.0	19.0	24.0	16.5
9	15.5	14.5	16.5	15.5	20.5	15.5	21.5	16.0	26.0	18.0	25.5	16.5
10	15.0	14.5	16.0	15.0	24.0	14.5	21.5	17.0	26.0	17.0	26.5	17.0
11	14.5	14.0	16.0	15.0	22.5	15.5	21.5	19.0	24.5	17.0	26.5	18.0
12	16.0	11.5	16.5	15.0	22.0	14.5	22.0	18.5	26.0	17.5	26.5	19.0
13	18.0	10.0	16.5	15.5	23.0	15.5	22.0	19.0	27.5	18.0	26.0	18.0
14	18.5	10.5	17.0	15.5	23.5	16.5	22.0	18.5	23.5	19.0	24.5	18.0
15	18.5	10.5	17.0	16.0	23.0	15.5	20.5	17.5	27.5	18.0	23.0	18.5
16	19.0	10.0	17.0	16.0	22.5	16.0	20.0	17.0	28.5	20.0	24.5	17.5
17	17.5	11.5	17.5	16.0	21.0	17.0	20.0	17.0	27.5	19.5	24.0	17.5
18	16.5	12.5	18.0	17.0	23.5	15.5	20.0	16.5	21.5	20.0	24.0	16.5
19	14.5	14.0	18.0	17.0	23.0	15.5	19.5	16.0	21.5	19.0	25.0	18.0
20	14.5	14.0	18.0	17.5	21.5	16.0	20.0	17.0	20.0	18.0	25.0	18.0
21	15.0	14.0	18.0	17.0	22.0	15.5	20.0	17.0	21.5	17.5	23.0	20.5
22	14.5	14.5	18.0	17.0	22.0	16.0	20.0	17.0	23.5	16.5	22.5	18.5
23	15.0	14.0	18.5	17.5	23.0	16.0	20.0	17.0	25.0	16.5	23.0	17.0
24	15.5	14.5	18.5	17.5	22.0	16.0	20.0	17.0	24.5	17.0	23.0	17.5
25	15.5	15.0	18.5	17.5	20.5	16.0	24.5	17.0	25.0	16.0	23.0	17.0
26	19.0	13.0	20.5	17.0	22.0	16.5	25.0	16.5	26.0	16.5	21.5	17.5
27	17.5	11.5	23.5	15.5	21.5	16.0	24.5	16.5	26.0	16.5	22.0	17.0
28	16.0	13.5	21.0	15.5	20.5	16.0	24.0	17.0	26.0	16.5	20.5	17.0
29	16.0	15.0	24.0	14.0	22.0	16.0	25.0	16.5	25.5	16.5	21.5	16.5
30	16.0	15.0	24.5	14.5	22.5	16.0	25.0	16.5	24.0	17.0	19.0	17.0
31	---	---	21.5	15.0	---	---	25.0	17.0	25.0	17.5	---	---
MONTH	19.0	10.0	24.5	14.0	24.0	13.5	25.0	16.0	28.5	16.0	26.5	16.5
YEAR	28.5	5.0										

## CANADA HONDA CREEK BASIN

11120900 CANADA HONDA AT POINT ARGUELLO, CA

LOCATION.--Lat 34°36'24", long 120°37'54", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060013, on left bank 0.3 mi upstream from mouth and 2.3 mi northeast of Point Arguello.

DRAINAGE AREA.--8.00 mi<sup>2</sup>.

PERIOD OF RECORD.--Water year 1982 to September 1983 (discontinued).

pH: Water year 1982 to September 1983 (discontinued).

WATER TEMPERATURES: Water year 1982 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--

pH: October 1982 to September 1983 (discontinued).

WATER TEMPERATURES: October 1982 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1983.

EXTREMES FOR PERIOD OF RECORD.--

pH: Maximum, 8.7 units June 10-12, 1983; minimum, 7.4 Sept. 18, 1982.

WATER TEMPERATURES: Maximum recorded, 29.0°C July 11, 1983; minimum recorded, 3.5°C Jan. 8, 1982.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 8.7 units June 10-12; minimum, 7.6 units several days during October and November.

WATER TEMPERATURES: Maximum recorded, 29.0°C July 11; minimum recorded, 5.0°C Dec. 25, Jan. 1.

## DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Time	Discharge (ft <sup>3</sup> /s)	Date	Time	Discharge (ft <sup>3</sup> /s)
Oct. 5	1250	<0.01	Jan. 31	1120	30.9
Oct. 13	1130	0.01	Feb. 17	1025	19.4
Oct. 29	1150	0.01	Mar. 30	1110	31.2
Nov. 15	0910	0.01	Apr. 29	1130	9.87
Dec. 2	1440	0.68	June 10	1030	2.81
Dec. 15	1115	0.10	July 25	1315	1.10
Jan. 4	1540	0.51	Sept. 8	0940	0.55
Jan. 17	0950	0.43			

## PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.1	7.7	7.9	7.9	7.7	7.8	8.0	7.8	7.9	8.3	8.3	8.3
2	8.0	7.6	7.8	7.8	7.7	7.8	8.2	7.8	8.0	8.4	8.3	8.3
3	8.0	7.6	7.8	7.8	7.6	7.7	8.2	8.1	8.2	8.4	8.3	8.3
4	8.1	7.8	7.9	7.8	7.6	7.7	8.1	8.0	8.1	8.4	8.3	8.3
5	8.2	7.8	7.9	7.8	7.6	7.7	8.1	8.0	8.1	---	---	---
6	8.2	7.9	8.0	7.8	7.7	7.8	8.1	8.0	8.0	---	---	---
7	8.2	7.9	8.0	7.8	7.7	7.7	8.1	8.0	8.0	---	---	---
8	8.1	7.9	7.9	7.9	7.7	7.8	8.1	8.0	8.0	---	---	---
9	8.3	8.0	8.0	8.0	7.6	7.8	8.1	8.0	8.0	---	---	---
10	8.2	7.9	8.0	8.0	7.8	7.9	8.1	8.0	8.0	---	---	---
11	8.3	8.0	8.1	7.9	7.7	7.8	8.1	8.0	8.0	---	---	---
12	8.3	8.0	8.1	8.0	7.8	7.8	8.1	8.0	8.0	---	---	---
13	8.2	7.9	8.0	7.9	7.7	7.8	8.1	8.0	8.0	---	---	---
14	8.1	7.8	7.9	7.9	7.6	7.8	8.1	8.0	8.0	---	---	---
15	8.0	7.8	7.9	8.0	7.8	7.8	8.3	8.0	8.1	---	---	---
16	8.0	7.8	7.9	7.9	7.8	7.8	8.2	7.9	8.1	---	---	---
17	7.9	7.7	7.8	7.9	7.8	7.8	8.1	8.0	8.1	---	---	---
18	7.8	7.7	7.7	7.9	7.7	7.8	8.1	7.9	8.0	---	---	---
19	7.8	7.6	7.7	8.1	7.8	8.0	8.1	8.0	8.0	---	---	---
20	7.8	7.6	7.7	7.9	7.8	7.9	8.1	8.0	8.0	---	---	---
21	7.8	7.7	7.7	7.9	7.8	7.8	8.1	8.0	8.0	---	---	---
22	7.9	7.6	7.7	7.9	7.8	7.8	8.4	7.8	8.1	---	---	---
23	7.9	7.6	7.7	7.9	7.7	7.8	8.2	8.1	8.1	---	---	---
24	7.9	7.6	7.7	8.0	7.9	7.9	8.2	8.1	8.1	---	---	---
25	7.9	7.6	7.7	8.0	7.8	7.9	8.3	8.3	8.3	---	---	---
26	7.9	7.6	7.7	7.9	7.8	7.9	8.4	8.3	8.3	---	---	---
27	7.8	7.7	7.8	8.0	7.8	7.9	8.4	8.2	8.3	---	---	---
28	7.8	7.7	7.8	8.0	7.8	7.9	8.3	8.2	8.3	---	---	---
29	7.9	7.8	7.8	8.2	7.8	8.0	8.2	8.2	8.2	---	---	---
30	8.0	7.8	7.8	8.2	7.8	7.9	8.3	8.2	8.3	---	---	---
31	7.9	7.7	7.8	---	---	---	8.3	8.2	8.3	8.3	8.2	8.2
MONTH	8.3	7.6	7.8	8.2	7.6	7.8	8.4	7.8	8.1	---	---	---



11120900 CANADA HONDA AT POINT ARGUELLO, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.3	8.2	8.3				---	---	---	8.5	8.4	8.4
2	8.4	8.1	8.3				---	---	---	8.5	8.5	8.5
3	8.2	8.0	8.1				---	---	---	8.5	8.5	8.5
4	---	---	---				---	---	---	8.5	8.4	8.5
5	---	---	---				---	---	---	8.5	8.5	8.5
6	---	---	---				---	---	---	8.5	8.5	8.5
7	---	---	---				---	---	---	8.5	8.5	8.5
8	---	---	---				---	---	---	8.6	8.5	8.5
9	---	---	---				---	---	---	8.6	8.5	8.5
10	---	---	---				---	---	---	8.6	8.5	8.5
11	---	---	---				---	---	---	8.6	8.5	8.5
12	---	---	---				---	---	---	8.6	8.5	8.5
13	---	---	---				---	---	---	8.6	8.5	8.5
14	---	---	---				---	---	---	8.6	8.5	8.5
15	---	---	---				---	---	---	8.6	8.5	8.5
16	---	---	---				---	---	---	8.6	8.5	8.5
17	---	---	---				---	---	---	8.6	8.5	8.5
18	---	---	---				---	---	---	8.5	8.5	8.5
19	---	---	---				---	---	---	8.5	8.4	8.5
20	---	---	---				---	---	---	8.5	8.5	8.5
21	---	---	---				---	---	---	8.5	8.5	8.5
22	---	---	---				---	---	---	8.5	8.5	8.5
23	---	---	---				---	---	---	8.6	8.5	8.5
24	---	---	---				---	---	---	8.6	8.5	8.5
25	---	---	---				---	---	---	8.6	8.5	8.5
26	---	---	---				---	---	---	8.6	8.5	8.5
27	---	---	---				---	---	---	8.6	8.5	8.5
28	---	---	---				---	---	---	8.6	8.5	8.5
29	---	---	---				---	---	---	8.5	8.4	8.5
30	---	---	---				8.5	8.3	8.4	8.5	8.5	8.5
31	---	---	---				---	---	---	8.6	8.5	8.5
MONTH	---	---	---				---	---	---	8.6	8.4	8.5

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	8.5	8.5	8.5	8.4	8.4	8.6	8.2	8.3	8.2	7.9	8.1
2	8.6	8.5	8.5	8.5	8.4	8.5	8.5	8.1	8.2	8.3	7.9	8.1
3	8.6	8.4	8.5	8.4	8.3	8.3	8.5	8.0	8.2	8.2	7.9	8.0
4	8.6	8.5	8.5	8.4	8.3	8.4	8.6	8.0	8.2	8.3	7.9	8.0
5	8.6	8.5	8.5	8.4	8.3	8.4	8.5	8.0	8.2	8.2	7.9	8.0
6	8.6	8.4	8.5	8.4	8.3	8.4	8.5	8.0	8.2	8.2	7.8	8.0
7	8.6	8.5	8.5	8.4	8.4	8.4	8.5	7.9	8.2	8.1	7.8	8.0
8	8.6	8.4	8.5	8.4	8.4	8.4	8.5	7.8	8.1	8.1	7.8	8.3
9	8.6	8.5	8.5	8.4	8.3	8.4	8.4	7.8	8.1	8.2	7.9	8.0
10	8.7	8.5	8.6	8.4	8.3	8.4	8.3	7.8	8.1	8.2	7.9	8.0
11	8.7	8.5	8.6	8.4	8.3	8.3	8.3	8.0	8.2	8.2	7.9	8.0
12	8.7	8.5	8.6	8.4	8.3	8.4	8.3	8.1	8.2	8.2	7.9	8.0
13	8.6	8.5	8.6	8.4	8.3	8.3	8.4	8.0	8.2	8.3	7.9	8.0
14	8.6	8.5	8.6	8.5	8.3	8.4	8.3	8.0	8.1	8.3	7.9	8.0
15	8.6	8.5	8.6	8.5	8.3	8.4	8.4	8.0	8.2	8.3	7.9	8.0
16	8.6	8.5	8.5	8.5	8.3	8.4	8.4	8.0	8.2	8.3	7.9	8.0
17	8.6	8.5	8.5	8.5	8.3	8.4	8.3	7.9	8.1	8.3	7.9	8.1
18	8.5	8.4	8.4	8.4	8.2	8.3	8.2	8.0	8.1	8.3	7.9	8.1
19	8.5	8.4	8.4	8.4	8.2	8.3	8.4	8.0	8.2	8.3	7.9	8.0
20	8.5	8.4	8.4	8.4	8.2	8.3	8.3	8.0	8.2	8.2	7.8	8.0
21	8.5	8.4	8.4	8.4	8.1	8.3	8.3	8.0	8.2	8.2	7.9	8.0
22	8.5	8.4	8.4	8.4	8.2	8.3	8.3	8.0	8.1	8.3	7.9	8.0
23	8.5	8.4	8.4	8.4	8.2	8.3	8.3	8.0	8.1	8.2	7.9	8.1
24	8.5	8.4	8.4	8.4	8.1	8.3	8.3	8.0	8.1	8.3	7.9	8.1
25	8.5	8.4	8.4	8.5	8.2	8.3	8.3	7.9	8.1	8.3	7.9	8.1
26	8.5	8.4	8.4	8.5	8.2	8.3	8.3	7.9	8.1	8.3	7.9	8.1
27	8.5	8.4	8.4	8.5	8.2	8.3	8.3	7.9	8.1	8.3	7.9	8.1
28	8.5	8.4	8.4	8.5	8.2	8.3	8.3	7.9	8.1	8.3	7.9	8.1
29	8.5	8.4	8.4	8.5	8.2	8.3	8.3	7.9	8.1	8.3	7.9	8.1
30	8.5	8.4	8.4	8.5	8.1	8.3	8.3	8.0	8.1	8.2	7.9	8.1
31	---	---	---	8.5	8.2	8.3	8.3	7.9	8.1	---	---	---
MONTH	8.7	8.4	8.5	8.5	8.1	8.3	8.6	7.8	8.2	8.3	7.8	8.1

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

[illegible]

## 11121000 SANTA YNEZ RIVER AT JAMESON LAKE, NEAR MONTECITO, CA

LOCATION.--Lat 34°29'32", long 119°30'25", in SW 1/4 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 mi<sup>2</sup>, 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 arbitrary datum (called sea level) generally used for work in this vicinity. 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 Colorado 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 furnished by Montecito Water District.

AVERAGE DISCHARGE.--52 years (water years 1932-83), 7.29 ft<sup>3</sup>/s, 5,280 acre-ft/yr.

## MONTHLY NET DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Gage height (feet) <sup>a</sup>	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.....	2,200.66	3,120	--	--	--	--	--	--	--
Oct. 31.....	2,198.80	2,940	-180	162	0	35	17	8	9
Nov. 30.....	2,198.56	2,920	-20	103	0	8	91	57	34
Dec. 31.....	2,207.18	3,770	+850	56	0	5	911	63	848
CAL YR 1982.....	--	--	+860	1,468	0	397	2,725	298	2,427
Jan. 31.....	2,224.11	5,760	+1,990	43	922	34	2,989	147	2,842
Feb. 28.....	2,224.34	5,790	+30	0	4,144	5	4,179	106	4,073
Mar. 31.....	2,224.09	5,760	-30	0	10,049	4	10,023	157	9,866
Apr. 30.....	2,224.09	5,760	0	0	2,763	6	2,769	70	2,699
May 31.....	2,223.95	5,740	-20	34	1,031	40	1,085	3	1,082
June 30.....	2,223.93	5,740	0	99	464	51	614	0	614
July 31.....	2,223.58	5,690	-50	180	55	81	266	0	266
Aug. 31.....	2,222.95	5,610	-80	177	0	73	170	4	166
Sept. 30.....	2,222.06	5,500	-110	157	0	56	103	8	95
WTR YR 1983.....	--	--	+2,380	1,011	19,428	398	23,217	623	22,594

<sup>a</sup> 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.

## SANTA YNEZ RIVER BASIN

11122000 SANTA YNEZ RIVER ABOVE GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.--Lat 34°31'34", long 119°41'08", in SW 1/4 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 mi<sup>2</sup>.

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. Reservoir gage is to 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 measure 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 Colorado land pan. Area and capacity tables are based on survey made in October 1982. 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 furnished by city of Santa Barbara.

## MONTHLY NET INFLOW, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet) <sup>a</sup>	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.....	1,391.02	6,420	--	--	--	--	--	--	--
Oct. 31.....	1,388.90	5,960	-460	441	5	81	67	13	54
Nov. 30.....	1,388.93	5,970	+10	303	29	28	370	137	233
Dec. 31.....	1,399.80	8,540	+2,570	536	6,220	30	9,356	122	9,234
CAL YR 1982.....	--	--	+4,900	4,499	18,088	858	28,345	649	27,696
Jan. 31.....	1,399.51	8,460	-80	336	39,360	26	39,642	340	39,302
Feb. 28.....	1,400.31	8,670	+210	431	32,100	23	32,764	188	32,576
Mar. 31.....	1,399.81	8,540	-130	495	105,300	30	105,695	352	105,343
Apr. 30.....	1,399.91	8,570	+30	480	29,690	54	30,254	180	30,074
May 31.....	1,401.27	8,920	+350	358	15,830	110	16,648	0	16,648
June 30.....	1,401.25	8,910	-10	172	4,930	124	5,216	0	5,216
July 31.....	1,400.52	8,720	-190	494	2,680	147	3,131	0	3,131
Aug. 31.....	1,400.33	8,670	-50	647	355	138	1,090	10	1,080
Sept. 30.....	1,398.94	8,320	-350	524	0	117	291	13	278
WTR YR 1983.....	--	--	+1,900	5,217	236,499	908	244,524	1,355	243,169

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 NW 1/4 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 mi<sup>2</sup>.

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 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.--Records fair. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 5,220 acre-ft during current year from Gibraltar Reservoir; Montecito Water District diverted 1,010 acre-ft during current year from Jameson Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,200 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 25.8 ft, from rating curve extended above 2,100 ft<sup>3</sup>/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, 25,100 ft<sup>3</sup>/s Mar. 1 (manipulation of spill gates), gage height, 19.44 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.43	0	33	537	14300	495	632	112	80	21	
2	0	.39	0	54	487	12100	449	534	109	77	21	
3	0	.39	0	46	246	5090	307	398	119	73	21	
4	0	.39	0	38	365	2750	373	339	117	72	19	
5	0	.39	0	34	310	1800	319	370	117	68	20	
6	0	.39	0	36	281	1380	318	431	117	62	19	
7	0	.39	0	41	305	1180	309	414	106	59	18	
8	0	.39	0	34	1370	927	271	275	94	57	17	
9	0	.39	0	30	694	830	265	343	90	57	11	
10	0	.39	0	27	471	697	257	319	87	55	2.5	
11	0	.15	0	34	431	541	249	301	79	52	1.4	
12	0	0	0	33	377	536	219	115	81	52	1.7	
13	0	0	0	26	417	520	211	101	85	51	1.6	
14	0	0	0	22	295	513	212	255	81	48	.57	
15	0	0	0	19	316	472	205	253	74	42	1.0	
16	0	0	0	15	245	435	139	248	74	40	.76	
17	0	0	0	16	217	376	182	231	70	40	.62	
18	0	0	0	19	250	457	678	229	67	39	.14	
19	0	1.7	0	55	232	523	672	223	63	39	.33	
20	0	2.5	0	34	177	470	1610	215	55	43	.23	
21	0	2.5	0	28	168	677	1910	198	58	27	.09	
22	0	2.5	1350	561	179	601	805	188	68	22	.07	
23	0	1.3	1190	2190	179	585	705	183	73	23	.10	
24	0	0	222	2860	201	989	630	174	69	22	.06	
25	0	0	145	1020	192	826	436	168	67	23	.05	
26	.27	0	106	493	442	719	579	160	66	22	.13	
27	.37	0	88	5710	3380	623	321	155	67	21	.20	
28	.39	0	35	1730	3420	578	560	146	70	21	.14	
29	.52	0	0	2770	---	568	464	135	71	23	.07	
30	.52	0	0	1180	---	461	819	128	80	22	.05	
31	.52	---	.27	656	---	554	---	122	---	21	.01	
TOTAL	2.59	14.59	3136.27	19844	16184	53078	14969	7983	2486	1353	178.82	0
MEAN	.084	.49	101	640	578	1712	499	258	82.9	43.6	5.77	0
MAX	.52	2.5	1350	5710	3420	14300	1910	632	119	80	21	0
MIN	0	0	0	15	168	376	139	101	55	21	.01	0
AC-FT	5.1	29	6220	39360	32100	105300	29690	15830	4930	2680	355	0
CAL YR 1982	TOTAL	9119.98	MEAN	25.0	MAX	1350	MIN	0	AC-FT	18090		
WTR YR 1983	TOTAL	119229.27	MEAN	327	MAX	14300	MIN	0	AC-FT	236500		

## 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929.

REMARKS.--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 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 18.88 ft, from rating curve extended above 11,600 ft<sup>3</sup>/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, 29,900 ft<sup>3</sup>/s Mar. 1, gage height, 14.0 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	57	24	741	17300	585	901	183	60	10	5.4
2		0	25	67	783	16600	532	720	183	59	9.6	4.7
3		0	19	75	538	7240	414	561	182	55	8.8	5.8
4		0	16	62	452	4600	402	449	176	51	8.2	5.8
5		0	13	53	478	3430	418	453	167	50	8.2	5.8
6		0	11	47	417	2770	378	493	160	46	8.5	5.4
7		0	11	54	417	2220	365	509	148	43	8.5	4.1
8		0	10	53	1570	1740	333	383	145	42	6.6	1.9
9		7.5	9.2	46	1030	1460	301	355	139	39	5.4	.88
10		1.1	9.0	42	684	1240	302	382	138	37	6.6	1.6
11		0	8.4	39	618	997	300	346	129	37	6.6	3.5
12		0	8.1	48	541	910	281	271	113	33	6.6	3.3
13		0	7.7	42	580	831	250	84	114	31	5.4	3.5
14		0	7.6	36	509	820	250	241	105	30	6.6	1.7
15		0	7.6	32	354	732	247	274	96	30	8.4	2.6
16		0	7.6	29	376	664	212	261	93	28	11	3.3
17		0	7.6	26	292	587	169	249	89	27	8.9	3.8
18		0	7.6	27	316	696	843	237	86	27	7.4	3.5
19		3.9	7.6	61	311	737	1000	239	83	27	9.5	3.3
20		.07	7.6	62	276	707	2270	236	77	27	8.4	3.8
21		0	7.6	51	232	1020	2590	231	69	26	7.9	5.0
22		0	699	432	244	894	1310	231	72	22	7.9	5.0
23		0	2300	2430	244	833	986	229	72	15	7.4	6.1
24		0	519	3040	249	1370	889	220	72	13	6.1	4.4
25		0	359	1450	279	1120	675	210	68	13	5.0	5.4
26		0	284	833	479	1000	702	204	64	13	4.4	3.8
27		0	235	6020	3420	873	508	199	62	13	3.8	1.2
28		0	215	2670	3430	773	706	192	62	13	5.0	3.8
29		0	62	3310	---	720	803	188	60	12	5.8	5.0
30		212	35	1670	---	598	1100	183	58	10	5.4	13
31		---	29	1160	---	597	---	183	---	10	5.4	---
TOTAL	0	224.57	5002.2	23991	19860	76079	20121	9914	3265	939	223.3	126.38
MEAN	0	7.49	161	774	709	2454	671	320	109	30.3	7.20	4.21
MAX	0	212	2300	6020	3430	17300	2590	901	183	60	11	13
MIN	0	0	7.6	24	232	587	169	84	58	10	3.8	.88
AC-FT	0	445	9920	47590	39390	150900	39910	19660	6480	1860	443	251
CAL YR 1982	TOTAL	13282.57	MEAN	36.4	MAX	2300	MIN	0	AC-FT	26350		
WTR YR 1983	TOTAL	159745.45	MEAN	438	MAX	17300	MIN	0	AC-FT	316900		

## 11123000 SANTA YNEZ RIVER BELOW GIBRALTAR DAM, NEAR SANTA BARBARA, CA

LOCATION.--Lat 34°31'28", long 119°41'11", in NW 1/4 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 mi<sup>2</sup>.

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 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.--Records fair. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 5,220 acre-ft during current year from Gibraltar Reservoir; Montecito Water District diverted 1,010 acre-ft during current year from Jameson Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,200 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 25.8 ft, from rating curve extended above 2,100 ft<sup>3</sup>/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, 25,100 ft<sup>3</sup>/s Mar. 1 (manipulation of spill gates), gage height, 19.44 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.43	0	33	537	14300	495	632	112	80	21	
2	0	.39	0	54	487	12100	449	534	109	77	21	
3	0	.39	0	46	246	5090	307	398	119	73	21	
4	0	.39	0	38	365	2750	373	339	117	72	19	
5	0	.39	0	34	310	1800	319	370	117	68	20	
6	0	.39	0	36	281	1380	318	431	117	62	19	
7	0	.39	0	41	305	1180	309	414	106	59	18	
8	0	.39	0	34	1370	927	271	275	94	57	17	
9	0	.39	0	30	694	830	265	343	90	57	11	
10	0	.39	0	27	471	697	257	319	87	55	2.5	
11	0	.15	0	34	431	541	249	301	79	52	1.4	
12	0	0	0	33	377	536	219	115	81	52	1.7	
13	0	0	0	26	417	520	211	101	85	51	1.6	
14	0	0	0	22	295	513	212	255	81	48	.57	
15	0	0	0	19	316	472	205	253	74	42	1.0	
16	0	0	0	15	245	435	139	248	74	40	.76	
17	0	0	0	16	217	376	182	231	70	40	.62	
18	0	0	0	19	250	457	678	229	67	39	.14	
19	0	1.7	0	55	232	523	672	223	63	39	.33	
20	0	2.5	0	34	177	470	1610	215	55	43	.23	
21	0	2.5	0	28	168	677	1910	198	58	27	.09	
22	0	2.5	1350	561	179	601	805	188	68	22	.07	
23	0	1.3	1190	2190	179	585	705	183	73	23	.10	
24	0	0	222	2860	201	989	630	174	69	22	.06	
25	0	0	145	1020	192	826	436	168	67	23	.05	
26	.27	0	106	493	442	719	579	160	66	22	.13	
27	.37	0	88	5710	3380	623	321	155	67	21	.20	
28	.39	0	35	1730	3420	578	560	146	70	21	.14	
29	.52	0	0	2770	---	568	464	135	71	23	.07	
30	.52	0	0	1180	---	461	819	128	80	22	.05	
31	.52	---	.27	656	---	554	---	122	---	21	.01	
TOTAL	2.59	14.59	3136.27	19844	16184	53078	14969	7983	2486	1353	178.82	0
MEAN	.084	.49	101	640	578	1712	499	258	82.9	43.6	5.77	0
MAX	.52	2.5	1350	5710	3420	14300	1910	632	119	80	21	0
MIN	0	0	0	15	168	376	139	101	55	21	.01	0
AC-FT	5.1	29	6220	39360	32100	105300	29690	15830	4930	2680	355	0
CAL YR 1982	TOTAL	9119.98	MEAN	25.0	MAX	1350	MIN	0	AC-FT	18090		
WTR YR 1983	TOTAL	119229.27	MEAN	327	MAX	14300	MIN	0	AC-FT	236500		

## 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 mi<sup>2</sup>.

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 National Geodetic Vertical Datum of 1929.

REMARKS.--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 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 18.88 ft, from rating curve extended above 11,600 ft<sup>3</sup>/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, 29,900 ft<sup>3</sup>/s Mar. 1, gage height, 14.0 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	57	24	741	17300	585	901	183	60	10	5.4
2		0	25	67	783	16600	532	720	183	59	9.6	4.7
3		0	19	75	538	7240	414	561	182	55	8.8	5.8
4		0	16	62	452	4600	402	449	176	51	8.2	5.8
5		0	13	53	478	3430	418	453	167	50	8.2	5.8
6		0	11	47	417	2770	378	493	160	46	8.5	5.4
7		0	11	54	417	2220	365	509	148	43	8.5	4.1
8		0	10	53	1570	1740	333	383	145	42	6.6	1.9
9		7.5	9.2	46	1030	1460	301	355	139	39	5.4	.88
10		1.1	9.0	42	684	1240	302	382	138	37	6.6	1.6
11		0	8.4	39	618	997	300	346	129	37	6.6	3.5
12		0	8.1	48	541	910	281	271	113	33	6.6	3.3
13		0	7.7	42	580	831	250	84	114	31	5.4	3.5
14		0	7.6	36	509	820	250	241	105	30	6.6	1.7
15		0	7.6	32	354	732	247	274	96	30	8.4	2.6
16		0	7.6	29	376	664	212	261	93	28	11	3.3
17		0	7.6	26	292	587	169	249	89	27	8.9	3.8
18		0	7.6	27	316	696	843	237	86	27	7.4	3.5
19		3.9	7.6	61	311	737	1000	239	83	27	9.5	3.3
20		.07	7.6	62	276	707	2270	236	77	27	8.4	3.8
21		0	7.6	51	232	1020	2590	231	69	26	7.9	5.0
22		0	699	432	244	894	1310	231	72	22	7.9	5.0
23		0	2300	2430	244	833	986	229	72	15	7.4	6.1
24		0	519	3040	249	1370	889	220	72	13	6.1	4.4
25		0	359	1450	279	1120	675	210	68	13	5.0	5.4
26		0	284	833	479	1000	702	204	64	13	4.4	3.8
27		0	235	6020	3420	873	508	199	62	13	3.8	1.2
28		0	215	2670	3430	773	706	192	62	13	5.0	3.8
29		0	62	3310	---	720	803	188	60	12	5.8	5.0
30		212	35	1670	---	598	1100	183	58	10	5.4	13
31		---	29	1160	---	597	---	183	---	10	5.4	---
TOTAL	0	224.57	5002.2	23991	19860	76079	20121	9914	3265	939	223.3	126.38
MEAN	0	7.49	161	774	709	2454	671	320	109	30.3	7.20	4.21
MAX	0	212	2300	6020	3430	17300	2590	901	183	60	11	13
MIN	0	0	7.6	24	232	587	169	84	58	10	3.8	.88
AC-FT	0	445	9920	47590	39390	150900	39910	19660	6480	1860	443	251
CAL YR 1982	TOTAL	13282.57	MEAN	36.4	MAX	2300	MIN	0	AC-FT	26350		
WTR YR 1983	TOTAL	159745.45	MEAN	438	MAX	17300	MIN	0	AC-FT	316900		



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 mi<sup>2</sup>.

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 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.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--42 years, 18.5 ft<sup>3</sup>/s, 13,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft<sup>3</sup>/s Feb. 24, 1969, gage height, 14.45 ft, from floodmark, present datum, from rating curve extended above 2,500 ft<sup>3</sup>/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 above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 110 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 12.10 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0900	1,400	10.97	Mar. 1	0200	*3,960	12.68
Dec. 22	1830	2,900	12.10	Mar. 21	Unknown	Unknown	Unknown
Jan. 22	2100	1,400	10.97	Mar. 24	Unknown	Unknown	Unknown
Jan. 27	0500	966	10.49	Apr. 21	Unknown	Unknown	Unknown
Feb. 8	0215	580	9.79	Apr. 30	Unknown	Unknown	Unknown
Feb. 13	0300	240	8.75				

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	70	24	120	2290	98	174	57	29	12	6.2
2		0	31	24	116	2090	96	158	57	28	12	6.3
3		0	19	22	113	860	92	148	55	28	11	5.9
4		0	16	21	108	470	90	142	53	26	10	5.6
5		0	16	21	109	300	89	138	51	26	10	5.4
6		0	15	20	127	260	88	133	48	25	9.2	5.1
7		0	13	20	163	220	85	126	47	25	8.7	4.9
8		0	12	19	284	200	83	122	46	24	8.8	4.7
9		0	11	19	171	185	80	117	45	24	8.6	4.7
10		0	9.9	18	143	172	80	113	44	23	8.7	4.5
11		0	9.1	18	127	160	79	109	43	22	8.4	4.0
12		0	8.7	18	124	155	79	106	43	21	7.9	3.7
13		0	8.2	18	183	150	78	103	41	21	7.3	3.6
14		0	7.8	17	126	149	78	100	39	20	7.6	3.6
15		0	7.4	18	114	148	78	97	38	20	9.3	3.5
16		0	7.2	18	106	148	78	94	37	21	9.1	3.4
17		0	6.9	18	99	149	90	89	37	21	15	3.4
18		0	6.8	18	97	190	180	86	36	21	14	3.4
19		64	6.5	31	91	170	170	84	36	20	16	3.4
20		11	6.3	21	86	160	170	81	35	19	14	3.4
21		2.6	6.4	20	81	240	210	78	35	18	13	3.6
22		1.1	478	169	78	170	180	75	34	17	12	4.1
23		1.4	172	181	73	140	165	72	33	17	11	4.5
24		6.5	77	254	71	290	160	69	33	16	10	4.4
25		2.3	52	151	70	230	153	67	32	16	9.7	4.3
26		1.2	44	104	135	170	150	64	32	16	8.9	4.2
27		.79	37	454	281	140	144	62	31	15	8.0	4.4
28		.71	33	178	414	130	151	60	31	15	7.4	4.7
29		2.0	30	278	---	120	161	59	31	14	7.0	5.2
30		359	29	147	---	110	207	57	30	14	6.7	11
31		---	26	120	---	100	---	57	---	13	6.4	---
TOTAL	0	452.60	1272.2	2459	3810	10466	3642	3040	1210	635	307.7	139.1
MEAN	0	15.1	41.0	79.3	136	338	121	98.1	40.3	20.5	9.93	4.64
MAX	0	359	478	454	414	2290	210	174	57	29	16	11
MIN	0	0	6.3	17	70	100	78	57	30	13	6.4	3.4
AC-FT	0	898	2520	4880	7560	20760	7220	6030	2400	1260	610	276
CAL YR 1982	TOTAL	5596.34	MEAN	15.3	MAX	478	MIN	0	AC-FT	11100		
WTR YR 1983	TOTAL	27433.60	MEAN	75.2	MAX	2290	MIN	0	AC-FT	54410		

## SANTA YNEZ RIVER BASIN

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, 6.1 mi east of Santa Ynez.

DRAINAGE AREA.--417 mi<sup>2</sup>.

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 furnished 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, 211,700 acre-ft Mar. 1, elevation, 752.19 ft; minimum, 152,200 acre-ft Nov. 28, elevation, 731.24 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Total diversions (acre-feet)
Sept. 30.....	734.06	159,500	--	--
Oct. 31.....	731.60	153,200	-6,300	2,380
Nov. 30.....	731.59	153,100	-100	1,290
Dec. 31.....	737.08	167,600	+14,500	969
CAL YR 1982.....	--	--	+4,600	24,749
Jan. 31.....	750.16	205,400	+37,800	1,700
Feb. 28.....	750.21	205,500	+100	1,300
Mar. 31.....	750.15	205,300	-200	1,200
Apr. 30.....	750.24	205,600	+300	1,550
May 31.....	749.94	204,700	-900	2,070
June 30.....	749.98	204,800	+100	2,640
July 31.....	749.14	202,200	-2,600	4,100
Aug. 31.....	748.24	199,500	-2,700	2,710
Sept. 30.....	747.20	196,300	-3,200	2,410
WTR YR 1983.....	--	--	+36,800	24,319

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA

LOCATION.--Lat 34°37'06", long 120°07'11", in SE 1/4 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year. 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.--Records poor. No regulation above station. Pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--13 years, 0.89 ft<sup>3</sup>/s, 645 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 900 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 6.10 ft, from floodmarks, from rating curve extended above 70 ft<sup>3</sup>/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 above base of 10 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0915	131	4.51	Mar. 1	0415	*900	6.10
Dec. 22	2015	250	4.77	Mar. 21	0115	94	3.96
Jan. 22	2245	278	4.81	Mar. 24	0100	76	3.87
Jan. 27	0345	530	5.51	Apr. 20	1545	44	3.54
Feb. 8	0200	268	4.57	Apr. 29	2300	44	3.52
Feb. 13	0400	88	3.66				

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.13	0	1.0	235	14	15	1.5	.12	.44	.16
2		0	0	0	.97	190	14	4.0	1.2	.13	.48	.18
3		0	0	0	.95	150	12	3.5	.91	.13	.37	.16
4		0	0	0	.95	93	9.0	3.0	.95	.12	.39	.17
5		0	0	0	.95	76	8.0	2.7	.88	.12	.78	.14
6		0	0	0	.95	56	6.8	2.5	.93	.09	.80	.15
7		0	0	0	.95	43	5.8	2.2	.98	.23	.60	.17
8		0	0	0	.68	34	5.0	1.9	1.0	.25	.23	.17
9		0	0	0	.23	28	4.5	1.7	.81	.21	.16	.17
10		0	0	0	.16	22	4.2	1.9	.72	.19	.17	.17
11		0	0	0	.15	18	4.0	2.0	.59	.23	.21	.12
12		0	0	0	.16	15	3.9	2.1	.32	.21	.22	.10
13		0	0	0	.35	14	3.9	1.9	.30	.28	.24	.13
14		0	0	0	.15	17	3.8	1.6	.23	.50	.31	.15
15		0	0	0	8.0	15	3.7	1.4	.22	.95	2.1	.15
16		0	0	0	3.0	12	3.8	1.5	.26	1.1	.28	.17
17		0	0	0	.96	13	4.8	1.5	.25	.74	.18	.15
18		0	0	.03	.96	15	13	1.4	.23	.83	.49	.15
19		0	0	.02	.98	6.6	12	1.4	.23	.80	1.1	.11
20		0	0	0	1.0	3.1	25	1.4	.26	.64	1.0	.11
21		0	0	0	1.0	28	13	1.5	.28	.59	1.0	.13
22		0	29	23	1.0	12	13	1.6	.19	.70	.73	.17
23		0	5.7	11	1.0	14	9.0	1.7	.19	1.1	.71	.17
24		0	0	32	1.0	38	10	1.8	.17	2.8	.59	.16
25		0	0	3.8	1.2	27	6.7	1.7	.17	1.5	.50	.13
26		0	0	.24	1.4	27	3.5	1.6	.16	.87	.46	.16
27		0	0	110	1.6	25	4.0	1.5	.16	.55	.38	.17
28		0	0	57	20	23	5.0	1.4	.16	.55	.34	.16
29		0	0	62	---	21	6.7	1.3	.15	.55	.32	.19
30		12	0	8.0	---	19	15	1.3	.14	.54	.23	.27
31		---	0	1.1	---	18	---	1.4	---	.51	.27	---
TOTAL	0	12	34.83	308.19	237.82	1307.7	247.1	71.4	14.54	18.13	16.08	4.69
MEAN	0	.40	1.12	9.94	8.49	42.2	8.24	2.30	.48	.58	.52	.16
MAX	0	12	29	110	68	235	25	15	1.5	2.8	2.1	.27
MIN	0	0	0	0	.95	3.1	3.5	1.3	.14	.09	.16	.10
AC-FT	0	24	69	611	472	2590	490	142	29	36	32	9.3
CAL YR 1982	TOTAL	58.09	MEAN	.16	MAX	29	MIN	0	AC-FT	115		
WTR YR 1983	TOTAL	2272.48	MEAN	6.23	MAX	235	MIN	0	AC-FT	4510		

## SANTA YNEZ RIVER BASIN

11128300 ALISAL RESERVOIR NEAR SOLVANG, CA

LOCATION.--Lat 34°32'56", long 120°07'45", in SE 1/4 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is to 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, 2,650 acre-ft Jan. 27, elevation, 602.97 ft; minimum, 2,190 acre-ft Nov. 8, elevation, 597.85 ft.

## MONTH-END ELEVATION NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	598.16	2,210	--
Oct. 31.....	597.91	2,190	-20
Nov. 30.....	598.38	2,230	+40
Dec. 31.....	599.93	2,370	+140
CAL YR 1982.....	--	--	+220
Jan. 31.....	600.24	2,400	+30
Feb. 28.....	601.28	2,500	+100
Mar. 31.....	600.08	2,390	-110
Apr. 30.....	600.12	2,390	0
May 31.....	600.00	2,380	-10
June 30.....	599.90	2,370	-10
July 31.....	599.86	2,370	0
Aug. 31.....	599.76	2,360	-10
Sept. 30.....	599.66	2,350	-10
WTR YR 1983.....	--	--	+140

## 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 mi<sup>2</sup>.

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 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.--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 ft<sup>3</sup>/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, 38,600 ft<sup>3</sup>/s Mar. 1, gage height, 10.62 ft; minimum daily, 1.3 ft<sup>3</sup>/s Nov. 6, 7, Dec. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	53	90	7.6	895	28700	1410	1750	157	20	3.7	2.5
2	74	25	40	7.0	837	23800	1190	1700	180	30	3.6	2.4
3	73	9.8	16	6.8	931	14000	1120	1300	225	40	3.5	2.4
4	71	4.8	7.0	6.6	930	8000	929	1100	200	15	3.5	2.4
5	46	2.5	3.8	6.4	930	5000	1000	900	175	6.0	3.4	2.4
6	40	1.3	3.5	6.0	920	4000	824	700	160	30	3.3	2.4
7	39	1.3	2.8	5.8	910	3000	813	680	150	14	3.3	2.4
8	40	1.9	2.3	5.6	2400	2500	860	720	140	11	3.3	2.4
9	40	12	1.9	5.2	3310	2000	715	750	136	9.0	3.3	2.4
10	42	17	1.5	5.1	2200	1700	731	680	170	8.0	3.2	2.4
11	45	14	1.4	4.9	1750	1600	625	600	145	7.2	3.2	2.4
12	42	9.1	1.4	4.8	1200	1500	632	580	120	7.0	3.1	2.4
13	42	6.3	1.4	4.8	1100	1400	561	500	100	6.6	3.0	2.3
14	41	5.4	1.4	4.7	1220	1300	472	350	125	6.4	3.0	2.3
15	41	5.1	1.3	4.7	1250	1250	472	400	96	6.0	3.0	2.3
16	42	4.6	1.3	4.7	1220	1200	435	500	58	5.8	2.9	2.3
17	42	4.6	1.4	4.7	1000	1200	450	450	60	5.6	2.9	2.3
18	42	5.1	1.4	5.1	800	1200	1500	320	62	5.4	2.8	2.3
19	42	7.1	1.5	61	560	1300	2400	350	100	5.2	2.8	2.3
20	42	12	1.6	28	580	1400	2200	400	76	5.0	2.8	2.3
21	42	9.0	1.7	18	600	1600	2800	350	64	4.8	2.7	2.3
22	44	7.5	573	954	600	1800	3500	270	78	4.7	2.7	2.3
23	44	6.1	317	971	610	1700	2500	300	80	4.5	2.7	2.3
24	45	4.4	83	1120	610	1800	2000	280	35	4.4	2.7	2.3
25	45	3.4	40	280	620	2400	1600	300	42	4.3	2.6	2.3
26	48	3.1	26	400	700	2200	1300	300	70	4.2	2.6	2.3
27	47	2.6	17	4450	5580	1800	1100	250	50	4.1	2.6	2.3
28	46	1.9	14	6060	8390	1500	1050	240	45	4.0	2.6	2.5
29	46	5.0	12	9180	---	1400	1150	230	13	3.9	2.5	2.9
30	51	254	9.6	2470	---	1350	1400	180	40	3.8	2.5	4.0
31	52	---	8.4	1870	---	1300	---	190	---	3.7	2.5	---
TOTAL	1473	498.9	1284.6	27962.5	42653	124900	37739	17620	3152	289.6	92.3	72.8
MEAN	47.5	16.6	41.4	902	1523	4029	1258	568	105	9.34	2.98	2.43
MAX	77	254	573	9180	8390	28700	3500	1750	225	40	3.7	4.0
MIN	39	1.3	1.3	4.7	560	1200	435	180	13	3.7	2.5	2.3
AC-FT	2920	990	2550	55460	84600	247700	74860	34950	6250	574	183	144
CAL YR 1982	TOTAL	5127.20	MEAN	14.0	MAX	573	MIN	0	AC-FT	10170		
WTR YR 1983	TOTAL	257737.7	MEAN	706	MAX	28700	MIN	1.3	AC-FT	511200		

## SANTA YNEZ RIVER BASIN

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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1941 to current year.

GAGE.--Water-stage recorder and concrete low-water control. Altitude of gage is 220 ft, from topographic map.

REMARKS.--Records fair. No regulation above station. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--42 years, 10.6 ft<sup>3</sup>/s, 7,680 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft<sup>3</sup>/s Mar. 15, 1952, gage height, 20.8 ft; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 22	2015	2,990	6.98	Mar. 20	2245	1,180	4.71
Jan. 27	0100	*7,740	10.76	Mar. 23	2330	1,270	4.85
Feb. 7	2315	1,090	4.56	Apr. 19	1930	3,440	7.43
Feb. 27	0430	5,400	9.11				

Minimum daily discharge, 0.05 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.09	.58	12	1.8	60	1070	47	102	15	9.4	6.0	4.8
2	.09	.37	2.7	1.8	65	601	43	55	16	9.3	5.9	4.7
3	.09	.21	1.6	1.7	47	395	40	49	15	8.8	5.7	4.7
4	.09	.14	1.3	1.6	36	215	39	43	14	8.0	5.9	3.7
5	.09	.13	1.2	1.5	121	155	37	39	14	7.4	5.9	3.5
6	.09	.12	1.1	1.5	112	100	35	37	13	7.6	5.6	3.6
7	.09	.20	1.1	1.4	150	70	33	35	13	7.6	4.8	3.5
8	.08	.21	.97	1.4	251	62	32	33	13	7.9	4.8	3.3
9	.08	7.9	.97	1.4	74	56	31	30	13	8.2	5.2	3.3
10	.05	1.5	.98	1.4	57	53	30	29	13	7.1	5.5	3.1
11	.05	.97	.97	1.4	48	51	29	27	12	6.8	5.4	3.0
12	.05	.70	1.1	1.4	83	49	32	26	12	6.5	6.1	2.8
13	.05	.53	1.1	1.4	118	48	27	26	12	6.5	5.5	2.9
14	.06	.48	.97	1.4	47	48	26	25	12	6.6	4.5	2.9
15	.06	.48	1.1	1.4	40	48	25	25	12	7.0	4.6	3.0
16	.06	.57	1.1	1.5	35	60	25	24	12	7.3	5.5	3.1
17	.06	.66	1.1	1.5	32	75	28	23	13	7.6	4.6	3.2
18	.06	.96	.98	4.5	32	85	180	22	12	7.6	6.3	3.2
19	.06	2.6	1.1	29	28	52	394	21	12	7.4	8.4	3.2
20	.06	1.5	1.1	3.6	26	165	535	20	12	7.0	7.2	3.1
21	.05	.91	1.2	2.5	24	128	184	20	12	7.0	5.6	3.5
22	.05	.81	109	847	23	267	117	19	12	7.2	5.2	4.1
23	.05	.96	27	151	23	196	93	20	12	7.3	6.0	4.0
24	.06	.97	6.1	469	29	287	94	19	12	7.1	5.6	3.8
25	.07	.96	3.2	48	409	140	70	19	12	7.0	5.5	3.8
26	.28	.88	2.5	180	547	93	58	17	12	7.2	5.2	3.9
27	.17	.82	2.2	1310	1410	85	49	17	12	7.2	4.2	3.9
28	.09	.99	2.0	748	732	74	105	17	11	7.2	3.7	3.9
29	.08	2.0	1.9	412	---	64	81	16	11	6.9	4.4	4.0
30	.70	19	1.8	100	---	57	69	15	10	6.5	4.9	8.6
31	.79	---	1.8	86	---	53	---	15	---	6.0	4.0	---
TOTAL	3.80	49.11	193.24	4416.1	4659	4902	2588	885	376	228.2	167.7	112.1
MEAN	.12	1.64	6.23	142	166	158	86.3	28.5	12.5	7.36	5.41	3.74
MAX	.79	19	109	1310	1410	1070	535	102	16	9.4	8.4	8.6
MIN	.05	.12	.97	1.4	23	48	25	15	10	6.0	3.7	2.8
AC-FT	7.5	97	383	8760	9240	9720	5130	1760	746	453	333	222

CAL YR 1982	TOTAL	945.50	MEAN	2.59	MAX	125	MIN	.02	AC-FT	1880
WTR YR 1983	TOTAL	18580.25	MEAN	50.9	MAX	1410	MIN	.05	AC-FT	36850

## 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 (discontinued).

WATER TEMPERATURES: Water year 1982 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--

pH: October 1981 to September 1983 (discontinued).

WATER TEMPERATURES: October 1981 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1983 (discontinued).

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.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 8.8 units July 30, Sept. 16; minimum, 7.2 units June 6, 16.

WATER TEMPERATURES: Maximum recorded, 26.0°C July 13, 14; minimum recorded, 5.0°C Jan. 4.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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 04...	1415	.10	1680	7.7	18.5	--	--	--	--	--	--	--	
NOV 01...	1330	.56	1450	7.8	15.5	--	--	--	--	--	--	--	
DEC 01...	1415	9.4	1150*	8.0	11.5	--	--	--	--	--	--	--	
JAN 03...	1215	1.7	1600	8.1	6.0	580	210	140	56	100	27	2	
FEB 01...	1320	48	1120	8.4	13.0	--	--	--	--	--	--	--	
MAR 15...	1400	48	1250*	8.3	15.0	--	--	--	--	--	--	--	
APR 04...	1340	40	1300	8.4	15.0	--	--	--	--	--	--	--	
MAY 03...	1230	54	1190	8.4	16.0	--	--	--	--	--	--	--	
JUN 02...	1215	16	1300	8.1	15.0	--	--	--	--	--	--	--	
JUL 05...	1330	7.1	1280	8.3	20.5	--	--	--	--	--	--	--	
AUG 01...	1315	6.2	1250	8.4	22.0	--	--	--	--	--	--	--	
SEP 07...	1235	3.8	1250	8.1	22.5	--	--	--	--	--	--	--	
DATE		POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (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- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 04...	--	--	--	--	--	--	--	1030	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	--	927	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	716	--	--	--	--	--
JAN 03...	2.7	376		280	120	.50	27	--	1950	.10	.43	630	34
FEB 01...	--	--	--	--	--	--	--	743	--	--	--	--	--
MAR 15...	--	--	--	--	--	--	--	868	--	--	--	--	--
APR 04...	--	--	--	--	--	--	--	830	--	--	--	--	--
MAY 03...	--	--	--	--	--	--	--	797	--	--	--	--	--
JUN 02...	--	--	--	--	--	--	--	896	--	--	--	--	--
JUL 05...	--	--	--	--	--	--	--	824	--	--	--	--	--
AUG 01...	--	--	--	--	--	--	--	804	--	--	--	--	--
SEP 07...	--	--	--	--	--	--	--	819	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

\* Laboratory value

## SANTA YNEZ RIVER BASIN

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.7	7.8	7.9	7.7	7.8	8.0	7.8	7.9			
2	7.8	7.7	7.8	7.9	7.7	7.8	7.9	7.8	7.9			
3	7.8	7.7	7.7	7.9	7.7	7.8	7.9	7.8	7.8			
4	7.8	7.6	7.7	7.9	7.7	7.8	7.9	7.8	7.8			
5	7.8	7.6	7.7	7.9	7.7	7.8	7.9	7.8	7.8			
6	7.8	7.6	7.7	7.9	7.7	7.8	7.9	7.8	7.8			
7	7.8	7.6	7.7	7.8	7.7	7.7	7.9	7.8	7.8			
8	7.8	7.7	7.7	7.9	7.7	7.8	7.9	7.8	7.8			
9	7.8	7.6	7.7	8.3	7.6	7.9	7.9	7.8	7.9			
10	7.8	7.6	7.7	7.8	7.7	7.8	7.9	7.9	7.9			
11	7.8	7.6	7.7	7.8	7.6	7.7	7.9	7.9	7.9			
12	7.7	7.6	7.7	7.8	7.6	7.6	7.9	7.9	7.9			
13	7.8	7.6	7.7	7.8	7.7	7.7	7.9	7.9	7.9			
14	7.8	7.6	7.7	7.7	7.6	7.6	7.9	7.9	7.9			
15	7.8	7.6	7.7	7.8	7.6	7.6	---	---	---			
16	7.7	7.6	7.7	7.6	7.6	7.6	---	---	---			
17	7.8	7.6	7.7	7.7	7.5	7.6	---	---	---			
18	7.8	7.6	7.7	7.6	7.6	7.6	---	---	---			
19	7.8	7.6	7.7	7.7	7.6	7.6	---	---	---			
20	7.8	7.6	7.7	7.8	7.6	7.7	---	---	---			
21	7.9	7.6	7.7	7.8	7.7	7.7	---	---	---			
22	7.8	7.6	7.7	7.8	7.7	7.7	---	---	---			
23	7.9	7.6	7.7	7.8	7.8	7.8	---	---	---			
24	7.7	7.5	7.6	7.9	7.8	7.9	---	---	---			
25	7.6	7.5	7.6	8.0	7.9	7.9	---	---	---			
26	7.8	7.5	7.6	8.0	7.9	7.9	---	---	---			
27	7.9	7.7	7.8	8.0	7.9	7.9	---	---	---			
28	7.8	7.7	7.8	7.9	7.9	7.9	---	---	---			
29	7.8	7.7	7.8	7.9	7.9	7.9	---	---	---			
30	7.7	7.6	7.6	8.0	8.0	8.0	---	---	---			
31	7.9	7.6	7.7	---	---	---	---	---	---			
MONTH	7.9	7.5	7.7	8.3	7.5	7.8	---	---	---			

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1										---	---	---
2										---	---	---
3										---	---	---
4										---	---	---
5										---	---	---
6										---	---	---
7										---	---	---
8										---	---	---
9										---	---	---
10										---	---	---
11										---	---	---
12										---	---	---
13										---	---	---
14										---	---	---
15										---	---	---
16										---	---	---
17										---	---	---
18										---	---	---
19										---	---	---
20										---	---	---
21										---	---	---
22										---	---	---
23										---	---	---
24										---	---	---
25										---	---	---
26										---	---	---
27										8.1	7.7	7.9
28										7.9	7.6	7.7
29										7.8	7.6	7.7
30										7.9	7.6	7.8
31										7.8	7.6	7.8
MONTH										---	---	---



11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA--Continued

PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.8	7.7	7.7	8.6	8.3	8.4	8.5	8.1	8.3	7.9	7.5	7.8
2	8.1	7.6	7.8	8.6	8.4	8.5	8.4	7.9	8.1	8.2	7.7	7.9
3	7.8	7.5	7.6	8.5	8.1	8.3	8.5	7.9	8.2	8.3	7.7	8.0
4	7.7	7.4	7.6	8.3	7.8	8.1	8.5	8.1	8.3	8.2	7.7	7.9
5	7.9	7.4	7.6	8.2	7.8	8.0	8.5	7.8	8.2	8.3	7.6	7.8
6	7.9	7.2	7.6	8.3	7.8	8.0	8.5	8.1	8.3	8.6	7.6	7.8
7	7.7	7.3	7.6	8.3	7.8	8.0	8.6	8.3	8.4	8.0	7.7	7.8
8	7.7	7.5	7.6	8.3	7.8	8.0	8.5	7.9	8.2	8.3	7.8	8.0
9	7.6	7.4	7.6	8.3	7.8	8.0	8.6	7.8	8.1	8.5	7.7	8.1
10	7.7	7.4	7.6	8.3	7.7	8.0	8.7	7.7	8.1	8.4	7.7	8.0
11	7.9	7.6	7.8	8.3	7.7	8.0	8.3	7.7	8.0	8.4	7.6	7.8
12	8.0	7.6	7.8	8.3	7.7	8.0	8.3	7.8	8.1	8.3	7.6	7.9
13	8.0	7.6	7.8	8.3	7.6	7.9	8.1	7.7	7.9	8.6	7.6	7.9
14	8.0	7.6	7.9	8.4	7.7	8.0	8.0	7.5	7.7	8.3	7.6	7.9
15	8.0	7.6	7.8	8.5	7.7	8.0	7.9	7.5	7.7	8.5	7.6	7.9
16	8.0	7.2	7.7	8.4	7.6	8.0	7.9	7.5	7.7	8.8	7.7	7.9
17	7.8	7.5	7.6	8.4	7.6	7.9	7.8	7.6	7.7	8.4	7.7	7.9
18	7.9	7.3	7.6	8.4	7.6	7.9	8.1	7.8	7.9	8.5	7.6	7.9
19	8.1	7.5	7.8	8.4	7.5	7.9	8.2	7.8	8.0	8.2	7.7	7.8
20	8.0	7.7	7.8	8.6	7.7	8.0	8.2	7.8	8.0	8.2	7.7	7.8
21	7.9	7.6	7.8	8.2	7.7	7.9	8.2	7.6	7.8	8.2	7.6	7.8
22	8.0	7.6	7.8	8.3	7.8	7.9	8.2	7.6	7.8	8.4	7.7	8.0
23	8.2	7.8	8.0	8.2	7.7	7.9	8.0	7.5	7.8	8.4	7.8	8.0
24	8.1	7.9	8.0	8.2	7.7	7.9	8.1	7.5	7.7	8.5	7.8	8.0
25	8.3	8.0	8.2	8.1	7.7	7.9	7.9	7.4	7.6	8.5	7.7	8.0
26	8.4	8.2	8.3	8.1	7.8	7.9	7.8	7.4	7.6	8.6	7.8	8.0
27	8.5	8.3	8.4	8.1	7.8	7.9	8.2	7.5	7.7	8.5	7.8	8.0
28	8.6	8.3	8.4	8.1	7.8	7.9	8.5	7.5	7.7	8.3	7.9	8.0
29	8.6	8.4	8.5	8.2	7.8	7.9	8.1	7.5	7.7	8.4	7.9	8.1
30	8.6	8.3	8.4	8.8	7.8	8.1	7.8	7.6	7.7	8.4	7.9	8.2
31	---	---	---	8.5	8.1	8.3	8.0	7.5	7.7	---	---	---
MONTH	8.6	7.2	7.9	8.8	7.5	8.0	8.7	7.4	7.9	8.8	7.5	7.9

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.0	13.0	15.5	13.0	13.5	12.5	8.0	7.0	11.5	10.5	13.5	13.0
2	17.0	12.5	14.5	11.5	12.5	12.0	8.0	7.0	11.0	10.5	13.5	13.0
3	18.0	15.0	14.0	11.0	12.0	12.0	8.0	5.5	10.5	10.0	13.5	13.0
4	19.0	16.0	13.0	10.0	12.0	11.5	8.0	5.0	10.5	10.0	13.5	13.0
5	17.5	13.5	13.0	9.5	12.0	11.5	8.5	5.5	10.5	10.0	13.5	13.0
6	18.0	14.5	13.0	10.0	11.5	11.0	9.0	6.0	11.0	10.5	13.5	13.5
7	18.0	14.5	14.0	12.0	11.5	11.0	10.5	8.5	12.0	11.0	13.5	13.5
8	17.5	14.0	13.5	12.0	11.0	10.5	10.0	7.0	13.0	11.5	14.0	13.5
9	16.5	12.5	12.5	9.0	11.0	10.5	10.5	8.5	12.0	11.0	14.0	14.0
10	16.0	12.0	13.0	12.5	11.0	10.5	9.5	7.0	12.5	12.0	14.0	14.0
11	16.0	12.0	13.0	12.5	11.0	10.5	9.5	6.5	12.5	12.0	14.5	14.0
12	17.5	13.0	12.5	12.0	11.5	11.0	9.0	6.0	13.0	12.5	14.5	14.0
13	16.5	12.0	12.5	12.0	11.5	11.5	9.0	6.0	13.0	12.5	14.5	14.5
14	17.0	12.0	12.0	11.5	11.5	10.5	9.5	6.5	12.5	12.5	14.5	14.0
15	18.0	14.5	12.0	11.0	11.0	10.0	10.0	7.5	12.5	12.5	14.5	14.0
16	18.0	15.0	12.5	12.0	10.0	9.0	12.0	10.0	12.5	12.5	14.5	13.5
17	17.5	14.0	12.5	12.0	10.5	9.0	12.0	9.5	15.0	12.5	14.0	13.5
18	17.5	14.5	12.5	12.5	10.5	9.5	12.0	10.0	15.0	12.0	13.5	13.5
19	18.0	15.0	13.0	12.5	10.5	9.0	12.0	10.5	14.0	11.0	13.5	13.0
20	17.5	14.0	13.0	12.5	10.5	9.0	10.5	9.5	13.5	10.0	13.5	13.0
21	16.5	13.5	12.5	12.0	11.0	10.0	9.5	8.5	14.0	11.0	13.5	12.0
22	17.5	14.5	12.0	11.5	13.0	11.0	12.0	9.5	15.0	12.0	13.0	12.5
23	17.5	15.0	13.0	12.0	12.5	12.0	12.0	11.5	14.5	12.5	13.0	13.0
24	18.5	17.0	13.0	12.5	11.5	11.0	13.0	12.0	13.5	11.5	13.0	13.0
25	18.0	16.5	13.0	12.0	11.0	10.5	12.5	11.5	12.5	10.5	13.0	12.5
26	18.0	16.0	12.5	11.5	10.5	10.5	12.5	11.5	12.5	12.0	13.0	12.5
27	16.0	13.0	12.0	11.0	10.5	10.5	12.5	12.0	13.0	12.0	13.5	12.5
28	15.0	12.0	13.0	12.0	11.0	10.5	12.0	11.0	13.5	13.0	13.5	13.0
29	16.0	12.0	13.5	13.0	11.0	10.0	11.5	11.0	---	---	13.5	13.0
30	15.0	13.5	13.5	13.5	9.5	8.5	11.5	11.0	---	---	14.0	13.5
31	16.5	14.0	---	---	8.5	7.5	11.5	10.5	---	---	14.5	14.0
MONTH	19.0	12.0	15.5	9.0	13.5	7.5	13.0	5.0	15.0	10.0	14.5	12.0

## SANTA YNEZ RIVER BASIN

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.5	14.0	14.5	14.0	15.5	14.5	23.5	16.5	24.0	18.0	21.0	19.0
2	14.5	14.0	14.0	14.0	16.0	13.5	21.5	17.5	24.5	19.0	20.5	18.5
3	14.5	13.5	19.0	14.0	21.0	14.0	23.5	16.0	24.5	19.0	20.5	18.5
4	15.5	12.5	18.0	13.5	19.5	14.5	24.0	16.5	24.5	19.0	20.5	19.0
5	15.0	10.5	17.0	12.5	22.5	15.0	23.5	18.5	24.5	18.5	20.5	19.0
6	16.0	10.0	19.5	13.0	22.5	15.5	23.5	18.5	24.0	19.0	21.0	19.5
7	16.0	10.5	19.5	12.0	22.5	16.5	23.5	17.5	24.0	20.0	22.0	18.5
8	17.0	12.0	20.0	13.0	19.5	16.5	23.0	16.5	24.5	20.0	23.0	18.0
9	14.5	13.0	19.0	12.0	18.5	15.5	23.0	16.0	21.5	20.0	22.5	17.5
10	14.5	12.0	18.5	12.0	22.0	15.5	23.5	16.0	21.0	19.0	22.0	16.5
11	14.5	11.5	20.0	12.5	22.0	15.5	25.0	17.0	21.0	19.0	22.5	17.0
12	14.5	11.0	19.0	13.5	22.5	15.0	25.5	17.5	20.5	19.5	23.0	17.5
13	15.0	11.0	19.5	13.0	24.0	15.5	26.0	18.0	20.5	19.0	23.5	18.5
14	15.5	11.5	20.0	13.5	23.0	16.5	26.0	19.0	20.0	19.5	23.5	19.0
15	15.5	11.5	21.0	14.0	23.0	16.0	24.5	18.5	20.5	19.0	23.5	19.0
16	16.0	11.5	21.0	13.5	24.0	16.5	24.0	18.0	20.5	19.5	23.5	19.0
17	15.0	12.0	22.0	13.0	21.0	17.5	23.0	17.5	20.5	19.5	24.0	19.0
18	13.5	13.5	21.5	13.0	23.5	16.5	23.0	18.0	20.5	20.0	23.5	18.5
19	14.0	13.5	23.0	15.0	23.5	16.0	22.5	17.5	19.5	19.0	22.5	17.5
20	13.5	12.5	23.0	15.0	21.0	16.5	22.0	17.5	19.0	18.0	21.5	18.5
21	13.5	13.5	20.5	16.0	23.0	16.0	22.5	18.0	19.0	18.5	21.5	21.0
22	13.5	13.5	21.0	15.5	23.5	17.0	21.5	18.0	19.0	17.0	22.0	19.5
23	13.5	13.5	20.0	15.5	23.5	17.0	21.0	18.0	20.5	18.5	23.5	18.5
24	14.0	13.5	20.5	15.0	23.5	17.0	21.0	18.0	20.5	19.0	22.5	18.5
25	14.0	14.0	20.5	15.0	21.0	17.0	21.0	18.5	20.0	18.0	22.5	18.5
26	14.5	14.0	20.5	15.0	23.0	16.5	21.0	18.5	20.0	18.5	23.0	18.5
27	14.5	13.5	21.0	15.5	21.5	17.0	21.0	18.0	20.5	19.0	23.0	17.5
28	14.0	14.0	18.0	15.5	20.5	16.5	21.0	18.5	20.5	19.0	21.0	18.0
29	14.0	14.0	22.5	15.0	23.0	16.5	21.5	18.5	20.5	19.0	21.5	17.0
30	14.0	14.0	22.0	15.0	23.0	17.0	21.0	18.5	20.0	19.0	18.5	17.0
31	---	---	20.0	15.0	---	---	20.5	18.0	20.5	19.0	---	---
MONTH	17.0	10.0	23.0	12.0	24.0	13.5	26.0	16.0	24.5	17.0	24.0	16.5

## 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 mi<sup>2</sup>.

## 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. Altitude of main gage is 90 ft, 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 National Geodetic Vertical Datum of 1929.

REMARKS.--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 ft<sup>3</sup>/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 ft<sup>3</sup>/s, gage height, 22.0 ft site and datum then in use, from mean-depth study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42,300 ft<sup>3</sup>/s Mar. 1, gage height, 14.50 ft, from supplementary gage; no flow for several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	41	223	27	1600	27000	1390	1790	272	73	15	9.2
2	0	38	106	26	1060	33200	1230	1520	236	62	13	10
3	0	36	64	24	1020	13500	1120	1170	253	62	11	9.2
4	0	27	48	24	940	3300	1120	849	278	65	13	10
5	0	20	38	22	1080	2000	1010	684	272	57	12	14
6	0	14	32	21	1050	1600	940	600	266	57	10	12
7	0	12	27	20	1010	1300	812	620	260	55	8.4	12
8	0	10	25	19	2840	1200	900	741	236	48	7.6	10
9	0	35	24	19	3610	1100	776	741	219	36	6.9	9.2
10	0	24	22	21	2550	1000	752	590	242	30	6.9	6.9
11	0	16	20	20	1570	960	729	550	247	29	6.2	6.9
12	0	14	17	20	1440	930	707	641	230	27	7.6	9.2
13	0	14	14	18	1930	900	695	610	213	32	9.2	6.2
14	.13	13	13	17	1500	880	610	442	192	27	10	5.6
15	6.0	11	13	16	1460	890	641	552	182	25	9.2	6.2
16	8.2	10	13	16	1410	922	620	591	154	21	10	6.9
17	8.7	10	13	16	1290	1010	590	547	136	21	9.2	7.6
18	11	10	12	17	938	1010	1130	500	124	18	12	10
19	14	12	11	56	824	1090	1990	468	116	18	16	12
20	13	13	12	34	776	1030	1810	498	132	16	18	10
21	15	11	10	30	764	1480	2420	425	120	16	17	9.2
22	17	11	66	696	752	1470	2090	425	113	15	15	9.2
23	18	12	453	1520	741	1180	1450	442	124	15	16	10
24	18	11	161	1650	764	1750	1790	450	124	15	15	13
25	19	10	84	798	940	1830	1440	450	113	13	13	14
26	24	9.8	60	334	1590	1520	1170	400	109	13	14	11
27	27	9.1	45	6480	4910	1410	1020	400	98	12	14	9.2
28	28	9.1	39	2670	11300	1520	980	377	98	12	13	7.6
29	30	15	36	7890	---	1550	1100	377	88	12	12	6.9
30	35	53	32	3040	---	1500	1580	354	73	13	10	14
31	41	---	28	2110	---	1270	---	340	---	14	10	---
TOTAL	333.03	531.0	1761	27671	51659	111302	34612	19144	5320	929	360.2	287.2
MEAN	10.7	17.7	56.8	893	1845	3590	1154	618	177	30.0	11.6	9.57
MAX	41	53	453	7890	11300	33200	2420	1790	278	73	18	14
MIN	0	9.1	10	16	741	880	590	340	73	12	6.2	5.6
AC-FT	661	1050	3490	54890	102500	220800	68650	37970	10550	1840	714	570
CAL YR 1982	TOTAL	5818.92	MEAN	15.9	MAX	453	MIN	0	AC-FT	11540		
WTR YR 1983	TOTAL	253909.43	MEAN	696	MAX	33200	MIN	0	AC-FT	503600		

## SANTA YNEZ RIVER BASIN

11133000 SANTA YNEZ RIVER AT NARROWS, NEAR LOMPOC, CA--Continued

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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
OCT												
15...	1030	5.9	1630	8.0	17.5	--	--	--	--	--	--	--
NOV												
01...	1020	38	1330	8.1	17.0	--	--	--	--	--	--	--
DEC												
01...	1215	286	573*	7.7*	12.0	--	--	--	--	--	--	--
JAN												
03...	0945	25	1520	8.3	8.0	630	330	130	75	85	22	2
FEB												
01...	1115	1340	860	8.4	15.0	--	--	--	--	--	--	--
MAR												
02...	1300	33100	680	7.9	13.0	--	--	--	--	--	--	--
APR												
04...	1115	1050	850	8.2	14.5	--	--	--	--	--	--	--
MAY												
03...	1050	1200	850	8.2	15.5	--	--	--	--	--	--	--
JUN												
02...	1100	237	1050	8.1	16.5	--	--	--	--	--	--	--
JUL												
05...	1025	58	1260	8.0	19.0	--	--	--	--	--	--	--
AUG												
01...	1045	16	1500	8.2	20.0	--	--	--	--	--	--	--
SEP												
07...	1030	13	1580	8.1	20.0	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (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 CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT												
15...	--	--	--	--	--	--	1160	--	--	--	--	--
NOV												
01...	--	--	--	--	--	--	930	--	--	--	--	--
DEC												
01...	--	--	--	--	--	--	433	--	--	--	--	--
JAN												
03...	3.4	309	410	91	.40	23	--	1000 <sup>1</sup>	<.10	.52	430	24
FEB												
01...	--	--	--	--	--	--	--	--	--	--	--	--
MAR												
02...	--	--	--	--	--	--	437	--	--	--	--	--
APR												
04...	--	--	--	--	--	--	529	--	--	--	--	--
MAY												
03...	--	--	--	--	--	--	586	--	--	--	--	--
JUN												
02...	--	--	--	--	--	--	733	--	--	--	--	--
JUL												
05...	--	--	--	--	--	--	852	--	--	--	--	--
AUG												
01...	--	--	--	--	--	--	1040	--	--	--	--	--
SEP												
07...	--	--	--	--	--	--	1080	--	--	--	--	--

<sup>1</sup> Results based on Laboratory Alkalinity value.

&lt; Actual value is known to be less than the value shown.

\* Lab value.

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 mi<sup>2</sup>.

## 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.--Records fair except those below 1.0 ft<sup>3</sup>/s, which are poor. No regulation or diversion above station; some pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--13 years, 2.01 ft<sup>3</sup>/s, 1,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,210 ft<sup>3</sup>/s Jan. 26, 1983, gage height, 7.63 ft, from rating curve extended above 380 ft<sup>3</sup>/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 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 22	1630	125	2.80	Mar. 16	2000	222	3.63
Jan. 26	2400	*1,210	7.63	Mar. 20	2130	374	4.45
Feb. 7	2300	252	3.78	Apr. 19	1800	356	4.35
Mar. 1	0115	868	6.48				

Minimum daily discharge, 0.06 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.25	9.6	.72	7.3	95	11	11	4.8	3.1	2.5	2.3
2	.09	.23	3.4	.73	9.7	64	11	8.0	4.8	3.1	2.2	2.4
3	.10	.22	.96	.73	5.7	43	10	7.7	4.5	2.9	2.3	2.7
4	.11	.26	.96	.73	4.3	33	9.8	7.3	4.5	3.0	2.5	2.9
5	.10	.29	.93	.76	18	23	9.2	7.2	4.2	3.1	2.0	2.9
6	.11	.34	.91	.73	14	21	8.8	7.0	4.1	2.9	2.3	3.1
7	.11	.49	.90	.70	26	17	8.3	7.0	3.9	2.7	2.6	2.9
8	.10	.56	.96	.75	28	15	8.0	6.9	3.7	2.6	2.6	2.9
9	.07	7.9	.96	.80	12	14	7.9	6.8	3.6	2.4	2.7	3.1
10	.07	.91	.91	.99	9.1	12	8.0	6.6	3.7	2.8	2.5	3.2
11	.07	.65	.84	1.1	7.6	17	7.9	6.0	3.5	2.4	2.1	3.4
12	.07	.65	.93	.96	22	14	9.0	6.0	3.7	2.5	2.0	2.8
13	.07	.65	.95	.96	17	12	8.1	5.6	3.6	2.5	2.3	1.6
14	.07	.65	.93	.96	8.2	10	7.9	5.5	3.4	2.6	2.3	1.6
15	.08	.65	.93	.96	7.3	8.1	7.6	5.6	3.8	2.5	2.2	1.5
16	.10	.65	.93	1.0	6.2	30	7.4	5.4	3.7	2.4	1.9	1.5
17	.11	.65	.96	1.0	5.6	15	11	5.3	3.6	2.5	1.9	1.6
18	.09	.99	.96	8.0	5.6	15	26	5.0	3.7	2.5	2.1	1.7
19	.06	2.1	.96	5.4	5.0	9.6	36	5.0	3.8	2.7	2.5	1.6
20	.06	1.7	.96	.73	4.9	32	49	5.2	3.7	2.7	2.1	1.5
21	.06	1.4	1.1	.62	4.8	23	34	5.3	3.6	2.7	2.2	1.3
22	.06	.87	31	96	4.9	45	25	5.5	3.7	2.8	2.3	1.4
23	.08	.89	2.8	25	4.9	60	19	5.3	3.8	2.6	2.3	1.3
24	.14	.65	1.6	15	5.2	47	15	5.2	3.9	2.5	2.4	1.4
25	.11	.65	1.0	9.0	47	37	12	5.1	3.7	2.8	2.5	1.5
26	.23	.65	.90	48	70	33	9.6	5.1	3.7	2.5	2.6	1.5
27	.06	.65	.86	108	88	22	9.8	5.0	3.5	2.2	2.6	1.4
28	.06	.71	.83	89	79	18	14	5.1	3.3	2.4	2.6	1.3
29	.09	3.7	.80	40	---	14	15	5.2	3.1	2.2	2.4	1.3
30	1.4	19	.80	20	---	12	9.5	5.2	3.1	2.7	2.3	1.8
31	.30	---	.80	10	---	12	---	5.1	---	2.6	2.4	---
TOTAL	4.34	49.96	72.33	489.33	527.3	822.7	424.8	187.2	113.7	81.9	72.2	61.4
MEAN	.14	1.67	2.33	15.8	18.8	26.5	14.2	6.04	3.79	2.64	2.33	2.05
MAX	1.4	19	31	108	88	95	49	11	4.8	3.1	2.7	3.4
MIN	.06	.22	.80	.62	4.3	8.1	7.4	5.0	3.1	2.2	1.9	1.3
AC-FT	8.6	99	143	971	1050	1630	843	371	226	162	143	122
CAL YR 1982	TOTAL	369.34	MEAN	1.01	MAX	31	MIN	.06	AC-FT	733		
WTR YR 1983	TOTAL	2907.16	MEAN	7.96	MAX	108	MIN	.06	AC-FT	5770		

## 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 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	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
OCT 04...	1310	.12	1600	8.4	19.0	--	--	--	--	--	--	--
NOV 01...	1230	.25	1650	8.1	16.0	--	--	--	--	--	--	--
DEC 02...	1055	.90	1660	8.2	11.0	--	--	--	--	--	--	--
JAN 04...	1150	.67	1590	8.4	10.0	650	310	140	73	95	24	2
FEB 02...	1145	7.1	1100	8.2	12.0	--	--	--	--	--	--	--
MAR 02...	1235	86	600	7.5	14.0	--	--	--	--	--	--	--
28...	1210	18	1100	8.3	15.0	--	--	--	--	--	--	--
MAY 10...	1350	6.8	1350	8.3	17.0	--	--	--	--	--	--	--
JUN 03...	1015	4.6	1400	8.0	15.5	--	--	--	--	--	--	--
JUL 11...	1230	2.6	1400	8.4	22.0	--	--	--	--	--	--	--
AUG 08...	1045	2.4	1450	8.2	19.0	--	--	--	--	--	--	--
SEP 19...	1145	1.8	1460	8.1	20.0	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CAC03)	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 CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 04...	--	--	--	--	--	--	1130	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	1110	--	--	--	--	--
DEC 02...	--	--	--	--	--	--	1090	--	--	--	--	--
JAN 04...	2.3	350	350	130	.60	40	--	1000 <sup>1</sup>	.20	1.1	170	60
FEB 02...	--	--	--	--	--	--	734	--	--	--	--	--
MAR 02...	--	--	--	--	--	--	387	--	--	--	--	--
28...	--	--	--	--	--	--	718	--	--	--	--	--
MAY 10...	--	--	--	--	--	--	906	--	--	--	--	--
JUN 03...	--	--	--	--	--	--	932	--	--	--	--	--
JUL 11...	--	--	--	--	--	--	973	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	988	--	--	--	--	--
SEP 19...	--	--	--	--	--	--	984	--	--	--	--	--

<sup>1</sup> Results based on Laboratory Alkalinity value.

## 11135000 SANTA YNEZ RIVER AT PINE CANYON, NEAR LOMPOC, CA

LOCATION.--Lat 34°40'20", long 120°29'30", in Lompoc Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank at Floradale Avenue bridge, 2.1 mi upstream from Santa Lucia Creek, 3 mi northwest of Lompoc, and 7 mi upstream from mouth at Pacific Ocean.

DRAINAGE AREA.--844 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1941 to October 1946, August 1964 to September 1983 (discontinued). Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 40.78 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 24, 1964, at different datum. Aug. 24, 1964, to Aug. 20, 1970, at datum 0.91 ft lower.

REMARKS.--Records fair. Flow regulated by Jameson Lake, Gibraltar Reservoir, and 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 pumped from wells along bank for irrigation in valley upstream. Effluent from city of Lompoc contributes to low flow most months.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 78,000 ft<sup>3</sup>/s, estimated, Jan. 25, 1969, gage height, 24.91 ft, present datum, from floodmark; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,800 ft<sup>3</sup>/s, Mar. 1, gage height, 19.21 ft; minimum daily, 1.8 ft<sup>3</sup>/s Nov. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.3	93	13	1800	29700	1310	1080	321	78	14	8.9
2	4.3	4.2	78	12	1220	33100	1220	1090	289	72	12	9.0
3	4.5	3.4	34	12	1120	12900	1120	1090	293	67	11	8.8
4	4.7	3.3	24	11	1070	3190	1090	998	308	70	10	8.7
5	5.0	3.3	17	8.8	1130	1620	1050	980	323	67	10	8.9
6	5.3	3.6	12	7.7	1080	1240	1020	970	306	59	8.9	9.1
7	5.5	3.1	7.7	7.2	1090	1080	981	950	277	56	8.7	9.1
8	6.5	3.0	6.0	6.7	2150	1080	985	940	262	54	8.2	9.3
9	6.7	28	4.5	6.2	2950	1100	934	930	233	52	8.2	8.7
10	6.9	9.0	3.7	5.7	1840	1160	941	920	200	50	8.4	8.9
11	8.7	4.7	3.2	5.0	1050	1320	945	915	209	49	8.1	8.5
12	11	4.0	2.9	4.8	998	1190	916	876	195	42	8.2	8.5
13	11	3.2	2.9	4.8	1160	1480	884	784	176	39	8.3	8.0
14	10	3.0	2.7	4.7	976	1660	821	609	161	36	8.4	8.0
15	8.5	3.0	2.7	4.4	970	1730	822	661	169	35	8.5	8.5
16	8.1	2.8	2.8	4.2	961	1600	829	700	153	33	8.2	8.4
17	7.2	2.5	2.8	4.2	932	1620	839	656	134	31	8.2	8.4
18	7.6	2.3	2.7	38	827	1630	1110	607	126	29	11	8.2
19	6.6	11	2.7	90	799	1720	1640	589	124	26	11	8.5
20	6.8	2.4	2.7	22	779	1680	2060	639	137	24	8.5	8.6
21	7.2	2.1	2.6	16	773	2260	2350	574	121	23	8.1	8.3
22	5.7	2.6	113	819	768	1990	2010	514	116	23	8.3	8.5
23	5.7	5.4	533	1610	766	1670	1020	539	126	21	8.3	8.5
24	14	2.3	290	1430	770	2300	956	522	119	19	8.0	8.4
25	14	2.2	116	909	908	2110	871	523	98	19	7.9	8.7
26	29	1.9	67	469	1690	1730	801	444	94	18	8.4	9.0
27	16	1.8	43	4870	4620	1540	783	435	100	17	8.2	9.2
28	19	1.9	30	1460	9430	1460	811	419	101	16	8.4	9.4
29	5.4	7.0	24	6790	---	1430	931	407	91	15	8.4	9.5
30	49	25	17	5030	---	1380	1010	382	80	14	8.6	12
31	7.0	---	14	2790	---	1210	---	356	---	14	9.0	---
TOTAL	311.0	156.3	1557.6	26465.4	44627	120880	33060	22099	5442	1168	279.4	264.5
MEAN	10.0	5.21	50.2	854	1594	3899	1102	713	181	37.7	9.01	8.82
MAX	49	28	533	6790	9430	33100	2350	1090	323	78	14	12
MIN	4.1	1.8	2.6	4.2	766	1080	783	356	80	14	7.9	8.0
AC-FT	617	310	3090	52490	88520	239800	65570	43830	10790	2320	554	525
CAL YR 1982	TOTAL	5140.3	MEAN	14.1	MAX	533	MIN	1.8	AC-FT	10200		
WTR YR 1983	TOTAL	256310.2	MEAN	702	MAX	33100	MIN	1.8	AC-FT	508400		

## SANTA YNEZ RIVER BASIN

11135000 SANTA YNEZ RIVER AT PINE CANYON, NEAR LOMPOC, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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
OCT												
05...	1410	4.6	1650	7.0	20.0	--	--	--	--	--	--	--
29...	1110	2.0	1950	6.9	18.5	--	--	--	--	--	--	--
DEC												
02...	1230	71	1080	8.2	12.5	--	--	--	--	--	--	--
JAN												
04...	1415	14	1660	7.7	15.0	410	240	90	46	180	48	4
FEB												
02...	1045	1140	848*	8.3	11.0	--	--	--	--	--	--	--
MAR												
15...	1030	1780	791*	8.0	13.5	--	--	--	--	--	--	--
APR												
12...	1130	935	905*	8.4	15.5	--	--	--	--	--	--	--
MAY												
11...	1100	915	975	8.3	17.0	--	--	--	--	--	--	--
JUN												
10...	1330	199	1100	8.3	22.0	--	--	--	--	--	--	--
JUL												
11...	1115	49	1260*	8.2	25.0	--	--	--	--	--	--	--
AUG												
08...	0915	8.4	1420*	--	21.0	--	--	--	--	--	--	--
SEP												
19...	0930	8.9	1650	7.2	21.0	--	--	--	--	--	--	--

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 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)
OCT												
05...	--	--	--	--	--	--	1040	--	--	--	--	--
29...	--	--	--	--	--	--	1150	--	--	--	--	--
DEC												
02...	--	--	--	--	--	--	620	--	--	--	--	--
JAN												
04...	8.8	170	380	180	.60	26	--	11000	8.0	4.60	500	25
FEB												
02...	--	--	--	--	--	--	583	--	--	--	--	--
MAR												
15...	--	--	--	--	--	--	523	--	--	--	--	--
APR												
12...	--	--	--	--	--	--	614	--	--	--	--	--
MAY												
11...	--	--	--	--	--	--	650	--	--	--	--	--
JUN												
10...	--	--	--	--	--	--	745	--	--	--	--	--
JUL												
11...	--	--	--	--	--	--	940	--	--	--	--	--
AUG												
08...	--	--	--	--	--	--	983	--	--	--	--	--
SEP												
19...	--	--	--	--	--	--	1040	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

\* Lab value.



## 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 580 ft, from topographic map.

REMARKS.--Records poor. No regulation above station. Pumping for irrigation of about 1,000 acres above station.

AVERAGE DISCHARGE.--13 years, 2.43 ft<sup>3</sup>/s, 1,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,230 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 11.6 ft, from floodmarks, from rating curve extended above 150 ft<sup>3</sup>/s on basis of flow-through-culverts measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges, above base of 30 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 22	2100	311	3.28	Mar. 1	0345	*3,230	11.6
Jan. 27	0145	850	6.28	Mar. 20	2345	366	3.88
Feb. 8	0115	264	3.47	Mar. 23	2400	277	3.53
Feb. 13	Unknown	Unknown	Unknown	Apr. 20	1015	71	2.20

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.03	.05	40	1430	17	2.7	.47	.04		0
2		0	.23	.05	33	1060	13	1.5	.53	0		0
3		0	.10	.05	37	511	10	1.2	.52	.15		0
4		0	.06	.04	22	150	8.6	1.1	.45	.55		0
5		0	.04	.04	12	100	7.2	.93	.42	.20		0
6		0	.03	.04	45	80	5.8	.78	.41	.45		0
7		0	.03	.03	36	65	3.0	.66	.43	.36		0
8		0	.03	.03	123	48	3.9	.67	.49	.29		0
9		0	0	.03	30	33	3.3	.45	.50	.11		0
10		.17	0	.03	27	28	3.2	.55	.47	0		0
11		0	0	.02	23	23	2.9	.66	.41	0		0
12		0	0	.02	21	19	4.2	.66	.43	0		0
13		0	0	.02	80	24	1.7	.66	.43	0		0
14		0	0	.02	25	18	.84	.45	.38	0		0
15		0	0	.02	19	13	.88	.45	.37	0		0
16		0	0	.02	17	15	.85	.45	.38	0		0
17		0	0	.02	15	16	1.3	.45	.51	0		0
18		0	0	.22	13	54	13	.45	.42	0		0
19		.09	0	.32	12	24	13	.45	.32	0		0
20		0	0	.05	11	39	31	.55	.40	0		0
21		0	0	.04	11	114	26	.43	.36	0		0
22		0	2.0	58	10	67	6.5	.51	.45	0		0
23		0	1.0	44	9.6	68	4.5	.55	.36	0		0
24		0	.20	79	9.2	145	3.6	.60	.66	0		0
25		0	.12	15	50	76	2.4	.57	.36	0		0
26		0	.09	6.1	170	56	1.9	.59	.45	0		0
27		0	.07	330	100	48	1.5	.50	.55	0		0
28		0	.06	100	177	44	2.3	.49	.36	0		0
29		1.1	.05	250	---	36	2.5	.49	.18	0		0
30		1.2	.05	90	---	26	3.8	.45	.08	0		.01
31		---	.04	55	---	22	---	.42	---	0		---
TOTAL	0	2.56	4.23	1028.26	1177.8	4452	199.67	21.37	12.55	2.15	0	0.01
MEAN	0	.085	.14	33.2	42.1	144	6.66	.69	.42	.069	0	.000
MAX	0	1.2	2.0	330	177	1430	31	2.7	.66	.55	0	.01
MIN	0	0	0	.02	9.2	13	.84	.42	.08	0	0	0
AC-FT	0	5.1	8.4	2040	2340	8830	396	42	25	4.3	0	.02
CAL YR 1982	TOTAL	19.20	MEAN	.053	MAX	3.6	MIN	0	AC-FT	38		
WTR YR 1983	TOTAL	6900.60	MEAN	18.9	MAX	1430	MIN	0	AC-FT	13690		

## 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 center pile bent 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Concrete control since August 1970. Altitude of gage is 160 ft, from topographic map. Prior to June 27, 1958, at datum 2.00 ft higher.

REMARKS.--Records 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.--28 years, 6.73 ft<sup>3</sup>/s, 4,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,680 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 14.32 ft, from rating curve extended above 1,100 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 12.93 ft; minimum daily, 0.10 ft<sup>3</sup>/s June 19, 20, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended as explained above:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 22	2145	557	8.08	Mar. 1	0930	*4,680	14.32
Jan. 27	0730	2,330	11.75	Mar. 20	1745	368	7.41
Feb. 8	0715	799	8.80	Mar. 23	1930	277	7.00
Feb. 13	0545	417	7.62	Apr. 20	0930	253	6.88
Feb. 26	0500	963	9.22				

Minimum daily discharge, 0.29 ft<sup>3</sup>/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	.95	34	3.3	47	1800	19	13	2.4	1.6	1.8	1.4
2	.31	.95	9.1	2.4	46	2040	17	7.8	2.5	1.6	1.8	1.4
3	.31	.82	5.1	1.7	42	900	15	5.4	2.6	1.6	1.7	1.3
4	.31	.75	6.8	1.5	23	440	13	4.8	2.5	1.6	2.0	1.4
5	.29	.75	8.1	1.4	80	175	12	4.3	2.8	1.6	1.7	1.4
6	.30	.69	5.1	1.3	103	120	10	4.2	2.4	1.6	2.0	1.4
7	.32	.71	4.1	1.2	81	80	9.0	3.8	2.8	1.6	1.6	1.4
8	.31	.69	4.9	1.2	441	66	30	3.7	2.5	1.5	1.5	1.3
9	.31	1.0	3.5	1.1	104	55	20	3.8	2.3	1.5	1.5	1.3
10	.32	1.2	3.4	1.1	58	45	15	3.8	2.2	1.5	3.0	1.3
11	.33	.92	2.3	1.2	40	39	14	3.7	2.1	1.5	2.0	1.3
12	.31	.76	3.0	1.1	47	35	35	3.6	2.1	1.5	2.4	1.3
13	.32	.66	3.5	1.1	235	50	15	3.5	2.0	1.5	2.5	1.3
14	.33	.62	3.3	1.5	70	38	7.3	3.4	1.9	1.5	1.8	1.3
15	.36	.56	3.5	1.6	50	29	6.7	3.3	1.9	1.5	1.9	1.3
16	.37	.55	3.7	1.4	44	24	6.1	3.2	1.9	1.7	1.6	1.3
17	.36	.53	3.0	1.3	36	30	6.5	3.1	1.9	1.6	1.6	1.3
18	.36	.53	2.8	1.3	31	80	55	3.0	1.8	1.5	1.6	1.3
19	.37	.77	2.2	1.4	26	45	16	2.9	1.8	1.7	2.0	1.3
20	.37	.54	2.0	5.5	21	200	101	2.8	1.8	1.5	1.9	1.2
21	.40	1.0	1.9	2.8	18	130	62	3.0	1.8	1.4	1.7	1.3
22	.41	1.5	7.8	123	16	120	21	3.0	1.7	1.6	1.6	1.3
23	.39	1.7	39	239	15	250	12	3.5	2.3	1.5	1.5	1.2
24	.48	1.4	9.1	128	17	180	12	3.3	1.9	1.6	1.5	1.3
25	.50	1.7	4.0	58	37	80	9.1	2.8	1.8	1.7	1.5	1.3
26	.70	2.6	2.7	23	487	50	7.5	2.9	1.8	2.0	1.5	1.3
27	.51	2.6	1.9	1110	456	40	7.8	2.8	1.7	1.6	1.5	1.2
28	.50	2.4	1.9	260	278	35	12	3.2	1.7	1.6	1.4	1.2
29	.56	4.9	4.7	867	---	30	9.3	2.9	1.6	1.6	1.4	1.2
30	1.0	38	4.7	150	---	26	18	2.6	1.6	1.7	1.4	1.3
31	1.1	---	4.2	77	---	22	---	2.4	---	1.7	1.4	---
TOTAL	13.13	72.75	195.3	3084.0	2949	7254	593.3	119.5	62.1	49.2	54.3	39.1
MEAN	.42	2.42	6.30	99.5	105	234	19.8	3.85	2.07	1.59	1.75	1.30
MAX	1.1	38	39	1110	487	2040	101	13	2.8	2.0	3.0	1.4
MIN	.29	.53	1.9	1.1	15	22	6.1	2.4	1.6	1.4	1.4	1.2
AC-FT	26	144	387	6120	5850	14390	1180	237	123	98	108	78
CAL YR 1982	TOTAL	842.29	MEAN	2.31	MAX	79	MIN	.24	AC-FT	1670		
WTR YR 1983	TOTAL	14485.68	MEAN	39.7	MAX	2040	MIN	.29	AC-FT	28730		

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## 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 (discontinued).

WATER TEMPERATURES: December 1981 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--

pH: December 1981 to September 1983 (discontinued).

WATER TEMPERATURES: December 1981 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor from December 1981 to September 1983.

EXTREMES FOR PERIOD OF 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.

EXTREMES FOR CURRENT YEAR.--

pH: Maximum, 8.8 units Feb. 5; minimum, 7.2 units Jan. 27, Feb. 25, 26.

WATER TEMPERATURES: Maximum recorded, 31.0°C Aug. 7; minimum recorded, 5.0°C Jan. 1-3.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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
OCT												
01...	1110	.28	3100	8.0	14.0	--	--	--	--	--	--	--
NOV												
02...	1100	.92	2800	8.0	13.0	600	170	160	49	400	58	7
DEC												
02...	1150	8.8	1220*	8.1	9.5	--	--	--	--	--	--	--
JAN												
06...	1205	1.3	2530	8.2	9.0	--	--	--	--	--	--	--
FEB												
03...	1220	39	1090	7.5	9.5	340	180	80	34	110	36	3
MAR												
16...	1205	25	1920	8.0	16.5	--	--	--	--	--	--	--
APR												
14...	1115	7.3	2740*	8.2	19.0	--	--	--	--	--	--	--
MAY												
09...	1145	3.8	3200	8.0	21.0	730	320	180	67	380	53	6
JUL												
05...	1315	1.6	3220	8.2	23.0	--	--	--	--	--	--	--
AUG												
01...	1305	1.7	2850	8.2	27.0	610	210	160	52	370	56	7
SEP												
01...	1310	1.4	3200	8.0	27.5	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (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 SI02)	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- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT												
01...	--	--	--	--	--	--	2110	--	--	--	--	--
NOV												
02...	20	430	310	530	.30	53	--	11800	8.4	4.6	2400	60
DEC												
02...	--	--	--	--	--	--	866	--	--	--	--	--
JAN												
06...	--	--	--	--	--	--	1730	--	--	--	--	--
FEB												
03...	63	160	240	140	.50	25	--	1790	2.8	3.1	300	110
MAR												
16...	--	--	--	--	--	--	1310	--	--	--	--	--
APR												
14...	--	--	--	--	--	--	1830	--	--	--	--	--
MAY												
09...	16	445	430	470	.40	44	--	11800	2.0	3.1	2000	20
JUL												
05...	--	--	--	--	--	--	1990	--	--	--	--	--
AUG												
01...	18	429	330	470	.30	10	--	11700	4.9	3.4	2200	80
SEP												
01...	--	--	--	--	--	--	1880	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

\* Laboratory value

OCTOBER				NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.2	7.8	7.9	8.0	7.7	7.8	8.1	7.9	8.0	---	---	---
2	8.1	7.8	7.9	8.0	7.8	7.8	8.3	8.1	8.1	---	---	---
3	8.0	7.9	7.9	8.1	7.7	7.8	8.5	8.1	8.2	---	---	---
4	8.0	7.8	7.9	8.1	7.8	7.9	8.6	8.1	8.3	---	---	---
5	8.1	7.8	7.9	8.1	7.8	7.9	8.6	8.2	8.3	---	---	---
6	8.1	7.8	7.9	8.1	7.8	7.9	8.6	8.2	8.3	---	---	---
7	8.0	7.8	7.9	8.0	7.9	7.9	8.6	8.1	8.3	---	---	---
8	8.0	7.7	7.9	8.0	7.8	7.9	8.7	8.2	8.4	7.8	7.8	7.8
9	8.0	7.7	7.8	8.0	7.9	7.9	8.5	8.3	8.3	7.8	7.7	7.8
10	7.9	7.7	7.8	8.0	7.9	7.9	---	---	---	7.8	7.7	7.7
11	7.9	7.7	7.8	8.1	7.8	7.9	---	---	---	7.8	7.7	7.7
12	7.8	7.7	7.8	8.1	7.8	7.9	---	---	---	7.8	7.7	7.7
13	7.9	7.7	7.8	8.2	7.7	7.9	---	---	---	7.8	7.7	7.7
14	7.9	7.7	7.8	8.2	7.7	7.9	---	---	---	7.8	7.7	7.8
15	7.8	7.7	7.8	8.1	7.8	7.9	---	---	---	7.8	7.7	7.8
16	7.9	7.7	7.8	8.0	7.9	7.9	---	---	---	7.8	7.6	7.7
17	7.9	7.8	7.8	8.2	7.8	7.9	---	---	---	7.8	7.6	7.7
18	7.9	7.8	7.8	8.0	7.9	7.9	---	---	---	7.8	7.7	7.7
19	7.9	7.7	7.8	8.0	7.8	7.9	---	---	---	8.0	7.7	7.9
20	7.9	7.7	7.8	8.4	7.8	8.0	---	---	---	7.8	7.7	7.8
21	7.9	7.7	7.8	8.5	7.9	8.0	---	---	---	7.8	7.7	7.8
22	7.9	7.7	7.8	8.1	8.0	8.0	---	---	---	7.7	7.3	7.6
23	7.9	7.7	7.8	8.1	8.0	8.0	---	---	---	7.7	7.5	7.6
24	7.8	7.7	7.8	8.2	7.9	8.0	---	---	---	7.7	7.5	7.6
25	7.8	7.8	7.8	8.5	7.9	8.1	---	---	---	7.8	7.6	7.7
26	7.9	7.8	7.8	8.3	8.0	8.1	---	---	---	7.8	7.8	7.8
27	7.9	7.8	7.8	8.5	8.0	8.1	---	---	---	7.7	7.2	7.6
28	8.0	7.7	7.9	8.1	8.0	8.1	---	---	---	7.7	7.4	7.7
29	8.0	7.8	7.9	8.1	8.0	8.1	---	---	---	7.9	7.4	7.7
30	7.9	7.8	7.9	8.1	7.9	8.0	---	---	---	7.7	7.6	7.6
31	8.0	7.8	7.8	---	---	---	---	---	---	7.6	7.5	7.6
MONTH	8.2	7.7	7.8	8.5	7.7	7.9	---	---	---	---	---	---
FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	7.4	7.5	8.1	7.4	7.7	---	---	---	---	---	---
2	7.9	7.4	7.5	7.9	7.5	7.6	---	---	---	---	---	---
3	7.5	7.3	7.4	---	---	---	---	---	---	---	---	---
4	7.4	7.3	7.3	---	---	---	---	---	---	---	---	---
5	8.8	7.3	7.6	---	---	---	---	---	---	---	---	---
6	8.3	7.4	7.6	---	---	---	---	---	---	---	---	---
7	7.9	7.4	7.6	---	---	---	---	---	---	---	---	---
8	7.6	7.3	7.5	---	---	---	---	---	---	---	---	---
9	7.6	7.4	7.5	---								

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA--Continued

## PH (UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	7.9	7.9	8.0	7.7	7.8	8.3	7.9	8.0	8.3	8.0	8.2
2	8.0	7.9	7.9	8.1	7.7	7.8	8.2	7.8	8.0	8.3	8.1	8.2
3	8.0	7.9	7.9	8.0	7.7	7.8	8.2	7.9	8.0	8.3	8.1	8.2
4	8.0	7.9	8.0	8.1	7.7	7.8	8.3	7.9	8.1	8.3	8.1	8.2
5	8.0	7.9	8.0	8.5	7.7	7.9	8.4	7.9	8.1	8.2	8.1	8.1
6	8.0	7.9	7.9	8.5	7.8	8.0	8.3	7.8	8.1	8.3	8.1	8.2
7	8.0	7.9	7.9	8.5	7.8	8.1	8.3	7.8	8.0	8.3	8.2	8.2
8	8.0	7.9	7.9	8.5	7.8	8.1	8.2	7.9	8.0	8.3	8.2	8.2
9	8.0	7.9	7.9	8.5	7.8	8.1	8.1	7.9	8.0	8.3	8.2	8.3
10	8.0	7.9	7.9	8.6	7.8	8.1	8.0	7.9	7.9	8.3	8.1	8.2
11	8.0	7.9	8.0	8.5	7.8	8.1	8.1	7.9	8.0	8.2	8.1	8.2
12	8.0	7.9	8.0	8.5	7.8	8.1	8.1	8.0	8.0	8.3	8.1	8.2
13	8.0	7.8	7.9	8.5	7.8	8.1	8.1	8.0	8.0	8.3	8.1	8.2
14	8.1	7.8	8.0	8.4	7.8	8.0	8.1	8.0	8.1	8.2	8.1	8.2
15	8.1	7.9	8.0	8.5	7.9	8.1	8.2	8.1	8.1	8.2	8.1	8.1
16	8.1	7.8	8.0	8.5	7.9	8.1	8.3	8.1	8.2	8.2	8.1	8.1
17	8.1	7.8	7.9	8.5	7.9	8.1	8.3	8.1	8.2	8.2	8.1	8.1
18	8.0	7.8	7.9	8.4	7.8	8.1	8.2	8.2	8.2	8.2	8.1	8.1
19	8.0	7.7	7.9	8.4	7.8	8.1	8.3	8.1	8.2	8.2	8.1	8.2
20	8.0	7.7	7.8	8.3	7.8	8.0	8.2	8.1	8.2	8.2	8.1	8.1
21	7.9	7.7	7.8	8.3	7.8	8.0	8.2	8.1	8.2	8.3	8.1	8.2
22	7.9	7.7	7.8	8.3	7.8	8.0	8.2	8.1	8.2	8.3	8.2	8.2
23	7.9	7.7	7.8	8.2	7.8	7.9	8.3	8.2	8.2	8.3	8.2	8.3
24	7.9	7.7	7.8	8.2	7.8	7.9	8.3	8.2	8.2	8.3	8.2	8.2
25	7.9	7.7	7.8	8.2	7.8	7.9	8.3	8.1	8.2	8.3	8.2	8.2
26	7.9	7.7	7.8	8.1	7.8	7.9	8.3	8.1	8.2	8.3	8.2	8.2
27	7.9	7.7	7.8	8.1	7.8	7.9	8.3	8.1	8.2	8.3	8.2	8.2
28	7.9	7.7	7.8	8.0	7.8	7.9	8.3	8.2	8.3	8.3	8.2	8.2
29	8.0	7.7	7.8	8.0	7.8	7.9	8.3	8.2	8.2	8.2	8.1	8.2
30	8.0	7.7	7.8	8.1	7.8	7.9	8.2	8.1	8.2	8.2	8.0	8.1
31	---	---	---	8.1	7.9	7.9	8.2	8.1	8.1	---	---	---
MONTH	8.1	7.7	7.9	8.6	7.7	8.0	8.4	7.8	8.1	8.3	8.0	8.2
YEAR	8.8	7.2	7.9									

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	15.0	12.5	14.0	12.5	12.0	10.5	6.5	5.0	10.5	10.0	13.5	13.0
2	15.0	12.0	13.0	11.5	10.0	9.0	6.5	5.0	10.5	10.5	---	---
3	14.5	12.5	12.5	11.0	11.0	9.5	7.0	5.0	10.5	9.5	---	---
4	15.5	14.0	12.0	10.0	10.5	9.0	8.0	6.0	10.0	9.5	---	---
5	15.0	12.5	11.5	9.5	11.0	9.5	8.5	6.5	10.0	9.5	---	---
6	14.5	12.5	11.5	10.0	11.0	9.5	9.0	7.0	10.5	10.0	---	---
7	14.5	12.5	11.5	10.5	10.0	9.0	9.5	7.5	11.5	11.0	---	---
8	14.5	12.5	11.5	10.0	9.5	8.5	9.5	7.5	12.0	11.0	---	---
9	14.5	12.0	10.5	10.0	10.0	8.5	10.5	8.5	12.0	10.5	---	---
10	14.0	12.0	10.5	10.0	10.0	8.5	10.0	8.0	12.0	11.0	---	---
11	14.0	12.0	10.0	9.0	9.5	8.0	9.5	7.5	12.5	12.0	---	---
12	14.5	12.0	10.0	8.5	10.0	9.0	9.5	7.0	12.5	12.0	---	---
13	14.0	12.0	9.5	8.0	10.5	9.5	9.5	7.0	13.0	12.0	---	---
14	14.0	12.0	9.5	7.5	9.0	7.5	9.5	7.5	12.5	11.5	---	---
15	15.0	13.0	9.0	7.5	8.5	7.5	10.0	8.0	12.0	11.5	---	---
16	15.0	13.5	10.0	8.5	8.5	7.0	11.5	9.5	12.5	12.0	---	---
17	14.5	13.0	10.0	8.5	9.5	7.5	11.0	9.0	12.5	12.0	---	---
18	14.0	12.5	11.5	9.5	9.0	8.0	11.0	9.0	13.0	12.5	---	---
19	15.0	13.5	12.0	11.0	9.0	7.5	10.5	9.0	13.0	12.5	---	---
20	15.0	13.0	11.0	10.0	10.0	8.5	9.0	7.5	12.5	12.0	---	---
21	15.0	13.5	9.5	9.0	11.0	9.0	8.5	7.0	12.5	12.0	---	---
22	15.5	14.0	10.5	9.5	12.5	11.0	11.5	8.5	12.5	12.0	---	---
23	15.5	14.0	11.5	10.5	11.5	9.5	12.5	11.0	13.0	12.5	---	---
24	16.5	15.0	12.0	11.0	9.5	7.5	14.0	12.5	13.0	12.5	---	---
25	16.5	16.0	11.0	10.0	8.0	6.5	12.5	10.5	13.0	12.0	---	---
26	16.5	15.5	11.0	10.0	8.5	7.0	12.5	11.5	13.0	12.0	---	---
27	15.0	13.5	10.5	9.0	9.0	7.5	12.0	11.5	13.5	12.5	---	---
28	14.0	12.0	11.5	10.5	10.0	8.5	12.0	10.5	13.5	13.0	---	---
29	13.5	11.5	13.0	11.5	9.5	7.5	11.0	9.5	---	---	---	---
30	13.5	12.5	13.0	12.0	8.0	6.5	11.0	10.0	---	---	---	---
31	14.0	13.0	---	---	7.5	5.5	11.0	10.0	---	---	---	---
MONTH	16.5	11.5	14.0	7.5	12.5	5.5	14.0	5.0	13.5	9.5	---	---

## SAN ANTONIO CREEK BASIN

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	17.5	14.0	27.0	14.0	29.0	18.0	28.0	16.5
2			---	---	22.0	14.0	26.5	16.5	28.0	18.0	28.5	15.5
3			---	---	25.5	14.5	28.0	14.0	29.0	18.0	27.0	15.5
4			---	---	24.0	15.0	28.5	14.5	28.5	18.5	28.5	18.0
5			---	---	27.5	15.5	27.0	20.0	29.5	16.0	28.0	18.5
6			---	---	26.0	15.5	27.5	18.0	28.5	17.0	29.5	18.5
7			---	---	25.5	15.5	27.0	15.5	31.0	18.5	28.0	17.5
8			---	---	24.0	16.5	26.5	14.0	29.5	19.5	27.5	17.0
9			---	---	24.0	15.5	28.0	14.0	24.5	19.0	27.5	14.5
10			---	---	27.5	15.5	29.0	15.5	27.0	17.5	28.0	15.0
11			---	---	25.0	14.0	30.0	15.0	29.0	18.0	29.5	16.0
12			---	---	26.5	12.5	29.5	15.5	28.5	18.0	29.5	16.5
13			---	---	28.5	13.5	30.5	16.5	29.5	18.0	29.0	17.0
14			---	---	27.0	15.5	29.5	18.0	24.0	18.5	28.5	18.5
15			---	---	26.5	14.0	28.0	17.0	30.5	17.5	28.0	18.5
16			---	---	28.0	14.0	27.0	17.0	30.5	17.5	27.5	18.5
17			---	---	22.0	16.5	28.0	16.5	30.0	19.0	27.5	18.5
18			---	---	27.5	15.5	27.5	16.5	21.5	19.5	27.5	18.0
19			---	---	27.5	13.5	27.5	14.0	21.0	18.0	26.5	16.5
20			28.0	15.0	24.5	14.5	29.0	14.0	21.0	17.5	25.0	16.5
21			22.0	16.0	27.5	16.0	29.0	14.5	24.5	17.5	28.0	21.0
22			21.0	16.0	26.5	16.5	26.5	17.0	27.0	15.0	22.5	19.0
23			22.5	15.5	28.0	16.5	27.5	17.0	28.0	15.5	26.5	17.5
24			26.0	15.5	27.5	15.5	28.0	17.0	26.5	17.5	26.0	16.0
25			24.5	15.0	23.0	16.5	28.5	17.5	27.0	15.0	24.5	18.0
26			23.5	15.5	26.0	16.0	27.0	17.5	28.5	16.0	24.0	16.5
27			26.0	15.5	24.5	16.0	26.5	17.0	29.0	15.0	24.0	16.5
28			19.0	15.5	26.5	16.0	28.5	17.5	28.5	16.0	21.5	17.0
29			26.0	15.0	27.0	16.0	29.0	17.5	29.0	18.0	21.0	16.0
30			26.0	13.5	25.5	13.5	24.5	18.0	26.0	17.0	18.5	16.0
31			25.0	14.5	---	---	26.0	17.5	27.5	17.0	---	---
MONTH			---	---	28.5	12.5	30.5	14.0	31.0	15.0	29.5	14.5

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 mi<sup>2</sup>.

## 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. Altitude of gage is 760 ft, from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REVISED RECORDS.--WDR-CA-77-1: 1976.

REMARKS.--Records poor. No regulation above station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

AVERAGE DISCHARGE.--26 years (water years 1904, 1905, 1960-83) 25.5 ft<sup>3</sup>/s, 18,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 13.70 ft, from rating curve extended above 4,900 ft<sup>3</sup>/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 discharge above base of 200 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 6,400 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 12.66 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0730	1,180	7.51	Mar. 1	1330	*13,300	12.66
Dec. 23	1530	992	7.36	Mar. 24	2045	2,350	8.43
Jan. 27	1845	3,640	8.97	Apr. 18	1615	211	6.84
Feb. 8	Unknown	Unknown	Unknown				

Minimum daily discharge, 0.50 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.77	134	6.7	100	5090	210	98	36	14	5.7	3.9
2	.52	.68	21	6.4	78	6110	200	90	35	11	5.8	3.9
3	.50	.64	17	6.0	66	3000	190	84	34	10	6.2	3.8
4	.50	.60	12	6.2	60	2000	180	80	32	9.5	6.1	3.7
5	.50	.58	10	6.4	55	1000	175	78	31	12	5.7	3.7
6	.50	.57	8.0	6.4	55	700	154	74	29	11	5.7	3.6
7	.50	.56	7.2	6.1	57	500	133	70	28	10	5.7	3.5
8	.50	.55	6.6	5.8	700	400	120	66	27	9.6	5.6	3.5
9	.54	3.3	6.0	6.1	450	278	114	62	27	8.7	5.4	3.7
10	.62	19	5.8	5.9	300	229	111	58	26	8.0	5.4	3.6
11	.62	15	5.3	5.8	320	170	109	56	24	8.1	5.4	3.5
12	.59	5.7	5.1	5.8	340	118	103	54	25	8.2	5.2	3.6
13	.58	5.6	5.0	5.7	250	100	106	52	25	7.7	5.0	3.5
14	.56	4.7	4.8	5.6	180	98	95	50	24	7.3	5.4	3.4
15	.50	3.3	4.6	5.6	118	75	90	47	23	7.1	5.9	3.5
16	.51	2.7	4.5	6.3	77	72	88	45	21	7.1	5.0	3.5
17	.56	2.3	4.5	6.1	58	73	86	44	20	7.2	4.6	3.4
18	.56	3.3	4.4	7.4	51	331	159	43	21	7.2	8.9	3.5
19	.54	5.9	4.1	19	40	336	126	41	21	7.1	31	3.5
20	.54	3.2	4.1	9.9	33	156	135	40	20	7.2	26	3.7
21	.61	2.6	4.3	8.0	28	1130	125	40	20	7.0	9.9	4.1
22	.59	2.5	164	279	24	1200	96	40	20	6.8	6.1	4.5
23	.59	5.0	252	635	21	1070	90	40	20	6.7	5.4	4.4
24	.61	5.4	34	586	22	1910	98	40	19	6.6	5.0	4.3
25	.62	3.4	17	328	39	1200	95	40	18	6.5	4.8	4.5
26	.89	3.0	15	120	226	600	92	40	17	6.5	4.6	4.7
27	.66	2.9	13	2110	271	350	87	39	17	6.4	4.5	4.9
28	.66	2.9	11	1180	134	270	84	39	17	6.3	4.4	5.3
29	.66	4.9	9.7	1090	---	250	90	39	17	6.1	4.2	6.1
30	2.6	361	8.5	500	---	240	100	37	15	6.1	4.1	10
31	1.4	---	7.4	300	---	220	---	36	---	6.0	4.0	---
TOTAL	20.66	472.55	809.9	7275.2	4153	29276	3641	1662	709	249.0	216.7	124.8
MEAN	.67	15.8	26.1	235	148	944	121	53.6	23.6	8.03	6.99	4.16
MAX	2.6	361	252	2110	700	6110	210	98	36	14	31	10
MIN	.50	.55	4.1	5.6	21	72	84	36	15	6.0	4.0	3.4
AC-FT	41	937	1610	14430	8240	58070	7220	3300	1410	494	430	248
CAL YR 1982	TOTAL	5659.25	MEAN	15.5	MAX	523	MIN	.18	AC-FT	11230		
WTR YR 1983	TOTAL	48609.81	MEAN	133	MAX	6110	MIN	.50	AC-FT	96420		

## 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 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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 05...	1200	.50	1300	8.2	20.5	--	--	--	--	--	--	--
NOV 01...	1020	.77	1280	8.4	16.5	560	290	120	63	98	27	2
DEC 01...	1230	122	2500	7.9	7.5	--	--	--	--	--	--	--
JAN 05...	1105	6.2	2280	8.3	11.0	--	--	--	--	--	--	--
FEB 01...	1135	197	1050*	8.5	10.0	440	230	110	40	67	25	1
MAR 10...	1200	242	1390*	8.2	18.0	--	--	--	--	--	--	--
APR 05...	1350	174	1290*	8.5	13.0	--	--	--	--	--	--	--
MAY 05...	1205	80	1500	8.2	19.0	--	--	--	--	--	--	--
JUN 09...	1500	26	2100*	8.0	28.0	--	--	--	--	--	--	--
JUL 06...	1650	11	1920	8.0	28.5	--	--	--	--	--	--	--
AUG 02...	1510	6.2	1900	8.1	27.0	--	--	--	--	--	--	--
SEP 06...	1545	4.3	1900	8.1	28.0	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (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- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 05...	--	--	--	--	--	--	869	--	--	--	--	--
NOV 01...	3.4	266	410	54	.60	17	--	1930	<.10	--	360	23
DEC 01...	--	--	--	--	--	--	1770	--	--	--	--	--
JAN 05...	--	--	--	--	--	--	1840	--	--	--	--	--
FEB 01...	2.5	217	330	36	.40	17	--	1730	.34	.12	170	26
MAR 10...	--	--	--	--	--	--	1020	--	--	--	--	--
APR 05...	--	--	--	--	--	--	950	--	--	--	--	--
MAY 05...	--	--	--	--	--	--	1140	--	--	--	--	--
JUN 09...	--	--	--	--	--	--	1600	--	--	--	--	--
JUL 06...	--	--	--	--	--	--	1520	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	1430	--	--	--	--	--
SEP 06...	--	--	--	--	--	--	1520	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

&lt; Actual value is known to be less than the value shown.

\* Laboratory value



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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 640 ft, from topographic map.

REMARKS.--Records fair except for those periods of no gage-height record, Dec. 8-21, 28, Jan 31 to Mar. 3, Mar. 27 to July 15, which are poor. No regulation above station. Some diversion above station into cattle ponds by two ranches upstream and one ranch at station. Extensive diversions by pumping for irrigation above station. Station affected by backwater from Twitchell Reservoir Mar. 1 to July 2.

AVERAGE DISCHARGE.--24 years, 21.3 ft<sup>3</sup>/s, 15,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 15.90 ft, from rating curve extended above 1,300 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1045	1,300	5.77	Feb. 8	1130	1,160	5.59
Dec. 22	2045	3,730	8.10	Feb. 13	1030	843	5.12
Jan. 27	1230	3,040	7.54	Mar. 1	Unknown	*4,010	8.30

Peak also occurred Apr. 18, 21.

Minimum daily, 0.34 ft<sup>3</sup>/s Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.78	88	15	182	2400	155	105	19	6.4	1.8	1.4
2	.74	.72	20	12	198	1300	140	97	18	6.1	1.6	1.1
3	.56	.72	13	11	172	1000	130	88	17	5.9	1.6	1.0
4	.71	.72	9.3	9.2	156	729	120	81	17	5.8	1.5	.95
5	.61	.72	7.5	8.1	163	533	105	74	16	5.6	1.3	1.2
6	.44	.72	6.2	7.3	185	415	98	68	15	5.4	1.3	1.2
7	.38	.72	5.3	6.3	523	368	92	64	15	5.2	1.2	1.1
8	.34	.72	4.8	5.8	636	314	84	60	14	5.0	1.1	.98
9	.44	.99	4.3	5.3	341	287	76	57	14	4.9	1.2	1.0
10	.53	1.2	4.0	4.8	255	278	71	53	13	4.7	1.3	1.1
11	.60	1.0	3.8	4.4	219	272	66	51	13	4.6	1.4	1.1
12	.59	.90	3.6	4.3	314	256	61	48	12	4.4	1.4	1.1
13	.49	.90	3.5	4.2	514	296	56	45	12	4.3	1.4	1.0
14	.40	.89	3.4	4.0	331	319	53	43	12	4.5	1.4	1.1
15	.40	.82	3.3	3.8	222	269	51	41	11	4.8	1.4	1.2
16	.41	.82	3.2	3.8	220	266	50	39	11	5.0	1.4	1.1
17	.47	.82	3.2	3.7	194	304	49	37	10	4.8	1.2	1.2
18	.59	1.1	3.2	4.8	236	392	97	35	10	4.2	.96	1.4
19	.69	1.4	3.1	13	160	337	94	33	9.7	4.1	1.1	1.5
20	.93	1.2	3.1	12	135	260	86	32	9.3	3.6	1.3	1.5
21	.99	1.1	3.1	9.0	115	332	130	30	9.0	3.0	1.7	1.4
22	1.1	1.1	929	312	106	329	110	29	8.7	2.8	1.9	1.4
23	1.2	1.1	615	591	97	369	92	27	8.4	2.7	1.7	1.4
24	.63	1.1	185	736	93	584	100	26	8.1	2.2	1.6	1.4
25	.54	1.1	99	402	92	430	89	25	7.9	2.5	1.7	1.6
26	.53	1.1	63	229	250	342	72	24	7.6	2.3	1.7	1.7
27	.34	1.1	44	1820	600	285	65	23	7.3	2.1	1.6	1.5
28	.34	1.1	37	603	450	240	74	22	7.1	1.9	1.6	1.4
29	.45	1.7	30	555	---	215	74	21	6.8	1.6	1.5	1.4
30	.83	451	23	302	---	190	80	20	6.6	1.6	1.3	1.6
31	.82	---	18	199	---	170	---	19	---	1.7	1.4	---
TOTAL	18.83	479.36	2241.9	5900.8	7159	14081	2620	1417	345.5	123.7	44.56	38.03
MEAN	.61	16.0	72.3	190	256	454	87.3	45.7	11.5	3.99	1.44	1.27
MAX	1.2	451	929	1820	636	2400	155	105	19	6.4	1.9	1.7
MIN	.34	.72	3.1	3.7	92	170	49	19	6.6	1.6	.96	.95
AC-FT	37	951	4450	11700	14200	27930	5200	2810	685	245	88	75
CAL YR 1982	TOTAL	8633.73	MEAN	23.7	MAX	1020	MIN	.10	AC-FT	17120		
WTR YR 1983	TOTAL	34469.68	MEAN	94.4	MAX	2400	MIN	.34	AC-FT	68370		

## SANTA MARIA RIVER BASIN

11137900 HUASNA RIVER NEAR ARROYO GRANDE, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1992 TO SEPTEMBER 1993

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH LAB (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
OCT 07...	1030	.40	960	7.6	16.0	652	.70	.89
NOV 17...	0950	.81	1000	7.7	12.0	636	1.4	.87
DEC 14...	0946	3.4	884	7.9	10.5	557	5.1	.76
JAN 09...	1410	16	784	8.0	15.0	519	22	.71
31...	1700	221	485	8.1	14.0	313	187	.43
MAR 03...	1300	934	357	8.0	14.0	256	646	.35
APR 11...	1400	67	765	8.2	16.0	476	86	.65
MAY 04-04	1355	81	665	8.1	20.0	434	95	.59
JUN 10...	1225	13	851	8.0	25.5	509	18	.69
JUL 13...	1310	4.3	838	8.1	22.0	535	6.2	.73
SEP 22...	1515	1.4	862	8.1	19.5	552	2.1	.75

70302  
1113

## 11138100 CUYAMA RIVER BELOW TWITCHELL DAM, CA

LOCATION.--Lat 34°56'40", long 120°17'30", in Suey Grant, Santa Barbara County, Hydrologic Unit 18060007, on left bank 3.5 mi upstream from mouth, 4 mi northeast of Garey, and 4.4 mi downstream from Twitchell Dam.

DRAINAGE AREA.--1,132 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1958 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 401.94 ft Bureau of Reclamation datum.

REMARKS.--Records fair. Flow regulated since February 1959 by Twitchell Reservoir, capacity, 240,000 acre-ft. Controlled releases are for ground-water recharge in Santa Maria Valley. Some pumping from wells along stream for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,100 ft<sup>3</sup>/s June 13, 1973, gage height, 8.22 ft, result of sluicing at dam; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,800 ft<sup>3</sup>/s Mar. 4; minimum daily, 0.04 ft<sup>3</sup>/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	7.4	4.8	50	8.5	26	8.4	315	1.9	303	334	392
2	.04	2.3	2.9	8.6	8.7	23	8.1	444	1.6	304	337	390
3	.05	1.1	2.3	37	7.6	698	7.9	459	1.6	311	342	392
4	.08	1.8	2.1	8.0	6.4	1800	7.8	394	1.6	310	345	388
5	.17	3.8	1.9	3.1	8.2	17	7.7	311	1.9	314	352	380
6	.18	1.8	2.0	2.5	8.4	11	7.5	310	25	319	354	376
7	.14	1.1	1.7	40	9.9	9.7	7.1	238	140	310	361	368
8	.07	.82	1.6	5.7	16	9.2	7.0	175	137	37	370	365
9	.06	4.8	1.6	3.1	12	9.3	6.8	171	176	261	382	362
10	.23	8.4	1.5	2.7	9.4	9.4	6.8	117	176	292	388	354
11	.43	9.2	1.3	2.4	8.5	9.7	6.7	69	172	295	392	351
12	.21	10	1.3	38	10	9.9	6.7	69	171	293	394	396
13	.12	8.8	1.3	76	15	12	6.0	69	209	292	399	378
14	.10	10	1.4	352	10	12	5.6	69	205	289	400	293
15	.15	7.7	1.3	331	9.2	12	5.4	69	202	295	406	120
16	.40	7.3	8.4	144	8.4	646	5.4	69	197	297	410	4.2
17	.68	6.9	12	137	7.8	124	5.5	69	234	299	414	49
18	.79	7.5	19	242	7.6	20	7.1	69	235	300	414	61
19	.80	13	4.1	25	7.1	10	6.5	70	243	303	409	62
20	.81	16	23	7.6	6.8	10	7.2	71	273	306	404	62
21	.85	11	5.9	4.7	6.5	14	6.6	71	277	308	397	63
22	1.0	8.7	48	8.7	6.5	14	5.7	72	278	309	393	137
23	.98	9.1	9.9	9.1	6.7	13	5.6	72	277	313	390	292
24	1.2	3.7	3.9	8.0	6.7	23	5.4	73	277	315	389	285
25	1.6	14	3.0	5.3	7.5	14	5.8	74	283	318	389	279
26	2.7	12	2.7	4.7	14	12	43	74	293	323	390	274
27	2.4	3.8	33	27	13	11	119	75	293	323	390	270
28	2.8	10	7.3	16	12	9.8	189	76	297	325	391	262
29	1.9	11	29	21	---	9.3	229	76	302	323	394	257
30	3.6	22	7.8	13	---	9.3	296	46	302	327	392	253
31	4.5	---	32	9.9	---	9.1	---	2.5	---	329	394	---
TOTAL	29.09	235.02	278.0	1643.1	258.4	3616.7	1042.3	4338.5	5682.6	9243	11916	7915.2
MEAN	.94	7.83	8.97	53.0	9.23	117	34.7	140	189	298	384	264
MAX	4.5	22	48	352	16	1800	296	459	302	329	414	396
MIN	.04	.82	1.3	2.4	6.4	9.1	5.4	2.5	1.6	37	334	4.2
AC-FT	58	466	551	3260	513	7170	2070	8610	11270	18330	23640	15700
CAL YR 1982	TOTAL	13939.98	MEAN	38.2	MAX	303	MIN	0	AC-FT	27650		
WTR YR 1983	TOTAL	46197.91	MEAN	127	MAX	1800	MIN	.04	AC-FT	91630		

## 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 mi<sup>2</sup>.

## 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 Corps of Engineers datum. See WSP 1735 for history of changes prior to Aug. 24, 1951.

REMARKS.--Records poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--40 years, 47.6 ft<sup>3</sup>/s, 34,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,200 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 15.75 ft, from rating curve extended above 1,700 ft<sup>3</sup>/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 ft<sup>3</sup>/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 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft<sup>3</sup>/s and maximum (\*) from rating curve extended above 300 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 7.57 ft, and 11.68 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1400	2,030	5.65	Feb. 8	0730	1,060	4.42
Dec. 22	2100	4,440	7.50	Mar. 1	Unknown	*13,950	11.68
Jan. 23	0300	1,560	5.15	Mar. 18	Unknown	Unknown	Unknown
Jan. 27	0915	3,520	6.88	Apr. 21	0200	634	3.66

Minimum daily discharge, 1.1 ft<sup>3</sup>/s several days during October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.6	360	56	444	5000	370	350	127	50	19	15
2	1.9	2.1	147	51	396	3300	360	325	127	49	18	15
3	1.7	3.2	91	51	380	2200	350	307	124	47	17	15
4	1.2	3.2	72	48	335	1500	340	290	117	46	19	15
5	1.2	3.2	63	45	328	1300	330	276	112	44	18	13
6	1.2	3.2	49	42	328	1000	330	267	102	42	18	13
7	1.1	3.2	40	40	371	800	320	251	97	45	17	14
8	1.1	3.2	36	38	735	660	310	241	93	43	18	13
9	1.1	4.4	33	36	549	600	310	232	88	40	20	13
10	1.1	4.4	32	35	474	500	300	223	88	38	20	13
11	1.1	3.9	29	34	415	440	298	217	82	36	17	12
12	1.1	3.9	28	32	440	400	307	204	80	36	16	11
13	1.1	3.5	26	32	480	370	300	201	78	35	11	10
14	1.1	3.5	24	30	384	380	286	195	74	34	11	10
15	1.6	3.2	24	29	360	360	276	186	72	34	11	10
16	1.3	3.2	23	29	340	330	270	178	68	34	12	9.5
17	1.2	3.2	23	29	300	320	263	169	66	34	12	9.5
18	1.3	3.5	22	30	260	430	450	163	66	33	20	9.5
19	1.6	3.9	20	46	240	420	447	155	63	32	26	9.5
20	3.2	3.9	20	45	210	440	508	152	63	32	26	8.7
21	3.9	3.9	20	38	200	700	563	147	64	30	23	8.7
22	6.0	3.9	672	61	197	570	436	150	64	29	20	8.7
23	6.0	4.4	716	711	189	520	388	147	68	28	18	8.7
24	1.9	4.4	281	544	189	900	361	147	64	26	18	8.7
25	1.6	4.4	195	440	195	700	335	145	66	25	18	8.7
26	1.5	4.4	150	322	365	600	325	145	64	24	18	8.7
27	1.5	4.4	110	1570	719	540	304	145	61	23	16	8.7
28	1.5	4.4	90	763	791	480	307	145	58	22	16	8.7
29	1.5	6.6	72	1170	---	440	314	139	54	21	15	9.5
30	1.5	645	68	659	---	410	372	134	52	20	16	11
31	1.5	---	61	517	---	380	---	129	---	20	16	---
TOTAL	56.3	753.2	3597	7573	10614	26990	10430	6155	2402	1052	540	328.8
MEAN	1.82	25.1	116	244	379	871	348	199	80.1	33.9	17.4	11.0
MAX	6.0	645	716	1570	791	5000	563	350	127	50	26	15
MIN	1.1	1.6	20	29	189	320	263	129	52	20	11	8.7
AC-FT	112	1490	7130	15020	21050	53530	20690	12210	4760	2090	1070	652
CAL YR 1982	TOTAL	15409.2	MEAN	42.2	MAX	716	MIN	1.1	AC-FT	30560		
WTR YR 1983	TOTAL	70491.3	MEAN	193	MAX	5000	MIN	1.1	AC-FT	139800		

11138500 SISQUOC RIVER NEAR SISQUOC, CA--Continued

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1978 to current year.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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 04...	1230	1.1	1040	8.0	19.0	--	--	--	--	--	--	--
NOV 01...	1310	1.6	1080	8.4	19.0	490	280	96	61	57	20	1
DEC 07...	1120	40	990	8.3	12.0	--	--	--	--	--	--	--
JAN 05...	1540	43	941*	8.3	14.0	--	--	--	--	--	--	--
FEB 22...	1120	197	917*	8.3	13.0	--	--	--	--	--	--	--
APR 11...	1540	298	1000	8.4	15.5	--	--	--	--	--	--	--
MAY 13...	1245	203	900	8.3	18.5	--	--	--	--	--	--	--
JUN 09...	1120	90	1050	8.0	19.5	--	--	--	--	--	--	--
JUL 06...	1215	41	1000	8.4	21.0	--	--	--	--	--	--	--
AUG 02...	1225	19	1020	8.4	24.0	--	--	--	--	--	--	--
SEP 06...	1245	12	1020	8.4	24.0	--	--	--	--	--	--	--
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (MG/L 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 CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 04...	--	--	--	--	--	--	758	--	--	--	--	--
NOV 01...	2.1	207	370	20	.40	20	--	1750	<.10	.12	170	30
DEC 07...	--	--	--	--	--	--	684	--	--	--	--	--
JAN 05...	--	--	--	--	--	--	679	--	--	--	--	--
FEB 22...	--	--	--	--	--	--	640	--	--	--	--	--
APR 11...	--	--	--	--	--	--	777	--	--	--	--	--
MAY 13...	--	--	--	--	--	--	699	--	--	--	--	--
JUN 09...	--	--	--	--	--	--	731	--	--	--	--	--
JUL 06...	--	--	--	--	--	--	719	--	--	--	--	--
AUG 02...	--	--	--	--	--	--	760	--	--	--	--	--
SEP 06...	--	--	--	--	--	--	795	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

&lt; Actual value is known to be less than the value shown.

\* Lab value.

## SANTA MARIA RIVER BASIN

11139500 TEPUSQUET CREEK NEAR SISQUOC, CA

LOCATION.--Lat 34°52'21", long 120°14'37", in NE 1/4 sec.9, T.9 N., R.32 W., 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 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft, from topographic map. Prior to Dec. 9, 1948, at datum 0.9 ft higher.

REMARKS.--Records fair. No regulation above station. Some diversion by pumping from wells along stream to irrigate about 100 acres above gage.

AVERAGE DISCHARGE.--40 years, 1.80 ft<sup>3</sup>/s, 1,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 788 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 5.48 ft, from rating curve extended above 220 ft<sup>3</sup>/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 above base 50 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 130 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 5.52 ft:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	0900	134	4.61	Feb. 8	0200	187	4.90
Dec. 22	2115	92	4.33	Mar. 1	0345	*585	6.33
Jan. 22	2300	164	4.64	Mar. 24	1730	75	4.45
Jan. 27	0730	332	5.52				

Minimum daily discharge, 0.09 ft<sup>3</sup>/s Oct. 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.21	4.6	.99	20	241	20	12	2.7	3.5	2.2	1.1
2	.12	.17	1.2	1.0	19	172	19	11	2.9	3.0	2.2	1.1
3	.12	.15	.92	1.0	18	136	18	11	2.8	2.8	2.0	1.1
4	.14	.14	.75	1.0	18	105	18	11	2.7	2.8	1.8	1.2
5	.15	.13	.59	1.0	18	86	17	11	2.8	2.5	1.7	1.2
6	.15	.14	.50	1.0	18	76	16	9.7	2.7	2.3	1.7	1.2
7	.13	.16	.41	1.0	40	63	16	9.3	2.8	2.2	1.7	1.2
8	.10	.16	.35	1.0	122	46	15	8.8	3.1	2.1	1.7	1.3
9	.10	.37	.34	1.0	61	43	15	8.2	3.0	1.9	1.7	1.3
10	.09	.34	.34	1.2	36	36	15	8.0	3.2	1.8	1.7	1.3
11	.09	.24	.36	1.2	27	29	15	7.3	3.4	1.9	1.6	1.3
12	.09	.22	.34	1.2	24	23	15	7.1	3.5	2.0	1.6	1.3
13	.09	.21	.34	1.2	35	24	14	6.8	3.6	2.3	1.5	1.3
14	.09	.19	.35	1.2	25	22	13	6.3	3.6	2.4	1.6	1.3
15	.12	.19	.36	1.2	21	22	13	6.0	3.9	2.8	1.5	1.4
16	.13	.19	.39	1.2	19	22	13	5.5	4.2	2.9	1.5	1.4
17	.13	.19	.42	1.2	18	23	13	5.1	4.1	3.1	1.4	1.4
18	.15	.27	.42	1.4	19	32	16	5.0	4.3	3.6	1.5	1.4
19	.15	.35	.40	1.3	19	18	14	4.4	4.3	3.5	1.7	1.4
20	.14	.24	.42	1.2	18	17	14	4.2	4.8	3.3	1.6	1.5
21	.14	.23	.43	1.2	18	34	13	4.1	5.0	3.3	1.6	1.6
22	.11	.25	15	26	19	30	12	3.7	4.9	3.2	1.4	1.7
23	.11	.55	17	38	19	33	12	3.7	5.1	3.5	1.3	1.6
24	.18	.29	3.2	62	19	61	12	3.4	5.2	3.1	1.2	1.6
25	.19	.25	2.0	32	19	60	11	3.2	5.1	2.9	1.2	1.6
26	.31	.23	1.5	16	26	48	11	3.1	4.9	2.7	1.1	1.6
27	.16	.24	1.2	191	31	33	10	2.8	4.2	2.5	1.1	1.6
28	.16	.30	1.0	66	36	28	10	2.7	3.9	2.5	1.2	1.6
29	.16	.64	1.0	87	---	25	11	2.6	3.9	2.3	1.2	1.6
30	.67	24	1.0	43	---	23	12	2.5	3.6	2.3	1.2	1.8
31	.27	---	.99	26	---	21	---	2.6	---	2.3	1.1	---
TOTAL	4.87	31.24	58.12	610.69	782	1632	423	192.1	114.2	83.3	47.5	42.0
MEAN	.16	1.04	1.87	19.7	27.9	52.6	14.1	6.20	3.81	2.69	1.53	1.40
MAX	.67	24	17	191	122	241	20	12	5.2	3.6	2.2	1.8
MIN	.09	.13	.34	.99	18	17	10	2.5	2.7	1.8	1.1	1.1
AC-FT	9.7	62	115	1210	1550	3240	839	381	227	165	94	83
CAL YR 1982	TOTAL	564.92	MEAN	1.55	MAX	38	MIN	.09	AC-FT	1120		
WTR YR 1983	TOTAL	4021.02	MEAN	11.0	MAX	241	MIN	.09	AC-FT	7980		

## 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 mi<sup>2</sup>.

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.--Records poor. No regulation above station. Pumping from wells along stream for irrigation of about 7,000 acres above station.

AVERAGE DISCHARGE.--43 years, 47.5 ft<sup>3</sup>/s, 34,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 11.16 ft; maximum gage height, 13.50 ft Dec. 6, 1966; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 30	1515	6,070	7.77	Mar. 1	0830	*33,600	11.16
Dec. 22	2330	8,830	8.38	Mar. 24	0900	1,790	5.77
Jan. 27	1030	9,250	8.46	Apr. 21	0300	1,030	4.58
Feb. 8	0900	3,590	7.01				

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	464	0	599	10300	580	480	90	22	2.8	.60
2	0	0	98	0	499	11500	560	415	91	21	2.7	.96
3	0	0	21	0	390	5240	550	375	88	20	2.7	1.4
4	0	0	5.3	0	267	3360	540	308	83	19	.52	1.1
5	0	0	1.6	0	301	2650	530	300	79	18	.76	.80
6	0	0	.40	0	327	2100	520	285	77	17	1.2	.71
7	0	0	0	0	620	1650	520	270	73	17	.78	.87
8	0	0	0	0	2120	1310	500	260	69	15	.70	.80
9	0	0	0	0	1280	1110	490	250	68	13	.72	.71
10	0	0	0	0	868	959	475	240	66	11	1.0	.47
11	0	0	0	0	590	798	465	230	62	11	1.1	.02
12	0	0	0	0	506	682	450	220	60	9.6	.77	.01
13	0	0	0	0	771	677	440	215	61	7.5	.30	.11
14	0	0	0	0	544	686	435	205	58	7.4	.02	.02
15	0	0	0	0	433	594	425	195	54	6.6	.05	.23
16	0	0	0	0	365	558	420	188	50	6.2	.15	.05
17	0	0	0	0	350	558	540	180	48	5.7	.24	.32
18	0	.05	0	0	334	777	800	175	44	5.4	.19	.01
19	0	0	0	27	305	792	730	168	40	5.1	.37	.30
20	0	0	0	40	249	672	700	165	38	4.8	.85	.01
21	0	0	0	34	213	908	861	158	36	4.5	1.5	.14
22	.07	0	380	164	189	830	640	151	34	4.3	2.0	.12
23	.01	.07	1520	1740	167	837	470	146	33	4.1	1.3	.03
24	0	.09	172	1280	157	1350	395	134	31	3.9	3.1	.01
25	.01	0	110	928	173	1270	365	136	30	3.7	2.4	.01
26	0	0	70	437	543	1030	360	130	28	3.5	1.6	.01
27	0	0	44	4070	1310	907	360	124	27	3.4	1.0	.01
28	0	0	25	1880	1520	786	360	122	24	3.2	.75	.03
29	0	.07	16	3120	---	700	400	118	24	3.1	.54	.01
30	.01	884	10	1710	---	646	540	113	23	3.0	.84	.16
31	0	---	1.5	901	---	597	---	98	---	2.9	.60	---
TOTAL	0.10	884.28	2938.80	16331	15990	56834	15421	6554	1589	281.9	33.55	10.03
MEAN	.003	29.5	94.8	527	571	1833	514	211	53.0	9.09	1.08	.33
MAX	.07	884	1520	4070	2120	11500	861	480	91	22	3.1	1.4
MIN	0	0	0	0	157	558	360	98	23	2.9	.02	.01
AC-FT	.2	1750	5830	32390	31720	112700	30590	13000	3150	559	67	20
CAL YR 1982	TOTAL	11333.88	MEAN	31.1	MAX	1520	MIN	0	AC-FT	22480		
WTR YR 1983	TOTAL	116867.66	MEAN	320	MAX	11500	MIN	0	AC-FT	231800		

## SANTA MARIA RIVER BASIN

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 NE 1/4 sec.11, T.10 N., R.34 W., Santa Barbara County, on left bank 250 ft upstream from bridge on Donovan Road, and 0.2 mi east of U.S. Highway 101 in Santa Maria.

PERIOD OF RECORD.--October 1970 to September 1978, October 1979 to current year.

GAGE.--Water-stage recorder on concrete-lined channel. Altitude of gage is 225 ft, from topographic map. Prior to September 1978, at site 50 ft downstream at same datum.

REMARKS.--Records poor. Extensive channel modification in 1979 water year widened the concrete-lined channel.

AVERAGE DISCHARGE.--12 years, 1.48 ft<sup>3</sup>/s, 1,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 539 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 4.59 ft, from rating curve based on 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 above base of 100 ft<sup>3</sup>/s and maximum (\*), from rating curve extended above 69 ft<sup>3</sup>/s on basis of computation of flow in concrete-lined channel:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Jan. 18	2230	119	2.64	Feb. 12	2100	129	2.71
Jan. 22	1900	199	3.12	Mar. 1	0100	*539	4.59
Jan. 28	2215	315	3.68	Mar. 4	0515	123	2.58
Feb. 5	1115	101	2.52	Mar. 23	2245	161	2.93
Feb. 7	2245	165	2.93	Sept. 30	2400	131	2.74

Minimum, no flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.01	1.7	.18	.35	98	.34	.84	2.1	2.1	1.1	1.3
2	.65	0	.08	.30	2.3	97	.53	.29	1.4	2.0	1.3	1.4
3	1.2	0	0	1.0	2.1	18	1.0	.80	1.7	2.3	2.4	1.0
4	.86	0	.42	.50	.08	34	.92	1.4	1.8	1.3	2.2	1.5
5	.47	.87	.02	.85	30	2.7	1.0	1.5	1.2	1.4	1.5	.97
6	.62	.63	.08	1.3	16	.24	1.1	2.2	1.3	2.1	1.5	1.4
7	.17	.17	.11	1.9	16	2.5	1.2	2.5	1.4	2.1	1.3	.62
8	.65	.01	.10	2.2	36	.15	1.8	1.6	1.4	2.4	1.1	.85
9	1.6	4.3	.06	2.3	2.5	.02	1.3	.87	1.0	2.3	1.5	1.9
10	.74	2.8	.61	1.3	.31	.22	1.4	2.3	.63	2.0	1.4	1.5
11	.58	.10	.89	2.1	.02	.06	.59	2.6	.69	2.6	1.7	1.8
12	.69	.05	.65	.98	28	.01	.89	2.8	1.8	4.0	1.9	1.9
13	1.2	.02	1.1	1.1	23	.76	1.2	1.6	1.6	2.6	2.0	1.7
14	1.4	.02	1.1	1.8	.76	.27	1.3	2.5	1.5	2.3	1.6	2.0
15	.99	.12	1.2	1.6	.33	.02	1.5	2.1	.64	2.1	1.8	2.3
16	1.0	.19	1.2	.36	.16	.55	.74	2.0	.93	2.2	2.1	1.8
17	1.0	.07	1.7	.72	.03	.57	.75	1.9	1.5	1.2	1.2	2.4
18	.78	2.1	1.1	6.7	.43	7.1	2.6	2.0	1.9	1.4	2.1	1.9
19	1.2	1.5	.85	4.5	.11	1.2	.89	1.7	2.2	1.7	3.5	1.2
20	1.3	.06	.41	.07	.02	.16	2.1	2.8	1.4	2.0	1.0	2.9
21	1.1	.04	.80	.11	.01	1.1	2.4	2.4	1.7	2.2	.26	2.8
22	1.2	.91	6.9	42	.23	7.1	.15	1.6	1.5	2.6	.44	2.3
23	1.4	2.9	1.5	4.5	.17	21	.05	1.5	1.3	2.7	1.0	2.5
24	1.9	1.1	.02	9.1	.22	50	.10	1.4	2.3	1.3	.73	3.0
25	.25	.08	.01	.27	14	4.8	0	2.3	2.3	1.1	.60	2.7
26	2.1	.28	0	16	15	.65	.14	1.5	1.7	1.9	1.5	2.0
27	.02	.12	.09	114	17	.02	.08	.66	2.0	1.6	1.5	2.8
28	0	.77	.10	41	11	0	1.0	2.1	2.1	1.8	.42	3.2
29	.14	2.8	.04	52	---	0	1.4	.74	2.4	1.5	.57	2.5
30	2.9	13	.32	5.9	---	.47	.86	.37	1.4	1.2	1.4	8.9
31	.15	---	.75	2.4	---	.20	---	.45	---	1.0	.82	---
TOTAL	28.64	35.02	23.91	319.04	216.13	348.87	29.33	51.32	46.79	61.0	43.44	65.04
MEAN	.92	1.17	.77	10.3	7.72	11.3	.98	1.66	1.56	1.97	1.40	2.17
MAX	2.9	13	6.9	114	36	98	2.6	2.8	2.4	4.0	3.5	8.9
MIN	0	0	0	.07	.01	0	0	.29	.63	1.0	.26	.62
AC-FT	57	69	47	633	429	692	58	102	93	121	86	129
CAL YR 1982	TOTAL	482.27	MEAN	1.32	MAX	51	MIN	0	AC-FT	957		
WTR YR 1983	TOTAL	1268.53	MEAN	3.48	MAX	114	MIN	0	AC-FT	2520		



## 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 mi<sup>2</sup>.

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 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 NGVD.

REMARKS.--Records poor. No gage height record May 5 to July 7. 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.--43 years, 32.4 ft<sup>3</sup>/s, 23,470 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,800 ft<sup>3</sup>/s Jan. 16, 1952, gage height, 8.18 ft; maximum gage height, 10.00 ft Feb. 26, 1969; no flow for all or parts of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,000 ft<sup>3</sup>/s Mar. 1, gage height, 8.70 ft, from floodmarks; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	7.7	0	20	8160	340	354	2.6	.57	.18	0
2		0	0	0	13	12900	300	384	2.3	.56	0	0
3		0	0	0	10	7640	280	433	2.0	.56	0	0
4		0	0	0	7.5	5970	260	433	1.8	.56	0	0
5		0	0	0	6.0	2400	240	360	1.6	.56	0	0
6		0	0	0	5.0	1800	220	300	1.5	.56	.02	0
7		0	0	0	120	1100	210	250	1.3	.56	.91	0
8		0	0	0	1180	900	200	200	1.2	.08	.34	0
9		0	0	0	870	700	190	150	1.1	.22	.26	0
10		0	0	0	570	560	185	125	1.0	.49	0	0
11		0	0	0	400	460	180	100	.95	.49	0	0
12		0	0	0	350	380	175	80	.90	.06	0	0
13		0	0	0	500	330	170	65	.90	.05	.04	0
14		0	0	0	120	280	170	55	.85	.91	.14	0
15		0	0	0	20	250	170	47	.80	1.5	.03	0
16		0	0	0	4.0	230	165	40	.75	.68	0	0
17		0	0	0	.70	460	180	33	.75	.14	0	0
18		0	.18	0	.20	390	230	27	.72	.05	0	0
19		0	230	0	.07	320	238	23	.70	0	0	0
20		0	5.7	0	0	270	286	20	.68	0	0	0
21		0	0	0	0	220	522	17	.66	0	0	0
22		0	0	.25	0	190	300	15	.65	0	0	0
23		0	0	217	0	369	238	12	.64	.03	0	0
24		0	0	69	0	1130	180	10	.62	.06	0	0
25		0	0	173	10	1130	150	9.0	.61	.01	0	0
26		0	0	7.3	614	1070	160	8.0	.60	0	0	0
27		0	0	2800	706	787	196	6.5	.60	0	0	0
28		0	0	1150	653	668	286	5.5	.58	.05	0	0
29		.06	0	2000	---	500	354	4.5	.58	.14	0	0
30		.17	0	300	---	430	369	3.8	.57	.68	0	.65
31		---	0	50	---	380	---	3.0	---	1.2	0	---
TOTAL	0	0.23	243.58	6766.55	6179.47	52374	7144	3573.3	30.51	10.77	1.92	0.65
MEAN	0	.008	7.86	218	221	1689	238	115	1.02	.35	.062	.022
MAX	0	.17	230	2800	1180	12900	522	433	2.6	1.5	.91	.65
MIN	0	0	0	0	0	190	150	3.0	.57	0	0	0
AC-FT	0	.5	483	13420	12260	103900	14170	7090	61	21	3.8	1.3
CAL YR 1982	TOTAL	406.21	MEAN	1.11	MAX	230	MIN	0	AC-FT	806		
WTR YR 1983	TOTAL	76324.98	MEAN	209	MAX	12900	MIN	0	AC-FT	151400		

## SANTA MARIA RIVER BASIN

11141050 ORCUTT CREEK NEAR ORCUTT, CA

LOCATION.--Lat 34°53'01", long 120°29'38", in NE 1/4 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to September 1983.

GAGE.--Water-stage recorder. Altitude of gage is 160 ft, from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft<sup>3</sup>/s Mar. 1, gage height, 7.53 ft, from floodmarks, from rating curve extended above 10 ft<sup>3</sup>/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.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	3.7	.13	4.5	582	1.7	1.7	.32	.11	.03	.60
2	0	0	2.4	.12	3.9	157	1.6	1.4	.31	.13	.02	.28
3	0	0	.44	.13	3.4	45	1.5	1.2	.30	.08	.02	.28
4	0	.04	.05	.13	2.0	46	1.4	1.0	.28	.05	.03	.10
5	0	.02	.04	.13	28	17	1.8	.90	.20	.05	.11	.06
6	0	.02	.04	.13	18	13	1.6	.78	.15	.07	.16	.13
7	0	.02	.05	.10	45	13	1.5	.72	.17	.06	.11	.12
8	0	.02	.05	.06	79	6.4	1.4	.66	.20	.09	.05	.13
9	0	.57	.06	.04	9.5	4.3	1.3	.60	.22	.07	.21	.15
10	0	2.4	.08	.03	5.8	4.9	1.2	.58	.15	.06	.20	.20
11	0	.13	.06	.03	4.1	2.5	1.2	.55	.09	.04	.20	.20
12	0	.01	.08	.03	22	3.4	1.1	.52	.10	.04	.24	.10
13	0	.01	.08	.03	22	15	1.1	.50	.06	.03	.24	.17
14	0	0	.08	.03	7.0	4.7	1.0	.48	.05	.03	.32	.17
15	.01	0	.08	.03	6.2	2.5	1.0	.47	.06	.03	.26	.19
16	.01	.01	.04	.04	4.1	9.4	1.0	.45	.12	.03	.24	.12
17	.01	.01	.03	.04	3.0	14	2.0	.43	.12	.03	.32	.13
18	.02	.02	.03	.64	3.7	38	4.5	.42	.13	.03	.32	.16
19	.02	1.7	.03	4.5	2.4	10	13	.41	.13	.01	.34	.15
20	.02	.03	.03	2.1	1.8	11	30	.40	.12	.02	.32	.08
21	.02	.01	.03	.20	1.0	68	10	.39	.16	.02	.34	.24
22	.02	.01	5.8	58	1.0	53	3.0	.38	.15	.02	.34	.20
23	.03	.54	3.8	6.8	1.3	54	2.3	.38	.13	.03	.32	.09
24	.03	.03	1.9	17	2.6	77	1.6	.37	.15	.03	.32	.06
25	.03	.02	.28	3.1	34	10	1.3	.37	.22	.03	.30	.12
26	.05	.02	.32	37	21	4.6	1.0	.36	.10	.03	.36	.17
27	.02	.02	.30	122	17	3.6	.90	.36	.16	.03	.34	.21
28	.02	.61	.22	82	29	2.9	1.1	.35	.15	.03	.28	.15
29	.03	3.7	.22	32	---	2.5	1.0	.35	.16	.03	.46	.16
30	.08	8.9	.22	6.4	---	2.0	2.0	.34	.16	.03	.20	.55
31	.45	---	.17	5.3	---	1.8	---	.33	---	.03	.19	---
TOTAL	.87	18.89	20.71	378.27	382.3	1278.5	95.10	18.15	4.82	1.37	7.19	5.47
MEAN	.028	.63	.67	12.2	13.7	41.2	3.17	.59	.16	.044	.23	.18
MAX	.45	8.9	5.8	122	79	582	30	1.7	.32	.13	.46	.60
MIN	0	0	.03	.03	1.0	1.8	.90	.33	.05	.01	.02	.06
AC-FT	1.7	37	41	750	758	2540	189	36	9.6	2.7	14	11

WTR YR 1983 TOTAL 2211.64 MEAN 6.06 MAX 582 MIN 0 AC-FT 4390

11141050 ORCUTT CREEK NEAR ORCUTT, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: November 1982 to September 1983.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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
NOV												
10...	1055	2.5	200	7.2	11.0	--	--	--	--	--	--	--
30...	1130	8.7	435	7.8	14.0	--	--	--	--	--	--	--
JAN												
06...	0940	.13	2600	8.1	8.0	--	--	--	--	--	--	--
FEB												
03...	1020	3.5	1080	7.7	9.5	180	97	39	20	140	62	5
MAR												
07...	1350	9.6	775	7.8	22.5	--	--	--	--	--	--	--
APR												
05...	1030	1.9	1420	8.2	15.5	--	--	--	--	--	--	--
MAY												
09...	1450	.60	1650	8.9	25.0	--	--	--	--	--	--	--
JUL												
05...	1055	.05	2210	8.9	21.0	--	--	--	--	--	--	--
AUG												
01...	1055	.03	2200	8.3	25.0	--	--	--	--	--	--	--
SEP												
01...	1025	.58	1140	7.8	24.0	--	--	--	--	--	--	--

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT LAB (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- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
NOV												
10...	--	--	--	--	--	--	176	--	--	--	--	--
30...	--	--	--	--	--	--	294	--	--	--	--	--
JAN												
06...	--	--	--	--	--	--	1660	--	--	--	--	--
FEB												
03...	7.6	83	130	200	.50	30	--	1620	.96	2.0	280	520
MAR												
07...	--	--	--	--	--	--	575	--	--	--	--	--
APR												
05...	--	--	--	--	--	--	844	--	--	--	--	--
MAY												
09...	--	--	--	--	--	--	988	--	--	--	--	--
JUL												
05...	--	--	--	--	--	--	1260	--	--	--	--	--
AUG												
01...	--	--	--	--	--	--	1330	--	--	--	--	--
SEP												
01...	--	--	--	--	--	--	778	--	--	--	--	--

1 Results based on Laboratory Alkalinity value.

## DISCHARGE AT PARTIAL-RECORD STATIONS

## Crest-stage partial-recrod 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 1983

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum Gage height (feet)	Discharge (ft <sup>3</sup> /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., Hydrologic Unit 18090208, at culvert on U.S. Highway 66, 8.5 mi southeast of Ludlow.	0.30	1959-74 1976-83	3-1-83	11.40	15
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., 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 1976-83	3-1-83	13.57	34
10262600	Boom Creek near Barstow, CA	Lat 34°54'20", long 116°56'57", NE¼NW¼NE¼ 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* 1976-83	11-30-82	10.60	45
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., 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 1977-83	8-17-83	5.68	168
10264530	Pine Creek near Palmdale, CA	Lat 34°36'09", long 118°14'48", in SW¼ sec.15, T.6 N., R.13 W., Hydrologic Unit 18090206, at culvert on Pine Canyon Road, 7.5 mi northwest of Palmdale.	1.37	1959-73 1977-83	3-2-83	14.41	49
10264560	Spencer Canyon Creek near Fairmont, CA	Lat 34°46'33", long 118°34'08", in SE¼SW¼SW¼ sec.15, T.8 N., R.16 W., Hydrologic Unit 18090206, at culvert on county road, 8.5 mi northwest of Fairmont.	3.60	1959-64 1965-73* 1974 1978-83	3-2-83	13.20	390
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* 1981-83	3-1-83	3.25	735

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Annual maximum	
						Gage height (feet)	Discharge (ft <sup>3</sup> /s)
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 1981-83	3-1-83	8.79	404
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* 1976-83	1-27-83	2.96	152
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 1980-83	1-26-83	4.20	1040

\*Operated as a continuous-record gaging station.

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

## DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1983

Stream	Tributary to	Location	Drainage area (mi <sup>2</sup> )	Measured previously (water years)	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Atascadero Creek basin						
Maria Ygnacio Creek	Atascadero Creek	Lat 34°27'34", long 119°47'24", in NW¼SE¼NE¼ sec.3, T.4 N., R.28 W., Santa Barbara County, 0.1 mi upstream from Old San Marcos Pass Road bridge, 300 ft upstream from confluence with East Fork, and 2.5 mi northeast of Goleta.	--	none	5/24/83	1.93
					6/03/83	1.65
					6/08/83	1.49
					6/17/83	1.35
					6/24/83	1.30
					6/30/83	1.09
					7/06/83	1.13
					7/13/83	0.95
					7/21/83	0.78
					7/28/83	0.86
					8/03/83	0.65
					8/12/83	0.87
					8/18/83	0.62
					9/02/83	1.30
					9/09/83	0.46
					9/16/83	0.58
					9/26/83	0.47
East Fork, Maria Ygnacio Creek	Maria Ygnacio Creek	Lat 34°27'36", long 119°47'26", in NE¼SE¼NE¼ sec.3, T.4 N., R.28 W., Santa Barbara County, 0.1 mi upstream from Old San Marcos Pass Road bridge, 75 ft upstream from colfluence with Maria Ygnacio Creek and 2.5 mi northeast of Goleta.	--	none	5/24/83	0.56
					6/03/83	0.43
					6/08/83	0.43
					6/17/83	0.37
					6/24/83	0.33
					6/30/83	0.26
					7/06/83	0.27
					7/13/83	0.20
					7/21/83	0.15
					7/28/83	0.16
					8/03/83	0.15
					8/12/83	0.14
					8/18/83	0.15
					9/02/83	0.11
					9/09/83	0.12
					9/16/83	0.13
					9/26/83	0.11
Santa Maria River basin						
Green Canyon Creek	Santa Maria River	Lat 34°57'27", long 120°37'54", Santa Barbara County, at culvert on west Main Street, 3.6 mi southwest of Guadalupe.	--	1982	4/06/82	4.99*
					5/04/82	8.69*
					6/03/82	13.8*
					8/02/82	9.94*
					9/01/82	12.8*
					10/1/82	8.44
					11/2/82	1.88
					12/2/82	3.95
					1/06/83	3.52
					2/18/83	46.3
					7/25/83	8.42
					9/16/83	21.2

\*Not previously published.

## GROUND WATER

## IMPERIAL COUNTY

## West Salton Sea Basin (7-22)

SITE NUMBER 332501116025701 LOCAL NUMBER 0095009E04M01S

NORTH OF DESERT SHORES. DRILLED GEOTHERMAL TEST WATER-TABLE WELL. DIAM 2 IN. DEPTH 489 FT. SCREENED 486-489 FT. ALTITUDE OF LSD -105 FT. RECORDS AVAILABLE 1979, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 71.58 FEET BELOW LAND SURFACE DATUM JUN 13, 1979.

LOWEST WATER LEVEL 79.33 FEET BELOW LAND SURFACE DATUM SEP 21, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 21, 1983	79.33

## Arroyo Seco Valley (7-37)

SITE NUMBER 331603114550601 LOCAL NUMBER 0105019E25R01S

ABOUT 6 MI NORTHWEST OF HWY 78 AND WEST OF MIDWAY ROAD. DRILLED WATER-TABLE WELL. DIAM 8 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 820 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 194.23 FEET BELOW LAND SURFACE DATUM JAN 22, 1981.

LOWEST WATER LEVEL 194.89 FEET BELOW LAND SURFACE DATUM SEP 30, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 20, 1983	194.92 T

SITE NUMBER 331659114481001 LOCAL NUMBER 0105021E30C01S

IN MILPITAS WASH. WEST OF OGILBY ROAD. DRILLED OBSERVATION WATER-TABLE WELL. DIAM 1.25 IN. DEPTH 70.1 FT. ALTITUDE OF LSD 485 FT. RECORDS AVAILABLE 1972, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 36.04 FEET BELOW LAND SURFACE DATUM AUG 01, 1979.

LOWEST WATER LEVEL 42.42 FEET BELOW LAND SURFACE DATUM AUG 24, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 20, 1983	39.50

## East Salton Sea Basin (7-33)

SITE NUMBER 331144115231501 LOCAL NUMBER 011S015E23M01S

EAST MESA AREA NEAR SIPHON 3 ON COACHELLA CANAL. DRILLED DOMESTIC WELL. DIAM 12 IN. DEPTH 550 FT IN 1958. ALTITUDE OF LSD 120 FT. RECORDS AVAILABLE 1963, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 20.68 FEET BELOW LAND SURFACE DATUM JAN 10, 1979.

LOWEST WATER LEVEL 34.73 FEET BELOW LAND SURFACE DATUM SEP 21, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 26, 1983	33.44	SEP 21, 1983	34.73

T Nearby, recently pumped.

GROUND WATER  
IMPERIAL COUNTY--Continued  
 Ocotillo Valley (7-25)

SITE NUMBER 330701116003501 LOCAL NUMBER 012S009E23D01S

ABOUT 0.5 MI SOUTH OF HWY 78 AND 0.75 MI NORTH OF SAN FELIPE CREEK. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 580 FT. ALTITUDE OF LSD -15 FT. RECORDS AVAILABLE 1953-58, 1961-68, 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 64.17 FEET BELOW LAND SURFACE DATUM DEC 15, 1953.

LOWEST WATER LEVEL 168.50 FEET BELOW LAND SURFACE DATUM JUL 22, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 27, 1983	153.43

Amos Valley (7-34)

SITE NUMBER 330842115174701 LOCAL NUMBER 012S016E09A01S

ABOUT 14 MI EAST OF CALIPATHIA ON NILAND-GLAMIS ROAD. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 12 IN. DEPTH 1000 FT. PERFORATED 150-1000 FT. ALTITUDE OF LSD 220 FT. RECORDS AVAILABLE 1979, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 126.33 FEET BELOW LAND SURFACE DATUM AUG 02, 1979.

LOWEST WATER LEVEL 134.83 FEET BELOW LAND SURFACE DATUM MAR 04, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 26, 1983	133.60

SITE NUMBER 325955115042601 LOCAL NUMBER 013S018E33A01S

IN GLAMIS. DRILLED DOMESTIC WATER-TABLE WELL. DIAM UNKNOWN. DEPTH 660 FT. ALTITUDE OF LSD 335 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 193.45 FEET BELOW LAND SURFACE DATUM AUG 26, 1981.

LOWEST WATER LEVEL 198.90 FEET BELOW LAND SURFACE DATUM FEB 11, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 26, 1983	194.49	SEP 21, 1983	222.72 R

Imperial Valley (7-30)

SITE NUMBER 324851115505901 LOCAL NUMBER 015S011E32R01S

ABOUT 1.5 MI NORTH OF PLASTER CITY. DRILLED UNUSED WATER-TABLE WELL. DIAM 1.25 IN. DEPTH 152 FT. PERFORATED 138-140 FT. WELL FILLED IN TO 145.8 FT IN 1974. ALTITUDE OF LSD 65 FT. RECORDS AVAILABLE 1964, 1974, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 50.34 FEET BELOW LAND SURFACE DATUM OCT 26, 1983.

LOWEST WATER LEVEL 101.00 FEET BELOW LAND SURFACE DATUM MAR 19, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1982	51.06	MAR 30, 1983	50.82

R Recently, Pumped.



IMPERIAL COUNTY--Continued

## Imperial Valley (7-30)

SITE NUMBER 325114115335201 LOCAL NUMBER 015S014E18C01S

IN IMPERIAL. DRILLED UNUSED WATER-TABLE WELL. DIAM 8 IN, DEPTH 500 FT IN 1958, 379.02 FT IN 1978, PERFORATED 140-440 FT. ALTITUDE OF LSD -64.97 FT. RECORDS AVAILABLE 1958, 1961, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.61 FEET BELOW LAND SURFACE DATUM OCT 16, 1979.

LOWEST WATER LEVEL 7.96 FEET BELOW LAND SURFACE DATUM MAR 07, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	7.50	FEB 17, 1983	7.46	JUN 16, 1983	7.40	SEP 15, 1983	7.50
NOV 22	7.48	MAR 15	7.47	22	7.42		
DEC 22	7.33	APR 20	7.37	JUL 19	7.52		
JAN 18, 1983	7.44	MAY 19	7.36	AUG 17	7.49		

## Ogilby Valley (7-35)

SITE NUMBER 325255114514301 LOCAL NUMBER 015S020E04R01S

ABOUT 0.04 MI NORTH OF GOLD ROCK RANCH. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 14 IN, DEPTH 720 FT. ALTITUDE OF LSD 505 FT. RECORDS AVAILABLE 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 388.38 FEET BELOW LAND SURFACE DATUM SEP 30, 1982.

LOWEST WATER LEVEL 388.80 FEET BELOW LAND SURFACE DATUM AUG 26, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 20, 1983	388.74 R

SITE NUMBER 324920114492201 LOCAL NUMBER 015S020E25N01S

ABOUT 1 MI NORTHEAST OF OGILBY. DRILLED UNUSED WATER-TABLE WELL. DIAM 8 IN, DEPTH 473 FT. ALTITUDE OF LSD 400 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 283.88 FEET BELOW LAND SURFACE DATUM SEP 20, 1983.

LOWEST WATER LEVEL 285.53 FEET BELOW LAND SURFACE DATUM JAN 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 20, 1983	283.88

R Recently, pumped.

GROUND WATER  
IMPERIAL COUNTY--Continued  
 Coyote Wells Valley (7-29)

SITE NUMBER 324558115595201 LOCAL NUMBER 016S009E24D01S

ABOUT 2 MI NORTH OF OCOTILLO. BORED UNUSED WATER-TABLE WELL IN SAND AND CLAY OF QUATERNARY AGE.  
 DIAM 2 IN, DEPTH 150 FT, CASED TO 145.5 FT, SAND POINT 145.5-149 FT. ALTITUDE OF LSD 382 FT.  
 RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 103.86 FEET BELOW LAND SURFACE DATUM APR 28, 1977.

LOWEST WATER LEVEL 105.10 FEET BELOW LAND SURFACE DATUM OCT 25, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1982	104.89	MAR 31, 1983	104.97

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
016S009E24D01S	83-03-31	790	8.7	29.0	36	9.0	3.3	150	88	11

POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
3.7	112	140	91	1.0	15	481	1.2	.03	440	8	3

SITE NUMBER 324518115591501 LOCAL NUMBER 016S009E24R01S

ABOUT 1 MI NORTH OF OCOTILLO. BORED UNUSED WATER-TABLE WELL IN SAND AND CLAY OF QUATERNARY AGE.  
 DIAM 2 IN, DEPTH 105 FT, CASED TO 101.5 FT, SAND POINT 98-101.5 FT. ALTITUDE OF LSD 335 FT. RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 58.00 FEET BELOW LAND SURFACE DATUM NOV 17, 1976.

LOWEST WATER LEVEL 60.23 FEET BELOW LAND SURFACE DATUM SEP 22, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1982	60.02	MAR 31, 1983	59.56	SEP 22, 1983	60.23

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
016S009E24R01S	83-09-22	670	8.8	28.0	39	8.7	4.3	120	84	8.5

POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
5.5	100	95	81	.8	17	393	.65	.01	270	<3	4

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

## IMPERIAL COUNTY--Continued

## Imperial Valley (7-30)

SITE NUMBER 324603115480501 LOCAL NUMBER 0165011E238015

ABOUT 3.5 MI SOUTHEAST OF PLASTER CITY, AUGERED UNUSED WATER-TABLE WELL. DIAM 1.25 IN, DEPTH 127 FT IN 1964, 114.7 FT IN 1974, PERFORATED 121-123 FT. ALTITUDE OF LSD 30 FT. RECORDS AVAILABLE 1964, 1974, 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 39.34 FEET BELOW LAND SURFACE DATUM APR 25, 1978.

LOWEST WATER LEVEL 101.17 FEET BELOW LAND SURFACE DATUM MAR 19, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1982	39.59	MAR 30, 1983	39.67

Yuma Valley (7-36)

SITE NUMBER 324444114385901 LOCAL NUMBER 0165022E21R015

ABOUT 1 MI NORTH OF COLORADO RIVER, NORTHWEST OF YUMA, ARIZONA. DRILLED UNUSED WATER-TABLE WELL. DIAM 1.25 IN, DEPTH 157 FT, PERFORATED AT 128 FT. ALTITUDE OF LSD 128 FT. RECORDS AVAILABLE 1964, 1967, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.66 FEET BELOW LAND SURFACE DATUM SEP 20, 1983.

LOWEST WATER LEVEL 12.67 FEET BELOW LAND SURFACE DATUM JAN 05, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 20, 1983	4.66

SITE NUMBER 324656114345001 LOCAL NUMBER 0165023E08E015

NEAR INTERSECTION OF ROSS AND FISHER ROADS. DRILLED UNUSED WATER-TABLE WELL. DIAM 8 IN, DEPTH 500 FT, PERFORATED 110-141 FT. ALTITUDE OF LSD 130 FT. RECORDS AVAILABLE 1968, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 6.53 FEET BELOW LAND SURFACE DATUM SEP 19, 1983.

LOWEST WATER LEVEL 9.15 FEET BELOW LAND SURFACE DATUM JAN 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 19, 1983	6.53

Coyote Wells Valley (7-29)

SITE NUMBER 324123115553101 LOCAL NUMBER 0175010E11G025

SOUTHEAST OF OCOTILLO ALONG HWY 98 IN YUMA ESTATES. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6.6 IN, DEPTH 335 FT, PERFORATED 235-315 FT. ALTITUDE OF LSD 375 FT. RECORDS AVAILABLE 1971, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 158.00 FEET BELOW LAND SURFACE DATUM NOV 01, 1971.

LOWEST WATER LEVEL 172.92 FEET BELOW LAND SURFACE DATUM MAR 13, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
OCT 07, 1982	178.03 R

R Recently, pumped.

## GROUND WATER

## IMPERIAL COUNTY--Continued

## Coyote Wells Valley (7-29)

SITE NUMBER 324118115552101 LOCAL NUMBER 017S010E11H02S

SOUTHEAST OF OCUTILLO ALONG HWY 98 IN YUHA ESTATES. DRILLED DOMESTIC WATER-TABLE WELL IN SAND AND CLAY. DIAM 4 IN. DEPTH 344 FT. ALTITUDE OF LSD 376 FT. RECORDS AVAILABLE 1973, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 165.00 FEET BELOW LAND SURFACE DATUM MAR 01, 1973.

LOWEST WATER LEVEL 189.87 FEET BELOW LAND SURFACE DATUM OCT 07, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1982	189.87	APR 01, 1983	185.95

## WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS 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
017S010E11H02S	83-04-01	480	7.9	31.0	76	0	23	4.6	72	65

SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	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)
3.7	4.0	125	54	47	.5	20	300	<.10	.05	160	43	5

## INYO COUNTY

## Owens Valley (6-12)

SITE NUMBER 372527118204601 LOCAL NUMBER 006S033E15M01M

ABOUT 1 MI NORTH OF LAWS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 113 FT. PERFORATED 91-111 FT. ALTITUDE OF LSD 4125.4 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1928 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.00 FEET BELOW LAND SURFACE DATUM NOV 15, 1945.

LOWEST WATER LEVEL 43.90 FEET BELOW LAND SURFACE DATUM NOV 01, 1979.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11, 1982	16.6	JAN 14, 1983	10.5	MAY 13, 1983	8.6	AUG 15, 1983	8.2
NOV 12	12.4	FEB 14	9.7	JUN 13	8.6	SEP 16	7.7
DEC 13	12.2	MAR 14	9.2	JUL 15	8.4		
JAN 13, 1983	10.08	APR 15	9.4	20	7.90		

&lt; Actual value is known to be less than the value shown.

## GROUND WATER

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## INYO COUNTY--Continued

Owens Valley (6-12)

SITE NUMBER 372318118241101 LOCAL NUMBER 006S033E31D01M

ABOUT 1 MI NORTHWEST OF BISHOP. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 798 FT. CASED TO 785 FT. PERFORATED 34-46, 47-66, 68-86, 422-431, 440-449, 454-501, 600-630, 640-643, 681-701, 704-735, 742-750 FT. ALTITUDE OF LSD 4157.15 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1929 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.19 FEET BELOW LAND SURFACE DATUM JUN 14, 1956.

LOWEST WATER LEVEL 13.14 FEET BELOW LAND SURFACE DATUM OCT 12, 1931.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01, 1982	4.5	FEB 01, 1983	4.2	MAY 04, 1983	4.3	JUL 20, 1983	5.50
JAN 04, 1983	4.4	MAR 04	3.9	JUN 02	5.0	AUG 01	5.9
13	4.12	APR 01	4.3	JUL 05	6.1	SEP 06	5.5

SITE NUMBER 372247118241101 LOCAL NUMBER 006S033E31M01M

ABOUT 0.74 MI SOUTH OF DIXON LANE AND 75 FT SOUTH OF BISHOP CREEK CANAL. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN. DEPTH 565 FT. PERFORATED 90-158, 560-565 FT. ALTITUDE OF LSD 4157.6 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1928, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.3 FEET BELOW LAND SURFACE DATUM SEP 02, 1983.

LOWEST WATER LEVEL 7.69 FEET BELOW LAND SURFACE DATUM JAN 15, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	2.6	JAN 13, 1983	6.61	MAY 02, 1983	1.0	AUG 01, 1983	1.0
NOV 01	3.3	FEB 01	2.1	JUN 01	1.0	SEP 02	0.3
DEC 01	3.3	MAR 01	3.3	JUL 01	1.0		
JAN 04, 1983	2.1	APR 01	3.3	20	5.94		

SITE NUMBER 370616118150601 LOCAL NUMBER 010S034E03N01M

ABOUT 4.5 MI SOUTH OF BIG PINE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 322 FT. CASED TO 114 FT. PERFORATED 96-114 FT. ALTITUDE OF LSD 3879.9 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1929 TO CURRENT YEAR.

HIGHEST WATER LEVEL 2.11 FEET BELOW LAND SURFACE DATUM JUL 23, 1969.

LOWEST WATER LEVEL 74.10 FEET BELOW LAND SURFACE DATUM FEB 01, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1982	30.2	JAN 20, 1983	23.6	MAY 20, 1983	21.3	AUG 15, 1983	20.0
NOV 22	28.7	FEB 18	20.0	JUN 17	21.2		
DEC 20	27.5	MAR 18	19.2	JUL 15	20.3		
JAN 12, 1983	24.77	APR 18	20.0	20	20.26		

SITE NUMBER 364802118105501 LOCAL NUMBER 013S035E16N01M

ABOUT 1.5 MI EAST OF INDEPENDENCE. DRILLED PUBLIC SUPPLY WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 275.5 FT. PERFORATED 60-79, 91-275.5 FT. ALTITUDE OF LSD 3866.1 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1944-60, 1964-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.53 FEET BELOW LAND SURFACE DATUM JAN 19, 1953.

LOWEST WATER LEVEL 96.50 FEET BELOW LAND SURFACE DATUM FEB 01, 1980.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1982	31.9	JAN 05, 1983	31.4	APR 01, 1983	28.7	JUL 20, 1983	26.40
NOV 01	31.9	12	31.12	MAY 02	28.4	AUG 01	23.1
DEC 01	31.7	FEB 04	28.9	JUN 03	27.3	SEP 01	22.0
02	36.5	MAR 04	29.6	JUL 01	27.3		

## GROUND WATER

## INYO COUNTY--Continued

## Owens Valley (6-12)

SITE NUMBER 364815118110401 LOCAL NUMBER 0135035E17J01M

EAST OF INDEPENDENCE, ABOUT 0.77 MI NORTH OF CITRUS ROAD. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN. DEPTH 376 FT. ALTITUDE OF LSD 368 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1924, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 13.40 FEET BELOW LAND SURFACE DATUM JAN 17, 1984.

LOWEST WATER LEVEL 50.83 FEET BELOW LAND SURFACE DATUM SEP 26, 1979.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08, 1982	23.8	JAN 12, 1983	23.38	MAY 03, 1983	22.0	AUG 01, 1983	16.2
NOV 01	24.3	FEB 04	22.0	JUN 03	20.3	SEP 01	15.0
DEC 01	24.3	MAR 04	22.7	JUL 01	19.9		
JAN 05, 1983	24.3	APR 01	22.7	20	18.54		

## Saline Valley (6-17)

SITE NUMBER 364100117485701 LOCAL NUMBER 014S038E35M01M

ABOUT 12.2 MI SOUTHEAST OF WILLOW SPRINGS. DRILLED UNUSED WATER-TABLE WELL. DIAM 72 IN. DEPTH 37 FT. ALTITUDE OF LSD 1095 FT. RECORDS AVAILABLE 1955, 1978-80, 1982 TO CURRENT YEAR.

HIGHEST WATER LEVEL 35.3 FEET BELOW LAND SURFACE DATUM JAN 26, 1955.

LOWEST WATER LEVEL 35.64 FEET BELOW LAND SURFACE DATUM SEP 26, 1979.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 12, 1983	35.38

## Owens Valley (6-12)

SITE NUMBER 363555118041301 LOCAL NUMBER 015S036E28L01M

SOUTHWEST OF LONE PINE. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 276 FT. PERFORATED 100-160 FT. ALTITUDE OF LSD 3773.6 FT. MEASUREMENTS FURNISHED BY LOS ANGELES DEPARTMENT OF WATER AND POWER; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1926 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.60 FEET BELOW LAND SURFACE DATUM AUG 28, 1941.

LOWEST WATER LEVEL 54.14 FEET BELOW LAND SURFACE DATUM APR 01, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 1982	41.3	MAY 11, 1983	42.8	JUL 20, 1983	37.86	SEP 13, 1983	36.8
JAN 12, 1983	42.08	JUL 15	39.1				

## INYO COUNTY--Continued

## Death Valley (6-18)

SITE NUMBER 363621117091801 LOCAL NUMBER 015S044E36M01M

ABOUT 0.5 MI WEST OF STOVEPIPE WELLS HOTEL. DRILLED OBSERVATION WATER-TABLE WELL IN ALLUVIAL FAN DEPOSITS OF QUATERNARY AGE. DIAM 2 IN, DEPTH 43.8 FT, CASSED TO 45.3 FT. SAND POINT 43.3-45.3 FT. ALTITUDE OF LSD -15.22 FT. RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.70 FEET BELOW LAND SURFACE DATUM APR 09, 1974.

LOWEST WATER LEVEL 28.51 FEET BELOW LAND SURFACE DATUM JUL 30, 1983.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1982	28.50	JUL 30, 1983	28.51	SEP 28, 1983	28.47

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SOWP- TION RATIO	
015S044E36M01M	83-09-28	9680	7.6	27.9	720	74	130	2000	82	32	
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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
150	290	900	2900	1.0	60	6406	.15	.03	17000	30	30

## Panamint Valley (6-58)

SITE NUMBER 360226117134701 LOCAL NUMBER 022S044E09B01M

ABOUT 0.63 MI WEST OF HALLARAT. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN, DEPTH 79 FT. ALTITUDE OF LSD 1040 FT. RECORDS AVAILABLE 1967, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.83 FEET BELOW LAND SURFACE DATUM JAN 23, 1979.

LOWEST WATER LEVEL 11.37 FEET BELOW LAND SURFACE DATUM SEP 12, 1967.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 1982	6.52	JAN 10, 1983	7.04	JUL 29, 1983	4.20

## Pahrump Valley (6-28)

SITE NUMBER 355832115525201 LOCAL NUMBER 022N010E27R01S

ABOUT 1.4 MI WEST OF STATE LINE ON ROAD TO TECOPA. DRILLED UNUSED WATER-TABLE WELL. DIAM 20 IN, DEPTH 350.1 FT. ALTITUDE OF LSD 2640 FT. RECORDS AVAILABLE 1959, 1962, 1975-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 116.25 FEET BELOW LAND SURFACE DATUM FEB 03, 1959.

LOWEST WATER LEVEL 122.14 FEET BELOW LAND SURFACE DATUM JUL 21, 1983.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	122.11	JUL 21, 1983	122.14

## GROUND WATER

INYO COUNTY--Continued

## Pahrump Valley (6-28)

SITE NUMBER 360951116072202 LOCAL NUMBER 024N008E21L02S

ABOUT 0.9 MI WEST OF STATE LINE ON HWY 178. DRILLED UNUSED WATER-TABLE WELL. DIAM 1.5 IN, DEPTH 63.9 FT. ALTITUDE OF LSD 2476 FT. RECORDS AVAILABLE 1976-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 38.13 FEET BELOW LAND SURFACE DATUM FEB 18, 1976.

LOWEST WATER LEVEL 40.23 FEET BELOW LAND SURFACE DATUM JAN 20, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	40.03	JUL 21, 1983	40.16

## Middle Amargosa Valley (6-20)

SITE NUMBER 361817116244701 LOCAL NUMBER 025N005E14M01S

NORTH EDGE OF DEATH VALLEY JUNCTION NEAR INTERSECTION OF HWYS 127 AND 190. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 12 IN. DEPTH 200 FT. PERFORATED 160-200 FT. ALTITUDE OF LSD 2038 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.20 FEET BELOW LAND SURFACE DATUM JAN 22, 1979.

LOWEST WATER LEVEL 6.92 FEET BELOW LAND SURFACE DATUM JUL 21, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1982	4.61	JUL 21, 1983	6.92

## Death Valley (6-18)

SITE NUMBER 362711116494401 LOCAL NUMBER 027N001E24E01S

EAST OF FURNACE CREEK INN. DRILLED UNUSED WATER-TABLE WELL IN LACUSTRINE OF PLEISTOCENE AGE. DIAM 14 IN. DEPTH 250 FT. ALTITUDE OF LSD 480 FT. RECORDS AVAILABLE 1958-59, 1962, 1964, 1966-67, 1971-72, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 74.51 FEET BELOW LAND SURFACE DATUM NOV 20, 1958.

LOWEST WATER LEVEL 76.14 FEET BELOW LAND SURFACE DATUM JUN 16, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1982	76.09	JAN 11, 1983	76.01	JUL 30, 1983	76.10

KERN COUNTY

## Indian Wells Valley (6-54)

SITE NUMBER 353921117433901 LOCAL NUMBER 026S039E24K01M

ABOUT 0.30 MI NORTH OF GOVERNMENT RAILROAD AND 3.15 MI WEST OF SANQUIST ROAD. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 323.1 FT IN 1953, PERFORATED 190-197, 230-278, 287-301 FT. ALTITUDE OF LSD 2347.4 FT. RECORDS AVAILABLE 1952-79, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 153.54 FEET BELOW LAND SURFACE DATUM MAR 16, 1953.

LOWEST WATER LEVEL 197.56 FEET BELOW LAND SURFACE DATUM SEP 08, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1982	195.90	SEP 08, 1983	197.56



KERN COUNTY--Continued

## Indian Wells Valley (6-54)

SITE NUMBER 353908117395201 LOCAL NUMBER 026S040E22P01M

AT CHINA LAKE. DRILLED UNUSED WATER-TABLE WELL IN SAND OF QUATERNARY AGE. DIAM 8 IN. DEPTH 1358 FT. PERFORATED 530-830 FT. ALTITUDE OF LSD 2258.7 FT. RECORDS AVAILABLE 1954 TO CURRENT YEAR.

HIGHEST WATER LEVEL 64.28 FEET BELOW LAND SURFACE DATUM MAY 13, 1954.

LOWEST WATER LEVEL 94.38 FEET BELOW LAND SURFACE DATUM NOV 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 16, 1982	94.08

SITE NUMBER 353644117380601 LOCAL NUMBER 027S040E02J01M

SOUTHEAST OF RIDGECREST. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 10 IN. DEPTH 220 FT. ALTITUDE OF LSD 2300 FT. RECORDS AVAILABLE 1958, 1960-62, 1964-66, 1968, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 106.36 FEET BELOW LAND SURFACE DATUM JAN 21, 1960.

LOWEST WATER LEVEL 124.87 FEET BELOW LAND SURFACE DATUM SEP 08, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 15, 1982	122.33

SITE NUMBER 353630117390901 LOCAL NUMBER 027S040E03R01M

ABOUT 100 FT NORTH OF EAST BOWMAN ROAD AND 0.10 MI WEST OF SOUTH GATEWAY BLVD. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 162.3 FT IN 1952. ALTITUDE OF LSD 2287.31 FT. RECORDS AVAILABLE 1952 TO CURRENT YEAR.

HIGHEST WATER LEVEL 92.14 FEET BELOW LAND SURFACE DATUM MAY 22, 1952.

LOWEST WATER LEVEL 103.21 FEET BELOW LAND SURFACE DATUM DEC 15, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 15, 1982	103.21

## Fremont Valley (6-46)

SITE NUMBER 352209117475201 LOCAL NUMBER 029S039E33K01M

NORTHEAST OF CANTIL. DRILLED UNUSED WATER-TABLE WELL IN SAND OF QUATERNARY AGE. DIAM 16 IN. DEPTH 403.4 FT. CASED TO 402 FT. PERFORATED 210-402 FT. ALTITUDE OF LSD 2050 FT. RECORDS AVAILABLE 1958, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 131.16 FEET BELOW LAND SURFACE DATUM FEB 13, 1958.

LOWEST WATER LEVEL 237.84 FEET BELOW LAND SURFACE DATUM APR 15, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 15, 1983	237.84

## GROUND WATER

## KERN COUNTY--Continued

Fremont Valley (6-46)

SITE NUMBER 351745117590401 LOCAL NUMBER 030S037E26E01M

ABOUT 0.9 MI NORTHEAST OF RANCHO SECO. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 14 IN, DEPTH 485 FT, PERFORATED 233-485 FT. ALTITUDE OF LSD 2035 FT.

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	
030S037E26E01M	83-08-25	805	7.8	23.0	246	67	19	76	39	2.1	
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, SUM OF CONSTITU- ENTS, 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)
2.9	250	110	35	1.0	25	486	.20	.07	360	<3	6

SITE NUMBER 350733118070801 LOCAL NUMBER 032S036E21Q01M

ABOUT 6 MI NORTHEAST OF MOJAVE. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 10 IN, DEPTH 805 FT. ALTITUDE OF LSD 2799 FT.

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	
032S036E21Q01M	83-08-25	1400	7.5	25.0	314	83	26	180	54	4.5	
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, SUM OF CONSTITU- ENTS, 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)
7.1	300	380	45	.5	28	932	1.3	.02	2200	7	1

&lt; Actual value is known to be less than the value shown.

## KERN COUNTY--Continued

## Antelope Valley (6-44)

SITE NUMBER 345951117503501 LOCAL NUMBER 010N009W04D01S

NORTHEAST OF ROSAMOND BLVD AND LAKE SHORE DRIVE, AT NORTH END OF RUGERS LAKE. DRILLED UNUSED WATER-TABLE WELL IN LAKESHORE DEPOSITS. DIAM 12 IN, DEPTH 502 FT, CASED TO 500 FT, PERFORATED 144-195, 200-433 FT. ALTITUDE OF LSD 2280 FT. RECORDS AVAILABLE 1957 TO CURRENT YEAR.

HIGHEST WATER LEVEL 94.21 FEET BELOW LAND SURFACE DATUM JUL 08, 1959.

LOWEST WATER LEVEL 122.54 FEET BELOW LAND SURFACE DATUM OCT 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1982	120.34	APR 12, 1983	119.42

SITE NUMBER 345518118172601 LOCAL NUMBER 010N013W32D01S

ABOUT 7.5 MI NORTH OF WILLOW SPRINGS. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN, DEPTH 900 FT. ALTITUDE OF LSD 2775 FT.

## WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	
010N013W32D01S	83-08-24	710	7.8	25.0	213	64	13	59	37	1.8	
POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L 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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
2.5	190	71	60	.3	23	407	4.3	.01	150	7	<1

## Fremont Valley (6-46)

SITE NUMBER 350411118023601 LOCAL NUMBER 011N011W09A01S

NORTHEAST OF MOJAVE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 14 IN, DEPTH 422 FT, CASED TO 422 FT, PERFORATED 262-295, 352-362 FT. ALTITUDE OF LSD 2549.6 FT. RECORDS AVAILABLE 1956-58, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 124.59 FEET BELOW LAND SURFACE DATUM OCT 17, 1956.

LOWEST WATER LEVEL 130.84 FEET BELOW LAND SURFACE DATUM OCT 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1982	130.58	APR 15, 1983	130.80

&lt; Actual value is known to be less than the value shown.

## GROUND WATER

## KERN COUNTY--Continued

## Antelope Valley (6-44)

SITE NUMBER 350055118172601 LOCAL NUMBER 011N013W29M01S

WEST OF MOJAVE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 16 IN. DEPTH 749 FT. CASED TO 744 FT. PERFORATED 520-724 FT. ALTITUDE OF LSD 3350 FT. RECORDS AVAILABLE 1954-56, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 300.00 FEET BELOW LAND SURFACE DATUM FEB 04, 1954.

LOWEST WATER LEVEL 336.19 FEET BELOW LAND SURFACE DATUM OCT 17, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1982	313.75	JAN 18, 1983	315.54	APR 12, 1983	317.15	JUL 07, 1983	316.94
NOV 15	314.36	FEB 15	316.24	MAY 10	317.70	AUG 09	309.27
DEC 21	315.00	MAR 16	316.66	JUN 09	318.13	SEP 06	304.00

## LOS ANGELES COUNTY

## San Fernando Valley (4-12)

SITE NUMBER 341319118273101 LOCAL NUMBER 002N015W28P01S

NORTH OF INTERSECTION OF RUSCUE BLVD AND KESTER AVE ALONG PACOIMA WASH IN SAN FERNANDO VALLEY. DRILLED OBSERVATION WATER-TABLE WELL. DIAM 2 IN. DEPTH 266.5 FT IN 1972. PERFORATED 253.2-263.2 FT. ALTITUDE OF LSD 805 FT. RECORDS FURNISHED BY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT. RECORDS AVAILABLE 1960-69, 1971-72, 1974, 1976-78, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 184.90 FEET BELOW LAND SURFACE DATUM DEC 16, 1960.

LOWEST WATER LEVEL 235.70 FEET BELOW LAND SURFACE DATUM JAN 24, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1982	217.2	NOV 22, 1982	215.7	DEC 15, 1982	217.4

## Antelope Valley (6-44)

SITE NUMBER 343259117593101 LOCAL NUMBER 005N011W01M01S

NORTHWEST OF 80TH STREET EAST AND AVENUE T INTERSECTION. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 14 IN. DEPTH 414 FT IN 1963, 396.29 FT IN 1967. CASED TO 392 FT. PERFORATED 100-364 FT. ALTITUDE OF LSD 2739 FT. RECORDS AVAILABLE 1955, 1963, 1967-68, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 64.48 FEET BELOW LAND SURFACE DATUM APR 10, 1980.

LOWEST WATER LEVEL 111.37 FEET BELOW LAND SURFACE DATUM OCT 11, 1977.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1982	83.70	APR 12, 1983	73.77

## Acton Valley (4-5)

SITE NUMBER 342818118114501 LOCAL NUMBER 005N013W36L01S

IN ACTON, NEAR INTERSECTION OF CROWN VALLEY ROAD AND SYRACUSE AVENUE. DRILLED INSTITUTION WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 12 IN. DEPTH 122 FT. ALTITUDE OF LSD 2700 FT. RECORDS AVAILABLE 1956, 1965, 1974-75, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 20.97 FEET BELOW LAND SURFACE DATUM APR 12, 1983.

LOWEST WATER LEVEL 88.56 FEET BELOW LAND SURFACE DATUM OCT 07, 1965.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 12, 1983	20.97

## LOS ANGELES COUNTY--Continued

Antelope Valley (6-44)

SITE NUMBER 343434117500801 LOCAL NUMBER 006N009W28P02S

ABOUT 0.25 MI SOUTH OF PALMDALE BLVD AND 275 FT WEST OF 65TH STREET. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN. DEPTH 797 FT. ALTITUDE OF LSD 2800 FT.

## WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
006N009W28P02S	83-08-24	600	7.9	25.5	109	35	5.3	77	59	3.3

POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
2.5	100	140	25	1.6	26	373	.90	<.01	270	6	<1

SITE NUMBER 344150118055401 LOCAL NUMBER 007N012W13H02S

WEST OF 20TH STREET EAST AND NORTH OF LANCASTER BLVD. DOMESTIC WATER-TABLE WELL. DIAM 4 IN. DEPTH 218 FT. ALTITUDE OF LSD 2385 FT. RECORDS AVAILABLE 1963, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 113.95 FEET BELOW LAND SURFACE DATUM SEP 25, 1963.

LOWEST WATER LEVEL 156.91 FEET BELOW LAND SURFACE DATUM OCT 20, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1982	155.24	APR 12, 1983	155.30

&lt; Actual value is known to be less than the value shown.

## GROUND WATER

## LOS ANGELES COUNTY--Continued

## Antelope Valley (6-44)

SITE NUMBER 344200118141001 LOCAL NUMBER 007N013W14E01S

ABOUT 0.3 MI SOUTH OF INTERSECTION OF 60TH STREET AND AVENUE I. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 14 IN. DEPTH 930 FT. ALTITUDE OF LSD 2350 FT.

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
007N013W14E01S	83-08-24	475	7.6	20.5	144	45	7.7	35	34	1.3

POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
1.4	120	42	37	.3	31	271	4.5	.02	80	6	<1

SITE NUMBER 344841118335001 LOCAL NUMBER 008N016W03F01S

NORTH OF AVENUE D AND WEST OF 240TH STREET WEST. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF GUATERNARY AVE. DIAM 1.5 TO 2 IN. DEPTH 326 FT. 1.5-IN CSG 0-245.5 FT. 2-IN CSG 245.5-326 FT. PERFORATED 317-326 FT. ALTITUDE OF LSD 2835 FT. RECORDS AVAILABLE 1965, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 191.64 FEET BELOW LAND SURFACE DATUM APR 13, 1965.

LOWEST WATER LEVEL 220.57 FEET BELOW LAND SURFACE DATUM OCT 14, 1980.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 06, 1982	215.35	APR 13, 1983	214.68

&lt; Actual value is known to be less than the value shown.

## LOS ANGELES COUNTY--Continued

## San Gabriel Valley (4-13)

SITE NUMBER 340535117573501 LOCAL NUMBER 001S010W07R025

NEAR INTERSECTION OF LOS ANGELES AND MAINE STREETS IN BALDWIN PARK. DRILLED OBSERVATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM 16 IN. DEPTH 200 FT. PERFORATED 74-174, 181-196 FT. ALTITUDE OF LSD 387 FT. RECORDS AVAILABLE 1932 TO CURRENT YEAR. COMPARABLE RECORDS 1903-32 AS PUBLISHED IN PREVIOUS WATER-SUPPLY PAPERS WERE FOR WELL 42(001S010W18A015).

HIGHEST WATER LEVEL 62.40 FEET BELOW LAND SURFACE DATUM MAY 31, 1943.

LOWEST WATER LEVEL 183.79 FEET BELOW LAND SURFACE DATUM DEC 22, 1977.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 26, 1982	142.72	JAN 26, 1983	134.67	APR 26, 1983	109.20	JUL 27, 1983	92.20
NOV 22	138.22	FEB 24	131.48	MAY 23	102.18	AUG 25	97.13
DEC 27	133.68	MAR 28	117.21	JUN 23	94.50	SEP 27	102.96

## Coastal Plain of Los Angeles (4-11)

SITE NUMBER 334905118124601 LOCAL NUMBER 004S013W23H025

PREVIOUSLY PUBLISHED AS 45/13W-2382. IN LONG BEACH, NEAR INTERSECTION OF 32ND AND DELTA STREETS. DRILLED UNUSED ARTESIAN WELL IN GRAVEL IN UPPERMOST PART OF SILVERADO WATER-BEARING ZONE OF PLEISTOCENE AGE. DIAM 26 TO 16 IN. DEPTH 1074 FT. 26-IN CSG 0-288 FT, 16-IN CSG 288-1068 FT, PERFORATED 650-900 FT. ALTITUDE OF LSD 24.1 FT. MEASUREMENTS FURNISHED BY CITY OF LONG BEACH. RECORDS AVAILABLE 1932 TO CURRENT YEAR.

HIGHEST WATER LEVEL 52.93 FEET BELOW LAND SURFACE DATUM FEB 06, 1939.

LOWEST WATER LEVEL 131.75 FEET BELOW LAND SURFACE DATUM JAN 20, 1953.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02, 1982	106.08	MAR 05, 1983	100.50	JUN 28, 1983	102.88	SEP 29, 1983	105.38
DEC 03	103.88	29	100.48	JUL 01	106.68		
JAN 10, 1983	103.78	APR 29	103.88	AUG 01	107.70		
26	104.78	MAY 23	104.08	29	108.40		

## MONO COUNTY

## Mono Valley (6-9)

SITE NUMBER 375332119054401 LOCAL NUMBER 001S026E03C01M

ABOUT 0.24 MI WEST OF HWY 395 AND 2 MI NORTH OF JUNE LAKE LOOP ROAD EXIT. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 TO 6.6 IN. DEPTH 120 FT IN 1958, DEEPENED TO 358 FT IN 1965, 8-IN CSG 0-120 FT, 6.6-IN CSG 75-305 FT, PERFORATED 78-85, 120-135, 150-170, 210-250, 270-290 FT. OPEN HOLE 305-358 FT. ALTITUDE OF LSD 6880 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 33.48 FEET BELOW LAND SURFACE DATUM MAY 22, 1980.

LOWEST WATER LEVEL 119.55 FEET BELOW LAND SURFACE DATUM JAN 14, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13, 1983	103.55	JUL 20, 1983	98.05 R

## Long Valley (6-11)

SITE NUMBER 374334118491401 LOCAL NUMBER 002S029E31P01M

ABOUT 8 MI NORTH OF HWY 395, NEAR LAKE CROWLEY. UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 30 IN. DEPTH 7.65 FT. ALTITUDE OF LSD 6915 FT. RECORDS AVAILABLE 1966, 1972-73, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.97 FEET BELOW LAND SURFACE DATUM MAY 22, 1980.

LOWEST WATER LEVEL 6.00 FEET BELOW LAND SURFACE DATUM JUN 13, 1966.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 20, 1983	1.99

R Recently, pumped.

## GROUND WATER

## ORANGE COUNTY

## Coastal Plain of Orange County (8-1)

SITE NUMBER 335459117580701 LOCAL NUMBER 0035010W18C015

NEAR INTERSECTION OF IMPERIAL HWY AND BEACH BLVD. UNUSED WATER-TABLE WELL. DIAM 26.25 TO 14.25 IN, DEPTH 385 FT. 26.25-IN CSG 0-24 FT. 14.25-IN CSG 0-385 FT. PERFORATED 144-385 FT. ALTITUDE OF LSD 211 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1961-77; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 83.51 FEET BELOW LAND SURFACE DATUM NOV 04, 1983.

LOWEST WATER LEVEL 127.80 FEET BELOW LAND SURFACE DATUM OCT 29, 1969.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 1982	88.19	FEB 09, 1983	87.29	MAY 10, 1983	85.68	AUG 17, 1983	84.34

SITE NUMBER 334900117502301 LOCAL NUMBER 0045009W17Q015

NEAR INTERSECTION OF TUSTIN AND TAFT AVENUES. UNUSED WATER-TABLE WELL. DIAM 10 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 239 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1932-77; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1932-35, 1937 TO CURRENT YEAR.

HIGHEST WATER LEVEL 142.79 FEET BELOW LAND SURFACE DATUM AUG 29, 1980.

LOWEST WATER LEVEL 241.34 FEET BELOW LAND SURFACE DATUM OCT 19, 1951.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 03, 1982	174.88	FEB 09, 1983	172.19	MAY 11, 1983	162.75

SITE NUMBER 334404117480701 LOCAL NUMBER 0055009W15R035

NEAR INTERSECTION OF BRYAN AND BROWNING STREETS. UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 787 FT. ALTITUDE OF LSD 96.7 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1969-76; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1969-76, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.54 FEET BELOW LAND SURFACE DATUM AUG 09, 1983.

LOWEST WATER LEVEL 32.60 FEET BELOW LAND SURFACE DATUM OCT 22, 1974.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05, 1982	20.27	FEB 11, 1983	20.38	MAY 16, 1983	18.35	AUG 09, 1983	17.54

SITE NUMBER 334456117551201 LOCAL NUMBER 0055010W09R015

ABOUT 400 FT WEST OF 5TH STREET AND HARBOR BLVD. DRILLED UNUSED WATER-TABLE WELL. DIAM 6 IN. DEPTH 115 FT. ALTITUDE OF LSD 74.2 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT 1938-56, 1958, 1964-77; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1978 TO CURRENT YEAR. RECORDS AVAILABLE 1938-55, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 32.73 FEET BELOW LAND SURFACE DATUM NOV 07, 1983.

LOWEST WATER LEVEL 82.80 FEET BELOW LAND SURFACE DATUM APR 22, 1953.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 02, 1982	39.97	APR 15, 1983	38.75	JUN 09, 1983	43.79	AUG 11, 1983	36.22
FEB 10, 1983	37.70	MAY 12	35.92	JUL 05	36.19	SEP 01	35.76



RIVERSIDE COUNTY

Rice Valley (7-4)

SITE NUMBER 340300114473301 LOCAL NUMBER 001S021F32801S

ABOUT 1.5 MI SOUTHEAST OF OLD RICE AIR BASE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 175 FT IN 1962. 160.85 FT IN 1979. PERFORATED 135-175 FT. ALTITUDE OF LSD 740 FT. RECORDS AVAILABLE 1962-67, 1969, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 150.43 FEET BELOW LAND SURFACE DATUM AUG 27, 1981.

LOWEST WATER LEVEL 152.74 FEET BELOW LAND SURFACE DATUM MAR 18, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 19, 1982	150.54

## Coachella Valley (7-21)

SITE NUMBER 335304116353001 LOCAL NUMBER 003S004E29F01S

NEAR HWY 111 NORTHWEST OF PALM SPRINGS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 3 IN. DEPTH 575 FT. CASED TO 575 FT. PERFORATED 555-575 FT. ALTITUDE OF LSD 865 FT. RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 377.91 FEET BELOW LAND SURFACE DATUM NOV 03, 1983.

LOWEST WATER LEVEL 547.00 FEET BELOW LAND SURFACE DATUM DEC 21, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01, 1982	423.1	MAY 10, 1983	397.7

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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		
003S004E29F01S	82-11-01 83-05-10	310 480	10.4 10.5	20.5 19.0	23 125	0 --	8.4 42	.6 4.8	35 33	71 35		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB AS (MG/L 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)	IRON, DIS- SOLVED (UG/L AS FE)
3.2 1.3	5.8 6.3	55 32	19 100	26 47	.2 .3	.1 .1	126 251	1 124 253	<.10 <.10	.02 .02	10 20	4 <3

MANGA-  
NESE,  
DIS-  
SOLVED  
(UG/L  
AS MN)

<1  
<1

1 Result based on laboratory alkalinity value.

&lt; Actual value is known to be less than the value shown.

## GROUND WATER

## RIVERSIDE COUNTY--Continued

## Coachella Valley (7-21)

SITE NUMBER 335231116345401 LOCAL NUMBER 003S004E29R01S

NEAR HWY 111 NORTHWEST OF PALM SPRINGS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN. DEPTH 551 FT. CASED TO 551 FT. PERFORATED 431-551 FT. ALTITUDE OF LSD 777 FT. RECORDS AVAILABLE 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 396.43 FEET BELOW LAND SURFACE DATUM NOV 03, 1983.

LOWEST WATER LEVEL 516.39 FEET BELOW LAND SURFACE DATUM MAR 14, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 01, 1982	420.43	MAY 10, 1983	428.63

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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
003S004E29R01S	82-11-01	150	7.9	20.5	50	0	15	3.1	9.5	27
	83-05-10	155	8.3	19.0	58	--	19	2.6	8.9	24

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)	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)
.6	2.5	52	6.0	5.6	.9	6.7	87	80	<.10	.01	<10	97
.5	2.4	74	2.7	2.5	.8	16	83	99	<.10	.02	<10	21

MANGA-  
NESE,  
DIS-  
SOLVED  
(UG/L  
AS MN)88  
2

## Pinto Valley (7-6)

SITE NUMBER 335612115243301 LOCAL NUMBER 003S015E04J01S

ABOUT 16 MI NORTH OF DESERT CENTER. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN. DEPTH 575 FT. ALTITUDE OF LSD 1080.6 FT. RECORDS AVAILABLE 1954-67, 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 150.00 FEET BELOW LAND SURFACE DATUM DEC 04, 1954.

LOWEST WATER LEVEL 167.72 FEET BELOW LAND SURFACE DATUM FEB 25, 1974.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 27, 1983	169.73 S

S Nearby, pumping.

&lt; Actual value is known to be less than the value shown.

## RIVERSIDE COUNTY--Continued

## Rice Valley (7-4)

SITE NUMBER 335503114490201 LOCAL NUMBER 0035021E1H001S

ABOUT 4.5 MI NORTH-NORTHWEST OF MIDLAND. UNUSED WATER-TABLE WELL IN ALLOUVIUM. DIAM 16 IN, DEPTH 371 FT. ALTITUDE OF LSD 885 FT. RECORDS AVAILABLE 1962, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 284.99 FEET BELOW LAND SURFACE DATUM MAR 29, 1962.

LOWEST WATER LEVEL 285.75 FEET BELOW LAND SURFACE DATUM JAN 22, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 09, 1982	285.46

## Pinto Valley (7-6)

SITE NUMBER 334712115485601 LOCAL NUMBER 0045011E27001S

ABOUT 3.5 MI NORTH OF COTTONWOOD SPRING. IN SMOKETREE WASH. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 TO 10 IN, DEPTH 403 FT, 12-IN CSG 0-232 FT, 10-IN CSG 209-403 FT, PERFORATED 212-223, 209-398 FT. ALTITUDE OF LSD 2975 FT. RECORDS AVAILABLE 1958-61, 1963 TO CURRENT YEAR.

HIGHEST WATER LEVEL 170.29 FEET BELOW LAND SURFACE DATUM MAR 12, 1959.

LOWEST WATER LEVEL 200.74 FEET BELOW LAND SURFACE DATUM APR 13, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 27, 1983	196.39

## Chuckwalla Valley (7-5)

SITE NUMBER 334647115195801 LOCAL NUMBER 0045016E32M01S

ABOUT 6.3 MI NORTHEAST OF DESERT CENTER. DRILLED UNUSED WATER-TABLE WELL. DIAM 14 IN, DEPTH 555 FT. ALTITUDE OF LSD 548 FT. RECORDS AVAILABLE 1961-62, 1970, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 66.95 FEET BELOW LAND SURFACE DATUM APR 19, 1979.

LOWEST WATER LEVEL 90.29 FEET BELOW LAND SURFACE DATUM JAN 27, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 27, 1983	90.29

SITE NUMBER 335133115141901 LOCAL NUMBER 0045017E06C01S

ABOUT 13.5 MI NORTHEAST OF DESERT CENTER. DRILLED DOMESTIC WATER-TABLE WELL IN ALLOUVIUM. DIAM 16 IN, DEPTH 501 FT. ALTITUDE OF LSD 500 FT. RECORDS AVAILABLE 1932, 1952, 1954, 1956-57, 1959, 1961-71, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 21.00 FEET BELOW LAND SURFACE DATUM MAY 21, 1952.

LOWEST WATER LEVEL 25.23 FEET BELOW LAND SURFACE DATUM OCT 01, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 27, 1983	25.01

## GROUND WATER

RIVERSIDE COUNTY--Continued

## Orocopia Valley (7-31)

SITE NUMBER 333929115552201 LOCAL NUMBER 006S010E11N01S

ABOUT 1 MI SOUTH OF INTERSTATE 10 AND 6.2 MI WEST OF COTTONWOOD SPRING ROAD. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8-12-14 IN. DEPTH 400 FT IN 1952, PERFORATED 335-400 FT. ALTITUDE OF LSD 1275 FT. RECORDS AVAILABLE 1952, 1979, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 329. FEET BELOW LAND SURFACE DATUM JUL 02, 1952.

LOWEST WATER LEVEL 330.96 FEET BELOW LAND SURFACE DATUM SEP 23, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 28, 1983	329.90

SITE NUMBER 333911115505701 LOCAL NUMBER 006S011E16E01S

ABOUT 0.6 MI SOUTH OF INTERSTATE 10 AND 2.5 MI WEST OF COTTONWOOD SPRING ROAD. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 515.4 FT. PERFORATED 320-460 FT. CASED TO 528 FT. ALTITUDE OF LSD 1320 FT. RECORDS AVAILABLE 1933-34, 1940, 1961, 1979, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 243. FEET BELOW LAND SURFACE DATUM MAR 20, 1934.

LOWEST WATER LEVEL 274. FEET BELOW LAND SURFACE DATUM JUN 10, 1934.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 27, 1983	246.12

## Palo Verde Mesa (7-39)

SITE NUMBER 334120114400001 LOCAL NUMBER 006S022E03H01S

ABOUT 5.5 MI NORTHWEST OF RLYTNE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12.75 IN. DEPTH 370 FT IN 1971, PERFORATED 275-414 FT. CASED 0-414 FT. ALTITUDE OF LSD 421 FT. RECORDS AVAILABLE 1964, 1971, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 161.00 FEET BELOW LAND SURFACE DATUM JAN 20, 1964.

LOWEST WATER LEVEL 171.16 FEET BELOW LAND SURFACE DATUM SEP 20, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1982	171.13	SEP 20, 1983	171.16

SITE NUMBER 334044114393201 LOCAL NUMBER 006S022E03R02S

ABOUT 1 MI WEST OF PALO VERDE JUNIOR COLLEGE. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN. DEPTH 350 FT. PERFORATED 170-350 FT. CASED 0-350 FT. ALTITUDE OF LSD 406 FT. RECORDS AVAILABLE 1966, 1971, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 143.00 FEET BELOW LAND SURFACE DATUM MAY 17, 1966.

LOWEST WATER LEVEL 171.56 FEET BELOW LAND SURFACE DATUM AUG 18, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1982	157.48	SEP 20, 1983	158.56

RIVERSIDE COUNTY--Continued

## Palo Verde Valley (7-38)

SITE NUMBER 333717114363401 LOCAL NUMBER 006S023E30K01S

ABOUT 1.5 MI NORTHWEST OF BLYTHE. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 12 IN, DEPTH 712 FT, CASED TO 712 FT, PERFORATED 620-648, 670-690 FT. ALTITUDE OF LSD 369 FT. RECORDS AVAILABLE 1977, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.37 FEET BELOW LAND SURFACE DATUM SEP 23, 1981.

LOWEST WATER LEVEL 10.62 FEET BELOW LAND SURFACE DATUM JAN 23, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 09, 1982	9.81	SEP 20, 1983	9.77

SITE NUMBER 333640114330201 LOCAL NUMBER 006S023E35E01S

ABOUT 2 MI EAST OF EAST BLYTHE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 365.5 FT. ALTITUDE OF LSD 267 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.76 FEET BELOW LAND SURFACE DATUM SEP 20, 1983.

LOWEST WATER LEVEL 10.24 FEET BELOW LAND SURFACE DATUM FEB 03, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1982	9.73	SEP 20, 1983	7.76

## Chuckwalla Valley (7-5)

SITE NUMBER 333340114552801 LOCAL NUMBER 007S020E18H01S

ABOUT 6.9 MI NORTH-NORTHWEST OF WILEYS WELL. DRILLED UNUSED WATER-TABLE WELL. DIAM 14 TO 12 IN, DEPTH 1139 FT, 14-IN CSG 0-343 FT, 12-IN CSG 343-1083 FT, PERFORATED 853-1083 FT. ALTITUDE OF LSD 445 FT. RECORDS AVAILABLE 1961, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 168.37 FEET BELOW LAND SURFACE DATUM APR 05, 1961.

LOWEST WATER LEVEL 173.48 FEET BELOW LAND SURFACE DATUM JUL 31, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 28, 1983	170.54

## Palo Verde Valley (7-38)

SITE NUMBER 333609114345701 LOCAL NUMBER 007S023E04D01S

ABOUT 1.3 MI SOUTHEAST OF BLYTHE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 502 FT, CASED TO 500 FT, PERFORATED 270-290, 334-344 FT. ALTITUDE OF LSD 268 FT. RECORDS AVAILABLE 1973, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.34 FEET BELOW LAND SURFACE DATUM AUG 27, 1981.

LOWEST WATER LEVEL 13.43 FEET BELOW LAND SURFACE DATUM JAN 22, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1982	12.52	SEP 20, 1983	12.54

## GROUND WATER

## RIVERSIDE COUNTY--Continued

## Palo Verde Valley (7-38)

SITE NUMBER 333030114412501 LOCAL NUMBER 008S022E04N02S

ABOUT 0.7 MI SOUTHWEST OF RIPLEY. UNUSED WATER-TABLE WELL. DIAM 0.75 IN. DEPTH 13.6 FT. ALTITUDE OF LSD 242 FT. MEASUREMENTS PRIOR TO 8/31/71 FURNISHED BY PALO VERDE IRRIGATION DISTRICT. RECORDS AVAILABLE 1923-26, 1936-37, 1948-71, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.11 FEET BELOW LAND SURFACE DATUM SEP 10, 1959.

LOWEST WATER LEVEL 12.82 FEET BELOW LAND SURFACE DATUM FEB 03, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10, 1982	11.49	SEP 20, 1983	11.26

## Upper Santa Ana Valley (8-2)

SITE NUMBER 335732117252801 LOCAL NUMBER 002S005W32M01S

IN NICHOLS PARK IN RIVERSIDE. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 110 FT. PERFORATED 95-110 FT. ALTITUDE OF LSD 777.8 FT. RECORDS FURNISHED BY WESTERN MUNICIPAL WATER DISTRICT. RECORDS AVAILABLE 1955, 1963-70, 1972, 1974-75, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 46.7 FEET BELOW LAND SURFACE DATUM MAY 19, 1983.

LOWEST WATER LEVEL 52.60 FEET BELOW LAND SURFACE DATUM DEC 05, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 20, 1982	47.0	MAY 19, 1983	46.7

SITE NUMBER 335731117330601 LOCAL NUMBER 002S006W31C01S

ABOUT 0.35 MI SOUTHEAST OF INTERSECTION OF ADAMS AVE AND SCHLEISMAN ROAD. DRILLED DOMESTIC WATER-TABLE WELL. DIAM AND DEPTH UNKNOWN. ALTITUDE OF LSD 601 FT. MOST MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT PRIOR TO 1982; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 22.50 FEET BELOW LAND SURFACE DATUM JUL 02, 1970.

LOWEST WATER LEVEL 41.20 FEET BELOW LAND SURFACE DATUM JUN 06, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 27, 1983	28.65

## San Jacinto Basin (8-5)

SITE NUMBER 335512117080001 LOCAL NUMBER 003S002W07P01S

EAST OF INTERSECTION OF THEODORE STREET AND ALESSANDRO BLVD. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 350 FT. ALTITUDE OF LSD 1590 FT. MOST MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT PRIOR TO 1982; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1939-48, 1951-55, 1962 TO CURRENT YEAR.

HIGHEST WATER LEVEL 101.80 FEET BELOW LAND SURFACE DATUM JAN 21, 1943.

LOWEST WATER LEVEL 145.30 FEET BELOW LAND SURFACE DATUM OCT 05, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 27, 1983	111.13

## RIVERSIDE COUNTY--Continued

## San Jacinto Basin (8-5)

SITE NUMBER 335437117110101 LOCAL NUMBER 003S003W15F01S

WEST OF INTERSECTION OF OLIVER STREET AND CACTUS AVENUE, DRILLED UNUSED WATER-TABLE WELL, DIAM 12 IN, DEPTH 243.6 FT, ALTITUDE OF LSD 1539 FT, MOST MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY, RECORDS AVAILABLE 1951 TO CURRENT YEAR.

HIGHEST WATER LEVEL 99.85 FEET BELOW LAND SURFACE DATUM APR 01, 1952.

LOWEST WATER LEVEL 159.09 FEET BELOW LAND SURFACE DATUM OCT 23, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 27, 1983	122.29

SITE NUMBER 334717117124401 LOCAL NUMBER 004S003W29Q01S

NORTH OF INTERSECTION OF WILSON AND SAN JACINTO ROADS, DRILLED UNUSED WATER-TABLE WELL, DIAM 14 IN, DEPTH 1624 FT, CASED TO 1624 FT, ALTITUDE OF LSD 1417 FT, MOST MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY, RECORDS AVAILABLE 1974-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 151.70 FEET BELOW LAND SURFACE DATUM NOV 30, 1983.

LOWEST WATER LEVEL 209.60 FEET BELOW LAND SURFACE DATUM OCT 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 27, 1983	155.44

## Temecula Valley (9-5)

SITE NUMBER 332653117050301 LOCAL NUMBER 008S002W28R01S

SOUTHEAST OF TEMECULA ON PECHANGA INDIAN RESERVATION, DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE, DIAM 12.25 IN, DEPTH 1002 FT, CASED TO 1000 FT, PERFORATED 130-220, 250-350, 400-710, 750-780, 830-870, 930-940, 975-1000 FT, ALTITUDE OF LSD 1190 FT, RECORDS AVAILABLE 1973 TO CURRENT YEAR.

HIGHEST WATER LEVEL 46.86 FEET BELOW LAND SURFACE DATUM APR 08, 1980.

LOWEST WATER LEVEL 133.50 FEET BELOW LAND SURFACE DATUM DEC 18, 1973.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 01, 1982	75.49 R	MAR 23, 1983	75.05 R	JUN 27, 1983	101.93 P

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS 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	
008S002W28R01S	83-07-21	475	7.9	19.0	130	46	3.7	52	46	2.0	
POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD AS CAC03)	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
1.0	170	17	39	.7	25	287	.80	.04	80	9	2

P Pumping.

R Recently, pumped.

## GROUND WATER

RIVERSIDE COUNTY--Continued

## Temecula Valley (9-5)

SITE NUMBER 332719117061501 LOCAL NUMBER 0085002W29601S

SOUTHEAST OF TEMECULA ON PECHANGA INDIAN RESERVATION. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 176 FT IN 1951, 159.1 FT IN 1972. ALTITUDE OF LSD 1091.1 FT. RECORDS AVAILABLE 1925-28, 1934-37, 1940, 1951-54, 1956, 1958-68, 1971 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.70 FEET BELOW LAND SURFACE DATUM APR 08, 1980.

LOWEST WATER LEVEL 55.40 FEET BELOW LAND SURFACE DATUM SEP 03, 1951.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 01, 1982	32.26	MAR 23, 1983	29.74	JUN 27, 1983	26.07

SAN BERNARDINO COUNTY

## Searles Valley (6-52)

SITE NUMBER 354040117223201 LOCAL NUMBER 0265043E18A01M

ABOUT 2 MI SOUTH OF WESTEND. UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 102 FT. ALTITUDE OF LSD 1680 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 29.85 FEET BELOW LAND SURFACE DATUM AUG 09, 1979.

LOWEST WATER LEVEL 36.60 FEET BELOW LAND SURFACE DATUM JUL 29, 1983.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22, 1982	34.93	JAN 10, 1983	34.66	JUL 29, 1983	36.60

## Superior Valley (6-40)

SITE NUMBER 351353117025101 LOCAL NUMBER 0315046E16J01M

ABOUT 0.5 MI SOUTH OF SOUTH EDGE OF SUPERIOR LAKE AND 21 MI NORTH OF HANSTOW. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 245.5 FT IN 1954, 227.5 FT IN 1968, 198.6 FT IN 1978. ALTITUDE OF LSD 3011 FT. RECORDS AVAILABLE 1953-54, 1961-68, 1970, 1978-79, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 93.00 FEET BELOW LAND SURFACE DATUM DEC 15, 1953.

LOWEST WATER LEVEL 94.05 FEET BELOW LAND SURFACE DATUM OCT 17, 1966.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 16, 1982	93.21

## Copper Mountain Valley (7-11)

SITE NUMBER 340945116125001 LOCAL NUMBER 001N007E23A01S

ABOUT 1.9 MI EAST OF SUNFAIR. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 368.5 FT. PERFORATED 360-370 FT. ALTITUDE OF LSD 2376 FT. RECORDS AVAILABLE 1969, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 209.96 FEET BELOW LAND SURFACE DATUM JAN 09, 1980.

LOWEST WATER LEVEL 210.41 FEET BELOW LAND SURFACE DATUM MAY 11, 1983.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1982	210.61	JAN 18, 1983	210.56	MAY 11, 1983	210.81	SEP 08, 1983	210.67
NOV 16	210.61	FEB 16	210.62	JUN 08	210.67		
24	210.60	MAR 16	210.53	JUL 06	210.74		
DEC 21	210.54	APR 12	210.61	AUG 08	210.61		



## SAN BERNARDINO COUNTY--Continued

## Twentynine Palms (7-10)

SITE NUMBER 340743116025501 LOCAL NUMBER 001N009E33F04S

ABOUT 0.3 MI SOUTHEAST OF TWENTYNINE PALMS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM.  
DIAM 2 IN, DEPTH 42 FT, SAND POINT 40-42 FT. ALTITUDE OF LSD 1981 FT. RECORDS AVAILABLE 1974  
TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.99 FEET BELOW LAND SURFACE DATUM DEC 27, 1982.

LOWEST WATER LEVEL 9.10 FEET BELOW LAND SURFACE DATUM JAN 17, 1974.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1982	7.99

SITE NUMBER 340741116022001 LOCAL NUMBER 001N009E33H01S

ABOUT 1 MI SOUTHEAST OF FOUR CORNERS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 2 IN, DEPTH  
77 FT, SAND POINT 75-77 FT. ALTITUDE OF LSD 1960.75 FT. RECORDS AVAILABLE 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 51.68 FEET BELOW LAND SURFACE DATUM MAR 10, 1981.

LOWEST WATER LEVEL 52.97 FEET BELOW LAND SURFACE DATUM OCT 12, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 27, 1982	52.51

## Dale Valley (7-9)

SITE NUMBER 340934115451501 LOCAL NUMBER 001N012E20D01S

ABOUT 30.2 MI WEST OF AMBOY. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF PLEISTOCENE AGE. DIAM  
12 IN, DEPTH 260 FT, PERFORATED 34-248 FT. ALTITUDE OF LSD 1211.3 FT. RECORDS AVAILABLE 1948, 1950-  
59, 1961-67, 1969-70, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 26.67 FEET BELOW LAND SURFACE DATUM OCT 01, 1981.

LOWEST WATER LEVEL 45.83 FEET BELOW LAND SURFACE DATUM APR 09, 1948.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 19, 1982	27.02

SITE NUMBER 340933115451101 LOCAL NUMBER 001N012E20D04S

NEAR AMBOY ROAD, ABOUT 1.5 MI NORTHWEST OF DALE LAKE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM.  
DIAM 12 IN, DEPTH 1190 FT, PERFORATED 65-200 FT. ALTITUDE OF LSD 1212.4 FT. RECORDS AVAILABLE 1940,  
1954, 1959-67, 1969-70, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 27.04 FEET BELOW LAND SURFACE DATUM MAR 18, 1964.

LOWEST WATER LEVEL 33.50 FEET BELOW LAND SURFACE DATUM JUL 01, 1940.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 19, 1982	27.78

## GROUND WATER

## SAN BERNARDINO COUNTY--Continued

## Vidal Valley (7-42)

SITE NUMBER 341140114353601 LOCAL NUMBER 001N023E08D01S

ABOUT 1.5 MI WEST OF VIDAL JUNCTION. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 502.7 FT, PERFORATED 296-336, 475-603 FT. ALTITUDE OF LSD 960 FT. RECORDS AVAILABLE 1962-67, 1969, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 263.08 FEET BELOW LAND SURFACE DATUM APR 24, 1979.

LOWEST WATER LEVEL 268.1 FEET BELOW LAND SURFACE DATUM NOV 17, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 19, 1982	267.37

## Ames Valley (7-16)

SITE NUMBER 341345116234701 LOCAL NUMBER 002N006E30L01S

ABOUT 20 MI NORTHWEST OF TWENTYNINE PALMS. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN, DEPTH 377 FT. ALTITUDE OF LSD 3328 FT. RECORDS AVAILABLE 1958, 1966-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 311.65 FEET BELOW LAND SURFACE DATUM MAY 22, 1958.

LOWEST WATER LEVEL 359.04 FEET BELOW LAND SURFACE DATUM APR 21, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 28, 1982	330.70	MAR 22, 1983	329.88

## Ward Valley (7-3)

SITE NUMBER 341627115102901 LOCAL NUMBER 002N017E11M01S

ABOUT 0.5 MI SOUTHWEST OF MILLIGAN. DRILLED WATER-TABLE WELL. DIAM 12 IN, DEPTH 100.6 FT IN 1979. ALTITUDE OF LSD 720 FT. RECORDS AVAILABLE 1964, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 92.25 FEET BELOW LAND SURFACE DATUM JUL 20, 1979.

LOWEST WATER LEVEL 93.55 FEET BELOW LAND SURFACE DATUM AUG 22, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	93.37

## Deadman Valley (7-13)

SITE NUMBER 341918116101501 LOCAL NUMBER 003N008E29C01S

ABOUT 9 MI NORTHWEST OF TWENTYNINE PALMS MARINE CORPS BASE HEADQUARTERS. DRILLED TEST WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN, DEPTH 201.3 FT. ALTITUDE OF LSD 1890.93 FT. RECORDS AVAILABLE 1952-67, 1970, 1973, 1975, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 86.61 FEET BELOW LAND SURFACE DATUM JAN 09, 1980.

LOWEST WATER LEVEL 89.17 FEET BELOW LAND SURFACE DATUM NOV 14, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	88.65	JAN 18, 1983	88.59	APR 12, 1983	88.58	JUL 06, 1983	88.56
NOV 16	88.61	FEB 16	88.60	MAY 11	88.67	AUG 08	88.59
DEC 21	88.61	MAR 16	88.56	JUN 08	88.61	SEP 07	88.59

SAN BERNARDINO COUNTY--Continued

## Johnson Valley (7-18)

SITE NUMBER 342517116380601 LOCAL NUMBER 004N003E23G01S

ABOUT 4.5 MI NORTH OF HWY 247. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 107 FT, PERFORATED 76-107 FT. ALTITUDE OF LSD 2850 FT. RECORDS AVAILABLE 1950, 1975, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 71.80 FEET BELOW LAND SURFACE DATUM OCT 14, 1950.

LOWEST WATER LEVEL 75.50 FEET BELOW LAND SURFACE DATUM APR 25, 1975.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	73.24	DEC 28, 1982	73.18	MAR 22, 1983	73.15	MAY 26, 1983	73.13

SITE NUMBER 342448116371501 LOCAL NUMBER 004N003E24G01S

ABOUT 3 MI NORTH OF HWY 247, NORTHEAST OF OLD WOMAN SPRINGS. DRILLED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 240.8 FT. ALTITUDE OF LSD 2833 FT. RECORDS AVAILABLE 1954-67, 1969-71, 1975, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 54.60 FEET BELOW LAND SURFACE DATUM MAY 06, 1954.

LOWEST WATER LEVEL 58.56 FEET BELOW LAND SURFACE DATUM FEB 28, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 28, 1982	55.94	MAR 22, 1983	55.91

## Cadiz Valley (7-7)

SITE NUMBER 342513115220001 LOCAL NUMBER 004N015E24E01S

ABOUT 16.2 MI NORTHWEST OF MILLIGAN. DRILLED UNUSED WATER-TABLE WELL. DIAM UNKNOWN, DEPTH 267.9 FT. ALTITUDE OF LSD 848 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 258.30 FEET BELOW LAND SURFACE DATUM JUL 20, 1979.

LOWEST WATER LEVEL 258.41 FEET BELOW LAND SURFACE DATUM JAN 21, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	258.35

## Chemehuevi Valley (7-43)

SITE NUMBER 342641114284301 LOCAL NUMBER 004N024E17H01S

ABOUT 3.2 MI SOUTHEAST OF LAKE HAVASU ROAD, IN CHEMEHUEVI WASH. DUG WATER-TABLE WELL IN ALLUVIUM. DIAM 36 IN, DEPTH 9 FT. ALTITUDE OF LSD 770 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.39 FEET BELOW LAND SURFACE DATUM OCT 20, 1983.

LOWEST WATER LEVEL 6.36 FEET BELOW LAND SURFACE DATUM APR 24, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	5.60

## GROUND WATER

SAN BERNARDINO COUNTY--Continued

## Lucerne Valley (7-19)

SITE NUMBER 343153116542301 LOCAL NUMBER 005N001E17D01S

ABOUT 6.5 MI NORTH OF LUCERNE VALLEY. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 169.5 FT. ALTITUDE OF LSD 2880 FT. RECORDS AVAILABLE 1954-55, 1960-71, 1976, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 62.27 FEET BELOW LAND SURFACE DATUM APR 22, 1954.

LOWEST WATER LEVEL 143.37 FEET BELOW LAND SURFACE DATUM OCT 20, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	141.68	DEC 13, 1982	141.97	MAR 22, 1983	141.68	JUN 16, 1983	141.84

## Bristol Valley (7-8)

SITE NUMBER 343106115295901 LOCAL NUMBER 005N014E15K01S

ABOUT 0.5 MI EAST OF CADIZ. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 348.6 FT. ALTITUDE OF LSD 820 FT. RECORDS AVAILABLE 1910, 1929, 1954, 1964, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 208. FEET BELOW LAND SURFACE DATUM JAN 22, 1929.

LOWEST WATER LEVEL 220. FEET BELOW LAND SURFACE DATUM AUG 24, 1910.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	213.79

SITE NUMBER 343334115443301 LOCAL NUMBER 006N012E32R01S

IN AMBOY. DRILLED UNUSED WATER-TABLE WELL. DIAM 38 IN. DEPTH 82.1 FT. CASED TO 55 FT. ALTITUDE OF LSD 658 FT. RECORDS AVAILABLE 1957, 1964, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 41.85 FEET BELOW LAND SURFACE DATUM AUG 12, 1964.

LOWEST WATER LEVEL 52. FEET BELOW LAND SURFACE DATUM JUL 01, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 17, 1982	43.14

SITE NUMBER 343407115421201 LOCAL NUMBER 006N012E35F01S

ABOUT 2 MI NORTH-NORTHWEST OF SALTUS. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN. DEPTH 284 FT. ALTITUDE OF LSD 767 FT. RECORDS AVAILABLE 1955, 1957, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 190. FEET BELOW LAND SURFACE DATUM SEP 30, 1955.

LOWEST WATER LEVEL 203.61 FEET BELOW LAND SURFACE DATUM JUL 21, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 17, 1982	202.33

SAN BERNARDINO COUNTY--Continued

## Fenner Valley (7-2)

SITE NUMBER 343803115203901 LOCAL NUMBER 006N016E06K01S

IN DANBY. DRILLED UNUSED WATER-TABLE WELL. DIAM 15.5 IN 0-245 FT, 12.5 IN 224-419 FT, 9.63 IN 409-983 FT, DEPTH 983 FT IN 1925, 350.3 FT IN 1979, PERFORATED 75-920 FT. ALTITUDE OF LSD 1352 FT. MEASUREMENTS FURNISHED BY DEPARTMENT OF WATER RESOURCES 1925, 1953-61, 1964; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1979 TO CURRENT YEAR. RECORDS AVAILABLE 1925, 1953-61, 1964, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 258.10 FEET BELOW LAND SURFACE DATUM MAY 16, 1960.

LOWEST WATER LEVEL 268.60 FEET BELOW LAND SURFACE DATUM SEP 13, 1953.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	259.01

SITE NUMBER 344655115155601 LOCAL NUMBER 008N016E13M01S

ABOUT 4.3 MI SOUTH OF FREEWAY 40. DRILLED UNUSED WELL. DIAM 16 IN, DEPTH GREATER THAN 1000 FT. ALTITUDE OF LSD 1840 FT. RECORDS AVAILABLE 1956, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 400.00 FEET BELOW LAND SURFACE DATUM JAN 01, 1956.

LOWEST WATER LEVEL 406.80 FEET BELOW LAND SURFACE DATUM OCT 20, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	406.65

SITE NUMBER 344352115145601 LOCAL NUMBER 008N016E36R01S

ABOUT 11 MI NORTHEAST OF DANBY. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 12 IN, DEPTH DRILLED 800 FT, PERFORATED 335-400 FT. ALTITUDE OF LSD 1720 FT. RECORDS AVAILABLE 1930, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 335.00 FEET BELOW LAND SURFACE DATUM NOV 04, 1930.

LOWEST WATER LEVEL 339.80 FEET BELOW LAND SURFACE DATUM JUL 24, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	336.3 R

## Lower Mojave River Valley (6-40)

SITE NUMBER 345110116473601 LOCAL NUMBER 009N002E20Q01S

AT DAGGETT AIRPORT. UNUSED WATER TABLE WELL. DIAM 8 IN, DEPTH 90 FT. ALTITUDE OF LSD 1921.4 FT. RECORDS IN 1932, 1941-48, 1952-57, 1959 FURNISHED BY U.S. BUREAU OF RECLAMATION AND SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT. RECORDS AVAILABLE 1932, 1941-48, 1952-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 41.81 FEET BELOW LAND SURFACE DATUM NOV 15, 1945.

LOWEST WATER LEVEL 88.98 FEET BELOW LAND SURFACE DATUM DEC 13, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 13, 1982	88.98	MAR 23, 1983	87.65	JUN 22, 1983	88.27

R Recently, pumped.

## GROUND WATER

SAN BERNARDINO COUNTY--Continued

## Lower Mojave River Valley (6-40)

SITE NUMBER 345709116390501 LOCAL NUMBER 010N003E15001S

ABOUT 0.5 MI WEST OF HARVARD ROAD AND NORTH OF CHEROKEE ROAD. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 12 IN, DEPTH 186.4 FT IN 1959, 165 FT IN 1980. ALTITUDE OF LSD 1808 FT. RECORDS AVAILABLE 1959, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 78.00 FEET BELOW LAND SURFACE DATUM JUN 12, 1959.

LOWEST WATER LEVEL 112.99 FEET BELOW LAND SURFACE DATUM DEC 13, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 13, 1982	112.99	MAR 23, 1983	112.65

## Piute Valley (7-45)

SITE NUMBER 345629114472601 LOCAL NUMBER 010N021E21002S

NORTHEAST OF THIS. UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 820 FT. PERFORATED 130-635 FT. ALTITUDE OF LSD 1460 FT. RECORDS AVAILABLE 1917, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 118.46 FEET BELOW LAND SURFACE DATUM NOV 18, 1982.

LOWEST WATER LEVEL 130.00 FEET BELOW LAND SURFACE DATUM OCT 25, 1917.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	118.46

## Coyote Lake Valley (6-37)

SITE NUMBER 350547116481301 LOCAL NUMBER 012N002E31A01S

ON FORT IRWIN, WEST OF COYOTE LAKE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 114.22 FT. ALTITUDE OF LSD 1789.5 FT. RECORDS AVAILABLE 1955-68, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 52.12 FEET BELOW LAND SURFACE DATUM APR 10, 1979.

LOWEST WATER LEVEL 57.63 FEET BELOW LAND SURFACE DATUM NOV 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 16, 1982	57.63

## Cronese Valley (6-35)

SITE NUMBER 350627116152401 LOCAL NUMBER 012N007E29A01S

ABOUT 15.5 MI WEST-SOUTHWEST OF BAKER. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 46.3 FT. ALTITUDE OF LSD 1100 FT. RECORDS AVAILABLE 1919, 1954, 1965, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 31.1 FEET BELOW LAND SURFACE DATUM DEC 05, 1919.

LOWEST WATER LEVEL 39.88 FEET BELOW LAND SURFACE DATUM AUG 08, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 1982	36.89	JUL 31, 1983	36.15

## SAN BERNARDINO COUNTY--Continued

## Lanfair Valley (7-1)

SITE NUMBER 350923115093501 LOCAL NUMBER 012N017E04D01S

NORTHWEST OF LANFAIR BUTTES. STOCK WATER-TABLE WELL. DIAM 8 IN, DEPTH 700 FT. ALTITUDE OF LSD 3980 FT. RECORDS AVAILABLE 1937, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 509.9 FEET BELOW LAND SURFACE DATUM NOV 17, 1983.

LOWEST WATER LEVEL 570.00 FEET BELOW LAND SURFACE DATUM JAN 01, 1937.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	510.4

SITE NUMBER 350844115092901 LOCAL NUMBER 012N017E04N01S

LOCATED IN FENNER VALLEY. DIAM 72 IN, DEPTH 17 FT. ALTITUDE OF LSD 3960 FT. RECORDS AVAILABLE 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.73 FEET BELOW LAND SURFACE DATUM NOV 17, 1983.

LOWEST WATER LEVEL 11.00 FEET BELOW LAND SURFACE DATUM AUG 31, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 18, 1982	9.14

## Soda Lake Valley (6-33)

SITE NUMBER 351148116022101 LOCAL NUMBER 013N009E20J01S

ABOUT 5 MI SOUTHEAST OF BAKER. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF PLEISTOCENE AGE. DIAM 16 IN, DEPTH 400 FT. ALTITUDE OF LSD 980 FT. RECORDS AVAILABLE 1954-56, 1958-68, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 64.69 FEET BELOW LAND SURFACE DATUM JUN 30, 1978.

LOWEST WATER LEVEL 66.57 FEET BELOW LAND SURFACE DATUM MAR 14, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 1982	65.90	JUL 31, 1983	65.86

## Bicycle Valley (6-25)

SITE NUMBER 351830116364501 LOCAL NUMBER 014N003E13K01S

ABOUT 5 MI NORTHEAST OF CAMP IRWIN. DRILLED INSTITUTION WATER-TABLE WELL. DIAM 14 TO 10 IN, DEPTH 600 FT, 14-IN CSG 0-430 FT, 10-IN CSG 420-600 FT, PERFORATED 180-410, 430-580 FT. ALTITUDE OF LSD 2393.8 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 173.00 FEET BELOW LAND SURFACE DATUM JUN 14, 1965.

LOWEST WATER LEVEL 192.83 FEET BELOW LAND SURFACE DATUM NOV 16, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 16, 1982	192.83

## GROUND WATER

SAN BERNARDINO COUNTY--Continued

## Soda Lake Valley (6-33)

SITE NUMBER 351610116035401 LOCAL NUMBER 014N009E30K01S

ABOUT 1 MI NORTHEAST OF BAKER. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN, DEPTH 95.3 FT. ALTITUDE OF LSD 965 FT. RECORDS AVAILABLE 1954-68, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 75.32 FEET BELOW LAND SURFACE DATUM MAR 03, 1955.

LOWEST WATER LEVEL 76.93 FEET BELOW LAND SURFACE DATUM OCT 31, 1956.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29, 1982	76.76	JUL 31, 1983	76.78

## Goldstone Valley (6-48)

SITE NUMBER 352306116540901 LOCAL NUMBER 015N001E20F01S

ABOUT 7.9 MI NORTH OF GOLDSTONE. DRILLED UNUSED WATER-TABLE WELL. DIAM 4 IN, DEPTH 181 FT. ALTITUDE OF LSD 3030 FT. RECORDS AVAILABLE 1969, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 134.25 FEET BELOW LAND SURFACE DATUM NOV 16, 1982.

LOWEST WATER LEVEL 137.02 FEET BELOW LAND SURFACE DATUM AUG 20, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 16, 1982	134.25	JUL 22, 1983	134.32

## Upper Kingston Valley (6-22)

SITE NUMBER 352308115420601 LOCAL NUMBER 015N012E16H02S

ABOUT 3 MI SOUTH OF VALLEY WELLS STATION. DRILLED STOCK WATER-TABLE WELL. DIAM UNKNOWN, DEPTH UNKNOWN. ALTITUDE OF LSD 3910 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 204.63 FEET BELOW LAND SURFACE DATUM NOV 17, 1982.

LOWEST WATER LEVEL 205.64 FEET BELOW LAND SURFACE DATUM OCT 07, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 17, 1982	204.63

## Ivanpah Valley (6-30)

SITE NUMBER 352713115204401 LOCAL NUMBER 015N015E59N01S

ABOUT 4.5 MI WEST OF NIPTON. DRILLED UNUSED WATER-TABLE WELL. DIAM 18 IN, DEPTH 125 FT WITH 12 FT TUNNEL AT BOTTOM IN 1893, 110.5 FT IN 1969. ALTITUDE OF LSD 2630 FT. RECORDS AVAILABLE 1916-17, 1953-56, 1958-60, 1965, 1969, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 90.00 FEET BELOW LAND SURFACE DATUM JAN 15, 1965.

LOWEST WATER LEVEL 105.00 FEET BELOW LAND SURFACE DATUM SEP 14, 1954.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 17, 1982	99.77



## SAN BERNARDINO COUNTY--Continued

## Riggs Valley (6-23)

SITE NUMBER 352722115583701 LOCAL NUMBER 016N009E24N01S

ABOUT 10 MI NORTHEAST OF SILVER LAKE. UNUSED WATER-TABLE WELL. DIAM 60 IN, DEPTH 31.0 FT. ALTITUDE OF LSD 3000 FT. RECORDS AVAILABLE 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.18 FEET BELOW LAND SURFACE DATUM JUN 24, 1965.

LOWEST WATER LEVEL 14.00 FEET BELOW LAND SURFACE DATUM OCT 06, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 1982	13.97	JUL 31, 1983	12.66

## Upper Kingston Valley (6-22)

SITE NUMBER 352626115402301 LOCAL NUMBER 016N012E26N01S

ABOUT 7.3 MI NORTHEAST OF PASO ALTO. DRILLED STOCK WATER-TABLE WELL. DIAM 48 IN, DEPTH 64.7 FT. ALTITUDE OF LSD 3725 FT. RECORDS FURNISHED BY DEPARTMENT OF WATER RESOURCES 1956-64. RECORDS AVAILABLE 1956-64, 1969, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 44.63 FEET BELOW LAND SURFACE DATUM JUN 20, 1980.

LOWEST WATER LEVEL 64.00 FEET BELOW LAND SURFACE DATUM DEC 04, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 17, 1982	43.81 P

SITE NUMBER 353157115454801 LOCAL NUMBER 017N011E25M01S

IN SHADOW VALLEY, NORTHWEST OF VALLEY WELLS STATION. DIAM 10 IN, DEPTH 376 FT. ALTITUDE OF LSD 3320 FT. RECORDS AVAILABLE 1933, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 358.50 FEET BELOW LAND SURFACE DATUM JAN 15, 1981.

LOWEST WATER LEVEL 388.00 FEET BELOW LAND SURFACE DATUM JUN 22, 1933.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
OCT 28, 1982	358.54

## Lower Kingston Valley (6-21)

SITE NUMBER 354122116175601 LOCAL NUMBER 019N006E36N01S

ABOUT 22 MI SOUTH-SOUTHEAST OF SHOSHONE. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN, DEPTH 295 FT. ALTITUDE OF LSD 480 FT. RECORDS AVAILABLE 1978-79, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 205.30 FEET BELOW LAND SURFACE DATUM JUL 28, 1978.

LOWEST WATER LEVEL 210.70 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28, 1982	210.49	JUL 31, 1983	210.67

P Pumping.

## GROUND WATER

## SAN BERNARDINO COUNTY--Continued

## Mesquite Valley (6-29)

SITE NUMBER 354642115383601 LOCAL NUMBER 019N012E13D01S

ABOUT 3 MI SOUTHWEST OF SANDY. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 500 FT. ALTITUDE OF LSD 2580 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.06 FEET BELOW LAND SURFACE DATUM JUL 10, 1979.

LOWEST WATER LEVEL 38.96 FEET BELOW LAND SURFACE DATUM NOV 16, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
OCT 28, 1982	38.57

## Upper Santa Ana Valley (8-2)

SITE NUMBER 340743117162001 LOCAL NUMBER 001N004W35L01S

ABOUT 0.14 MI SOUTHWEST OF INTERSECTION OF 16TH STREET AND CRESTVIEW IN SAN BERNARDINO. DRILLED UNUSED WATER-TABLE WELL. DIAM 3 IN. DEPTH 235.5 FT. ALTITUDE OF LSD 1130 FT. MEASUREMENTS FURNISHED BY CALIFORNIA DEPARTMENT OF WATER RESOURCES 1904-70; MEASUREMENTS BY U.S. GEOLOGICAL SURVEY 1971 TO CURRENT YEAR. RECORDS AVAILABLE 1904-74, 1979, 1981 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.22 FEET ABOVE LAND SURFACE DATUM MAR 02, 1917.

LOWEST WATER LEVEL 216.14 FEET BELOW LAND SURFACE DATUM AUG 31, 1967.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29, 1982	85.5	MAR 23, 1983	67.0	JUN 02, 1983	75.0	SEP 27, 1983	79.90
FEB 01, 1983	78.	25	52.8	AUG 29	86.7		

## Lucerne Valley (7-19)

SITE NUMBER 342519116591401 LOCAL NUMBER 004N001W21G01S

ABOUT 0.4 MI WEST OF INTERSECTION OF CUSTER AVENUE AND SUTTER ROAD. DOMESTIC WELL. DIAM UNKNOWN. DEPTH 250 FT. ALTITUDE OF LSD 3121 FT. RECORDS AVAILABLE 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 168.35 FEET BELOW LAND SURFACE DATUM DEC 11, 1980.

LOWEST WATER LEVEL 169.37 FEET BELOW LAND SURFACE DATUM OCT 20, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	169.37	DEC 13, 1982	168.69	JUN 16, 1983	168.63

## WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
004N001W21G01S	83-08-12	390	7.7	24.5	113	34	6.8	41	43	1.7

POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CAC03)	SULFATE DIS-SOLVED (MG/L AS S04)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
2.9	141	55	9.4	.5	29	263	.82	.02	90	7	2

## SAN BERNARDINO COUNTY--Continued

Upper Mojave River Valley (6-42)

SITE NUMBER 342813117123301 LOCAL NUMBER 004N003W05A02S

ABOUT 0.1 MI WEST OF INTERSECTION OF BEAR VALLEY ROAD AND KIOWA ROAD IN APPLE VALLEY. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 300 FT, PERFORATED 238-268 FT. ALTITUDE OF LSD 3002 FT. RECORDS AVAILABLE 1953, 1956, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 182.12 FEET BELOW LAND SURFACE DATUM MAR 21, 1980.

LOWEST WATER LEVEL 195.93 FEET BELOW LAND SURFACE DATUM DEC 29, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 29, 1982	195.93	MAR 16, 1983	194.79	MAY 25, 1983	194.15

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS 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
004N003W05A02S	83-08-12	340	7.8	20.5	122	35	8.3	22	27	.9
POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CAC03)	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)
2.8	91	74	11	.4	31	239	.60	.01	50	4

SITE NUMBER 343122117094501 LOCAL NUMBER 005N003W14G01S

ABOUT 1.5 MI NORTHEAST OF APPLE VALLEY. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN, DEPTH 226.3 FT. ALTITUDE OF LSD 2916 FT. RECORDS AVAILABLE 1957, 1964-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 81.64 FEET BELOW LAND SURFACE DATUM APR 25, 1957.

LOWEST WATER LEVEL 103.88 FEET BELOW LAND SURFACE DATUM OCT 19, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	103.46	MAY 26, 1983	103.11

SITE NUMBER 343150117151502 LOCAL NUMBER 005N004W11P03S

IN APPLE VALLEY. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 IN, DEPTH 145 FT. ALTITUDE OF LSD 2788 FT. RECORDS AVAILABLE 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 51.27 FEET BELOW LAND SURFACE DATUM OCT 19, 1983.

LOWEST WATER LEVEL 55.16 FEET BELOW LAND SURFACE DATUM AUG 06, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	52.28	MAY 26, 1983	53.29 R

R Recently, pumped.

## GROUND WATER

## SAN BERNARDINO COUNTY--Continued

## Upper Mojave River Valley (6-42)

SITE NUMBER 343900117261801 LOCAL NUMBER 006N005W19J025

ABOUT 1.5 MI NORTHWEST OF ADELANTO. DRILLED UNUSED WATER-TABLE WELL. DIAM 9 IN, DEPTH 1200 FT. ALTITUDE OF LSD 2838 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 78.3 FEET BELOW LAND SURFACE DATUM APR 17, 1979.

LOWEST WATER LEVEL 78.87 FEET BELOW LAND SURFACE DATUM MAR 06, 1980.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1982	78.82	MAY 26, 1983	78.77

## Middle Mojave River Valley (6-41)

SITE NUMBER 344728117145601 LOCAL NUMBER 008N004W12Q01S

ABOUT 16 MI SOUTHWEST OF BARSTOW. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN, DEPTH 49.1 FT. ALTITUDE OF LSD 2329 FT. RECORDS AVAILABLE 1931-32, 1935-37, 1939-41, 1943-64, 1966-70, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.16 FEET BELOW LAND SURFACE DATUM MAY 13, 1954.

LOWEST WATER LEVEL 33.50 FEET BELOW LAND SURFACE DATUM OCT 31, 1963.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 14, 1982	13.28	MAR 23, 1983	10.36

SITE NUMBER 344726117145501 LOCAL NUMBER 008N004W13B01S

NORTH OF NATIONAL TRAILS HWY, 15 MI SOUTHWEST OF BARSTOW. DRILLED WITHDRAWAL WATER-TABLE WELL. DIAM 10 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 2330 FT.

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
008N004W13B01S	83-08-10	1340	7.4	19.5	411	130	21	150	44	3.3
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+N03 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)
3.4	315	200	150	.6	28	872	5.9	.03	330	4

SAN BERNARDINO COUNTY--Continued

## Lower Mojave River Valley (6-40)

SITE NUMBER 345243116563802 LOCAL NUMBER 009N001W11R02S

NEAR BARSTOW. DRILLED UNUSED WATER-TABLE WELL. DIAM 2 IN, DEPTH 102 FT, SAND POINT 100-102 FT. ALTITUDE OF LSD 2032.51 FT. RECORDS AVAILABLE 1972-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.02 FEET BELOW LAND SURFACE DATUM JUN 17, 1983.

LOWEST WATER LEVEL 31.80 FEET BELOW LAND SURFACE DATUM NOV 03, 1976.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	20.66	DEC 13, 1982	20.49	MAR 17, 1983	19.17	JUN 17, 1983	19.02

## Middle Mojave River Valley (6-41)

SITE NUMBER 345153117080701 LOCAL NUMBER 009N003W13R01S

ABOUT 2 MI SOUTHWEST OF LENWOOD. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 212 FT. ALTITUDE OF LSD 2245 FT. RECORDS AVAILABLE 1954, 1963-71, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 60.60 FEET BELOW LAND SURFACE DATUM APR 20, 1954.

LOWEST WATER LEVEL 89.14 FEET BELOW LAND SURFACE DATUM NOV 14, 1968.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 20, 1982	81.11	DEC 14, 1982	81.26	JUN 22, 1983	75.82 R

## Harper Valley (6-47)

SITE NUMBER 350039117185301 LOCAL NUMBER 011N004W29R01S

ABOUT 2.9 MI EAST OF LOCKHART. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN, DEPTH 500 FT IN 1952, 303 FT IN 1968, 361.2 FT IN 1978. ALTITUDE OF LSD 2045 FT. RECORDS AVAILABLE 1953-71, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 83.42 FEET BELOW LAND SURFACE DATUM NOV 17, 1960.

LOWEST WATER LEVEL 176.75 FEET BELOW LAND SURFACE DATUM JUN 22, 1983.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1982	168.71	DEC 14, 1982	164.17	MAR 17, 1983	159.88	JUN 22, 1983	176.75

R Recently, pumped.

## GROUND WATER

## SAN BERNARDINO COUNTY--Continued

## Harper Valley (6-47)

SITE NUMBER 350038117184501 LOCAL NUMBER 011N004W32A01S

NEAR HARPER LAKE AND LOCKHART ROAD, DRILLED WITHDRAWAL WATER-TABLE WELL, DIAM 14 IN, DEPTH 425 FT, PERFORATED 158-425 FT. ALTITUDE OF LSD 2044 FT.

## WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	SPECIFIC CONDUCTANCE (UMHOS)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM ADSORPTION RATIO
011N004W32A01S	83-08-10	1770	7.7	25.0	218	69	11	310	74	9.5

POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3, DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
6.1	129	240	390	.7	59	1164	2.0	<.01	1300	4

SITE NUMBER 350235117321501 LOCAL NUMBER 011N006W17P02S

ABOUT 6 MI NORTHEAST OF BORON, DRILLED UNUSED WATER-TABLE WELL, DIAM 10 IN, DEPTH 647 FT. ALTITUDE OF LSD 2550 FT. RECORDS AVAILABLE 1953, 1968, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 262.00 FEET BELOW LAND SURFACE DATUM JUL 13, 1953.

LOWEST WATER LEVEL 265.52 FEET BELOW LAND SURFACE DATUM AUG 09, 1968.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 21, 1982	264.29	DEC 14, 1982	264.32	MAR 17, 1983	263.78	MAY 26, 1983	263.91

## Upper Santa Ana Valley (8-2)

SITE NUMBER 340416117205101 LOCAL NUMBER 001S004W19E01S

EAST OF MERIDIAN AVENUE, NORTH OF VALLEY BLVD. DRILLED OBSERVATION WELL IN ALLUVIUM, DIAM 2 IN, DEPTH 222 FT, CASED TO 251 FT, PERFORATED 223-244 FT. ALTITUDE OF LSD 1038.9 FT. RECORDS AVAILABLE 1964, 1967-70, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 151.67 FEET BELOW LAND SURFACE DATUM NOV 30, 1983.

LOWEST WATER LEVEL 193.94 FEET BELOW LAND SURFACE DATUM JAN 02, 1969.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 27, 1983	152.74

&lt; Actual value is known to be less than the value shown.

SAN DIEGO COUNTY

## Borrego Valley (7-24)

SITE NUMBER 331800116210001 LOCAL NUMBER 010S006E21A01S

ABOUT 0.1 MI SOUTHEAST OF INTERSECTION OF BORREGO VALLEY AND HENDERSON CANYON ROADS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 310 FT. ALTITUDE OF LSD 640 FT. RECORDER INSTALLED BY CALIFORNIA STATE WATER RESOURCES DEPARTMENT IN 1952. RECORDS AVAILABLE 1952-76, 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 130.55 FEET BELOW LAND SURFACE DATUM JAN 03, 1953.

LOWEST WATER LEVEL 185.48 FEET BELOW LAND SURFACE DATUM JUL 22, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	179.81	SEP 27, 1983	179.19

SITE NUMBER 331432116194602 LOCAL NUMBER 011S006E11D02S

ABOUT 1 MI SOUTHEAST OF INTERSECTION OF BORREGO VALLEY ROAD AND PALM CANYON DRIVE. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 218 FT. ALTITUDE OF LSD 500 FT. RECORDS AVAILABLE 1953-71, 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 17.53 FEET BELOW LAND SURFACE DATUM NOV 16, 1953.

LOWEST WATER LEVEL 65.60 FEET BELOW LAND SURFACE DATUM AUG 14, 1958.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	45.72	SEP 27, 1983	43.67

## Ocotillo Valley (7-25)

SITE NUMBER 330639116074701 LOCAL NUMBER 012S008E22E01S

ABOUT 2.5 MI SOUTHEAST OF INTERSECTION OF HWY 78 AND SPLIT MTN ROAD. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 226 FT. ALTITUDE OF LSD 110 FT. RECORDS AVAILABLE 1951, 1953-71, 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 101.83 FEET BELOW LAND SURFACE DATUM NOV 10, 1954.

LOWEST WATER LEVEL 119.16 FEET BELOW LAND SURFACE DATUM NOV 10, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1982	109.16	SEP 27, 1983	109.09

## Vallecito-Carrizo Valley (7-28)

SITE NUMBER 325848116260301 LOCAL NUMBER 014S005E02J03S

ABOUT 0.2 MI NORTH OF AGUA CALIENTE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN, DEPTH 181 FT. ALTITUDE OF LSD 2030 FT. RECORDS AVAILABLE 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 60.66 FEET BELOW LAND SURFACE DATUM JUL 22, 1980.

LOWEST WATER LEVEL 74.10 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
SEP 22, 1983	101.25 P

p Pumping.

## GROUND WATER

SAN DIEGO COUNTY--Continued

## Vallecito-Carrizo Valley (7-28)

SITE NUMBER 325808116232801 LOCAL NUMBER 014S006E08F03S

ABOUT 1 MI NORTHEAST OF TROUTMAN MTN. UNUSED WATER-TABLE WELL. DIAM 8 IN, DEPTH 110 FT.  
 ALTITUDE OF LSD 1645 FT. RECORDS AVAILABLE 1960, 1962, 1964-66, 1968, 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 65.31 FEET BELOW LAND SURFACE DATUM MAR 16, 1962.

LOWEST WATER LEVEL 78.20 FEET BELOW LAND SURFACE DATUM OCT 01, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	78.20	SEP 22, 1983	73.93

## San Diego River Valley (9-15)

SITE NUMBER 325159116551101 LOCAL NUMBER 015S001E18L03S

ABOUT 0.3 MI NORTHEAST OF INTERSECTION OF MAPLEVIEW STREET AND HWY 67, NORTH OF LAKESIDE. DRILLED  
 UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM UNKNOWN, DEPTH UNKNOWN. ALTITUDE OF LSD 395 FT. RECORDS  
 AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.41 FEET BELOW LAND SURFACE DATUM MAR 11, 1983.

LOWEST WATER LEVEL 21.80 FEET BELOW LAND SURFACE DATUM JUL 10, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 11, 1983	15.41

## Vallecito-Carrizo Valley (7-28)

SITE NUMBER 325215116110701 LOCAL NUMBER 015S008E17D02S

WEST OF BOW WILLOW RANGER STATION. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 6 IN, DEPTH 87 FT.  
 ALTITUDE OF LSD 610 FT. RECORDS AVAILABLE 1966, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 44.51 FEET BELOW LAND SURFACE DATUM SEP 22, 1983.

LOWEST WATER LEVEL 71.40 FEET BELOW LAND SURFACE DATUM FEB 01, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	62.95	SEP 22, 1983	44.51

## San Luis Rey Valley (9-7)

SITE NUMBER 332141117033401 LOCAL NUMBER 009S002W26P01S

ABOUT .24 MI SOUTH OF HWY 76. DUG PUBLIC SUPPLY WATER-TABLE WELL. DIAM 96 IN, DEPTH 63 FT.  
 ALTITUDE OF LSD 422.7 FT. RECORDS AVAILABLE 1915, 1941, 1961, 1971-72, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.01 FEET BELOW LAND SURFACE DATUM MAR 02, 1915.

LOWEST WATER LEVEL 40.56 FEET BELOW LAND SURFACE DATUM NOV 17, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1982	16.67	FEB 25, 1983	11.18	JUL 08, 1983	11.86	AUG 29, 1983	11.88
DEC 15	11.26	APR 25	9.97				



## SAN DIEGO COUNTY--Continued

## San Mateo Valley (9-2)

SITE NUMBER 332402117345701 LOCAL NUMBER 009S007W11L01S

ON CAMP PENDLETON MARINE CORPS BASE, SOUTHEAST OF SAN CLEMENTE. DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE. DIAM 20 TO 12 IN, DEPTH 100 FT IN 1971, 42 FT IN 1972, CASED TO 100 FT, PERFORATED 5-100 FT. ALTITUDE OF LSD 36.95 FT. RECORDS FURNISHED BY CAMP PENDLETON. RECORDS AVAILABLE 1966 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.74 FEET BELOW LAND SURFACE DATUM MAR 13, 1979.

LOWEST WATER LEVEL 18.05 FEET BELOW LAND SURFACE DATUM JAN 03, 1978.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1982	9.26	JAN 31, 1983	6.94	APR 1983	5.45	JUL 1983	5.06
NOV	8.00	FEB	6.29	MAY	5.98	AUG	6.05
DEC	7.03	MAR	5.18	JUN	4.52	SEP	6.59

## San Onofre Valley (9-3)

SITE NUMBER 332303117332801 LOCAL NUMBER 009S007W13R01S

ABOUT 0.6 MI SOUTH OF BASILONE ROAD NEAR SAN ONOFRE CREEK. DRILLED UNUSED WATER-TABLE WELL. DIAM 24 IN, DEPTH 225.7 FT, PERFORATED 94-164, 215-225 FT. ALTITUDE OF LSD 51.26 FT. RECORDS FURNISHED BY CAMP PENDLETON. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.09 FEET BELOW LAND SURFACE DATUM FEB 26, 1973.

LOWEST WATER LEVEL 37.53 FEET BELOW LAND SURFACE DATUM FEB 28, 1962.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1982	19.59	JAN 31, 1983	17.67	APR 1983	8.15	JUL 1983	9.50
NOV	19.29	FEB	9.98	MAY	8.40	AUG	12.92
DEC	17.24	MAR	7.85	JUN	8.59	SEP	14.10

## GROUND WATER

## SAN DIEGO COUNTY--Continued

## San Luis Rey Valley (9-7)

SITE NUMBER 331826116585201 LOCAL NUMBER 010S001W16H01S

NORTH OF PAUMA VALLEY. DRILLED IRRIGATION WATER-TABLE WELL IN SAND AND GRAVEL OF QUATERNARY AGE.  
 DIAM UNKNOWN TO 245 FT, 10 IN 245-365 FT, 8 IN 364-419 FT, DEPTH 419 FT, PERFORATED 270-360, 364-419  
 FT. ALTITUDE OF LSD 885 FT. RECORDS AVAILABLE 1961, 1967, 1971-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 117.39 FEET BELOW LAND SURFACE DATUM MAR 31, 1980.

LOWEST WATER LEVEL 223.50 FEET BELOW LAND SURFACE DATUM MAR 21, 1967.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1982	142.10 R	FEB 25, 1983	121.25	JUL 08, 1983	133.32 R	AUG 29, 1983	132.87
DEC 15	127.31	APR 25	117.83				

## WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
010S001W16H01S	83-08-10	1040	7.6	22.0	333	74	36	79	33	1.9

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 SI02)	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)
3.7	190	110	120	.3	45	582	12	.04	30	9	5

SITE NUMBER 331613116570901 LOCAL NUMBER 010S001W35C01S

WEST OF HWY 6 AND SOUTH OF SECTION LINE ROAD. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN.  
 DEPTH 105 FT. ALTITUDE OF LSD 860 FT, RECORDS AVAILABLE 1938, 1940, 1950, 1959-63, 1971-73,  
 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.16 FEET BELOW LAND SURFACE DATUM MAR 31, 1980.

LOWEST WATER LEVEL 48.50 FEET BELOW LAND SURFACE DATUM JUN 01, 1963.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1982	13.66	FEB 25, 1983	13.81	JUL 08, 1983	13.45	AUG 29, 1983	12.16
DEC 15	13.94	APR 25	12.59				

R Recently, pumped.

SAN DIEGO COUNTY--Continued

Santa Margarita Valley (9-4)

SITE NUMBER 33154411722101 LOCAL NUMBER 010S005W35K05S

ABOUT 0.5 MI NORTHWEST OF VANDERGRIFT BLVD AND EL CAMINO REAL. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 6 IN. DEPTH 150.4 FT. PERFORATED 99-119, 129-149 FT. ALTITUDE OF LSD 26.57 FT. RECORDS FURNISHED BY CAMP PENDLETON. RECORDS AVAILABLE 1951 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.19 FEET BELOW LAND SURFACE DATUM JAN 18, 1979.

LOWEST WATER LEVEL 25.61 FEET BELOW LAND SURFACE DATUM AUG 17, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 1982	7.61	JAN 31, 1983	5.38	APR 1983	3.16	JUL 1983	4.63
NOV	7.65	FEB	4.44	MAY	3.82	AUG	5.39
DEC	5.58	MAR	2.30	JUN	4.39	SEP	5.88

San Dieguito Valley (9-12)

SITE NUMBER 325852117134801 LOCAL NUMBER 014S003W06P04S

ABOUT 0.13 MI SOUTHWEST OF INTERSECTION OF VIA DE LA VALLE AND EL CAMINO REAL NEAR DEL MAR. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN. DEPTH 36.6 FT. ALTITUDE OF LSD 18 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 0.80 FEET BELOW LAND SURFACE DATUM MAR 11, 1983.

LOWEST WATER LEVEL 5.08 FEET BELOW LAND SURFACE DATUM DEC 06, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 11, 1983	0.80

Mission Valley (9-14)

SITE NUMBER 324630117082701 LOCAL NUMBER 016S003W13Q04S

ABOUT 0.3 MI SOUTHWEST OF INTERSECTION OF FRIARS ROAD AND STADIUM WAY, NORTH OF UNIVERSITY HEIGHTS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH 52.45 FT. ALTITUDE OF LSD 45 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 11.60 FEET BELOW LAND SURFACE DATUM JUL 14, 1980.

LOWEST WATER LEVEL 14.86 FEET BELOW LAND SURFACE DATUM AUG 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 11, 1983	12.20

Sweetwater Valley (9-17)

SITE NUMBER 324005117012001 LOCAL NUMBER 017S001W30B01S

ABOUT 0.25 MI FROM SOUTHEAST CORNER OF BONITA AND CENTRAL AVENUES IN SUNNYSIDE. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN. DEPTH UNKNOWN. ALTITUDE OF LSD 85 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.02 FEET BELOW LAND SURFACE DATUM MAR 11, 1983.

LOWEST WATER LEVEL 12.83 FEET BELOW LAND SURFACE DATUM AUG 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 11, 1983	7.02

## GROUND WATER

SAN DIEGO COUNTY--Continued

## Otay Valley (9-18)

SITE NUMBER 323530117050701 LOCAL NUMBER 018S002W21H03S

ABOUT 0.25 MI SOUTH OF MAIN STREET NEAR INTERSTATE 5, EAST OF IMPERIAL BEACH. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 13 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 12 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 7.52 FEET BELOW LAND SURFACE DATUM MAR 11, 1983.

LOWEST WATER LEVEL 11.03 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 11, 1983	7.52

## Tijuana Basin (9-19)

SITE NUMBER 323257117051201 LOCAL NUMBER 019S002W04H08S

ABOUT 0.23 MI WEST OF HOLLISTER STREET, SOUTHEAST OF IMPERIAL BEACH. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 26 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.15 FEET BELOW LAND SURFACE DATUM MAR 11, 1983.

LOWEST WATER LEVEL 12.87 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 11, 1983	4.15

SAN LUIS OBISPO COUNTY

## Cuyama Valley (3-13)

SITE NUMBER 345604119340001 LOCAL NUMBER 010N025W20H01S

ABOUT 1.4 MI EAST OF CUYAMA NEAR HWY 166. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 10 IN, DEPTH 656 FT IN 1946, PERFORATED 108-656 FT. ALTITUDE OF LSD 2335 FT. RECORDS AVAILABLE 1946-47, 1956, 1961, 1966, 1968, 1979-81, 1983 TO CURRENT YEAR.

HIGHEST WATER LEVEL 59.00 FEET BELOW LAND SURFACE DATUM JUL 08, 1946.

LOWEST WATER LEVEL 336.49 FEET BELOW LAND SURFACE DATUM APR 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 22, 1983	307.20

## Arroyo Grande Valley (3-11)

SITE NUMBER 350312120314101 LOCAL NUMBER 011N035W11B01S

ABOUT 5.5 MI SOUTHWEST OF NIPOMO MESA. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 IN, DEPTH 360 FT. ALTITUDE OF LSD 385 FT. RECORDS FURNISHED BY SAN LUIS OBISPO COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1960, 1967 TO CURRENT YEAR.

HIGHEST WATER LEVEL 306.35 FEET BELOW LAND SURFACE DATUM JUN 30, 1960.

LOWEST WATER LEVEL 350.70 FEET BELOW LAND SURFACE DATUM MAR 20, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 25, 1983	347.7

SANTA BARBARA COUNTY  
Carpinteria Basin (3-18)

SITE NUMBER 342427119294601 LOCAL NUMBER 004N025W21R01S

NORTHEAST OF CARPINTERIA. DRILLED UNUSED WATER-TABLE WELL. DIAM 12 IN. DEPTH 468 FT. CASED TO 434 FT. PERFORATED 82-90, 120-150, 170-176, 239-240, 289-304, 314-318, 340-341, 356-386, 412-416 FT. ALTITUDE OF LSD 127 FT. MEASUREMENTS BEGINNING 2/15/78 COLLECTED BY U.S. GEOLOGICAL SURVEY AND CARPINTERIA COUNTY WATER DISTRICT. RECORDS AVAILABLE 1941 TO CURRENT YEAR.

HIGHEST WATER LEVEL 30.58 FEET BELOW LAND SURFACE DATUM JAN 17, 1984.

LOWEST WATER LEVEL 126.08 FEET BELOW LAND SURFACE DATUM NOV 26, 1951.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 12, 1982	43.74	MAR 23, 1983	35.97	JUN 15, 1983	31.57	SEP 16, 1983	33.80
NOV 12	44.00	APR 19	33.82	JUL 15	31.43		
FEB 28, 1983	38.87	MAY 16	32.44	AUG 12	35.49		

Santa Barbara Basin (3-17)

SITE NUMBER 342509119413703 LOCAL NUMBER 004N027W22R04S

IN VERA CRUZ PARK. DRILLED TEST WATER-TABLE WELL. DIAM 2 IN. DEPTH 660 FT. CASED TO 660 FT. PERFORATED 650-660 FT. ALTITUDE OF LSD 20 FT. MEASUREMENTS BEGINNING 6/16/76 FURNISHED BY CITY OF SANTA BARBARA. RECORDS AVAILABLE 1976 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.48 FEET BELOW LAND SURFACE DATUM APR 08, 1976.

LOWEST WATER LEVEL 113.04 FEET BELOW LAND SURFACE DATUM MAY 19, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07, 1982	34.23	JAN 11, 1983	7.15	APR 12, 1983	12.37	JUL 13, 1983	47.87 S
NOV 03	15.57	FEB 03	15.39	MAY 03	19.81 S	AUG 04	96.17 S
DEC 02	9.88	MAR 08	8.05 S	JUN 08	4.35	SEP 01	99.58 S

Some measurements reflect nearby and general pumping in the basin.

Goleta Basin (3-16)

SITE NUMBER 342610119485301 LOCAL NUMBER 004N028W09R06S

EAST OF GOLETA. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF SANTA BARBARA FORMATION OF PLEISTOCENE AGE. DIAM 8 IN. DEPTH 306 FT. PERFORATED 238-283 FT. ALTITUDE OF LSD 42 FT. RECORDS BEGINNING IN 1970 FURNISHED BY GOLETA WATER DISTRICT. RECORDS AVAILABLE 1955-56, 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 61.53 FEET BELOW LAND SURFACE DATUM JAN 04, 1972.

LOWEST WATER LEVEL 92.26 FEET BELOW LAND SURFACE DATUM OCT 01, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	92.26	MAR 02, 1983	83.50	APR 29, 1983	81.21	AUG 01, 1983	80.51
DEC 01	89.75	APR 01	82.43	JUN 01	80.52	SEP 30	79.96
FEB 01, 1983	85.91						

S Nearby, pumping.

## GROUND WATER

## SANTA BARBARA COUNTY--Continued

## Santa Ynez River Valley (3-15)

SITE NUMBER 343911120264001 LOCAL NUMBER 007N034W34B01S

IN LOMPOC. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 14 IN, DEPTH 195 FT, CASED TO 192 FT, PERFORATED 96-192 FT. ALTITUDE OF LSD 102 FT. RECORDS BEGINNING IN 1972 FURNISHED BY U.S. BUREAU OF RECLAMATION. RECORDS AVAILABLE 1965, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 40.70 FEET BELOW LAND SURFACE DATUM APR 23, 1975.

LOWEST WATER LEVEL 68.70 FEET BELOW LAND SURFACE DATUM JUL 27, 1974.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 27, 1982	57.7	JAN 31, 1983	50.7	MAY 23, 1983	43.7	AUG 30, 1983	43.7
NOV 23	59.7	FEB 02	48.7	JUN 23	55.7	SEP 18	43.7
DEC 27	52.7	APR 27	43.7	JUL 01	42.7		

SITE NUMBER 343840120304801 LOCAL NUMBER 007N035W36J03S

ABOUT 3 MI WEST OF LOMPOC. DRILLED UNUSED ARTESIAN WELL IN ALLUVIUM. DIAM 16 IN, DEPTH 102 FT, PERFORATED 71-95 FT. ALTITUDE OF LSD 58.76 FT. RECORDS 1930-42 FURNISHED BY CITY OF SANTA BARBARA. RECORDS AVAILABLE 1929-42, 1944, 1952, 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 4.60 FEET BELOW LAND SURFACE DATUM APR 16, 1941.

LOWEST WATER LEVEL 81.00 FEET BELOW LAND SURFACE DATUM JUL 18, 1933.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25, 1982	25.65	JAN 25, 1983	21.72	APR 26, 1983	15.29	JUL 25, 1983	21.28
NOV 22	23.28	FEB 25	19.79	MAY 25	18.02	AUG 29	22.32
DEC 22	20.00	MAR 28	15.65	JUN 27	18.09	SEP 27	22.48

## San Antonio Creek Valley (3-14)

SITE NUMBER 344457120174001 LOCAL NUMBER 008N032W30D01S

NORTH OF HWY 135 AND 0.33 MI WEST OF BELL STREET. DRILLED UNUSED WATER-TABLE WELL IN SAND AND GRAVEL. DIAM 16 IN, DEPTH 899 FT, PERFORATED 265-355, 378-409, 463-523, 667-895 FT. ALTITUDE OF LSD 540 FT. RECORDER INSTALLED 12/1977. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 23.18 FEET BELOW LAND SURFACE DATUM APR 30, 1978.

LOWEST WATER LEVEL 62.09 FEET BELOW LAND SURFACE DATUM SEP 18, 1982.

## WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01, 1982	56.10	OCT 04, 1982	55.46	APR 04, 1983	40.68	JUL 26, 1983	52.79
02	55.92	05	55.44	MAY 25	41.43	AUG 31	56.75
03	55.70	06	55.37	JUN 27	43.27	SEP 27	52.69

## SANTA BARBARA COUNTY--Continued

San Antonio Creek Valley (3-14)

SITE NUMBER 344443120164501 LOCAL NUMBER 008N032W30H07S

IN LOS ALAMOS, DRILLED PUBLIC SUPPLY ARTESIAN WELL IN PASO ROBLES FORMATION, DIAM 12 IN, DEPTH 310 FT, CASED TO 310 FT, PERFORATED 124-310 FT. ALTITUDE OF LSD 563 FT. RECORDS AVAILABLE 1964-76, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 24.10 FEET BELOW LAND SURFACE DATUM MAR 25, 1966.

LOWEST WATER LEVEL 37.90 FEET BELOW LAND SURFACE DATUM SEP 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 19, 1983	27.73

## WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	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)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO
008N032W30H07S	83-07-13	600	6.5	18.0	186	43	19	46	34	1.5

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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
2.7	110	100	62	.2	55	397	1.6	.13	100	2400	60

## Cuyama Valley (3-13)

SITE NUMBER 345500119343201 LOCAL NUMBER 010N025W29K02S

ABOUT 6.5 MI EAST OF NEW CUYAMA, IRRIGATION WATER-TABLE WELL, DIAM 14 IN, DEPTH 450 FT, CASED TO 296 FT, PERFORATED 120-296 FT. ALTITUDE OF LSD 2357 FT. RECORDS AVAILABLE 1966, 1968, 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 121.20 FEET BELOW LAND SURFACE DATUM DEC 11, 1968.

LOWEST WATER LEVEL 334.77 FEET BELOW LAND SURFACE DATUM APR 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 23, 1983	332.66

## GROUND WATER

## SANTA BARBARA COUNTY--Continued

## Santa Maria Valley (3-12)

SITE NUMBER 345548120242202 LOCAL NUMBER 010N034W24K01S

EAST OF HWY 101 AND SOUTH OF BATTLES ROAD. DRIVEN UNUSED ARTESIAN WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 16 IN, DEPTH 714 FT, PERFORATED 650-657, 692-710 FT, ALTITUDE OF LSD 254 FT. MEASUREMENTS FURNISHED BY SANTA MARIA VALLEY WATER CONSERVATION DISTRICT. RECORDS AVAILABLE 1941, 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 75.32 FEET BELOW LAND SURFACE DATUM DEC 30, 1941.

LOWEST WATER LEVEL 215.50 FEET BELOW LAND SURFACE DATUM JUL 01, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10, 1982	139.80	JAN 15, 1983	146.10	APR 15, 1983	140.30	JUL 15, 1983	148.30

## VENTURA COUNTY

## Arroyo Santa Rosa Valley (4-7)

SITE NUMBER 341406118561201 LOCAL NUMBER 002N020W23R01S

ABOUT 0.35 MI EAST OF INTERSECTION OF SANTA ROSA AND GERRY ROADS. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 14 IN, DEPTH 555 FT, PERFORATED 120-225, 465-550 FT, ALTITUDE OF LSD 234.6 FT. RECORDS AVAILABLE 1956-79, 1980, 1983 TO CURRENT YEAR.

HIGHEST WATER LEVEL 25.40 FEET BELOW LAND SURFACE DATUM AUG 09, 1973.

LOWEST WATER LEVEL 204.50 FEET BELOW LAND SURFACE DATUM OCT 31, 1961.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 13, 1983	52.66	AUG 25, 1983	53.09

Pleasant Valley (4-6)

SITE NUMBER 341351118583801 LOCAL NUMBER 002N020W28G02S

ABOUT 1 MI NORTHEAST OF INTERSECTION OF SANTA ROSA AND OAK CANYON ROADS. DRILLED UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 450 FT, ALTITUDE OF LSD 170 FT. MEASUREMENTS FURNISHED BY VENTURA COUNTY FLOOD CONTROL DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 69.0 FEET BELOW LAND SURFACE DATUM JUL 27, 1983.

LOWEST WATER LEVEL 160.90 FEET BELOW LAND SURFACE DATUM JUL 12, 1966.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 08, 1982	70.8	FEB 09, 1983	70.6	MAY 20, 1983	69.6	JUL 27, 1983	69.0
JAN 13, 1983	73.93	APR 26	70.2				

## Los Posas Valley (4-8)

SITE NUMBER 341616119023701 LOCAL NUMBER 002N021W11J02S

NEAR LOS ANGELES AVENUE AND PRICE ROAD. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 1150 FT, PERFORATED 375-416, 659-699, 832-873, 1017-1150 FT, ALTITUDE OF LSD 387 FT. MEASUREMENTS FURNISHED BY VENTURA COUNTY FLOOD CONTROL DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 329.0 FEET BELOW LAND SURFACE DATUM JUN 08, 1983.

LOWEST WATER LEVEL 364.62 FEET BELOW LAND SURFACE DATUM NOV 16, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 08, 1982	339.40	DEC 09, 1982	338.5	JUN 08, 1983	329.0



## VENTURA COUNTY--Continued

## Santa Clara River Valley (4-4)

SITE NUMBER 341640119074301 LOCAL NUMBER 002N022W12A02S

ABOUT 0.5 MI EAST OF INTERSECTION OF HWY 232 AND LOS ANGELES AVENUE. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 12 IN, DEPTH 121 FT, PERFORATED 40-121 FT. ALTITUDE OF LSD 142 FT. RECORDS AVAILABLE 1978, 1980, 1983 TO CURRENT YEAR.

HIGHEST WATER LEVEL 29.28 FEET BELOW LAND SURFACE DATUM NOV 15, 1978.

LOWEST WATER LEVEL 49.46 FEET BELOW LAND SURFACE DATUM JAN 13, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JAN 13, 1983	49.46

SITE NUMBER 341557119074401 LOCAL NUMBER 002N022W12R01S

ABOUT 0.5 MI WEST OF INTERSECTION OF ROSE AVENUE AND LOS ANGELES AVENUE. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 20 IN, DEPTH 147 FT, PERFORATED 90-130 FT. ALTITUDE OF LSD 135.1 FT. MEASUREMENTS FURNISHED BY VENTURA COUNTY FLOOD CONTROL DISTRICT AND UNITED WATER CONSERVATION DISTRICT; MEASURED PERIODICALLY BY U.S. GEOLOGICAL SURVEY. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 20.54 FEET BELOW LAND SURFACE DATUM MAY 29, 1980.

LOWEST WATER LEVEL 128.9 FEET BELOW LAND SURFACE DATUM DEC 20, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 09, 1982	47.9	JAN 13, 1983	52.07	FEB 11, 1983	52.3	APR 13, 1983	47.4

## Upper Ojai Valley (4-1)

SITE NUMBER 342721119122001 LOCAL NUMBER 004N022W05L08S

EAST OF OJAI. DRILLED IRRIGATION WATER-TABLE WELL IN SAND OF QUATERNARY AGE. DIAM 11 IN, DEPTH 525 FT, CASSED 0-525 FT, PERFORATED 250-525 FT. ALTITUDE OF LSD 890.7 FT. RECORDS AVAILABLE 1977-78, 1982 TO CURRENT YEAR.

HIGHEST WATER LEVEL 38.20 FEET BELOW LAND SURFACE DATUM APR 18, 1978.

LOWEST WATER LEVEL 168.70 FEET BELOW LAND SURFACE DATUM DEC 08, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 03, 1982	121.2	MAR 31, 1983	50.2	JUN 02, 1983	53.7	AUG 11, 1983	81.8
FEB 10, 1983	77.4						

## Ventura River Valley (4-3)

SITE NUMBER 342550119174601 LOCAL NUMBER 004N023W16C04S

ABOUT 1150 FT WEST OF RICE ROAD AND 250 FT NORTH OF EXTENSION OF BALDWIN ROAD. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 12 IN, DEPTH 227 FT. ALTITUDE OF LSD 5577.3 FT. MEASUREMENTS FURNISHED BY VENTURA COUNTY FLOOD CONTROL DISTRICT. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.9 FEET BELOW LAND SURFACE DATUM MAR 30, 1983.

LOWEST WATER LEVEL 76.4 FEET BELOW LAND SURFACE DATUM DEC 05, 1972.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 29, 1982	42.3	MAR 30, 1983	3.9	MAY 31, 1983	7.5	AUG 09, 1983	22.2
FEB 09, 1983	17.2						



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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)	$2.54 \times 10^1$ $2.54 \times 10^{-2}$	millimeters (mm) meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$ $4.047 \times 10^{-1}$ $4.047 \times 10^{-3}$	square meters (m <sup>2</sup> ) square hectometers (hm <sup>2</sup> ) square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometers (km <sup>2</sup> )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$ $3.785 \times 10^0$ $3.785 \times 10^{-3}$	liters (L) cubic decimeters (dm <sup>3</sup> ) cubic meters (m <sup>3</sup> )
million gallons	$3.785 \times 10^3$ $3.785 \times 10^{-3}$	cubic meters (m <sup>3</sup> ) cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	$2.832 \times 10^1$ $2.832 \times 10^{-2}$	cubic decimeters (dm <sup>3</sup> ) cubic meters (m <sup>3</sup> )
cfs-days	$2.447 \times 10^3$ $2.447 \times 10^{-3}$	cubic meters (m <sup>3</sup> ) cubic hectometers (hm <sup>3</sup> )
acre-feet (acre-ft)	$1.233 \times 10^3$ $1.233 \times 10^{-3}$ $1.233 \times 10^{-6}$	cubic meters (m <sup>3</sup> ) cubic hectometers (hm <sup>3</sup> ) cubic kilometers (km <sup>3</sup> )
<i>Flow</i>		
cubic feet per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$ $2.832 \times 10^{-2}$	liters per second (L/s) cubic decimeters per second (dm <sup>3</sup> /s) cubic meters per second (m <sup>3</sup> /s)
gallons per minute (gal/min)	$6.309 \times 10^{-2}$ $6.309 \times 10^{-2}$ $6.309 \times 10^{-5}$	liters per second (L/s) cubic decimeters per second (dm <sup>3</sup> /s) cubic meters per second (m <sup>3</sup> /s)
million gallons per day	$4.381 \times 10^1$ $4.381 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s) cubic meters per second (m <sup>3</sup> /s)
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	megagrams (Mg) or metric tons

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