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Water Resources Data for California

Volume 1. Colorado River Basin, 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-80-
WATER YEAR 1980

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

CALENDAR FOR WATER YEAR 1980

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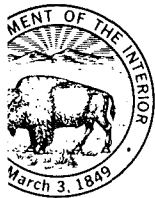
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UNITED STATES DEPARTMENT OF THE INTERIOR

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1981

PREFACE

This report was prepared by personnel of the California District of the Water Resources Division, U.S. Geological Survey, under the supervision of Richard M. Bloyd, District Chief, and J. D. Bredehoeft, Regional Hydrologist, Western Region. It was done in cooperation with the California Department of Water Resources and with other agencies.

This report is one of a series issued by State. General direction for the series is by Philip Cohen, Chief Hydrologist.

Data for California are in four volumes as follows:

- Volume 1. Colorado River Basin, 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

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SURFACE-WATER AND WATER-QUALITY STATIONS,
IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

IX

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

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WATER RESOURCES DATA FOR CALIFORNIA, 1980

Volume 1

INTRODUCTION

Water-resources data for the 1980 water year for California consist of records of stage, discharge, and water quality of streams; records of stage, contents, and water quality of lakes and reservoirs; and records of water levels and water quality of 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 U.S. 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 the Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Va. 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-80-1." 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, Va. 22161.

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, R. B. Robie, Director.
 California Regional Water Quality Control Board, Lahontan Region,
 Roy C. Hampson, Executive Officer.
 Carpinteria County Water District, Robert Lieberknecht, Manager.
 Casitas Municipal Water District, Robert N. McKinney, General Manager-Chief Engineer.
 Coachella Valley Water District, Lowell O. Weeks, General Manager-Chief Engineer.
 Crestline-Lake Arrowhead Water Agency, Robert M. Massey, General Manager.
 Desert Water Agency, Paul G. Payne, General Manager.
 Goleta County Water District, Lloyd C. Fowler, General Manager-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.
 Mojave Water Agency, Jon D. Edson, General Manager.
 Montecito Water District, Charles Evans, General Manager-Secretary.
 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, Ken Edwards, Chief Engineer.
 San Bernardino County Flood Control District, C. J. DiPietro, Flood Control Engineer.
 San Bernardino Valley Municipal Water District, G. Louis Fletcher, General Manager.
 San Diego, City of, Water Utilities, R. W. King, Director.
 San Diego, County of, Department of Public Works, R. J. Massman, Director.
 Santa Barbara, City of, Department of Public Works, R. 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, Richard A. Smith, General Manager-Chief Engineer.
 Ventura County Public Works Agency, Arthur Goulet, Director.
 Western Municipal Water District, Howard A. Hicks, General Manager.

Assistance in the form of funds or services was given by Environmental Protection Agency; U.S. International Boundary and Water Commission; Corps of Engineers, U.S. Army; U.S. Air Force; U.S. Navy; Bureau of Indian Affairs, Bureau of Reclamation, National Park Service, U.S. Department of the Interior.

The following organizations aided in collecting records: Big Bear Municipal Water District; cities of Long Beach, San Bernardino, and San Diego; Escondido Mutual Water Co.; Fallbrook Public Utility District; Fontana Union Water Co.; Lake Hemet Municipal Water District; Metropolitan Water District of Southern California; Santa Paula Water Works, Ltd; Sweetwater Authority of South Bay Irrigation District; Southern California Edison Co.; Temescal Water Co.; and White Water Mutual Water Co.

HYDROLOGIC CONDITIONS

Runoff during the 1980 water year in the area covered by this volume was above normal for all months except December. Total runoff at selected sites in California is shown in figure 1. Runoff in the Santa Ana River basin and coastal basins to the south was 874 percent of the median; in the Los Angeles River basin, 788 percent of the median; in the Santa Clara River basin, 490 percent of the median.

Rainfall totals had been well below normal, and all parts of southern California were unseasonably dry until January 9 when a 5-day storm struck most of the area. Consequently, runoff from this storm was not extreme but did cause some local mudslides and unusual street and freeway flooding.

The storm of January 28-31 brought large amounts of rainfall to the south coastal and southeast desert areas. Most peak flows in the area were well below the historical record peaks. Farther south, in the Tijuana River basin, heavy runoff from the Rio Las Palmas into Rodriguez Reservoir in Mexico caused concern for the safety of the dam and necessitated large releases. These releases reached 28,000 cubic feet per second ($793 \text{ m}^3/\text{s}$) January 30 and with the floodwater from the Tijuana River produced recordbreaking floods that were almost double the previous 1937 historical peaks and caused widespread flooding along the Tijuana River downstream from the international boundary.

Little rain fell in early February. A series of storms during February 13-22, however, brought severe flooding from Ventura County to the Mexican state of Baja California. At Los Angeles more than 13 inches (330 mm) of rainfall was recorded in 9 days, with 10.54 inches (267 mm) in 6 days. At some locations in the storm-affected area, this was the wettest February in history. Moderately high peak discharges occurred in most streams with some peak flows recorded. San Diego County was hard hit with extensive flooding on the Tijuana River and in the Mission Valley area along the lower San Diego River. Heavy runoff from Baja California again necessitated large releases from Rodriguez Dam Reservoir, and flooding was extensive downstream from San Ysidro. Most San Diego County reservoirs spilled for the first time since their construction. Peak discharges in the San Luis Rey River and Santa Margarita River basins were generally the highest in the last 50 years. Peak discharges in the Santa Ana River basin were not as high as in either 1969 or 1938, but runoff volumes were among the highest of this century. Lake Elsinore, in eastern Riverside County, caused much damage to lakeside property as it filled to an elevation not reached since 1916. In the desert region of Palm Springs, 5,000 people were forced from their homes by rising water; in San Jacinto, 6,500 residents were evacuated because the floods burst levees along the San Jacinto River. Flooding in the headwater tributaries of the San Gabriel and Los Angeles Rivers was comparable to the extreme floods of 1969. Flood damage was extensive in the small basins between the Los Angeles River and the Santa Clara River. Flooding in the Santa Clara River basin and in Santa Barbara County was generally less severe than record floods in 1969 and 1978. Much property damage was caused by the slippage of saturated soils and by wind-driven spring tides that battered the shoreline from Ventura County to Imperial Beach, at the Mexican border. Thirty-six deaths and property damage approaching \$500 million have been attributed to the February storms. Six counties--Ventura, Los Angeles, Orange, San Diego, Riverside, and San Bernardino--were declared Federal disaster areas.

Continued storms in March caused the collapse of an earth-filled dam near Lake Wohlford. Rainfall total for the year for the Los Angeles area was 26.98 inches (685 mm) with normal rainfall at 14.05 inches (357 mm).

The quality of surface water changed for short periods during storms, but overall little change occurred throughout the water year.

In certain basins in southern California, ground-water levels in some wells rose to record highs in response to above-average rainfall during the winter of 1979-80. In other basins, heavy use of ground water continued to lower the water tables.

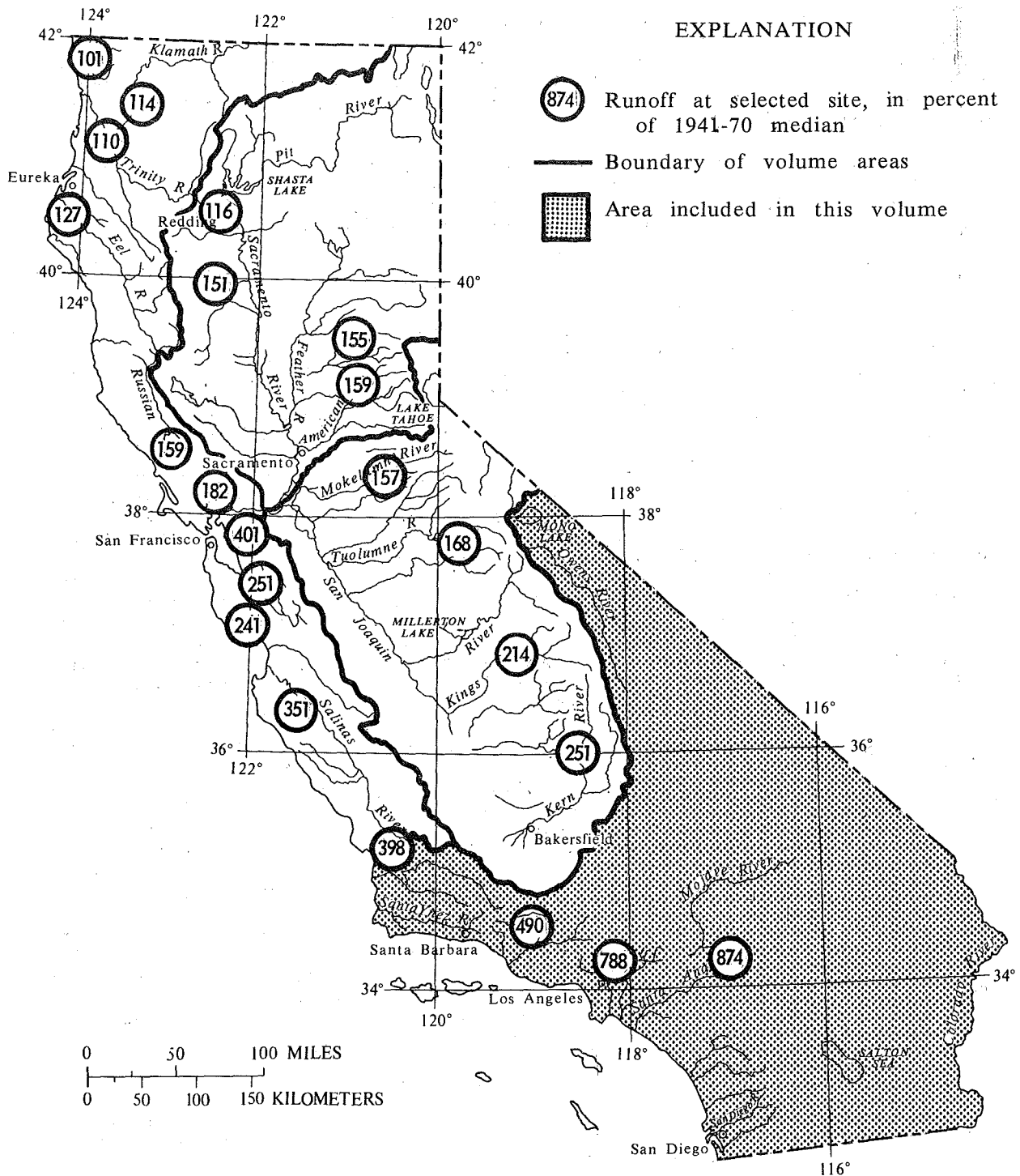


FIGURE 1.--Runoff for the current water year.

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 ± 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 indicator of the sanitary quality of the water. For the membrane filter method they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by 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 (g/m^3), and periphyton and benthic organisms in grams per square meter (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 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 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^3/S , ft^3/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 fluids 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.

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

$$\bar{d} = \frac{s}{i \sum_i} \frac{n_i}{n} \log_2 \frac{n_i}{n},$$

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 (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, λ is the light-attenuation coefficient, and e is the base of the natural logarithm. The light-attenuation coefficient is defined as

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

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

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

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

Micrograms per gram (UG/G, $\mu\text{g/g}$) is a unit expressing the concentration of a chemical 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, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of sediment per liter of water-sediment mixture.

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

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

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

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

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

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

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.

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

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

Phytoplankton compose the plant part of the plankton. They are usually microscopic and their movement is subject to water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release

materials to 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 to organochlorine insecticides.

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

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

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

Sediment is solid material that is derived mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the 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 at 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 emerged or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket

samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic-organism collection and plexiglass strips for periphyton collection.

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

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

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

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

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

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

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

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

Kingdom.....Animal
Phylum.....Arthropoda
Class.....Insecta
Order.....Ephemeroptera
Family.....Ephemeridae
Genus.....Hexagenia
Species.....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 or suspended 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 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 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 both the dissolved and suspended phases of the sample. 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." (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) or Jackson turbidity units (JTU), 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 an incident light source (see also p. 23).

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 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 indention in a list of

stations in the front of the report. Each indention represents one rank. This downstream order and system of indention 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 stations 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 9 (Colorado River basin), Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State 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 2.

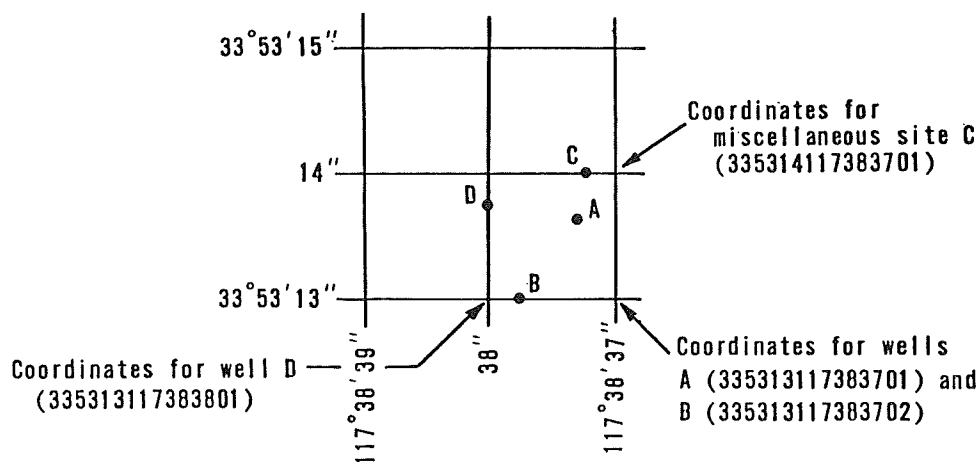


FIGURE 2.--System for numbering wells and miscellaneous sites (latitude and longitude).

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 3.

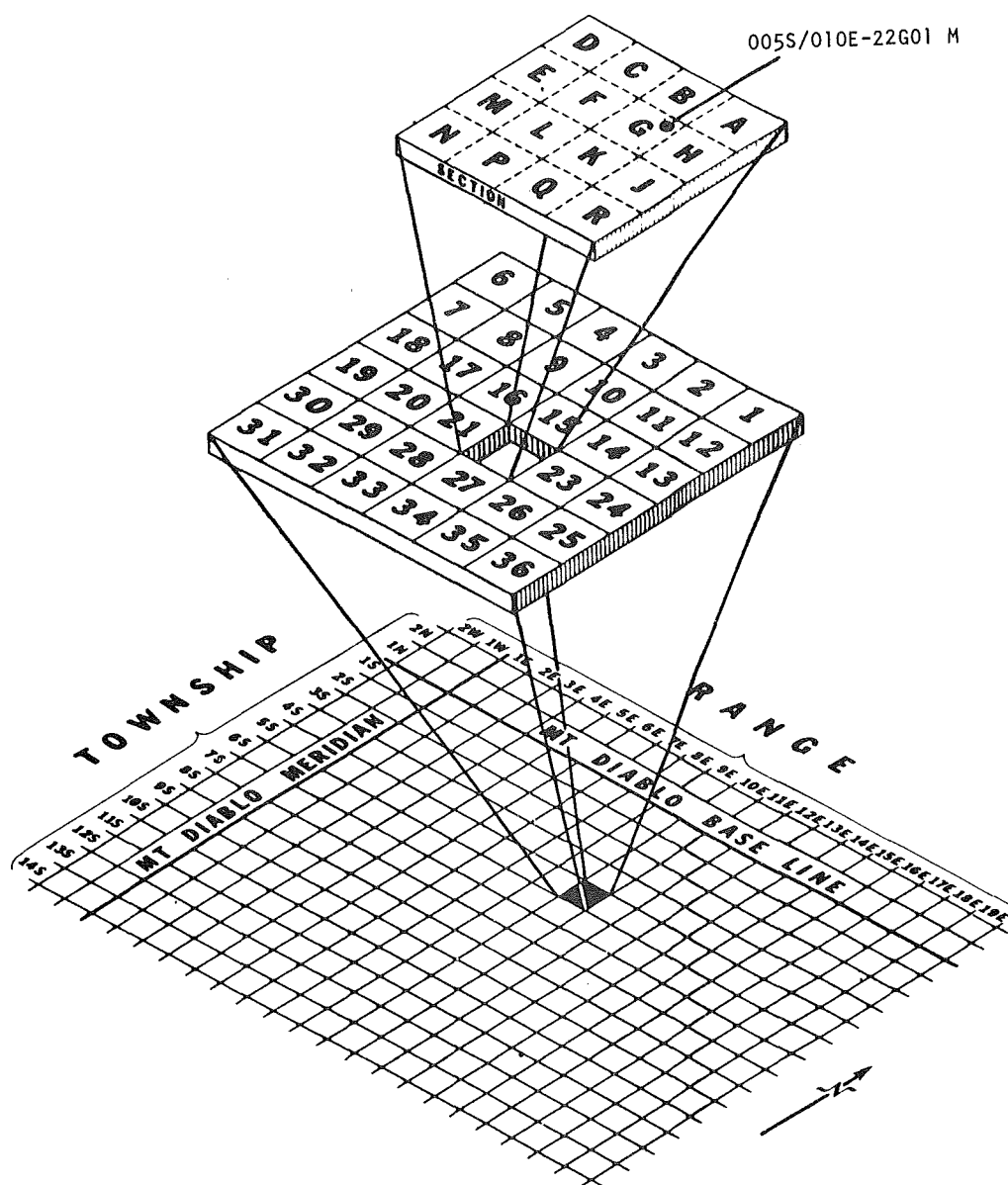


FIGURE 3.--California well-numbering system.

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:

09424190 Colorado River Aqueduct near San Jacinto, CA
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 Rey River at Oceanside, CA
11074000 Santa Ana River below Prado Dam, CA
11103000 Los Angeles River 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
11250000 Friant-Kern Canal at Friant, 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 streams in areas where contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal inter-agency activity.

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 flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives a continuous graph of the fluctuations or a tape punched at 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 888, 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 slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is 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 and 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 discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current 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 daily 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 8.

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 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 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 daily minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE 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.

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

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 on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of 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; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft³/s; to tenths between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures above 1,000 ft³/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 of other hydrologic studies for the area have been issued in publications other than water-supply papers. Information relative to these reports may be obtained from the District Office.

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 230-78, "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 the 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.

The descriptive heading for ground-water records includes general location. Casing diameter (diam), depth, and perforated interval are also included when known.

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.

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge weighted average). Therefore, for 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 quality and streamflow 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. Also included are particle-size distribution analyses of suspended sediment, surface bed material, and bedload material (sediment in transit within 0.25 ft (0.076 m) of the bed).

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 of the sediment moving within 0.25 ft (0.076 m) of the streambed. Sediment moving in this portion of the flow cannot be sampled with standard suspended-sediment samplers. It is assumed that samples obtained by this sampler represent the bedload discharge when used in coarse-material bedded streams (median diameter coarser than about 4 mm) and that these data can be used in conjunction with theoretical computations to define the bedload-transport relation for a station.

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

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 site number that is based on the grid system of latitude and longitude as shown in figure 2, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs (fig. 3).

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. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month.

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 Arroyo Seco Valley (7-37), are from "California's Ground Water," California Department of Water Resources Bulletin No. 118, 1975, 135 p.

PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-five 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 Distribution Branch, Text Products Section, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Va. 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please specify the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

- 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.
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- 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.
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- 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.
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- 3-B1. Aquifer-test design, observation, and data analyses, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. Introduction to ground-water hydraulics, a programmed text for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
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- 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, edited by M. W. Skougstad, M. J. Fishman, L. C. Friedman, D. E. Erdmann, and S. S. Duncan: USGS--TWRI Book 5, Chapter A1. 626 p.
- 5-A2. Determination of minor elements in water by emission spectroscopy, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. Methods for analysis of organic substances in water, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
- 5-A4. Methods for collection and analysis of aquatic biological and microbiological samples, edited by P. E. Greeson, T. A. Ehlike, 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 analyses, 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.
- 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.

COLORADO RIVER MAIN STEM

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°49'18", long 116°58'01", in NE¼ sec.15, T.4 S., R.1 W., San Bernardino County, at west portal of San Jacinto Tunnel, 1.7 mi (2.7 km) southeast of Gilman Hot Springs, and 2.5 mi (4.0 km) north of San Jacinto.

PERIOD OF RECORD.--Water years 1975 to current year.
CHEMICAL ANALYSES: Water years 1975 to current year.
BIOLOGICAL DATA: Water years 1975 to current year.
SEDIMENT RECORDS: Water years 1975-79 (partial-record station).

COOPERATION.--Discharge values were furnished by Metropolitan Water District from the aqueduct records.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	COLI- FORM, FECAL, 0.7 UM-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	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)
JUN 18...	1030	1320	950	--	24.5	48	--	--	340	240	85	30
JUL 30...	1000	1318	890	9.7	30.0	1.1	K13	K1	330	200	81	30
SEP 24...	1020	710	1100	8.2	24.0	.60	--	22	320	200	77	30

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L 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 TOTAL (MG/L AS N)
JUN 18...	110	41	2.6	5.0	100	310	94	.3	8.4	738	704	.19
JUL 30...	110	42	2.7	5.3	130	310	93	.4	5.7	744	715	.21
SEP 24...	110	43	2.7	5.0	120	290	93	.4	8.4	735	686	.08

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
JUN 18...	.20	.06	.10	.78	.63	.84	.11	.73	1.0	.93	.01	.00
JUL 30...	.20	.00	.00	.69	.62	.69	.07	.62	.90	.82	.01	.00
SEP 24...	.08	.01	.02	.55	.56	.56	.00	.58	.64	.66	.03	.00

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
JUN 18...	1030	3	0	3	100	0	100	0	<1	0
JUL 30...	1000	3	0	3	200	100	100	0	<1	10
SEP 24...	1020	--	--	--	--	--	--	--	--	--

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.

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, SUSPENDED RECOV. (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
JUN 18...	0	0	0	<3	4	1	3	90	<10	2
JUL 30...	10	0	0	<3	37	32	5	130	<10	6
SEP 24...	--	--	--	--	--	--	--	--	--	--

DATE	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY, DISSOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)
JUN 18...	0	3	10	--	<1	1.2	.0	2.7	5	5
JUL 30...	2	4	10	9	1	.1	.1	.0	4	0
SEP 24...	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
JUN 18...	0	3	0	3	0	0	0	30	30	5
JUL 30...	5	3	0	3	1	1	0	30	20	10
SEP 24...	--	--	--	--	0	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED (MG/L AS C)
JUN 18...	1030	34	.2
JUL 30...	1000	4.2	.5
SEP 24...	1020	7.2	--

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

COLORADO RIVER MAIN STEM

09424190 COLORADO RIVER AQUEDUCT NEAR SAN JACINTO, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 30,80 1000	SEP 24,80 1020
TOTAL CELLS/ML	1000	1700
DIVERSITY: DIVISION	1.4	1.5
..CLASS	1.4	1.5
...ORDER	1.8	1.7
...FAMILY	3.0	2.3
....GENUS	3.1	2.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)				
..CHLOROPHYCEAE				
...CHLOROCOCCALES				
...MICRACTINIACEAE				
...MICRACTINIUM	26	3	--	-
...OOCYSTACEAE				
...ANKISTRODESMUS	--	-	13	1
...OOCYSTIS	52	5	--	-
...TETRAEDRON	--	-	13	1
...SCENEDESMACEAE				
...SCENEDESMUS	77	8	100	6
...OEDOGONIALES				
...OEDOGONIAACEAE				
...OEDOGONIUM	--	-	100	6
...VOLVOCALES				
...CHLAMYDOMONADACEAE				
...CHLAMYDOMONAS	13	1	--	-
CHRYSTOPHYTA				
..BACILLARIOPHYCEAE				
...CENTRALES				
...COSCINODISCACEAE				
...CYCLOTELLA	26	3	--	-
...MELOSIRA	39	4	--	-
...PENNALES				
...ACHNANTHACEAE				
...ACHNANTHES	26	3	--	-
...CYMBELLACEAE				
...CYMBELLA	13	1	430#	25
...FRAGILARIACEAE				
...FRAGILARIA	140	14	--	-
...SYNEDRA	--	-	150	9
...NAVICULACEAE				
...NAVICULA	250#	24	52	3
...NITZSCHIA	120	11	26	2
CRYPTOPHYTA (CRYPTOMONADS)				
..CRYPTOPHYCEAE				
...CRYPTOMONADALES				
...CRYPTOMONADACEAE				
...CRYPTOMONAS	13	1	26	2
CYANOPHYTA (BLUE-GREEN ALGAE)				
..CYANOPHYCEAE				
...CHROOCOCCALES				
...CHROOCOCCACEAE				
...ANACYSTIS	230#	23	13	1
...HORMOGONALES				
...OSCILLATORIA				
...OSCILLATORIA	--	-	770#	45

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

LOCATION.--Lat 36°19'14", long 117°31'23", in NW¼SE¼SW¼ sec.34, T.18 S., R.41 E., Inyo County, Hydrologic Unit 18090204, on left bank 510 ft (155 m) downstream from Darwin Falls, 1.6 mi (2.6 km) upstream from unnamed tributary, and 5.2 mi (8.4 km) northeast of Darwin.

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

REMARKS.--Records good. No regulation above station. Town of Darwin pumps water above station for municipal supply.

AVERAGE DISCHARGE.--18 years, 0.40 ft³/s (0.011 m³/s), 290 acre-ft/yr (358,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,400 ft³/s (125 m³/s) Jan. 25, 1969, gage height, 8.40 ft (2.560 m), at site then in use, from floodmarks, on basis of slope-conveyance study of maximum flow; minimum daily, 0.05 ft³/s (0.001 m³/s) Aug. 30 to Sept. 4, 1969, Sept. 10-12, 15, 17, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 20.42 ft (6.224 m), present site, from floodmarks, date and discharge unknown.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.4 ft³/s (0.040 m³/s) Feb. 16, gage height, 3.85 ft (1.173 m), no peak above base of 10 ft³/s (0.28 m³/s); minimum daily, 0.05 ft³/s (0.001 m³/s) Sept. 10-12, 15, 17.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.12	.24	.16	.16	.18	.31	.18	.18	.17	.07	.07
2	.14	.12	.24	.16	.16	.24	.27	.14	.18	.17	.08	.07
3	.14	.12	.27	.16	.16	.31	.24	.12	.16	.17	.07	.07
4	.12	.14	.27	.16	.14	.31	.21	.12	.18	.17	.08	.06
5	.12	.14	.27	.16	.14	.31	.16	.10	.16	.16	.10	.06
6	.12	.14	.27	.14	.12	.35	.18	.10	.16	.16	.08	.06
7	.14	.16	.27	.12	.12	.35	.16	.10	.16	.16	.08	.06
8	.14	.16	.31	.12	.12	.35	.14	.10	.14	.16	.10	.06
9	.12	.16	.31	.16	.12	.35	.14	.12	.14	.16	.10	.07
10	.12	.16	.27	.18	.12	.35	.14	.14	.12	.16	.10	.05
11	.14	.14	.27	.21	.12	.35	.12	.16	.12	.16	.10	.05
12	.14	.14	.27	.18	.12	.35	.10	.14	.12	.16	.10	.05
13	.14	.14	.24	.18	.14	.35	.12	.18	.14	.16	.10	.06
14	.14	.14	.21	.16	.21	.35	.14	.18	.12	.16	.10	.06
15	.16	.14	.21	.16	.18	.35	.10	.14	.12	.16	.12	.05
16	.16	.14	.21	.16	.24	.35	.12	.16	.12	.16	.10	.06
17	.14	.14	.21	.19	.21	.31	.12	.16	.12	.16	.10	.05
18	.14	.14	.21	.21	.18	.35	.12	.14	.12	.16	.12	.06
19	.14	.12	.18	.18	.21	.35	.14	.16	.14	.14	.10	.06
20	.16	.12	.18	.16	.21	.35	.14	.16	.14	.16	.10	.06
21	.14	.12	.18	.16	.16	.35	.16	.18	.15	.14	.10	.07
22	.14	.12	.18	.16	.16	.35	.14	.21	.15	.14	.10	.07
23	.14	.14	.18	.16	.16	.35	.18	.24	.15	.14	.10	.06
24	.12	.15	.18	.16	.16	.35	.18	.24	.15	.12	.10	.07
25	.12	.17	.16	.16	.18	.35	.14	.24	.16	.12	.10	.08
26	.12	.18	.16	.14	.18	.31	.16	.24	.16	.12	.10	.08
27	.12	.20	.18	.14	.18	.31	.14	.21	.16	.10	.08	.08
28	.12	.21	.18	.14	.18	.31	.16	.24	.16	.08	.10	.08
29	.12	.23	.16	.14	.18	.31	.18	.21	.17	.07	.12	.08
30	.12	.24	.16	.14	---	.31	.18	.21	.17	.08	.08	.08
31	.12	---	.16	.16	---	.31	---	.21	---	.08	.08	---
TOTAL	4.14	4.54	6.79	4.97	4.72	10.17	4.79	5.23	4.44	4.41	2.96	1.94
MEAN	.13	.15	.22	.16	.16	.33	.16	.17	.15	.14	.096	.065
MAX	.16	.24	.31	.21	.24	.35	.31	.24	.18	.17	.12	.08
MIN	.12	.12	.16	.12	.12	.18	.10	.10	.12	.07	.07	.05
AC-FT	8.2	9.0	13	9.9	9.4	20	9.5	10	8.8	8.7	5.9	3.8
CAL YR 1979	TOTAL	65.09	MEAN	.18	MAX	.91	MIN	.01	AC-FT	129		
WTR YR 1980	TOTAL	59.10	MEAN	.16	MAX	.35	MIN	.05	AC-FT	117		

DEATH VALLEY

10251100 SALT CREEK NEAR STOVEPIPE WELLS, CA

LOCATION.--Lat 36°35'58", long 117°00'46", in NE¼ sec.6, T.16 S., R.46 E., Inyo County, Hydrologic Unit 18090203, Death Valley National Monument, on left bank 3.0 mi (4.8 km) southeast of intersection of State Highway 190 and Stovepipe Wells Road, and 7.4 mi (11.9 km) east 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 (-55 m), from topographic map.

AVERAGE DISCHARGE.--6 years, 0.338 ft³/s (0.010 m³/s), 245 acre-ft/yr (302,000 m³/s).

REMARKS.--Records poor. No gage-height record Jan. 25 to May 22 and June 17 to Sept. 25. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 363 ft³/s (10.3 m³/s) Feb. 9, 1976, gage height, 4.81 ft (1.466 m) based on slope-conveyance study of peak flow; minimum daily, 0.05 ft³/s (0.001 m³/s) July 14, 19, Aug. 4-6, 8, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 6.1 ft³/s (0.17 m³/s) Jan. 18 (1400 hrs), gage height, 2.97 ft (0.905 m); other peaks above base of 5.0 ft³/s (0.14 m³/s) occurred on Feb. 14, 17, Mar. 3, 7, and May 1, stage and discharge unknown; minimum daily, 0.09 ft³/s (0.003 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.14	.17	.22	.38	.60	.50	3.0	.21	.12	.11	.10
2	.09	.14	.19	.22	.39	.60	.41	.80	.18	.12	.11	.10
3	.11	.14	.18	.22	.40	4.5	.41	.35	.18	.12	.11	.10
4	.11	.14	.19	.22	.40	1.0	.40	.32	.17	.12	.11	.10
5	.11	.14	.18	.22	.41	.80	.40	.31	.17	.12	.11	.10
6	.11	.14	.18	.22	.42	2.0	.39	.29	.18	.12	.11	.10
7	.11	.14	.18	.22	.43	2.2	.39	.27	.18	.12	.11	.10
8	.10	.15	.18	.22	.44	.70	.38	.26	.17	.12	.11	.10
9	.12	.15	.19	.24	.44	.68	.38	.25	.15	.12	.11	.10
10	.12	.15	.19	.24	.45	.66	.38	.23	.14	.11	.11	.10
11	.13	.15	.18	.26	.46	.64	.37	.22	.12	.11	.11	.10
12	.13	.15	.19	.26	.47	.62	.37	.21	.12	.11	.11	.10
13	.13	.15	.19	.26	.47	.61	.36	.20	.13	.11	.11	.10
14	.13	.15	.19	.26	3.5	.59	.36	.23	.13	.11	.11	.10
15	.13	.16	.19	.25	1.5	.58	.35	.22	.13	.11	.11	.10
16	.13	.16	.19	.26	2.0	.56	.35	.20	.13	.11	.11	.10
17	.13	.16	.19	.27	4.0	.54	.34	.20	.13	.11	.11	.10
18	.13	.16	.19	1.3	3.0	.54	.34	.20	.13	.11	.11	.10
19	.13	.16	.19	.34	2.5	.53	.34	.20	.13	.11	.11	.10
20	.12	.15	.20	.29	.70	.52	.33	.20	.13	.11	.10	.10
21	.12	.16	.20	.29	.67	.51	.33	.20	.13	.11	.10	.10
22	.13	.17	.19	.29	.66	.50	.32	.20	.13	.11	.10	.10
23	.13	.17	.20	.29	.65	.49	.32	.21	.12	.11	.10	.10
24	.13	.17	.22	.30	.64	.48	.32	.24	.12	.11	.10	.10
25	.13	.17	.22	.31	.63	.47	.31	.23	.12	.11	.10	.10
26	.13	.17	.21	.32	.62	.46	.31	.24	.12	.11	.10	.10
27	.13	.17	.21	.33	.61	.45	.30	.23	.12	.11	.10	.10
28	.13	.17	.22	.34	.60	.44	.30	.24	.12	.11	.10	.10
29	.12	.17	.22	.35	.60	.43	.35	.24	.12	.11	.10	.10
30	.14	.17	.22	.45	---	.42	1.5	.24	.14	.11	.10	.10
31	.15	---	.22	.37	---	.41	---	.21	---	.11	.10	---
TOTAL	3.81	4.67	6.06	9.63	28.44	24.53	11.91	10.64	4.25	3.50	3.29	3.00
MEAN	.12	.16	.20	.31	.98	.79	.40	.34	.14	.11	.11	.10
MAX	.15	.17	.22	1.3	4.0	4.5	1.5	3.0	.21	.12	.11	.10
MIN	.09	.14	.17	.22	.38	.41	.30	.20	.12	.11	.10	.10
AC-FT	7.6	9.3	12	19	56	49	24	21	8.4	6.9	6.5	6.0

CAL YR 1979 TOTAL 85.94 MEAN .24 MAX 1.8 MIN .05 AC-FT 170
WTR YR 1980 TOTAL 113.73 MEAN .31 MAX 4.5 MIN .09 AC-FT 226

10251300 AMARGOSA RIVER AT TECOPA, CA

LOCATION.--Lat 35°50'53", long 116°13'43", in NW¼NW¼SE¼ sec.9, T.20 N., R.7 E., Inyo County, Hydrologic Unit 18090202, on right bank 20 ft (6 m) upstream from county road, and 0.2 mi (0.3 km) west of Tecopa.

DRAINAGE AREA.--3,090 mi² (8,000 km²), approximately, much of which is non-contributing.

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

GAGE.--Water-stage recorder and culvert control. Altitude of gage is 1,310 ft (399 m), from topographic map.

REMARKS.--Records fair. No regulation. City of Tecopa pumps water for municipal use upstream.

AVERAGE DISCHARGE.--19 years, 3.37 ft³/s (0.095 m³/s), 2,440 acre-ft/yr (3.01 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft³/s (142 m³/s), estimated, Feb. 26, 1969, gage height, 18.34 ft (5.590 m), from floodmark; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended above 75 ft³/s (2.12 m³/s) on basis of slope-area measurement at gage height 13.9 ft (4.24 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 29	0830	261	7.39	6.59	2.009	Mar. 3	0400	133	3.77	5.38	1.640
Feb. 14	1100	110	3.12	5.16	1.573	Mar. 6	1945	80	2.27	4.86	1.481
Feb. 17	0030	*686	19.4	11.39	3.472	Mar. 9	1245	92	2.61	4.98	1.518
Feb. 19	1500	646	18.3	11.07	3.374	July 1	2100	224	6.34	6.18	1.884

Minimum daily discharge, no flow many days during year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.20	1.5	10	3.2	.70	4.7	.02	32		
2		0	.27	1.5	5.5	3.2	.75	2.9	.02	8.8		
3		0	.30	1.5	4.0	52	.77	4.2	.01	.04		
4		0	.35	1.4	3.2	16	.76	32	.01	0		
5		0	.45	1.4	2.8	12	.56	14	.01	0		
6		0	.43	1.6	3.3	37	.40	7.6	0	0		
7		0	.35	1.8	3.5	48	.73	2.4	.01	0		
8		0	.40	1.7	2.3	58	.53	.52	0	0		
9		0	.46	5.6	1.3	77	.46	.08	0	0		
10		0	.56	4.1	1.5	54	.70	.07	0	0		
11		0	1.3	16	1.7	34	.91	.06	0	0		
12		0	.60	5.6	1.7	22	.66	.10	0	0		
13		0	.64	2.9	2.5	15	.29	.13	0	0		
14		0	.68	1.4	48	8.9	.32	.15	0	0		
15		.01	.73	1.5	22	4.1	.35	.52	0	0		
16		.01	.78	1.8	85	4.9	.37	.25	0	0		
17		.01	.83	1.8	172	1.8	.35	.18	0	0		
18		.03	.89	2.1	56	1.5	.35	.11	0	0		
19		.07	.93	2.5	180	2.6	.35	.07	0	0		
20		.04	1.0	1.5	88	.84	.29	.06	0	0		
21		.01	1.2	1.0	72	.84	.20	.05	0	0		
22		.01	1.5	.85	42	2.2	.20	.06	0	0		
23		.06	1.3	.50	35	1.0	.26	.06	0	0		
24		.07	1.1	.61	27	1.3	.53	.07	0	0		
25		.10	1.0	.60	20	1.3	.55	.10	0	0		
26		.12	1.7	.66	14	1.3	.49	.11	0	0		
27		.27	2.5	.46	9.2	1.0	.33	.08	0	0		
28		.14	1.1	.46	5.6	2.0	.60	.06	0	0		
29		.10	1.3	109	5.2	1.3	7.6	.06	0	0		
30		.12	1.3	28	---	1.3	2.2	.05	0	0		
31		---	1.4	19	---	1.5	---	.03	---	0		---
TOTAL	0	1.17	27.55	220.34	924.3	471.08	23.56	70.83	.08	40.84	0	0
MEAN	0	.039	.89	7.11	31.9	15.2	.79	2.28	.003	1.32	0	0
MAX	0	.27	2.5	109	180	77	7.6	32	.02	32	0	0
MIN	0	0	.20	.46	1.3	.84	.20	.03	0	0	0	0
AC-FT	0	2.3	55	437	1830	934	47	140	.2	81	0	0
CAL YR 1979	TOTAL	215.74	MEAN	.59	MAX	22	MIN	0	AC-FT	428		
WTR YR 1980	TOTAL	1779.75	MEAN	4.86	MAX	180	MIN	0	AC-FT	3530		

BRISTOL LAKE BASIN

10252550 CARUTHERS CREEK NEAR IVANPAH, CA

LOCATION.--Lat 35°14'33", long 115°17'58", in NW¼NW¼NE¼ sec.6, T.13 N., R.16 E., San Bernardino County, Hydrologic Unit 15030102, on left bank 6.6 mi (10.6 km) south of Ivanpah.

DRAINAGE AREA.--1.13 mi² (2.93 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,640 ft (1,719 m), from topographic map.

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

AVERAGE DISCHARGE.--17 years, 0.113 ft³/s (0.003 m³/s), 82 acre-ft/yr (101,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 583 ft³/s (16.5 m³/s) Oct. 1, 1976, gage height, 4.95 ft (1.509 m), on basis of slope-conveyance measurement of 518 ft³/s (14.7 m³/s); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft³/s (0.28 m³/s) and maximum (*), from rating curve extended above 1.0 ft³/s (0.003 m³/s) on basis of slope-area measurement at gage height 3.34 ft (1.018 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0445	15 0.42	1.83 0.558	Feb. 15	0915	12 0.34	1.73 0.527
Feb. 14	0600	*52 1.47	2.70 0.823	Feb. 16	1945	33 0.93	2.31 0.704

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.01	.02	.07	.04				
2				0	.01	.02	.06	.04				
3				0	.01	5.0	.06	.03				
4				0	0	.70	.05	.02				
5				0	0	.20	.05	.01				
6				0	0	2.1	.04	0				
7				0	0	6.0	.03	0				
8				0	0	1.9	.02	0				
9				1.1	0	.30	.01	0				
10				1.5	0	.05	0	0				
11				1.5	0	7.0	0	0				
12				.20	.01	1.5	0	0				
13				.08	3.0	.40	0	0				
14				.06	21	.30	0	0				
15				.04	5.4	.20	0	0				
16				.03	7.8	.10	0	0				
17				.02	4.0	.08	0	0				
18				.02	.15	.06	0	0				
19				.02	.05	.30	0	0				
20				.02	.05	.05	0	0				
21				.02	.06	.04	0	0				
22				.02	.05	.03	0	0				
23				.01	.04	.03	0	0				
24				.01	.04	.03	0	0				
25				.01	.03	.03	0	0				
26				.01	.03	.02	0	0				
27				.01	.03	.02	0	0				
28				.24	.02	.02	0	0				
29				7.1	.02	.02	.04	0				
30				.76	---	.02	.04	0				
31		---		.02	---	.02	---	0	---			---
TOTAL	0	0	0	12.80	41.81	26.56	.47	.14	0	0	0	0
MEAN	0	0	0	.41	1.44	.86	.016	.005	0	0	0	0
MAX	0	0	0	7.1	21	7.0	.07	.04	0	0	0	0
MIN	0	0	0	0	0	.02	0	0	0	0	0	0
AC-FT	0	0	0	25	83	53	.9	.3	0	0	0	0
CAL YR 1979	TOTAL	116.04	MEAN .32	MAX 80	MIN 0	AC-FT 230						
WTR YR 1980	TOTAL	81.78	MEAN .22	MAX 21	MIN 0	AC-FT 162						

SALTON SEA BASIN

33

10254005 SALTON SEA NEAR WESTMORLAND, CA

LOCATION.--Lat 33°11'37", long 115°49'54", in NE¼SE¼SW¼ sec.21, T.11 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on western shore at Sandy Beach, and 15.5 mi (24.9 km) northwest of Westmorland.

DRAINAGE AREA.--8,360 mi² (21,650 km²), 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 (76.200 m) 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 (84.64 m) below NGVD. See WSP 300, 735, and 918 for condensed history of Salton Sea.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 195.9 ft (59.71 m) below NGVD, in February and March 1907; minimum since 1906, 251.6 ft (76.69 m) below NGVD in November 1924.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevation, 227.2 ft (69.25 m) below NGVD, May 7; minimum, 228.7 ft (69.71 m) below NGVD several days.

MEAN DAILY MONTHEND ELEVATIONS, IN FEET, BELOW NGVD, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Date	Elevation (feet)
Sept. 30.....	228.4	Apr. 30.....	227.3
Oct. 31.....	228.6	May 31.....	227.4
Nov. 30.....	228.7	June 30.....	227.5
Dec. 31.....	228.6	July 31.....	227.6
Jan. 31.....	228.2	Aug. 31.....	227.9
Feb. 29.....	227.6	Sept. 30.....	228.0
Mar. 31.....	227.4		

INFLOW TO SALTON SEA

Salton Sea, located near the northeast corner of Imperial County, is a closed basin consisting of approximately 8,360 mi² (21,650 km²).

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 1979 to September 1980 and the annual inflow for the calendar year January to December 1979. Inflow from Imperial Valley is the sum of flows in Alamo River (station 10254730), New River (station 10255550), 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), Wasteway No. 1 (station 10259920), and 23 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 104100	83630	81070	78200	76440	113600	137500	109800	92510	102200	113900	112200	
Coachella Valley 11290	10500	11100	15850	31290	12970	13820	16040	12010	11920	13190	12710	
Total cal yr 1979	1,367,000 ac-ft											
Total wtr yr 1980	1,378,000 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

	62	93	112	181	138	144	145	118	113	113	174	153
Alamo River	10350	10120	10290	11490	12110	13190	13840	12390	10810	12750	14791	14660
New River												
Cal yr 1979:	Alamo River			1,420 ac-ft			Wtr yr 1980:			1,450 ac-ft		
Cal yr 1979:	New River			144,900 ac-ft			Wtr yr 1980:			146,800 ac-ft		

10254050 SALT CREEK NEAR MECCA, CA

LOCATION.--Lat 33°26'49", long 115°50'33", in NE¼SE¼SW¼ sec.28, T.8 S., R.11 E., Riverside County, Hydrologic Unit 18100200, on pier of Southern Pacific Railroad bridge, 0.3 mi (0.5 km) upstream from mouth, and 16 mi (26 km) southeast of Mecca.

DRAINAGE AREA.--269 mi² (697 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is -230 ft (-70.1 m), from topographic map.

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

AVERAGE DISCHARGE.--19 years, 6.87 ft³/s (0.195 m³/s), 4,980 acre-ft/yr (6.14 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,900 ft³/s (280 m³/s) Sept. 24, 1976, gage height, 14.3 ft (4.36 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of contracted-opening measurement of maximum flow; minimum daily, 0.06 ft³/s (0.002 m³/s) Nov. 1, 4, 5, 9, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,290 ft³/s (36.5 m³/s) Feb. 21, gage height, 9.44 ft (2.877 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of contracted-opening measurement; minimum daily, 2.0 ft³/s (0.057 m³/s) June 30, July 1, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	4.6	5.9	6.2	16	10	7.4	106	3.5	2.0	2.8	4.6
2	3.3	4.9	6.2	6.2	12	10	7.4	119	3.5	2.2	2.6	4.9
3	3.3	4.9	6.2	5.9	24	10	7.4	14	3.5	2.0	2.8	5.7
4	3.3	4.9	6.2	5.9	20	10	7.4	6.6	3.5	2.2	2.8	5.9
5	3.0	5.2	6.2	5.9	8.2	9.5	7.4	4.9	3.5	2.4	2.6	5.9
6	3.0	5.2	6.2	5.9	7.4	12	7.4	4.3	3.3	2.6	2.8	5.9
7	2.8	5.2	5.9	6.2	7.0	17	6.6	4.3	3.3	3.3	3.0	5.5
8	2.8	5.5	5.9	6.2	6.9	12	5.9	3.5	3.3	3.3	3.0	5.2
9	3.0	5.5	5.9	5.4	6.8	9.0	15	3.5	3.3	2.4	3.3	5.9
10	3.3	5.2	5.9	5.0	6.7	9.0	8.6	4.6	3.0	2.2	3.5	6.2
11	3.3	5.2	5.9	20	6.6	25	5.9	3.5	3.3	2.2	3.5	6.2
12	3.5	5.2	5.5	27	6.5	16	5.2	7.1	3.0	2.2	3.8	6.2
13	3.3	5.2	4.9	50	8.6	10	29	36	3.0	2.2	4.0	6.2
14	3.0	5.2	4.9	35	111	9.0	7.8	7.4	3.3	2.2	3.5	6.2
15	2.8	5.2	5.2	23	69	8.6	5.5	5.5	3.3	2.2	3.5	5.9
16	3.3	5.2	5.2	20	191	9.5	5.2	4.6	3.5	2.2	3.5	5.9
17	3.5	5.2	5.2	17	163	7.8	4.9	4.6	3.5	2.4	4.0	5.9
18	3.5	5.5	5.5	14	44	6.6	4.6	4.0	3.3	2.4	4.3	5.2
19	3.8	5.5	5.5	10	40	15	4.3	4.0	3.3	2.4	4.3	5.2
20	4.0	5.5	5.5	9.5	59	8.6	4.3	4.9	3.3	2.6	4.6	4.9
21	4.0	5.2	5.5	9.0	363	7.4	4.3	3.8	3.5	2.4	4.9	5.9
22	3.8	5.2	5.5	8.7	49	7.0	4.3	3.3	3.5	2.4	4.9	6.2
23	4.0	5.5	5.5	8.3	20	6.2	4.3	3.3	3.5	2.2	4.9	6.2
24	4.0	5.9	5.5	8.0	16	6.2	4.3	3.0	3.5	2.2	4.9	5.9
25	4.3	5.9	5.5	7.6	13	6.6	10	2.8	3.5	2.4	4.9	5.5
26	4.3	6.2	5.9	7.3	12	7.4	6.6	3.3	3.5	2.4	4.9	5.9
27	4.0	6.6	6.2	7.0	12	9.0	27	3.3	3.3	2.4	4.9	5.9
28	4.0	6.6	5.9	6.4	10	7.8	67	6.6	3.5	2.4	4.6	5.9
29	4.0	6.2	5.9	9.5	10	6.2	29	5.5	2.6	2.4	4.6	5.9
30	4.3	5.9	5.9	61	---	10	43	3.8	2.0	2.6	4.9	5.5
31	4.3	---	5.9	60	---	9.0	---	3.5	---	2.8	4.6	---
TOTAL	110.1	163.2	177.0	570.7	1318.7	307.4	357.0	394.5	98.9	74.2	121.2	172.3
MEAN	3.55	5.44	5.71	18.4	45.5	9.92	11.9	12.7	3.30	2.39	3.91	5.74
MAX	4.3	6.6	6.2	61	363	25	67	119	3.5	3.3	4.9	6.2
MIN	2.8	4.6	4.9	5.9	6.5	6.2	4.3	2.8	2.0	2.0	2.6	4.6
AC-FT	218	324	351	1130	2620	610	708	782	196	147	240	342
CAL YR 1979	TOTAL	2570.44	MEAN	7.04	MAX	117	MIN	.24	AC-FT	5100		
WTR YR 1980	TOTAL	3865.20	MEAN	10.6	MAX	363	MIN	2.0	AC-FT	7670		

10254585 ALAMO RIVER NORTH OF INTERNATIONAL BOUNDARY, NEAR CALEXICO, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 32°40'30", long 115°22'08", in SW¼NE¼ sec.18, T.17 S., R.16 E., Imperial County, Hydrologic Unit 18100200, at gaging station 7 mi (11 km) east of Calexico.

PERIOD OF RECORD.--October 1979 to September 1980.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources; discharges were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	HARD- NESS (MG/L AS CAC03)	
DATE	TIME										
DEC 12...	1410	1.9	4270	8.4	15.0	20	11.1	--	--	910	
MAR 20...	1010	2.1	4870	8.1	19.5	30	8.9	--	--	1080	
20...	1105	2.1	--	--	19.5	--	--	62	6.4	--	
20...	1106	2.1	--	--	19.5	--	--	--	--	--	
JUN 24...	1820	1.9	5700	7.9	28.0	60	5.7	--	--	1140	
SEP 16...	1250	4.9	--	--	28.0	--	--	29	3.4	--	
24...	1750	1.9	4020	7.9	26.0	--	7.0	--	--	--	
		SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPATE DISSOL. (MG/L AS P)
DEC 12...	940	900		3190	--	.54	.04	1.6	.80	.24	.10
MAR 20...	1050	1200		3790	--	1.4	.07	.00	1.1	.30	.08
20...	--	--	--	111	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
JUN 24...	1170	1220		4020	--	.18	<.01	.00	1.2	.21	.01
SEP 16...	--	--	--	148	--	--	--	--	--	--	--
24...	--	--	--	--	--	.81	.04	.00	.70	.05	.00
DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
DEC 12...	1410	0	400	0	0	10	20	0	270	.0	0
JUN 24...	1820	0	200	20	0	20	0	0	110	.0	0

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAR 20...	1105	--	.78
20...	1106	6.3	--
SEP 16...	1250	--	.36

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

SALTON SEA BASIN

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, at gaging station 2.2 mi (3.5 km) southeast of Calipatria.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to September 1980. 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 (-56.4 m), from topographic map.

REMARKS.--Records good. Flow is mainly return flow from irrigated areas. Flow affected at times by North End Dam .25 mi (.4 km) upstream, by changing dam elevation to regulate size of water-fowl preserve above gage.

COOPERATION.--Discharges for some periods were furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,370 ft³/s (38.8 m³/s) Mar. 27, 1980, gage height 2.77 ft (0.844 m); minimum daily, 305 ft³/s (8.64 m³/s) Feb. 24; 27, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,370 ft³/s (38.8 m³/s) Mar. 27, gage height 2.77 ft (0.844 m); minimum daily, 305 ft³/s (8.64 m³/s) Feb. 24, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	827	750	636	509	431	431	940	913	723	715	767	723
2	883	766	629	521	416	496	976	867	730	790	753	737
3	915	760	620	574	400	567	943	791	737	730	775	745
4	891	740	620	595	421	588	1050	692	737	715	760	775
5	907	723	620	601	410	588	1120	642	715	685	760	851
6	931	700	620	622	454	667	1140	706	715	636	745	851
7	915	707	610	595	471	715	1020	730	730	700	745	820
8	851	737	610	496	426	783	1020	775	737	650	797	851
9	843	730	610	496	442	790	1090	790	723	629	763	783
10	851	693	610	607	477	827	1100	850	700	678	775	770
11	843	664	610	416	496	1240	1070	853	700	707	827	792
12	883	636	605	355	554	1000	1070	822	715	700	813	823
13	835	643	605	360	636	797	1150	771	693	715	859	850
14	813	657	605	365	987	707	1120	734	664	737	843	839
15	707	671	605	355	696	650	1080	732	664	737	820	855
16	891	650	605	336	483	650	1020	771	636	715	859	839
17	693	650	601	369	509	643	1030	797	678	745	843	815
18	515	636	636	384	431	650	1070	797	657	745	723	842
19	608	588	608	384	426	713	1090	814	643	775	707	819
20	745	567	608	405	395	767	1070	842	650	783	700	797
21	805	595	643	400	390	835	1020	907	650	737	753	833
22	867	601	643	416	318	901	1020	911	657	745	775	845
23	907	608	615	410	309	993	1010	896	685	745	820	798
24	813	595	567	466	305	1020	989	851	685	729	790	798
25	760	615	502	509	309	998	1080	875	723	730	730	884
26	730	622	410	521	314	1150	1030	875	715	749	700	924
27	715	650	460	588	305	1280	1090	737	671	794	715	908
28	693	622	534	608	318	1110	1030	793	664	749	723	878
29	700	643	567	643	365	1020	1040	700	707	778	730	866
30	720	671	581	899	---	983	1050	723	707	760	730	804
31	740	---	547	671	---	905	---	723	---	800	737	---
TOTAL	24797	19890	18342	15476	12894	25464	31528	24680	20811	22603	23857	24715
MEAN	800	663	592	499	445	821	1051	796	694	729	770	824
MAX	931	766	643	899	987	1280	1150	913	737	800	859	924
MIN	515	567	410	336	305	431	940	642	636	629	700	723
AC-FT	49180	39450	36380	30700	25580	50510	62540	48950	41280	44830	47320	49020
WTR YR 1980	TOTAL	265057	MEAN	724	MAX	1280	MIN	305	AC-FT	525700		

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 to current year.
 BIOLOGICAL DATA: Water years 1979 to current year.
 SPECIFIC CONDUCTANCE: May 1980 to September 1980.
 WATER TEMPERATURES: May 1980 to September 1980.

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

COOPERATION.--Discharges were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT 23...	1630	874	2840	7.9	20.5	87	9.2	K300000	3400	850
NOV 27...	1445	669	4010	7.8	15.5	89	10.4	K4000	4000	910
DEC 12...	1430	601	4600	7.9	12.5	210	--	4200	12600	930
JAN 16...	1530	330	5900	8.0	17.0	31	10.4	3470	4460	1300
FEB 12...	1450	574	4350	7.4	15.0	130	10.2	68000	47000	990
MAR 19...	1430	716	4400	7.9	17.5	180	9.8	6800	14000	1000
APR 16...	1000	963	4080	7.9	22.0	190	8.9	--	8830	950
MAY 14...	1615	760	4100	--	22.5	98	8.4	2250	K2110	930
JUN 18...	1030	671	3810	7.9	25.5	230	--	K61000	K1000	950
JUL 16...	0930	730	4000	7.4	29.0	250	--	80000	1250	890
AUG 13...	0900	835	3140	7.7	31.0	140	11.5	K81000	2550	890
SEP 10...	0830	805	3500	7.5	26.5	180	11.1	50000	2300	950

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 23...	850	180	97	480	55	7.2	12	--	940
NOV 27...	690	200	100	550	70	7.9	11	220	910
DEC 12...	710	190	110	500	54	7.1	9.7	220	990
JAN 16...	1300	260	160	770	56	9.3	14	56	1200
FEB 12...	800	200	120	540	54	7.5	11	190	950
MAR 19...	800	210	120	560	54	7.6	14	220	1000
APR 16...	750	200	110	510	53	7.2	12	200	920
MAY 14...	710	190	110	550	56	7.9	15	220	950
JUN 18...	740	200	110	480	52	6.8	13	210	830
JUL 16...	700	190	100	490	54	7.2	13	190	790
AUG 13...	680	190	100	510	56	7.5	3.2	210	920
SEP 10...	740	200	110	490	53	6.9	5.9	210	940

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

SALTON SEA BASIN

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, 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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT 23...	590	.6	13	2960	2350	8.7	7.3	.36	.34
NOV 27...	670	.6	13	2800	2630	9.1	9.5	1.1	1.1
DEC 12...	730	.6	13	3030	2720	9.9	9.8	1.8	1.8
JAN 16...	1000	.6	12	3740	3490	9.2	8.8	2.1	2.1
FEB 12...	690	.7	11	2840	2670	7.4	8.1	1.6	2.0
MAR 19...	700	.5	9.9	2550	2790	8.8	8.8	2.3	2.3
APR 16...	660	.6	12	2740	2580	7.5	7.2	.70	.72
MAY 14...	710	.6	12	2900	2700	7.4	7.9	.99	1.2
JUN 18...	620	.7	8.6	2640	2420	6.7	6.1	--	--
JUL 16...	640	.6	8.8	2360	2370	6.5	4.5	.90	.83
AUG 13...	640	.6	9.1	2620	2540	8.6	8.1	--	.43
SEP 10...	650	.8	8.8	2420	2550	6.6	4.9	.35	.28

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. 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)
OCT 23...	1.8	.63	2.2	1.2	.97	11	8.3	.73	.32
NOV 27...	--	1.2	1.9	--	2.3	11	12	.54	.24
DEC 12...	1.9	1.1	3.7	.80	2.9	14	13	.58	.22
JAN 16...	2.1	1.6	4.2	.50	3.7	13	13	.42	.19
FEB 12...	.90	.90	2.5	--	2.9	11	10	.69	.32
MAR 19...	2.7	1.6	5.0	1.1	3.9	14	13	1.1	.70
APR 16...	1.7	.98	2.4	.70	1.7	9.9	8.9	.82	.39
MAY 14...	1.8	.80	2.8	.80	2.0	10	9.9	.67	.33
JUN 18...	--	--	--	--	--	--	--	.86	.28
JUL 16...	1.7	1.1	2.6	.70	1.9	9.1	6.4	.82	.18
AUG 13...	--	1.3	2.0	.30	1.7	11	9.8	.61	.19
SEP 10...	1.8	1.0	2.1	.80	1.3	8.7	6.2	.56	.14

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)
OCT				JUL			
23...	1630	2840	20.5	16...	1100	3680	29.0
NOV				17...	0900	3830	29.0
27...	1445	4010	15.5	18...	1100	3870	29.5
DEC				21...	1140	3660	30.5
12...	1430	4600	12.5	22...	1125	3740	31.0
JAN				23...	1110	3810	31.0
16...	1530	5900	17.0	24...	1100	3730	32.0
FEB				25...	1100	3840	32.0
12...	1450	4350	15.0	26...	1100	3720	32.5
MAR				27...	1100	3690	32.5
14...	0900	4010	15.0	28...	1100	3670	32.5
15...	0830	3800	16.0	29...	1140	3740	30.5
19...	1430	4400	17.5	30...	0830	3690	30.0
APR				31...	1050	3600	31.5
16...	1000	4080	22.0	AUG			
MAY				01...	1110	3610	32.0
14...	1615	4100	22.5	02...	1030	3750	31.5
16...	0930	4010	22.0	03...	1250	3750	31.0
17...	1025	4100	23.5	04...	1110	4270	31.0
18...	1135	4050	25.0	05...	1405	3640	30.5
19...	0830	3980	25.0	06...	1035	3800	30.0
21...	0925	4000	24.5	07...	1225	3940	30.0
22...	1130	3750	23.0	08...	1055	3810	30.0
23...	1000	3810	21.5	09...	1005	3750	30.0
24...	1015	4000	18.5	10...	0935	3720	31.0
25...	0945	3630	18.0	11...	1010	3540	31.5
26...	1130	3850	21.0	12...	1030	3760	31.0
27...	1240	3870	21.0	13...	0900	3140	31.0
28...	0930	4220	20.0	13...	0955	3640	30.5
29...	1205	4060	21.0	14...	1040	3610	30.0
30...	0900	4070	21.5	15...	1050	3730	28.5
31...	1220	3920	22.0	16...	0910	3650	26.0
JUN				17...	1035	3700	27.0
01...	1040	3920	21.0	18...	0915	3900	27.0
02...	0950	3820	22.5	19...	1005	3960	26.0
03...	0940	3900	23.0	20...	0945	4150	26.5
04...	1235	3670	24.5	21...	0920	3860	27.0
05...	1040	4000	24.0	22...	0925	3710	27.5
06...	1100	3920	22.5	23...	0945	3820	27.0
07...	0830	3920	22.5	24...	0850	3750	28.0
08...	0915	3670	23.0	25...	1025	3820	29.5
09...	1015	3620	25.0	26...	1050	4040	29.5
10...	1225	3890	26.8	27...	0930	4090	29.0
11...	0955	3890	25.0	28...	1100	3950	28.0
12...	1055	3820	25.0	29...	1100	3960	28.0
13...	1100	3680	24.5	30...	1100	3900	27.0
14...	1215	3890	24.0	31...	1115	3890	25.5
15...	1025	3870	25.0	SEP			
16...	1010	4010	26.0	01...	1305	3860	26.0
17...	0940	3980	27.0	02...	1005	3890	26.5
18...	1030	3810	25.5	03...	1100	3870	28.0
19...	0950	4030	26.0	04...	1025	3840	29.0
20...	0900	3920	26.5	05...	1055	3730	29.0
21...	1045	3870	26.0	06...	1000	3720	29.0
22...	1120	3830	26.0	07...	1035	3760	29.0
23...	0900	3560	25.5	08...	1000	3770	27.0
24...	0905	3710	24.5	09...	1050	3830	27.0
25...	0905	3860	25.0	10...	0830	3500	26.5
26...	0920	3670	26.0	10...	1120	3830	27.0
27...	0915	3680	27.5	11...	1000	4010	27.0
28...	1130	3870	29.5	12...	1140	3960	27.5
29...	1000	3900	30.0	13...	1115	4010	27.0
30...	1125	3870	30.0	14...	1100	3840	26.5
JUL				15...	1025	3750	25.5
01...	1245	3840	29.0	16...	1025	3640	26.0
02...	0940	3910	28.5	17...	1000	3860	27.0
03...	1115	3720	28.0	18...	0900	3740	28.0
04...	0930	3890	28.0	19...	0930	3930	27.0
05...	1000	4020	28.5	20...	1000	3860	25.0
06...	1020	4250	29.5	21...	1130	3680	23.5
07...	1025	4050	28.5	22...	1130	3530	24.0
08...	1035	3790	29.0	23...	1130	3710	24.0
09...	0920	4210	29.0	24...	1015	3970	24.0
10...	1135	3900	29.0	25...	1200	3680	25.0
11...	1055	3990	29.5	26...	1000	3610	25.0
12...	1020	3660	29.5	27...	1030	3610	26.5
13...	1020	3880	29.5	28...	1010	3720	27.0
14...	1055	3690	29.0	29...	1100	3640	26.5
15...	1030	3800	28.0	30...	1020	3740	26.0
16...	0930	4000	29.0				

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

[illegible][illegible][illegible]

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 23...	3	9	0	9	0	0	0	40	30	10
DEC 12...	--	--	--	--	0	--	--	--	--	--
JAN 16...	3	13	1	12	0	0	0	30	0	30
MAR 19...	--	--	--	--	1	--	--	--	--	--
APR 16...	2	11	0	11	1	1	0	70	40	30
JUN 18...	--	--	--	--	0	--	--	--	--	--
JUL 16...	3	11	1	10	0	0	0	140	110	30
SEP 10...	--	--	--	--	0	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED (MG/L AS C)
OCT 23...	1630	--	8.4	1.7
NOV 27...	1445	20	--	--
DEC 12...	1430	14	--	--
JAN 16...	1530	--	18	--
FEB 12...	1450	12	--	--
MAR 19...	1430	12	--	--
APR 16...	1000	--	19	1.6
MAY 14...	1615	14	--	--
JUN 18...	1030	--	9.1	.5
JUL 16...	0930	--	13	1.5
AUG 13...	0900	25	--	--
SEP 10...	0830	10	--	--

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON								
DATE TIME	NOV 27,79 1445	MAR 19,80 1430	MAY 14,80 1615	JUN 18,80 1030				
TOTAL CELLS/ML	710	27000	11000	29000				
DIVERSITY: DIVISION	1.2	0.9	0.4	1.0				
..CLASS	1.7	0.9	0.4	1.0				
..ORDER	2.2	1.7	1.0	1.5				
...FAMILY	2.5	1.9	1.3	1.8				
....GENUS	2.5	1.9	1.3	1.9				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....COELASTRACEAE								
.....COELASTRUM	--	-	--	-	--	-	--	-
.....OOCYSTACEAE								
.....ANKISTRODESMUS	--	-	--	-	*	0	210	1
.....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
.....KIRCHNERIELLA	--	-	--	-	--	-	*	0
.....OOCYSTIS	--	-	250	1	--	-	--	-
.....WESTELLA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
.....ACTINASTRUM	--	-	--	-	*	0	--	-
.....CRUCIGENIA	--	-	--	-	--	-	--	-
.....SCENEDESMUS	--	-	--	-	*	0	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	30	4	190	1	77	1	--	-

See footnotes at end of table.

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	PHYTOPLANKTON							
	NOV 27,79 1445	MAR 19,80 1430	MAY 14,80 1615	JUN 18,80 1030				
TOTAL CELLS/ML	710	27000	11000	29000				
DIVERSITY: DIVISION	1.2	0.9	0.4	1.0				
..CLASS	1.7	0.9	0.4	1.0				
..ORDER	2.2	1.7	1.0	1.5				
...FAMILY	2.5	1.9	1.3	1.8				
....GENUS	2.5	1.9	1.3	1.9				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....CHAETOCERACEAE								
....CHAETOCEROS	--	-	--	-	--	-	320	1
...COSCINODISCACEAE								
....CYCLOTELLA	30	4	1500	6	190	2	5700#	20
....MELOSIRA	--	-	--	-	--	-	420	1
..PENNALES								
....ACHNANTHACEAE								
....ACHNANTHES	--	-	--	-	--	-	530	2
....COCCONEIS	5	1	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	* 0		--	-	--	-
....CYMBELLACEAE								
....CYMBELLA	--	-	* 0		--	-	--	-
....FRAGILARIACEAE								
....SYNEDRA	--	-	--	-	--	-	* 0	
....NAVICULACEAE								
....ENTOMONEIS	--	-	--	-	--	-	* 0	
....NAVICULA	70	10	2000	7	150	1	960	3
....NITZSCHACEAE								
....NITZSCHIA	70	10	1600	6	260	2	1600	5
....SURIRELLACEAE								
....SURIRELLA	--	-	* 0		--	-	--	-
..CHRYSTOPHYCEAE								
..CHRYSSOMONADALES								
...OCHROMONADACEAE								
....OCHROMONAS	170#	24	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
....CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	* 0		--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
....AGMENELLUM	--	-	6000#	22	--	-	--	-
....ANACYSTIS	250#	35	--	-	1200	11	18000#	61
...HORMOGONALES								
....NOSTOCACEAE								
....ANABAENOPSIS	80	11	--	-	540	5	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	15000#	56	8300#	76	1100	4
....SPIRULINA	--	-	--	-	--	-	* 0	
....RIVULARIACEAE								
....RAPIDIOPSIS	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
....GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	* 0		--	-

See footnotes at end of table.

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
PHYTOPLANKTON

DATE TIME	JUL 16,80 0930	AUG 13,80 0900	SEP 10,80 0830
TOTAL CELLS/ML	13000	13000	5100
DIVERSITY: DIVISION	0.6	0.3	0.3
..CLASS	0.6	0.3	0.3
..ORDER	1.1	1.0	1.1
...FAMILY	2.1	1.7	1.1
....GENUS	2.5	2.0	1.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....COELASTRACEAE						
.....COELASTRUM	99	1	190	1	--	-
....OOCYSTACEAE						
.....ANKISTRODESMUS	--	-	--	-	--	-
.....DICTYOSPHAERIUM	--	-	* 0		--	-
.....KIRCHNERIELLA	--	-	--	-	--	-
....OOCYSTIS	120	1	--	-	--	-
.....WESTELLA	160	1	--	-	--	-
....SCENEDESMACEAE						
.....ACTINASTRUM	--	-	--	-	--	-
....CRUCIGENIA	79	1	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	* 0		26	1
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
....CHAETOCERACEAE						
.....CHAETOCEROS	--	-	--	-	--	-
....COSCINODISCACEAE						
.....CYCLOTELLA	260	2	150	1	120	2
.....MELOSIRA	--	-	--	-	--	-
..PENNALES						
...ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
....COCONEIS	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-
....CYMBELLACEAE						
.....CYMBELLA	--	-	--	-	--	-
....FRAGILARIACEAE						
.....SYNEDRA	--	-	--	-	--	-
....NAVICULACEAE						
.....ENTOMONEIS	--	-	--	-	--	-
.....NAVICULA	160	1	* 0		* 0	
....NITZSCHIACEAE						
.....NITZSCHIA	260	2	190	1	52	1
....SURIRELLACEAE						
.....SURIRELLA	--	-	--	-	--	-
..CHRYSTOPHYCEAE						
...CHRYSONOMADALES						
....OCHROMONADACEAE						
.....OCHROMONAS	--	-	--	-	--	-

See footnotes at end of table.

SALTON SEA BASIN

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 16,80 0930	AUG 13,80 0900	SEP 10,80 0830
TOTAL CELLS/ML	13000	13000	5100
DIVERSITY: DIVISION	0.6	0.3	0.3
..CLASS	0.6	0.3	0.3
..ORDER	1.1	1.0	1.1
...FAMILY	2.1	1.7	1.1
....GENUS	2.5	2.0	1.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONADALES						
....CRYPTOMONADACEAE						
.....CRYPTOMONAS	* 0		-- -		-- -	
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
....CHROOCOCCACEAE						
.....AGMENELLUM	160 1		710 5		410 8	
.....ANACYSTIS	1400 11		1600 13		800# 16	
...HORMOGONALES						
....NOSTOCACEAE						
.....ANABAENOPSIS	260 2		-- -		-- -	
....OSCILLATORIACEAE						
.....LYNGBYA	1300 10		210 2		-- -	
....OSCILLATORIA	3300# 26		2600# 20		-- -	
....SPIRULINA	-- -		-- -		-- -	
...RIVULARIACEAE						
....RAPHIDIOPSIS	5000# 40		7300# 56		3700# 72	
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
....EUGLENACEAE						
.....EUGLENA	* 0		-- -		-- -	
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...PERIDINIALES						
....GLENODINIACEAE						
.....GLENODINIUM	-- -		-- -		-- -	

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR 1979 TO SEPTEMBER 1980

PERIPHYTON

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
JAN 16...	1530	2763	1.52	<.029	58.6	54.4	35

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
FEB 12...	1450	15.0	574	544	843	--	--
MAR 19...	1430	17.5	716	427	825	--	--
APR 16...	1000	22.0	963	503	1310	--	--
MAY 14...	1615	22.5	760	481	987	--	--
JUN 18...	1030	26.0	671	529	958	54	64
JUL 16...	0930	29.0	730	834	1640	--	--
AUG 13...	0900	31.0	835	531	1200	52	59
SEP 10...	0830	26.5	805	410	891	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
FEB 12...	--	--	--	61	--	--	--
MAR 19...	--	--	--	90	--	--	--
APR 16...	--	--	--	78	--	--	--
MAY 14...	--	--	--	82	--	--	--
JUN 18...	73	81	87	92	98	100	--
JUL 16...	--	--	--	94	--	--	--
AUG 13...	67	75	86	95	98	99	100
SEP 10...	--	--	--	90	--	--	--

SALTON SEA BASIN

10254730 ALAMO RIVER NEAR NILAND, CA

LOCATION.--Lat 33°12'03", long 115°36'07", in NE¼SW¼NE¼ sec.22, T.11 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on left bank 0.6 mi (1.0 km) upstream from mouth, and 5.8 mi (9.3 km) southwest of Niland.

WATER-DISCHARGE RECORDS

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 -235 ft (-72 m), from topographic map.

REMARKS.--Records good. 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 ft³/s (127 m³/s) Aug. 17, 1977, estimated by Imperial Irrigation District, minimum daily, 288 ft³/s (8.16 m³/s) Jan. 2, 1966.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	992	850	771	627	627	512	1000	1180	817	874	983	983
2	1040	874	779	627	586	592	1090	1110	841	933	967	975
3	1040	858	711	668	558	697	1110	1020	907	891	983	992
4	1040	787	675	733	558	741	1230	933	915	882	933	967
5	1030	741	668	726	552	771	1330	882	915	858	949	1020
6	1040	682	711	794	579	891	1340	882	882	810	933	1050
7	1050	762	726	748	627	915	1260	992	874	817	924	1030
8	1030	841	756	634	613	1010	1220	1000	882	810	958	1040
9	958	841	719	627	579	1050	1230	1120	866	787	958	992
10	958	756	726	741	592	1130	1230	1110	850	825	949	924
11	958	726	726	519	647	1480	1220	1150	833	841	1000	941
12	983	741	704	461	690	1260	1220	1060	850	841	992	1010
13	975	771	697	468	779	992	1280	1040	825	858	1010	1050
14	975	817	711	474	1170	874	1280	1070	794	924	1040	1050
15	915	787	704	461	924	858	1260	866	794	874	1050	1090
16	983	748	711	455	668	841	1220	967	779	891	1060	1050
17	787	779	726	487	726	817	1220	958	825	907	1070	992
18	579	690	787	592	579	882	1260	915	825	933	992	1050
19	756	668	771	506	599	866	1400	899	825	949	992	1020
20	874	661	711	558	506	933	1570	899	825	941	899	1030
21	882	661	810	565	599	1080	1620	983	802	882	975	1060
22	899	704	825	558	424	1120	1320	1070	817	891	983	1100
23	975	719	756	558	405	1160	1270	1110	833	882	1010	1040
24	907	719	690	606	398	1260	1230	1060	794	891	1030	1000
25	858	748	627	647	386	1260	1320	975	825	891	958	1080
26	850	741	552	704	398	1350	1270	899	841	891	915	1110
27	833	810	545	771	411	1530	1290	841	817	941	941	1110
28	825	763	634	763	443	1350	1280	771	833	933	958	1100
29	949	763	661	841	455	1190	1320	741	850	941	1000	1100
30	810	802	704	1130	---	1140	1280	726	858	802	992	1010
31	802	---	675	941	---	1010	---	779	---	924	1000	---
TOTAL	28553	22810	21969	19990	17078	31562	38170	30008	25194	27315	30404	30966
MEAN	921	760	709	645	589	1018	1272	968	840	881	981	1032
MAX	1050	874	825	1130	1170	1530	1620	1180	915	949	1070	1110
MIN	579	661	545	455	386	512	1000	726	779	787	899	924
AC-FT	56630	45240	43580	39650	33870	62600	75710	59520	49970	54180	60310	61420
CAL YR 1979	TOTAL	320273	MEAN	877	MAX	1370	MIN	412	AC-FT	635300		
WTR YR 1980	TOTAL	324019	MEAN	885	MAX	1620	MIN	386	AC-FT	642700		

SALTON SEA BASIN

10254730 ALAMO RIVER NEAR NILAND, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT									
17...	--	--	--	8.8	.23	.00	.53	.25	.18
NOV									
29...	--	--	--	9.1	.38	.00	1.0	.34	.27
DEC									
11...	--	2770	--	8.1	.35	.00	.53	.32	.23
JAN									
22...	14	2920	--	6.9	.45	--	.47	.20	.16
FEB									
28...	--	--	--	8.8	.21	.00	.65	.20	.14
MAR									
20...	14	2650	--	8.8	.63	.00	.96	1.1	.76
20...	--	--	318	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
APR									
17...	--	--	--	7.4	.36	.00	.66	.39	.26
MAY									
13...	9.0	2580	--	6.4	.30	.00	.86	.42	.34
JUN									
24...	--	2650	--	5.4	.32	.00	.83	.38	.18
JUL									
24...	11	2510	--	6.5	.55	.00	.98	.28	.16
AUG									
27...	--	--	350	7.9	.65	.00	.57	.14	.09
SEP									
16...	--	--	442	--	--	--	--	--	--
25...	--	--	--	6.0	.28	.00	.62	.22	.10

DATE	TIME	ARSENIC, DIS- SOLVED (UG/L AS AS)	BARIIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM, DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PR)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JAN												
22...	1340	0	0	700	10	0	10	0	1.0	0	3700	10
MAR												
20...	1340	0	0	600	110	0	0	0	5.0	20	3400	20
MAY												
13...	1835	0	100	600	0	0	20	0	.0	0	3300	10
JUL												
24...	1720	0	100	600	0	0	20	0	1.0	0	3200	10

DATE	TIME	DACTHAL TOTAL (UG/L)
JUN		
24...	0825	.57

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAR			
20...	1415	--	.48
20...	1416	5.6	--
SEP			
16...	1525	--	.44

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 NE¼SW¼SE¼ sec.14, T.17 S., R.14 E., Imperial County, Hydrologic Unit 18100200, at Second Street bridge, 0.2 mi (0.3 km) downstream from international boundary in Calexico (revised).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1 ft (0.3 m), from topographic map.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 335 ft³/s (9.49 m³/s) Jan. 31, 1980; minimum daily 145 ft³/s (4.11 m³/s) Oct. 3, 6, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 335 ft³/s (9.49 m³/s) Jan. 31; minimum daily, 145 ft³/s (4.11 m³/s) Oct. 3, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	146	203	160	173	308	185	228	291	177	291	274	218
2	146	182	164	191	252	174	244	321	193	240	252	245
3	145	219	166	201	215	177	249	284	196	217	235	241
4	146	198	172	194	185	191	234	215	184	205	237	227
5	146	180	168	183	180	185	224	201	186	199	242	229
6	145	175	163	172	177	174	229	220	172	173	225	240
7	151	185	174	165	181	169	217	224	171	171	213	240
8	159	177	163	152	181	165	220	225	180	172	195	236
9	168	174	156	177	181	164	201	187	181	159	195	248
10	170	183	157	187	184	166	195	158	181	155	199	263
11	166	173	156	193	198	222	190	159	178	168	209	251
12	166	171	155	171	188	255	190	179	173	176	219	231
13	166	164	149	165	200	250	189	220	168	193	223	231
14	164	169	149	157	195	236	205	227	161	210	230	247
15	167	173	148	165	320	220	211	223	160	207	233	253
16	175	177	162	170	293	216	252	208	163	211	249	274
17	175	162	179	169	255	215	235	189	169	196	257	294
18	195	158	169	164	248	224	202	186	167	189	255	279
19	183	159	165	159	281	246	197	188	162	185	277	271
20	203	153	152	164	234	236	217	180	157	183	283	256
21	159	159	152	203	202	216	238	165	165	203	263	255
22	188	166	152	219	196	202	273	161	168	217	252	251
23	191	163	156	209	187	210	320	158	169	218	244	247
24	185	155	158	180	177	215	321	219	180	218	254	244
25	182	157	165	172	183	231	319	182	187	228	255	241
26	178	161	204	178	187	250	285	194	187	217	272	231
27	158	155	255	178	172	257	245	187	191	229	279	234
28	159	150	207	178	162	290	216	178	213	229	256	231
29	161	148	177	207	182	252	200	177	260	236	236	239
30	164	154	167	260	---	232	231	171	249	256	229	246
31	213	---	169	335	---	224	---	170	---	277	215	---
TOTAL	5220	5103	5189	5791	6104	6649	6977	6247	5448	6428	7457	7393
MEAN	168	170	167	187	210	214	233	202	182	207	241	246
MAX	213	219	255	335	320	290	321	321	260	291	283	294
MIN	145	148	148	152	162	164	189	158	157	155	195	218
AC-FT	10350	10120	10290	11490	12110	13190	13840	12390	10810	12750	14790	14660
WTR YR 1980	TOTAL	74006	MEAN	202	MAX	335	MIN	145	AC-FT	146800		

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 to current year.

WATER TEMPERATURES: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1973 to current year.

WATER TEMPERATURES: October 1973 to current year.

INSTRUMENTATION.--Specific-conductance recorder since October 1973. Temperature recorder since October 1973.

REMARKS.--Records fair. Periods of missing conductivity and temperature data due to equipment malfunction or fouled probe. Sudden changes in chemical quality can occur due to slug flows of wastewater.

COOPERATION.--Discharge records were furnished by Imperial Irrigation District. The letter "A" following a date indicates chemical-quality data furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 12,000 micromhos July 12, 1978; minimum recorded, 2,240 micromhos Oct. 31, 1976.

WATER TEMPERATURES: Maximum recorded, 38.0°C June 20, 1980; minimum recorded, 10.0°C Dec. 8-11, 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 9,720 micromhos Oct. 31; minimum recorded, 4,770 micromhos Feb. 2.

WATER TEMPERATURES: Maximum recorded, 38.0°C June 20; minimum recorded, 11.0°C Dec. 16, 17.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
23...	1115	180	6400	7.6	22.0	--	20	2.9K.1.5E+07	1900000	
NOV										
27...	0930	134	7010	7.6	13.5	--	18	7.2	273000	210000
DEC										
12...	0940	162	8000	7.2	12.5	--	29	--	160000	530000
12...A	1150	154	6440	7.6	13.0	15	--	6.6	526000	160000
JAN										
16...	1000	195	7200	7.7	16.0	--	2.0	5.8	170000	55300
FEB										
12...	1000	180	--	--	15.0	--	--	--	--	--
12...	1015	180	7500	6.9	15.0	--	20	6.8	690000	27000
MAR										
19...	0900	239	7800	7.9	16.0	--	52	6.2	110000	730000
20...A	0830	238	6300	7.8	18.5	15	--	3.6	--	--
APR										
16...	1500	252	7850	7.9	25.0	--	50	4.6	155000	1170000
22...	0910	251	5640	7.8	20.0	--	--	--	--	--
MAY										
14...	1000	259	8000	7.9	21.5	--	52	--	34000	K4000
JUN										
16...	1345	160	8000	7.6	27.5	--	10	--	215000	13000
17...	0930	160	--	--	27.5	--	--	--	--	--
25...A	0920	193	8300	7.8	28.5	4	--	5.4	--	--
JUL										
15...	0830	234	7030	7.4	28.0	--	16	--	70000	K6000
AUG										
12...	0900	217	--	--	31.0	--	--	--	--	--
12...	0915	217	6250	7.8	30.5	--	3.9	--	43000	38000
SEP										
09...	0900	242	6000	7.9	27.0	--	49	--	414000	45000

E Estimated

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

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 23...	1000	820	240	100	900	65	12	39	190	680
NOV 27...	860	630	190	93	1200	72	18	140	230	590
DEC 12...	1100	840	240	110	1200	77	16	130	210	710
12... A	1070	--	--	--	--	--	--	--	--	700
JAN 16...	1100	830	230	120	1100	67	15	100	240	710
FEB 12...	--	--	--	--	--	--	--	--	--	--
12...	1100	890	230	130	1100	66	14	92	220	770
MAR 19...	1200	940	260	130	1200	66	15	110	240	750
20... A	1100	--	--	--	--	--	--	--	--	720
APR 16...	1300	1100	280	150	1300	66	16	110	240	610
22...	1200	--	250	140	1200	66	15	100	--	--
MAY 14...	1100	900	240	130	1300	69	17	110	230	820
JUN 16...	1200	960	260	130	1300	68	16	120	220	740
17...	--	--	--	--	--	--	--	--	--	--
25... A	1200	--	--	--	--	--	--	--	--	790
JUL 15...	1100	820	240	110	1100	67	15	96	230	630
AUG 12...	--	--	--	--	--	--	--	--	--	--
12...	1000	790	220	110	980	66	13	68	210	770
SEP 09...	1000	760	220	110	930	65	13	59	240	750

DATE	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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT 23...	1600	.7	25	3920	3700	--	.78	--	5.1	--
NOV 27...	1700	.6	24	3960	4080	1.2	.95	4.5	4.9	--
DEC 12...	2000	.7	29	4730	--	.86	.70	5.3	4.8	5.7
12... A	2030	--	--	4710	--	--	--	--	--	--
JAN 16...	1900	.7	29	4290	4340	1.1	1.1	4.4	4.3	--
FEB 12...	--	--	--	--	--	--	--	--	--	--
12...	1900	.7	23	4450	4380	1.3	1.1	4.4	3.9	1.5
MAR 19...	2100	.6	27	4770	4730	.94	.94	3.0	3.0	6.0
20... A	1860	--	--	4380	--	--	--	--	--	--
APR 16...	2300	.8	30	5090	4930	.91	.94	--	2.4	5.7
22...	--	--	--	--	--	--	--	--	--	--
MAY 14...	2100	.7	28	4950	4870	.94	.91	1.9	2.0	2.0
JUN 16...	2200	.7	23	5050	4910	4.7	.29	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
25... A	2280	--	--	5240	--	--	--	--	--	--
JUL 15...	1800	.7	25	4400	4140	.77	.79	2.4	2.3	2.5
AUG 12...	--	--	--	--	--	--	--	--	--	--
12...	1700	.7	23	4190	4000	.80	.78	1.4	1.3	1.6
SEP 09...	1500	.8	19	3620	3740	1.2	.94	1.8	1.7	2.2

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. 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)	POTAS- SIUM 40 DIS- SOLVED (PCI/L AS K40)
OCT 23...	.00	4.9	.40	4.5	5.0	5.3	1.3	.97	--
NOV 27...	2.1	--	--	7.0	--	8.0	1.5	.25	--
DEC 12...	1.1	11	5.1	5.9	12	6.6	4.0	.52	97
12... A	--	--	--	--	--	--	--	--	--
JAN 16...	--	--	--	--	--	3.7	1.5	.56	--
FEB 12...	--	--	--	--	--	--	--	--	--
12...	.10	5.9	1.9	4.0	7.2	5.1	1.2	.29	--
MAR 19...	.90	9.0	5.1	3.9	9.9	4.8	1.5	.31	--
20... A	--	--	--	--	--	--	--	--	--
APR 16...	.50	8.0	5.1	2.9	8.9	3.8	1.7	.33	--
22...	--	--	--	--	--	--	--	--	--
MAY 14...	.60	3.9	1.3	2.6	4.8	3.5	.88	.29	--
JUN 16...	--	--	--	--	--	--	1.9	.74	--
17...	--	--	--	--	--	--	--	--	--
25... A	--	--	--	--	--	--	--	--	--
JUL 15...	.50	4.9	2.1	2.8	5.7	3.6	1.3	.15	--
AUG 12...	--	--	--	--	--	--	--	--	--
12...	1.3	3.0	.40	2.6	3.8	3.4	.92	.36	--
SEP 09...	.80	4.0	1.5	2.5	5.2	3.4	.96	.30	--

[illegible][illegible]

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, SUS- PENDE D RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE D RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE D RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, SUS- PENDE D RECOV- ERABLE (UG/L AS NI)
OCT 23...	40	3	--	150	70	80	--	--	1.6	8	4
DEC 12...	--	--	--	--	--	--	--	--	--	--	--
JAN 16...	7	0	--	220	90	130	2.3	.0	2.5	9	6
MAR 19...	--	--	--	--	--	--	--	--	--	--	--
APR 16...	12	3	--	210	110	100	110	100	6.0	12	9
22...	--	0	1200	--	--	--	--	--	--	--	--
JUN 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	8	3	--	260	120	140	1.3	.0	1.4	8	5
SEP 09...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE D TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE D RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE D RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 23...	4	2	0	2	1	1	0	--	80	60	20
DEC 12...	--	--	--	--	0	--	--	--	--	--	--
JAN 16...	3	2	0	2	0	0	0	--	--	--	40
MAR 19...	--	--	--	--	2	--	--	--	--	--	--
APR 16...	3	2	0	2	0	0	0	--	50	30	20
22...	--	--	--	--	--	--	--	4500	--	--	20
JUN 16...	--	--	--	--	0	--	--	--	--	--	--
JUL 15...	3	2	0	2	0	0	0	--	30	10	20
SEP 09...	--	--	--	--	0	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE D (MG/L AS C)
OCT 23...	1115	--	14	.5
NOV 27...	0930	26	--	--
DEC 12...	0940	18	--	--
JAN 16...	1000	--	9.0	3.2
FEB 12...	1015	30	--	--
MAR 19...	0900	22	--	--
APR 16...	1500	--	25	2.2
MAY 14...	1000	16	--	--
JUL 15...	0830	25	--	--
AUG 12...	0915	42	--	--
SEP 09...	0900	13	--	--

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	NOV 27,79 0930	MAR 19,80 0900	MAY 14,80 1000	JUN 16,80 1345
TOTAL CELLS/ML	430000	72000	160000	300000
DIVERSITY: DIVISION	0.1	0.9	0.9	0.4
..CLASS	0.1	0.9	0.9	0.4
...ORDER	0.1	1.0	1.1	0.5
...FAMILY	0.1	1.0	1.3	0.5
....GENUS	0.1	1.0	1.3	0.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....CHLOROCOCCACEAE								
....CHLOROCOCCUM	--	-	1100	1	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	--	-	12000	7	18000	6
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	*	0	--	-
....CHLORELLA	430000#	99	--	-	--	-	--	-
....CHODATELLA	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	11000	15	19000	11	3000	1
....TETRASTRUM	--	-	--	-	2600	2	--	-
...VOLVOCALES								
....CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	2100	3	4200	3	3000	1
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE								
....CYCLOTELLA	3200	1	1600	2	1600	1	*	0
...PENNALES								
....CYMBELLACEAE								
....EPITHEMIA	--	-	--	-	--	-	--	-
...NITZSCHACEAE								
....NITZSCHIA	--	-	--	-	960	1	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
....CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	56000#	78	120000#	75	280000#	92
...HORMOGONALES								
....OSCILLATORIA								
....OSCILLATORIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	--	-	--	-	*	0	--	-

See footnotes at end of table.

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	PHYTOPLANKTON		
	JUL 15,80 0830	AUG 12,80 0915	SEP 9,80 0900
TOTAL CELLS/ML	320000	240000	560000
DIVERSITY: DIVISION	0.5	0.6	0.1
..CLASS	0.5	0.6	0.1
...ORDER	0.7	1.4	0.4
...FAMILY	0.7	1.4	0.4
....GENUS	0.9	1.4	0.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....CHLOROCOCCACEAE						
.....CHLOROCOCCUM	--	-	--	-	--	-
....MICRACTINIACEAE						
.....MICRACTINIUM	--	-	--	-	--	-
....OOCYSTACEAE						
.....ANKISTRODESMUS	--	-	--	-	*	0
....CHLORELLA	--	-	--	-	--	-
....CHODATELLA	--	-	*	0	--	-
....KIRCHNERIELLA	--	-	1900	1	--	-
....SCENEDESMACEAE						
.....SCENEDESMUS	31000	10	21000	9	5700	1
....TETRASTRUM	--	-	--	-	--	-
..VOLVOCALES						
....CHLAMYDOMONADACEAE						
.....CHLAMYDOMONAS	*	0	*	0	*	0
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
....COSCINODISCACEAE						
.....CYCLOTELLA	*	0	4900	2	*	0
....PENNALES						
....CYMBELLACEAE						
.....EPITHEMIA	--	-	--	-	*	0
....NITZSCHIAEAE						
.....NITZSCHIA	--	-	*	0	*	0
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONADALES						
....CRYPTOMONADACEAE						
.....CRYPTOMONAS	--	-	*	0	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
....CHROOCOCCACEAE						
.....AGMENELLUM	9600	3	--	-	50000	9
....ANACYSTIS	270000#	83	160000#	65	470000#	85
..HORMOGONALES						
....OSCILLATORIACEAE						
.....OSCILLATORIA	11000	3	55000#	23	27000	5
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
....EUGLENACEAE						
.....EUGLENA	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR 1979 TO SEPTEMBER 1980

PERIPHYTON

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS) (70950)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70958)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)
AUG 12...	0915	21000	1.00	.000	222	201

SALTON SEA BASIN

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	8880	5240	7140	---	---	---	7370	6730	7000
2	---	---	---	7540	4860	5710	7700	7380	7520	7370	6690	7030
3	---	---	---	8560	5640	6760	7440	6780	7080	7390	6630	6960
4	---	---	---	5550	5090	5280	7170	6770	7000	6790	6310	6570
5	---	---	---	5390	4970	5140	7370	6990	7160	6850	6630	6750
6	---	---	---	6270	5430	5780	7420	7120	7280	7010	6170	6620
7	---	---	---	6610	5970	6200	7460	7200	7340	6520	5900	6230
8	---	---	---	7130	6650	6930	7360	7200	7300	6360	5960	6210
9	---	---	---	7080	6720	6870	7470	6090	6950	6860	5300	6340
10	---	---	---	6800	5720	6170	6500	6360	6440	7360	6880	7130
11	---	---	---	6280	5260	5800	6660	6440	6550	7290	6090	6610
12	---	---	---	6370	5410	5850	7330	6670	6960	6610	6150	6400
13	---	---	---	6730	6170	6460	7400	6920	7250	6680	6580	6640
14	---	---	---	6990	6610	6790	7910	7250	7390	6930	6410	6660
15	---	---	---	7130	6310	6760	7570	6970	7270	6930	6170	6630
16	---	---	---	6860	5820	6360	7320	6880	7150	7480	6620	7020
17	---	---	---	6320	5880	6170	7780	6960	7450	7610	6110	6960
18	---	---	---	6690	6210	6440	7890	6330	7140	6690	6390	6560
19	---	---	---	7070	6570	6760	6980	5800	6430	7580	6940	7220
20	---	---	---	7240	6980	7120	7120	5780	6900	8210	7470	7770
21	---	---	---	8020	6800	7160	7510	7030	7210	7470	7090	7250
22	---	---	---	7470	7190	7330	7390	7250	7300	7160	6540	6850
23	7780	5790	6050	7520	6980	7390	7340	7120	7220	7150	5990	6620
24	7830	5590	6160	7620	7340	7490	7300	7160	7230	7070	5890	6560
25	5570	4930	5230	7730	7450	7590	7390	7230	7300	6670	5610	6160
26	5590	4810	5120	7740	7160	7500	7770	7170	7330	5930	5670	5830
27	6250	5490	5820	7480	6200	7050	7970	6290	7250	6850	5950	6400
28	6590	5610	6050	8190	6450	7200	7690	5350	6230	7060	6860	6950
29	6880	5500	6020	---	---	---	7590	5990	6680	6900	6120	6710
30	9360	6920	8600	---	---	---	7050	6270	6620	6670	6170	6500
31	9720	7900	8880	---	---	---	7010	6290	6650	7200	6280	6810
MONTH	---	---	---	8880	4860	6610	7970	5350	7050	8210	5300	6710

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7200	5180	5830	7820	7640	7730	---	---	---	---	---	---
2	5930	4770	5110	7790	7570	7680	---	---	---	---	---	---
3	5670	4830	5210	7730	7570	7660	---	---	---	---	---	---
4	5940	5420	5690	7760	7480	7640	---	---	---	---	---	---
5	5920	5520	5710	8100	7900	7990	---	---	---	---	---	---
6	6270	5770	5920	8500	8380	8450	---	---	---	---	---	---
7	6450	6110	6360	8830	8630	8720	---	---	---	---	---	---
8	6830	6270	6540	9250	8710	9000	---	---	---	---	---	---
9	7000	6320	6680	9690	8310	8910	---	---	---	---	---	---
10	6820	6240	6480	8210	7990	8030	---	---	---	---	---	---
11	7140	6480	6800	8060	7940	8010	---	---	---	---	---	---
12	7950	7450	7670	8320	7320	7770	---	---	---	---	---	---
13	7880	6980	7610	7670	6810	7360	---	---	---	---	---	---
14	7170	5750	6300	7750	7010	7360	---	---	---	8460	8020	8210
15	6960	6640	6800	7260	6880	7040	---	---	---	8640	6300	7380
16	6860	6020	6580	7340	6900	7170	---	---	---	6830	5790	6320
17	6490	6030	6310	7390	7070	7200	---	---	---	7590	6230	7110
18	6360	6040	6200	7630	7030	7290	---	---	---	7980	7340	7620
19	6570	5950	6300	7810	7370	7590	---	---	---	8590	7970	8180
20	6740	6220	6430	7490	6450	6900	---	---	---	8430	6930	7700
21	6760	5680	6110	6930	6310	6650	---	---	---	7880	7220	7510
22	6630	5730	6270	7510	6970	7360	---	---	---	8090	7530	7970
23	6930	6470	6680	7590	7470	7530	---	---	---	7940	7420	7740
24	7060	6460	6780	7690	7230	7430	---	---	---	7930	4970	6490
25	---	---	---	7470	7250	7390	---	---	---	7260	6300	6870
26	---	---	---	7700	6320	7060	---	---	---	7410	6710	7150
27	---	---	---	---	---	---	---	---	---	7800	7300	7530
28	---	---	---	---	---	---	---	---	---	7800	6980	7510
29	7800	7660	7720	---	---	---	---	---	---	7680	7100	7330
30	---	---	---	---	---	---	---	---	---	7270	6950	7070
31	---	---	---	---	---	---	---	---	---	7190	6850	7010
MONTH	7950	4770	6400	9690	6310	7650	---	---	---	---	---	---

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7030	6850	6920	---	---	---	6460	6160	6340			
2	7050	6710	6850	6240	5920	6170	6090	5750	5890			
3	6740	6500	6610	6640	6120	6390	6090	5970	6020			
4	6850	6730	6790	6680	6140	6390	6120	5880	6020			
5	6930	6010	6670	6910	6050	6330	6130	5970	6040			
6	7240	6780	7070	6530	6190	6420	6590	6130	6260			
7	7400	7200	7300	7430	6330	6570	6660	6360	6500			
8	7580	7380	7470	7250	6670	7040	6710	6390	6580			
9	7620	7280	7420	7030	6630	6750	6750	6510	6630			
10	7520	7200	7380	7090	6650	6870	6660	5120	6300			
11	7840	7500	7610	7350	7070	7220	6440	5780	6260			
12	8320	7920	8120	7850	7450	7680	---	---	---			
13	8360	8100	8190	8230	8010	8100	---	---	---			
14	8430	8190	8300	8390	6650	7630	---	---	---			
15	8450	8050	8190	7230	6830	7060	---	---	---			
16	8480	7610	8120	7210	6910	7090	---	---	---			
17	8320	8220	8280	7350	6270	7050	---	---	---			
18	8290	7990	8110	7170	5970	6740	---	---	---			
19	8210	7690	8010	7290	6290	6790	---	---	---			
20	8240	8020	8140	6630	6010	6360	---	---	---			
21	8330	7830	8070	6530	5970	6280	---	---	---			
22	8240	7920	8110	6730	6530	6620	---	---	---			
23	8370	8070	8230	6760	6260	6380	---	---	---			
24	8370	7830	8050	6550	6170	6390	---	---	---			
25	8130	7490	7880	6450	6150	6290	---	---	---			
26	8280	7680	7990	6760	6180	6410	---	---	---			
27	7960	7760	7870	6810	6350	6480	---	---	---			
28	8020	7760	7900	6580	6300	6390	---	---	---			
29	7840	7220	7710	7040	6480	6720	---	---	---			
30	6920	6260	6490	7150	6950	7060	---	---	---			
31	---	---	---	6940	6400	6620	---	---	---			
MONTH	8480	6010	7660	8390	5920	6740	---	---	---			
YEAR	9720	4770	6960									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	30.0	27.5	28.5	21.0	18.5	20.0	15.0	12.5	14.0	14.5	12.5	13.5
2	29.5	27.5	28.5	20.5	18.0	19.5	14.5	12.5	14.0	15.0	12.5	14.0
3	29.5	26.5	28.0	20.0	18.5	19.5	14.5	12.5	14.0	14.5	12.5	13.5
4	29.0	26.5	28.0	20.5	18.0	19.5	14.5	12.5	14.0	15.0	13.0	14.0
5	29.5	26.0	27.5	20.5	18.0	19.5	15.5	13.0	14.0	14.0	12.5	13.5
6	29.0	26.0	27.5	20.0	18.5	19.5	15.5	13.5	14.5	14.5	12.5	13.5
7	29.0	26.5	27.5	20.0	18.5	19.5	15.5	13.5	15.0	16.5	13.5	14.5
8	27.5	25.5	26.5	20.0	18.5	19.0	16.0	14.0	15.0	---	---	---
9	27.5	24.5	26.0	19.5	17.5	19.0	16.5	14.5	15.5	---	---	---
10	28.0	24.5	26.5	19.5	17.5	18.5	16.5	14.5	15.5	---	---	---
11	27.5	25.0	26.0	19.5	17.0	18.5	16.5	14.5	15.5	---	---	---
12	27.0	24.5	25.5	20.0	16.0	18.5	14.5	12.5	14.0	---	---	---
13	27.0	24.5	25.5	19.0	16.0	18.0	14.5	12.0	13.5	---	---	---
14	26.0	23.5	24.5	19.0	16.0	17.5	14.0	11.5	13.0	---	---	---
15	26.0	23.5	24.5	18.5	16.5	17.5	14.0	11.5	12.5	---	---	---
16	26.0	23.0	24.5	19.0	16.0	18.0	13.5	11.0	12.5	---	---	---
17	26.0	23.0	25.0	19.5	17.0	18.5	13.5	11.0	12.5	18.5	16.5	18.0
18	26.0	23.5	25.0	19.0	17.0	18.0	14.5	11.5	13.0	18.5	16.0	17.5
19	25.5	24.0	24.5	18.5	17.0	18.0	15.0	12.5	13.5	17.0	15.5	16.0
20	25.0	22.5	23.5	17.5	15.5	16.5	15.0	13.5	14.5	16.5	14.5	15.5
21	23.5	20.5	22.0	16.5	14.5	15.5	15.5	13.5	14.5	16.5	14.0	15.0
22	23.5	20.5	22.0	15.0	12.5	14.0	14.5	12.5	13.5	16.0	13.5	14.5
23	24.5	21.5	23.0	15.0	13.0	14.0	14.5	12.0	13.5	16.0	13.0	14.5
24	23.0	21.0	22.5	15.0	12.5	14.0	14.5	12.5	13.5	16.0	13.0	14.5
25	23.5	22.0	23.0	15.5	13.5	14.5	14.0	12.5	13.5	16.5	13.5	14.5
26	23.5	21.5	23.0	15.5	13.0	14.5	14.5	13.0	14.0	17.0	14.5	15.5
27	24.0	22.0	23.5	16.0	13.5	15.0	14.5	12.5	13.5	16.5	15.0	15.5
28	23.5	21.5	23.0	16.0	13.5	14.5	14.0	12.5	13.5	16.5	15.0	15.5
29	23.0	20.0	21.5	15.0	13.0	14.0	14.5	13.0	13.5	16.5	15.5	16.0
30	21.5	19.0	20.0	15.0	12.5	14.0	14.0	12.5	13.5	18.0	16.0	17.0
31	21.0	19.0	20.0	---	---	---	14.0	13.0	13.5	18.5	16.0	17.0
MONTH	30.0	19.0	24.5	21.0	12.5	17.0	16.5	11.0	14.0	---	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.5	16.5	18.0	20.5	18.5	19.5	---	---	---	23.5	20.5	22.0
2	19.5	17.5	18.5	21.0	19.0	20.0	---	---	---	25.0	21.5	23.0
3	19.5	17.5	18.5	20.5	19.0	20.0	21.0	17.0	19.0	26.5	22.5	24.5
4	19.5	17.5	18.5	20.5	18.0	19.0	21.5	18.0	20.0	26.5	24.0	25.0
5	19.5	17.5	18.5	21.0	18.0	19.5	22.0	19.0	20.5	27.0	23.0	25.0
6	19.5	17.5	18.5	20.0	18.0	19.0	23.0	18.0	20.5	28.0	24.5	26.0
7	18.0	16.0	17.0	20.0	16.5	18.0	23.5	20.0	21.5	28.0	24.0	26.0
8	18.0	13.5	16.5	20.5	17.0	18.5	24.0	20.0	22.0	26.5	22.5	24.5
9	17.5	15.5	16.5	20.0	17.5	19.0	25.0	20.5	22.5	26.5	22.0	24.5
10	17.5	15.5	16.5	19.0	18.0	18.5	25.0	21.5	23.0	23.0	20.0	21.5
11	17.5	15.0	16.0	21.0	18.5	19.5	24.5	21.0	22.5	22.5	18.5	20.5
12	17.5	14.5	16.0	20.5	17.5	19.0	23.0	20.0	21.5	23.0	18.5	20.5
13	16.0	15.5	15.5	21.5	18.0	19.5	24.0	20.0	22.0	24.0	19.5	21.5
14	18.0	13.5	15.5	22.5	18.5	20.5	25.0	20.5	22.5	23.5	20.5	22.0
15	18.5	15.0	17.0	22.0	20.5	21.0	25.5	21.5	23.5	24.5	20.0	22.5
16	18.5	16.5	17.5	21.0	18.5	19.5	26.0	22.0	24.0	26.0	22.5	24.0
17	20.0	16.5	18.0	21.0	17.5	19.5	27.0	23.0	24.5	27.0	23.5	25.0
18	20.0	17.0	18.5	20.5	17.5	18.5	27.0	24.0	25.5	28.0	24.0	26.0
19	19.0	17.0	18.0	20.0	15.5	18.5	27.5	24.0	25.5	29.5	24.5	27.0
20	20.0	16.0	17.5	21.0	17.5	19.5	27.5	24.5	25.5	29.0	25.5	27.0
21	20.0	17.0	18.5	21.0	17.0	19.5	24.0	20.0	22.5	28.0	23.0	25.5
22	19.5	15.5	17.5	19.0	14.0	16.5	21.5	19.0	20.0	26.5	21.0	23.5
23	20.5	15.5	18.5	20.5	12.0	17.5	20.0	18.0	19.0	25.0	19.5	22.5
24	20.5	17.5	19.0	---	---	---	21.0	17.5	19.0	23.0	16.0	20.0
25	20.5	17.0	18.5	---	---	---	23.0	19.0	21.0	24.0	18.0	21.0
26	21.5	15.5	18.5	---	---	---	24.5	21.5	22.5	25.0	19.0	22.0
27	22.0	18.0	20.0	---	---	---	24.0	21.5	22.5	24.0	19.0	21.5
28	21.0	18.5	20.0	20.5	18.5	19.5	23.5	21.5	22.0	24.0	18.5	21.5
29	21.0	18.5	19.5	21.0	17.0	19.0	23.0	20.5	22.0	25.0	18.5	22.0
30	---	---	---	21.5	18.0	19.5	23.0	20.5	21.5	25.5	20.5	23.0
31	---	---	---	21.0	17.5	19.0	---	---	---	25.5	19.5	22.5
IONTH	22.0	13.5	18.0	22.5	12.0	19.0	27.5	17.0	22.0	29.5	16.0	23.5
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.0	19.0	22.0	31.5	29.0	30.0	35.0	31.0	33.0	29.5	25.5	27.5
2	26.5	21.0	24.0	33.0	28.5	30.5	33.5	31.0	32.5	30.5	27.0	28.5
3	27.5	22.5	25.0	32.0	26.5	29.0	33.5	30.5	31.5	31.0	28.0	29.0
4	27.5	22.0	24.5	33.0	28.0	30.0	33.5	29.5	31.5	30.5	28.0	29.0
5	26.0	22.0	24.0	33.5	29.0	31.0	33.5	29.5	31.5	31.5	27.5	29.0
6	26.5	21.0	23.5	31.5	29.5	30.0	33.5	29.5	31.5	31.5	28.5	30.0
7	27.0	21.0	24.0	33.0	28.0	30.5	34.0	30.0	32.0	31.0	28.5	29.5
8	29.0	22.5	25.5	33.0	28.5	30.5	34.0	30.0	32.0	30.0	27.0	28.5
9	29.5	24.0	27.0	33.0	28.0	30.5	33.0	30.0	31.5	30.5	26.5	28.5
10	29.5	24.0	26.5	33.0	28.0	30.5	34.0	30.5	32.0	30.0	26.5	28.0
11	28.5	23.0	26.0	33.5	29.0	31.0	34.0	30.5	32.5	30.0	26.5	28.0
12	28.0	23.5	25.0	33.5	29.5	31.5	33.0	29.5	31.5	29.5	26.5	28.0
13	28.5	21.5	24.5	33.5	29.0	31.0	34.0	30.0	32.0	29.5	27.0	28.0
14	29.0	21.0	24.5	33.5	28.5	30.5	33.5	30.0	31.5	29.0	26.0	27.5
15	32.0	21.0	26.0	33.0	28.0	30.0	32.0	28.5	30.0	29.5	26.0	28.0
16	31.5	24.0	27.5	33.0	29.0	30.5	30.5	27.5	29.0	29.5	26.5	28.0
17	30.5	26.0	28.0	34.0	28.5	31.0	31.5	28.0	29.5	30.5	27.0	28.5
18	30.5	26.0	28.0	34.5	30.0	32.0	31.0	28.0	29.5	30.5	28.0	29.0
19	30.5	24.5	27.0	34.5	29.5	32.0	30.5	27.0	28.5	30.5	27.0	29.0
20	38.0	22.0	29.0	34.5	30.0	32.0	30.5	27.0	28.5	29.0	25.0	27.0
21	30.5	20.5	26.5	35.0	30.0	32.0	31.0	27.5	29.0	28.0	24.5	26.5
22	30.5	24.0	27.0	34.5	30.5	32.5	31.0	27.5	29.0	28.0	24.5	26.5
23	30.5	24.0	26.5	35.0	30.5	33.0	31.0	26.5	28.5	28.0	24.5	26.0
24	30.0	23.0	27.0	35.5	31.5	33.5	32.0	28.0	30.0	28.0	24.0	26.0
25	31.0	25.5	28.0	35.5	31.5	33.5	32.0	28.0	30.0	28.0	24.5	26.0
26	31.0	26.0	28.5	34.5	30.5	33.0	32.0	29.0	30.5	29.0	25.0	27.0
27	31.5	28.0	30.0	34.5	31.5	33.5	32.0	29.0	30.5	29.5	25.5	27.5
28	33.5	29.0	31.0	32.5	30.5	31.5	32.5	29.0	30.5	29.5	26.0	28.0
29	33.5	28.5	31.0	33.0	30.0	31.5	31.5	28.0	29.5	29.5	26.0	27.5
30	31.0	29.5	30.5	33.5	30.0	31.5	30.0	26.5	28.0	30.0	26.5	28.0
31	---	---	---	34.0	30.5	32.0	30.0	25.5	27.5	---	---	---
IONTH	38.0	19.0	26.5	35.5	26.5	31.5	35.0	25.5	30.5	31.5	24.0	28.0
YEAR	38.0	11.0	22.5									

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

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (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	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT										
23...	1115	22.0	180	191	93	31	--	--	--	--
NOV										
27...	0930	13.5	134	60	22	53	--	--	--	--
DEC										
12...	0940	12.5	154	88	37	68	--	--	--	--
JAN										
16...	1000	16.0	195	168	88	29	--	--	--	--
FEB										
12...	1000	15.0	180	109	53	46	--	--	--	--
MAR										
19...	0900	16.0	239	266	172	57	--	--	--	--
APR										
16...	1500	25.0	252	250	170	66	--	--	--	--
MAY										
14...	1000	21.5	259	224	157	50	--	--	--	--
JUN										
17...	0930	27.5	160	75	32	46	71	96	99	100
JUL										
15...	0830	28.0	234	107	68	82	--	--	--	--
AUG										
12...	0900	31.0	217	90	53	90	97	99	100	--
SEP										
09...	0900	27.0	242	94	61	79	--	--	--	--

SALTON SEA BASIN

10255550 NEW RIVER NEAR WESTMORLAND, CA

LOCATION.--Lat 33°06'17", long 115°39'49", in SW¼SW¼SW¼ sec.19, T.12 S., R.13 E., Imperial County, Hydrologic Unit 18100200, on right bank 3.5 mi (5.6 km) upstream from mouth, and 5.2 mi (8.4 km) northwest of Westmorland.

WATER-DISCHARGE RECORDS

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 (-67 m), 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 ft³/s (85 m³/s) Aug. 17-18, 1977, estimated by Imperial Irrigation District; minimum daily, 293 ft³/s (8.30 m³/s) Jan. 6, 1967.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	633	587	513	490	585	479	763	782	615	711	671	631
2	650	609	490	447	557	500	780	761	599	650	658	621
3	656	583	498	465	535	504	804	769	587	698	681	639
4	648	557	515	509	502	528	837	780	571	613	669	658
5	629	601	494	530	502	544	848	717	583	619	648	711
6	617	619	525	513	506	585	822	667	549	601	660	713
7	599	587	525	525	494	615	802	677	571	607	660	685
8	625	581	483	532	485	621	795	681	581	639	660	679
9	652	575	507	601	481	643	767	706	571	607	685	702
10	607	559	525	681	500	641	751	713	589	597	711	648
11	648	553	540	567	504	767	742	706	563	591	744	696
12	652	545	530	515	517	757	744	692	559	589	717	673
13	652	532	525	502	561	675	795	702	525	561	704	671
14	595	559	525	490	667	621	830	667	553	617	692	662
15	631	547	517	490	581	656	800	677	557	635	702	631
16	751	555	527	489	575	631	769	656	557	615	694	685
17	721	565	525	479	591	627	780	645	547	577	679	704
18	542	551	549	454	547	677	826	664	517	617	690	698
19	553	496	569	436	551	645	848	641	528	585	709	704
20	557	498	567	438	542	664	862	619	542	591	711	696
21	601	506	561	445	563	648	844	627	547	575	744	706
22	633	511	530	439	481	713	839	617	544	599	763	641
23	599	507	528	472	447	742	859	613	534	627	732	702
24	619	525	507	538	429	769	883	599	534	615	711	727
25	650	500	500	579	421	782	887	615	538	629	711	746
26	656	528	468	571	420	844	903	611	601	641	709	753
27	667	540	445	579	416	864	892	599	615	648	692	746
28	662	500	470	561	434	778	804	623	621	660	713	748
29	633	483	507	615	457	751	835	631	623	660	709	702
30	601	494	536	675	---	734	815	662	698	656	711	685
31	561	---	507	667	---	704	---	615	---	673	664	---
TOTAL	19500	16353	16008	16294	14851	20709	24526	20734	17119	19303	21604	20663
MEAN	629	545	516	526	512	668	818	669	571	623	697	689
MAX	751	619	569	681	667	864	903	782	698	711	763	753
MIN	542	483	445	436	416	479	742	599	517	561	648	621
AC-FT	38680	32440	31750	32320	29460	41080	48650	41130	33960	38290	42850	40990

CAL YR 1979 TOTAL 230728 MEAN 632 MAX 891 MIN 388 AC-FT 457600
WTR YR 1980 TOTAL 227664 MEAN 622 MAX 903 MIN 416 AC-FT 451600

WATER-QUALITY RECORDS

CHEMICAL ANALYSES: October 1963 to September 1964, water year 1967 (partial-record station), August 1969 to June 1971, August 1975 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources; discharges were furnished by Imperial Irrigation District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	HARD- NESS (MG/L AS CAC03)
OCT										
17...	1630	671	4250	7.6	24.5	--	5.4	--	--	--
NOV										
29...	1510	492	5800	7.9	14.5	--	8.4	--	--	--
DEC										
12...	0940	536	5100	7.8	13.5	65	8.7	--	--	1000
JAN										
22...	1550	441	5900	7.7	14.0	75	8.6	--	--	1100
FEB										
28...	1250	439	6300	7.8	19.0	--	7.3	--	--	--
MAR										
18...	1650	681	4900	7.5	16.5	85	7.4	--	--	960
20...	1510	694	--	--	18.5	--	--	68	13	--
20...	1511	694	--	--	--	--	--	--	--	--
APR										
17...	1545	811	5080	7.7	24.0	--	7.0	--	--	--
23...	1215	889	--	--	--	--	--	--	--	--
MAY										
13...	1605	725	4930	7.9	21.5	100	8.4	--	--	930
JUN										
24...	1050	551	5300	7.7	25.5	100	5.9	--	--	1000
JUL										
24...	1905	621	5200	7.6	34.0	90	4.9	--	--	950
AUG										
27...	1435	702	4830	7.8	30.0	--	6.1	50	--	--
SEP										
16...	1420	709	--	--	28.0	--	--	45	6.4	--
25...	1035	765	4420	7.8	24.5	--	6.8	--	--	--

[illegible]

SALTON SEA BASIN

10255550 NEW RIVER NEAR WESTMORLAND, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPATE DISSOL, (MG/L AS P)
OCT 17...	--	--	--	4.2	.28	.47	.50	.30	.25
NOV 29...	--	--	--	4.3	.30	.00	1.3	.61	.34
DEC 12...	--	3590	--	4.9	.28	1.2	.51	.60	.39
JAN 22...	--	4230	--	4.3	.45	1.3	.38	.38	.38
FEB 28...	--	--	--	4.7	.72	.00	.95	.56	.44
MAR 18...	20	3510	--	5.3	.55	.00	1.1	.75	.56
20...	--	--	311	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
APR 17...	--	--	--	5.0	.58	.00	.96	.61	.39
23...	--	--	--	--	--	--	--	--	--
MAY 13...	12	3220	--	2.4	.25	.00	.92	.47	.23
JUN 24...	--	3640	--	2.8	.45	.65	1.0	.60	.32
JUL 24...	16	3470	--	4.7	.65	.00	1.2	.52	.34
AUG 27...	--	--	391	3.2	.30	.00	.84	.38	.26
SEP 16...	--	--	314	--	--	--	--	--	--
25...	--	--	--	3.8	.30	.00	.78	.39	.21

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JAN 22...	1550	0	200	1300	0	10	10	0	.0	0	4500	10
MAR 18...	1650	0	100	1000	110	0	10	0	.0	20	3800	20
MAY 13...	1605	0	200	1200	0	0	20	0	.0	0	3800	10
JUL 24...	1905	0	200	1200	0	0	20	0	1.0	0	3800	20

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAR 20...	1510	--	.94
20...	1511	6.4	--
SEP 16...	1420	--	1.0

DATE	TIME	DI- AZINON, TOTAL (UG/L)
JUN 24...	1050	.01

10255700 SAN FELIPE CREEK NEAR JULIAN, CA

LOCATION.--Lat 33°07'07", long 116°26'04", in NW¼NE¼ 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 (1.6 km) upstream from Grapevine Canyon, and 10 mi (16 km) northeast of Julian.

DRAINAGE AREA.--89.2 mi² (231.0 km²).

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

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 1,872.69 ft (570.796 m) National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--22 years, 0.57 ft³/s (0.016 m³/s), 413 acre-ft/yr (509,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,150 ft³/s (174 m³/s) Feb. 21, 1980, gage height, 7.85 ft (2.393 m), 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 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended above 12 ft³/s (0.34 m³/s) on basis of slope-area measurements at 3.50 ft (1.067 m) and 7.85 ft (2.393 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 30	0245	254	7.19	Feb. 21	0330	*6,150	174
Feb. 18	1200	563	15.9				7.85
			3.49				2.393

Minimum daily discharge, no flow Oct. 1-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.11	.34	.53	2.3	15	1.7	.61	.83	.32	.12	.42
2	0	.12	.35	.60	2.0	11	3.7	2.1	.77	.27	.12	.48
3	0	.12	.34	.60	2.0	20	2.3	.86	.72	.27	.12	.54
4	0	.14	.36	.67	2.0	50	1.4	.69	.66	.23	.12	.54
5	0	.14	.40	.67	1.8	100	1.0	.61	.62	.23	.12	.54
6	0	.16	.37	.67	1.8	200	.77	.54	.59	.23	.19	.54
7	0	.17	.38	.68	1.7	65	.54	.48	.55	.23	.16	.61
8	0	.19	.38	.86	1.6	38	.48	.42	.51	.19	.09	.61
9	0	.18	.38	3.1	1.6	25	.42	.42	.47	.19	.16	.61
10	0	.18	.41	2.8	1.7	29	.42	.42	.45	.19	.23	.61
11	0	.18	.41	2.7	1.7	20	.36	1.8	.44	.16	.23	.18
12	0	.19	.38	1.9	1.6	12	.36	1.2	.41	.19	.23	.61
13	0	.19	.37	1.0	3.6	8.5	.36	1.0	.39	.09	.23	.60
14	0	.21	.38	.59	5.3	7.0	.36	.95	.37	.19	.27	.46
15	0	.22	.38	.53	5.0	6.0	.36	1.0	.35	.19	.27	.38
16	0	.23	.39	.51	5.6	4.9	.36	.95	.33	.16	.27	.36
17	0	.24	.41	.53	79	4.5	.36	1.0	.32	.07	.27	.37
18	0	.27	.44	.67	149	4.4	.36	1.0	.31	.16	.32	.31
19	0	.26	.44	2.5	46	4.8	.36	1.0	.29	.16	.32	.29
20	.03	.24	.47	.60	285	2.7	.36	.95	.28	.16	.32	.26
21	.05	.26	.48	.53	500	2.5	.36	.95	.28	.19	.32	.26
22	.04	.29	.89	.53	200	3.7	.86	1.0	.27	.19	.36	.30
23	.05	.35	.57	.53	60	3.1	1.1	1.0	.26	.42	.36	.33
24	.07	.31	.47	.53	40	2.3	.61	1.0	.25	.27	.36	.34
25	.04	.33	.47	.53	25	2.3	.48	1.0	.24	.23	.36	.35
26	.04	.31	.53	.47	21	4.0	.42	1.0	.23	.19	.42	.30
27	.06	.31	.49	.53	18	3.1	.42	1.0	.23	1.2	.42	.31
28	.06	.32	.47	.60	20	1.4	.42	1.1	.23	.23	.36	.30
29	.06	.32	.53	48	18	.95	.42	1.0	.19	.16	.23	.29
30	.07	.33	.53	63	---	.77	.42	.93	.27	.14	.23	.28
31	.10	---	.53	3.6	---	.48	---	.90	---	.13	.27	---
TOTAL	.67	6.87	13.74	141.56	1502.3	652.40	21.84	28.88	12.11	7.23	7.85	12.38
MEAN	.022	.23	.44	4.57	51.8	21.0	.73	.93	.40	.23	.25	.41
MAX	.10	.35	.89	63	500	200	3.7	2.1	.83	1.2	.42	.61
MIN	0	.11	.34	.47	1.6	.48	.36	.42	.19	.07	.09	.18
AC-FT	1.3	14	27	281	2980	1290	43	57	24	14	16	25

CAL YR 1979	TOTAL	214.79	MEAN	.59	MAX	31	MIN	0	AC-FT	426
WTR YR 1980	TOTAL	2407.83	MEAN	6.58	MAX	500	MIN	0	AC-FT	4780

SALTON SEA BASIN

10255800 COYOTE CREEK NEAR BORREGO SPRINGS, CA

LOCATION.--Lat 33°22'25", long 116°25'36", in NE¼NE¼NE¼ sec. 23, T.9 S., R.5 E., San Diego County, Hydrologic Unit 18100200, on left bank just upstream from Box Canyon, 2.3 mi (3.7 km) northwest of Rancho De Anza, and 8.7 mi (13.9 km) northwest of Borrego Springs.

DRAINAGE AREA.--144 mi² (373 km²).

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 1,250 ft (381 m), from topographic map. Since Apr. 19, 1978, at present site and datum. Prior to Mar. 24, 1967, at site 250 ft (76 m) upstream at different datum. Mar. 24, 1967 to Aug. 16, 1977 at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records poor. No regulation above station. Diversion about 0.5 mi (0.8 km) upstream for irrigation below station since January 1973. No gage-height record many days.

AVERAGE DISCHARGE.--30 years, 2.31 ft³/s (0.065 m³/s), 1,670 acre-ft/yr (2.06 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,890 ft³/s (110 m³/s) Feb. 21, 1980, gage height 7.50 ft (2.286 m) 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 ft³/s (1.42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 26	1400	97 2.75	4.29 1.308	Feb. 18	Unknown	Unknown	Unknown
Jan. 29	Unknown	Unknown	Unknown	Feb. 21	Unknown	*3,890 110	7.50 2.286
Feb. 13	2045	141 3.99	4.75 1.448	Mar. 6	Unknown	Unknown	Unknown
Feb. 15	0645	400 11.3	6.60 2.012	Mar. 10	Unknown	Unknown	Unknown

Minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Oct. 8-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	3.5	3.0	2.4	2.8	5.8	4.4	3.8	5.0	8.0	4.0	5.5
2	1.9	3.6	2.9	2.3	2.6	5.6	4.8	4.0	5.5	4.9	4.5	5.5
3	1.9	3.5	2.7	2.4	2.4	14	4.6	3.0	5.5	4.9	4.5	5.5
4	1.9	3.4	2.7	2.5	2.3	11	4.4	2.8	5.0	4.8	4.5	5.5
5	1.9	3.1	2.6	2.5	2.2	10	4.1	2.6	5.5	4.9	4.0	5.5
6	1.6	3.1	2.6	2.5	2.1	250	4.0	2.5	5.5	5.2	4.0	5.5
7	1.5	3.1	2.6	2.5	2.1	110	3.9	2.4	6.0	4.9	4.5	5.0
8	1.4	4.4	2.6	2.6	2.0	74	3.9	2.4	6.0	4.6	4.5	5.5
9	1.4	3.4	2.7	2.5	2.0	43	3.8	3.0	6.0	4.6	5.0	5.5
10	1.4	3.1	2.6	2.0	2.0	50	3.8	3.8	5.5	4.4	5.0	5.5
11	1.4	2.9	2.6	2.4	6.3	25	3.8	3.6	5.5	4.5	4.5	5.5
12	1.4	2.8	2.6	2.3	3.0	15	3.8	3.3	5.0	4.5	5.0	6.0
13	1.4	2.8	2.6	2.2	23	13	3.7	3.0	5.0	4.6	5.0	5.9
14	1.4	2.8	2.6	2.2	10	11	3.6	2.1	4.5	4.7	5.0	5.9
15	1.5	2.8	2.5	2.1	51	9.7	3.5	2.4	5.5	4.7	5.0	5.9
16	1.6	2.9	2.5	2.1	30	8.8	3.4	2.1	5.5	4.5	5.0	5.7
17	1.7	3.1	2.5	2.1	200	8.2	3.3	2.1	5.0	4.5	5.0	5.8
18	2.0	3.1	2.5	2.1	720	8.0	3.3	2.8	4.5	4.6	5.0	5.6
19	3.0	3.1	2.4	2.1	500	11	3.2	4.5	4.5	4.6	5.5	5.7
20	24	3.1	2.4	2.0	800	5.6	3.2	5.0	5.2	4.7	5.5	5.8
21	8.0	3.2	2.5	2.0	900	5.2	3.2	4.5	5.3	4.7	5.5	5.8
22	2.6	3.2	2.5	2.0	50	4.9	3.3	3.6	5.5	4.9	5.0	6.2
23	2.5	3.2	2.5	1.8	32	4.8	3.9	3.2	5.5	5.0	5.5	6.1
24	2.6	3.1	2.4	1.7	18	4.7	3.6	3.6	5.4	4.8	5.5	6.1
25	2.7	3.2	2.4	1.7	9.5	4.7	3.3	5.0	5.3	4.5	5.5	6.2
26	2.8	3.1	2.5	1.8	7.8	4.6	3.2	6.0	5.3	4.5	5.5	6.3
27	3.0	3.1	2.4	2.0	6.6	4.6	3.0	6.0	5.7	5.0	5.5	6.2
28	3.0	3.1	2.5	1.6	6.0	4.5	3.0	5.0	5.4	4.5	5.0	5.9
29	3.1	3.1	2.4	56	5.9	4.5	3.2	4.5	5.5	4.5	5.0	5.7
30	3.2	3.1	2.4	30	---	4.4	4.1	4.5	6.8	4.5	4.5	5.6
31	3.4	---	2.4	3.3	---	4.4	---	5.0	---	4.5	5.0	---
TOTAL	93.1	95.0	79.1	165.9	3401.6	740.0	110.3	112.1	161.4	148.5	152.5	172.4
MEAN	3.00	3.17	2.55	5.35	117	23.9	3.68	3.62	5.38	4.79	4.92	5.75
MAX	24	4.4	3.0	56	900	250	4.8	6.0	6.8	8.0	5.5	6.3
MIN	1.4	2.8	2.4	1.6	2.0	4.4	3.0	2.1	4.5	4.4	4.0	5.0
AC-FT	185	188	157	329	6750	1470	219	222	320	295	302	342
CAL YR 1979 TOTAL	1204.60			MEAN 3.30	MAX 300	MIN .71	AC-FT 2390					
WTR YR 1980 TOTAL	5431.90			MEAN 14.8	MAX 900	MIN 1.4	AC-FT 10770					

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 (5.3 km) northwest of Borrego Springs.

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.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s (74.8 m³/s) Aug. 16, 1979, gage height, 9.8 ft (2.99 m) 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 ft³/s (0.42 m³/s) and maximum (*), from rating curve extended above 100 ft³/s (2.83 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 20	1845	18	0.51	2.99	0.911	Mar. 6	1315	124	3.51	4.05	1.234
Jan. 11	1200	20	0.57	3.56	1.085	Mar. 10	2045	68	1.93	3.61	1.100
Jan. 30	0100	59	1.67	4.13	1.259	Apr. 29	0215	17	0.48	2.96	0.902
Feb. 15	1445	129	3.65	4.69	1.430	May 1	2300	34	0.96	3.22	0.981
Feb. 18	1100	190	5.38	5.03	1.533	June 30	1800	96	2.72	3.85	1.173
Feb. 21	0015	*279	7.90	5.42	1.652	July 30	2030	19	0.54	3.00	0.914
Mar. 3	2200	70	1.98	3.63	1.106						

Minimum daily discharge, 0.34 ft³/s (0.010 m³/s) Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	1.3	1.1	1.2	3.0	24	14	13	5.4	3.4	2.3	1.4
2	.50	1.3	1.1	1.2	2.0	19	15	9.4	5.2	3.2	2.0	1.4
3	.50	1.3	1.1	1.2	1.8	45	13	8.8	5.0	2.9	2.2	1.4
4	.40	1.2	1.1	1.2	1.7	40	13	8.4	4.7	2.8	1.8	1.4
5	.35	1.1	1.1	1.2	1.6	24	12	7.7	4.7	2.8	1.3	1.6
6	.35	1.1	1.1	1.2	1.5	63	12	7.5	4.5	2.8	1.6	1.8
7	.34	1.1	1.1	1.5	1.5	47	12	7.3	4.5	2.7	1.7	1.5
8	.35	1.6	1.0	1.6	1.5	30	12	7.2	4.3	2.7	1.6	1.5
9	.42	1.3	1.1	4.6	1.5	23	12	7.2	4.2	2.6	1.7	1.6
10	.44	1.1	1.1	4.4	1.5	28	12	11	3.8	2.6	1.8	1.6
11	.44	1.0	1.1	8.5	1.5	30	11	12	3.5	2.6	1.6	1.6
12	.45	1.0	1.1	4.3	1.5	22	11	10	3.7	2.5	1.7	1.6
13	.46	1.0	1.1	1.4	5.0	20	11	9.3	3.7	2.5	1.8	1.5
14	.52	1.0	1.1	1.6	26	21	11	8.7	3.6	2.5	1.7	1.4
15	.55	1.0	1.1	1.4	55	19	10	8.0	3.6	2.4	1.7	1.5
16	.60	1.0	1.1	1.3	45	16	9.9	7.2	3.5	2.4	1.7	1.4
17	.64	1.1	1.1	1.3	64	15	9.8	6.7	3.2	2.4	1.7	1.2
18	.61	1.2	1.1	1.5	97	17	9.7	6.5	2.9	2.4	1.6	1.2
19	.61	1.2	1.1	6.3	71	16	9.6	6.3	2.9	2.3	1.7	1.1
20	6.2	1.1	1.1	3.9	112	15	9.6	6.0	2.9	2.3	1.6	1.1
21	2.3	1.1	1.7	1.6	126	14	9.5	5.7	2.9	2.2	1.5	1.2
22	.91	1.2	2.8	1.4	70	19	12	6.3	3.0	2.2	1.5	1.2
23	.90	1.3	7.8	1.3	54	17	13	6.4	2.8	2.2	1.4	1.2
24	.92	1.3	6.5	1.3	46	15	11	6.4	2.8	2.1	1.6	1.2
25	.94	1.2	1.8	1.3	39	14	9.5	6.3	2.7	2.1	1.6	1.2
26	1.0	1.2	1.5	1.3	34	17	9.3	6.1	2.6	2.0	1.5	1.2
27	1.1	1.2	1.3	1.3	29	15	9.0	6.0	2.5	2.3	1.3	1.2
28	1.1	1.2	1.2	5.0	24	14	9.0	5.8	2.5	4.5	1.2	1.2
29	1.1	1.2	1.2	40	26	13	13	5.6	2.3	3.5	1.3	1.2
30	1.1	1.2	1.2	30	---	13	11	5.6	15	4.3	1.2	1.1
31	1.3	---	1.2	5.7	---	13	---	5.5	---	3.4	1.3	---
TOTAL	27.90	35.1	50.1	141.0	943.6	698	335.9	233.9	118.9	83.6	50.2	40.7
MEAN	.90	1.17	1.62	4.55	32.5	22.5	11.2	7.55	3.96	2.70	1.62	1.36
MAX	6.2	1.6	7.8	40	126	63	15	13	15	4.5	2.3	1.8
MIN	.34	1.0	1.0	1.2	1.5	13	9.0	5.5	2.3	2.0	1.2	1.1
AC-FT	55	70	99	280	1870	1380	666	464	236	166	100	81
CAL YR 1979	TOTAL	1239.28		MEAN	3.40	MAX	277	MIN	0	AC-FT	2460	
WTR YR 1980	TOTAL	2758.90		MEAN	7.54	MAX	126	MIN	.34	AC-FT	5470	

SALTON SEA BASIN

10255850 VALLECITO CREEK NEAR JULIAN, CA

LOCATION.--Lat 32°59'10", long 116°25'10", in SW¼NE¼ sec.1, T.14 S., R.5 E., San Diego County, Hydrologic Unit 18100200, on right bank 0.2 mi (0.3 km) downstream from Cottonwood Wash, and 12.6 mi (20.3 km) southeast of Julian.

DRAINAGE AREA.--39.7 mi² (102.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,950 ft (594 m), from topographic map.

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

AVERAGE DISCHARGE.--17 years, 0.12 ft³/s (0.003 m³/s), 87 acre-ft/yr (107,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (32.9 m³/s) Sept. 10, 1976, gage height, 6.30 ft (1.920 m), from high-water mark in well, from rating curve extended above 0.10 ft³/s (0.003 m³/s) on basis of slope-area study of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 231 ft³/s (6.54 m³/s) Feb. 18, gage height, 6.22 ft (1.896 m) estimated, no other peak above base of 15 ft³/s (0.43 m³/s); no flow Oct. 7-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.01	.03	.02	.02	.04	.01	.05	.05	.07	.06	.06
2	.01	.01	.03	.02	.02	.03	.01	.06	.04	.07	.07	.06
3	.01	.02	.02	.02	.02	.03	.01	.06	.03	.07	.06	.06
4	.01	.02	.02	.02	.02	.03	.01	.07	.02	.07	.06	.07
5	.01	.02	.02	.02	.01	.03	.01	.07	.01	.08	.07	.08
6	.01	.02	.03	.02	.02	.08	.01	.08	.01	.08	.08	.08
7	0	.02	.02	.02	.02	.02	.01	.08	.01	.09	.10	.08
8	0	.02	.02	.02	.03	.01	.01	.09	.01	.10	.12	.08
9	0	.02	.02	.03	.03	.02	.01	.09	.01	.10	.13	.08
10	0	.02	.02	.03	.03	.02	.01	.10	.01	.10	.14	.08
11	0	.02	.02	.05	.03	.03	.01	.10	.01	.10	.14	.08
12	0	.02	.02	.02	.04	.04	.01	.12	.01	.10	.14	.08
13	.01	.03	.03	.02	.03	.04	.01	.12	.01	.10	.15	.08
14	.01	.03	.03	.02	.02	.02	.01	.12	.01	.07	.14	.08
15	.01	.03	.03	.02	.02	.01	.02	.12	.01	.06	.14	.08
16	.01	.03	.03	.02	.06	.02	.02	.12	.01	.04	.14	.08
17	.01	.03	.03	.02	.16	.04	.02	.14	.01	.08	.13	.07
18	.01	.03	.03	.03	15	.07	.02	.16	.02	.07	.13	.07
19	.01	.03	.03	.03	.12	.08	.02	.14	.03	.08	.11	.08
20	.01	.03	.02	.03	.08	.06	.03	.12	.04	.07	.10	.08
21	.01	.03	.02	.03	.07	.08	.03	.10	.04	.09	.11	.08
22	.01	.03	.02	.03	.06	.07	.03	.09	.05	.10	.09	.08
23	.01	.03	.02	.03	.06	.09	.03	.09	.05	.08	.08	.08
24	.01	.03	.02	.03	.05	.06	.03	.12	.06	.08	.08	.08
25	.01	.03	.02	.03	.04	.07	.03	.14	.07	.07	.06	.08
26	.01	.04	.02	.03	.04	.10	.04	.12	.07	.07	.05	.08
27	.01	.03	.02	.03	.04	.03	.04	.10	.08	.09	.05	.08
28	.01	.03	.02	.04	.04	.02	.05	.09	.08	.09	.08	.08
29	.01	.02	.02	1.9	.04	.03	.04	.07	.07	.08	.08	.07
30	.01	.02	.02	.26	---	.01	.05	.05	.07	.08	.07	.07
31	.01	---	.02	.01	---	.01	---	.06	---	.07	.07	---
TOTAL	.25	.75	.72	2.90	16.22	1.29	.64	3.04	1.00	2.50	3.03	2.29
MEAN	.008	.025	.023	.094	.56	.042	.021	.098	.033	.081	.098	.076
MAX	.01	.04	.03	1.9	15	.10	.05	.16	.08	.10	.15	.08
MIN	0	.01	.02	.01	.01	.01	.01	.05	.01	.04	.05	.06
AC-FT	.5	1.5	1.4	5.8	32	2.6	1.3	6.0	2.0	5.0	6.0	4.5

CAL YR 1979 TOTAL 9.69 MEAN .027 MAX .08 MIN 0 AC-FT 19
WTR YR 1980 TOTAL 34.63 MEAN .095 MAX 15 MIN 0 AC-FT 69

10255885 SAN FELIPE CREEK NEAR WESTMORLAND, CA

LOCATION.--Lat 33°07'25", long 115°51'08", in NW¼SW¼ sec.17, T.12 S., R.11 E., Imperial County, Hydrologic Unit 18100200, on left bank 320 ft (98 m) downstream from State Highway 86, and 14.6 mi (23.5 km) northwest of Westmorland.

DRAINAGE AREA.--1,693 mi² (4,385 km²).

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is -190 ft (-58 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Diversion and pumping for domestic use and irrigation in Borrego Valley 25 mi (40 km) upstream.

AVERAGE DISCHARGE.--19 years (water years 1962-80) 7.57 ft³/s (0.214 m³/s), 5,480 acre-ft/yr (6.76 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 100,000 ft³/s (2,830 m³/s) Sept. 10, 1976, gage height, 19.0 ft (5.79 m), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of contracted-opening measurement combined with road overflow at peak gage height; no flow for some months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*) from rating curve extended as explained above.

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 17	0400	374	10.6	7.15	2.179	Mar. 10	1600	940	26.6	6.80	2.073
Feb. 21	0600	*3,440	97.4	8.65	2.637						

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.20	.15						
2				0	.20	.14						
3				0	.10	.13						
4				0	.10	.12						
5				0	.05	.11						
6				0	0	.10						
7				0	0	.09						
8				0	0	.08						
9				0	0	.07						
10				0	0	54						
11				0	0	1.1						
12				0	0	1.0						
13				0	.10	.65						
14				0	8.3	.50						
15				0	.03	.40						
16				0	21	.35						
17				0	87	.30						
18				0	.60	.27						
19				0	.30	.25						
20				0	111	.20						
21				0	1600	.18						
22				0	646	.16						
23				0	449	.14						
24				0	344	.12						
25				0	10	.10						
26				0	.20	.20						
27				0	.17	.10						
28				0	.16	.10						
29				0	.15	.05						
30				2.6	---	.05						
31		---		.60	---	.05	---		---			---
TOTAL	0	0	0	3.20	3278.66	61.26	0	0	0	0	0	0
MEAN	0	0	0	.10	113	1.98	0	0	0	0	0	0
MAX	0	0	0	2.6	1600	54	0	0	0	0	0	0
MIN	0	0	0	0	0	.05	0	0	0	0	0	0
AC-FT	0	0	0	6.3	6500	122	0	0	0	0	0	0
CAL YR 1979	TOTAL	1623.03	MEAN	4.45	MAX	905	MIN	0	AC-FT	3220		
WTR YR 1980	TOTAL	3343.12	MEAN	9.13	MAX	1600	MIN	0	AC-FT	6630		

SALTON SEA BASIN

10256000 WHITEWATER RIVER AT WHITE WATER, CA

LOCATION.--Lat 33°56'48", long 116°38'24", in NW¼NW¼NE¼ sec.2, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank 1.5 mi (2.4 km) north of White Water, and 3.5 mi (5.6 km) upstream from San Geronio River.

DRAINAGE AREA.--57.5 mi² (148.9 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder on river; water-stage recorder and Cipolletti weir on diversion 500 ft (152 m) downstream. Datum of river gage is 1,610 ft (491 m) National Geodetic Vertical Datum of 1929. Feb. 24, 1950, to Sept. 30, 1952, and Apr. 13, 1960, to June 19, 1968, supplementary gages at different sites and datums within 200 ft (61 m) of base gage. Since Aug. 12, 1969, supplementary gage at site 1.5 mi (2.4 km) downstream at different datum.

REMARKS.--Indefinite stage-discharge relation entire year. No regulation above station. Water is diverted out of basin about 15 mi (24 km) upstream to powerplants in San Geronio River basin and then to an area north of Banning for irrigation. One small diversion for domestic use and one for irrigation are made 2 to 3 mi (3.2 to 4.8 km) upstream. White Water Mutual Water Company diverts 500 ft (150 m) downstream. Coachella Valley Water District imported water is released to channel 0.9 mi (1.4 km) downstream. Discharge measurements for the 1980 water year are given in table below.

AVERAGE DISCHARGE.--River only: 31 years (water years 1949-79) 17.4 ft³/s (0.493 m³/s), 12,610 acre-ft/yr (15.5 hm³/yr).

Combined river and infiltration line: 30 years (water years 1950-79), 18.8 ft³/s (0.532 m³/s), 13,620 acre-ft/yr (16.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 24,000 ft³/s (680 m³/s) Nov. 22, 1965, gage height, 13.60 ft (4.145 m), from rating curve extended above 660 ft³/s (18.7 m³/s) on basis of field estimate of maximum flow; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--River only: Maximum discharge, 42,000 ft³/s (1,190 m³/s) Mar. 2, 1938, by slope-area measurement of peak flow, at site 2.5 mi (4.0 km) upstream, drainage area, 51.4 mi² (133 km²).

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Time	Discharge		Date	Time	Discharge	
		(ft ³ /s)	(m ³ /s)			(ft ³ /s)	(m ³ /s)
Oct. 18	1500	70.7	2.00	Mar. 4	1000	109	3.09
Nov. 29	1410	126	3.57	Mar. 19	1500	222	6.29
Jan. 23	1000	114	3.23	May 2	1120	177	5.01
Jan. 29	Unknown	3,200	90.6	June 9	1145	104	2.95
Feb. 7	1020	2.71	0.077	July 2	1300	68.3	1.93
Feb. 14	1125	188	5.32	Sept. 10	1200	38.0	1.08
Feb. 19	1145	1,440	40.8				

NOTE.--Discharge measurements were made at old Highway 60 bridge 1.5 mi (2.4 km) downstream and include imported water.

10256200 SAN GORGONIO RIVER NEAR BANNING, CA

LOCATION.--Lat 33°59'54", long 116°54'29", in SW¼NW¼NW¼ sec.17, T.25 S., R.1 E., Riverside County, Hydrologic Unit 18100200, on right bank 3.7 mi (6.0 km) upstream from Mais Canyon, and 5.3 mi (8.5 km) northwest of Banning.

DRAINAGE AREA.--14.8 mi² (38.3 km²).

PERIOD OF RECORD.--October 1975 to current year. Discharge measurements only for 1979 and 1980 water years.

GAGE.--Water-stage recorder. Altitude of gage is 3,720 ft (1,130 m), from topographic map.

REMARKS.--Records poor. No regulation above station. Some pumping upstream for irrigation. (Floods of 1978 water year caused heavy deposition of boulders at gage resulting in indefinite stage-discharge relation). Discharge measurements made during year given in table below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 432 ft³/s (12.2 m³/s) Sept. 11, 1976, gage height, 8.92 ft (2.719 m), from rating curve extended above 35 ft³/s (0.99 m³/s) on basis of estimate of maximum flow, may have been exceeded in 1978 water year; no flow long periods some years.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Date	Time	Discharge (ft ³ /s) (m ³ /s)	
Oct. 19	0915	0.67	0.019	Feb. 22	1300	83	2.35
Dec. 6	1300	No flow		Mar. 7	1030	55	1.56
Jan. 10	1540	2.2	0.062	Sept. 24	1120	6.4	0.18
Jan. 30	1330	6.0	0.17				

10256400 SAN GORGONIO RIVER NEAR WHITE WATER, CA

LOCATION.--Lat 33°55'14", long 116°41'45", in NW¼SE¼SW¼ sec.8, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on right bank 0.2 mi (0.3 km) south of Interstate Highway 10, and 3.4 mi (5.5 km) west of town of White Water.

DRAINAGE AREA.--154 mi² (399 km²).

PERIOD OF RECORD.--February 1966 to September 1978, October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 1,320 ft (402 m), from topographic map. Prior to Mar. 19, 1968, flood-hydrograph recorder.

REMARKS.--Records poor. No regulation or diversion above station. No gage-height record for entire year due to vandalism and indefinite stage-discharge relation. No data published for the 1979 water year due to lack of data. Discharge measurements for the 1980 water year are given in table below.

AVERAGE DISCHARGE.--12 years (water years 1967-78), 1.30 ft³/s (0.037 m³/s), 942 acre-ft/yr (1.16 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,250 ft³/s (205 m³/s) Jan. 25, 1969, gage height, 6.0 ft (1.83 m), from floodmarks, on basis of slope-area measurement of maximum flow, may have been exceeded in 1980 water year; no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 23, 1965, reached a stage of 6.10 ft (1.859 m), from floodmarks, discharge, 4,500 ft³/s (127 m³/s), on basis of slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge probably occurred Feb. 14 or Feb. 21, discharge and gage height unknown; minimum daily, no flow most of the year.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Time	Discharge (ft ³ /s) (m ³ /s)	
Jan. 15	0830	0.10	0.003
Jan. 29	Unknown	†3,970	112
Jan. 30		No flow	
Feb. 4		No flow	
Feb. 6		No flow	
Mar. 4	0815	0.40	0.011
Sept. 2		No flow	

†From floodmarks, on basis of slope-conveyance study of maximum flow.

SALTON SEA BASIN

10256500 SNOW CREEK NEAR WHITE WATER, CA

LOCATION.--Lat 33°52'14", long 116°40'49", in SE4NW4NW4 sec.33, T.3 S., R.3 E., Riverside County, Hydrologic Unit 18100200, on left bank 300 ft (90 m) upstream from Southern Pacific Railroad diversion dam, 300 ft (90 m) downstream from East Fork, 2.5 mi (4.0 km) upstream from mouth, and 4.4 mi (7.1 km) southwest of White Water.

DRAINAGE AREA.--10.8 mi² (28.0 km²).

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 (610 m), from topographic map. Prior to September 1931, at various sites within 500 ft (150 m) of present site at different datums. September 1931 to Oct. 6, 1970, at site 190 ft (58 m) downstream at datum 15.9 ft (4.85 m) lower. Oct. 6, 1970 to Oct. 25, 1978, at site 280 ft (85.3 m) upstream above diversion at same datum. Gage moved to present site 10 ft (3.05 m) downstream of diversion to concrete control Oct. 25, 1978.

REMARKS.--Records good. No regulation above station. Palm Springs Water Co. diverts 10 ft (3.05 m) 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: 28 years (water years 1923-26, 1929-31, 1960-80), 9.61 ft³/s (0.272 m³/s), 6,960 acre-ft/yr (8.58 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (368 m³/s) Jan. 25, 1969, gage height, 13.8 ft (4.21 m), from floodmarks, site and datum then in use, from rating curve extended above 55 ft³/s (1.56 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 2.1 ft³/s (0.059 m³/s) June 23-27, Sept. 5-11, 1961.

EXTREMES FOR CURRENT YEAR.--Combined creek and diversion: Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*) from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of study of flow over broad-crested weir:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	1245	400 11.3	3.94 1.201	Feb. 18	0800	912 25.8	5.35 1.631
Jan. 11	1245	264 7.48	3.46 1.055	Mar. 2	2400	443 12.5	4.08 1.244
Jan. 14	0115	130 3.68	2.91 0.887	Mar. 6	1145	191 5.41	3.16 0.963
Jan. 29	0700	*1,330 37.7	6.24 1.902	May 10	1545	75 2.12	2.60 0.792
Feb. 16	1945	1,040 29.5	5.64 1.719				

Minimum daily discharge, 4.7 ft³/s (0.13 m³/s) Nov. 5, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.3	.83	1.3	73	87	20	27	19	20	7.5	3.3
2	1.3	1.3	.83	1.3	51	102	18	28	19	17	6.9	3.3
3	1.3	2.1	.83	1.3	42	204	17	24	19	14	6.9	3.3
4	.83	2.9	.83	1.3	38	110	16	24	18	13	5.7	2.9
5	0	2.5	.59	1.0	38	54	16	26	20	12	6.0	4.9
6	0	2.5	1.1	.83	40	103	16	32	20	12	5.1	2.5
7	0	2.5	.81	2.2	35	63	31	19	12	5.2	2.5	2.5
8	0	1.9	.64	3.7	29	48	16	27	17	12	5.2	2.5
9	0	1.3	.64	33	25	40	16	25	19	11	4.9	2.9
10	0	1.0	.64	37	22	40	18	47	21	11	5.1	4.4
11	0	.76	.64	147	20	37	21	41	21	10	5.1	2.8
12	0	.64	.64	76	18	32	20	32	21	10	4.7	3.3
13	0	.64	.64	43	22	29	18	25	18	9.6	4.9	3.3
14	0	.64	.64	70	215	26	17	23	16	9.4	4.6	3.3
15	.48	.60	.64	41	348	24	17	23	16	9.4	3.9	3.2
16	.48	.48	.64	24	405	21	18	22	16	10	4.2	2.9
17	.48	.35	.64	17	393	19	22	26	17	9.6	4.0	2.7
18	.48	.66	.64	17	537	20	25	29	17	8.2	4.0	2.1
19	.42	.55	.64	14	533	19	27	31	16	8.0	4.1	1.1
20	82	.48	.64	12	407	16	29	34	16	7.5	4.0	.98
21	16	.48	2.7	9.0	484	15	29	35	15	7.5	3.9	.83
22	6.5	.48	4.4	6.3	267	15	27	31	15	8.4	3.8	.83
23	2.7	.37	4.1	5.7	202	13	28	29	15	9.4	3.6	.83
24	2.4	.35	4.0	5.6	171	13	25	26	15	9.6	3.7	.83
25	2.1	.42	3.7	5.2	150	12	20	23	13	9.6	3.6	.83
26	2.1	.48	3.7	5.0	133	14	18	21	13	12	3.6	.96
27	1.7	.88	2.4	5.0	117	16	22	20	16	14	3.7	1.0
28	1.4	1.0	1.3	21	106	20	25	19	19	13	3.7	1.0
29	1.3	1.0	1.3	476	98	20	27	19	22	10	3.3	1.0
30	1.2	.83	1.3	167	---	20	27	19	21	8.9	3.3	1.9
31	1.3	---	1.3	104	---	20	---	19	---	8.2	3.3	---
TOTAL	128.27	31.39	44.34	1353.73	5019	1272	631	838	529	336.3	141.5	68.19
MEAN	4.14	1.05	1.43	43.7	173	41.0	21.0	27.0	17.6	10.8	4.56	2.27
MAX	82	2.9	4.4	476	537	204	29	47	22	20	7.5	4.9
MIN	0	.35	.59	.83	18	12	16	19	13	7.5	3.3	.83
AC-FT	254	62	88	2690	9960	2520	1250	1660	1050	667	281	135

CAL YR 1979 TOTAL 5634.40 MEAN 15.4 MAX 366 MIN 0 AC-FT 11180
WTR YR 1980 TOTAL 10392.72 MEAN 28.4 MAX 537 MIN 0 AC-FT 20610

THIS IS RIVER
ONLY RECORD

10257600 MISSION CREEK NEAR DESERT HOT SPRINGS, CA

LOCATION.--Lat 34°00'40", long 116°37'38", in NE¼SW¼ sec.12, T.2 S., R.3 E., Riverside County, Hydrologic Unit 18100200, in Mission Creek Indian Reservation, 0.6 mi (1.0 km) downstream from West Fork, and 6.8 mi (10.9 km) northwest of Desert Hot Springs.

DRAINAGE AREA.--35.7 mi² (92.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,400 ft (732 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, Oct. 1 to Mar. 19, which are poor. Slight regulation of low flow by two small dams with a combined capacity of about 3 acre-ft (3,700 m³), 2 mi (3 km) above station.

AVERAGE DISCHARGE.--13 years, 4.57 ft³/s (0.129 m³/s), 3,310 acre-ft/yr (4.08 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,660 ft³/s (47.0 m³/s) Jan. 25, 1969, gage height, 6.40 ft (1.951 m) on basis of slope-area measurement of maximum flow; no flow for long periods in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 540 ft³/s (15.3 m³/s) Feb. 18; minimum daily, 1.7 ft³/s (0.048 m³/s) Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.8	2.2	1.8	68	92	32	28	19	12	5.6	3.8
2	2.7	2.8	2.2	1.8	52	110	29	26	19	12	5.6	3.8
3	2.7	2.7	2.2	1.8	44	200	29	26	18	12	5.6	3.8
4	2.7	2.7	2.2	1.8	38	100	29	26	18	12	5.3	3.8
5	2.8	2.7	2.2	1.8	39	55	29	26	18	12	5.0	3.8
6	2.8	2.7	2.2	1.8	41	100	29	26	17	12	4.8	3.8
7	2.8	2.7	2.2	1.8	35	63	29	26	16	11	4.8	3.8
8	2.8	2.6	2.1	5.0	26	50	30	26	16	11	4.8	3.8
9	2.8	2.6	2.1	30	24	44	30	26	15	11	4.8	3.8
10	2.8	2.6	2.1	60	22	42	31	25	15	10	4.5	3.8
11	2.9	2.6	2.1	100	20	39	31	25	15	10	4.3	3.8
12	2.9	2.6	2.1	50	18	38	30	24	15	10	4.3	3.8
13	2.9	2.5	2.1	27	23	37	29	24	15	11	4.3	3.8
14	2.9	2.5	2.1	40	280	35	29	24	15	11	4.3	3.8
15	2.9	2.5	2.1	15	350	33	29	24	15	10	4.2	3.8
16	2.9	2.5	2.1	11	400	32	29	23	14	10	4.2	3.6
17	2.9	2.5	2.0	10	390	32	29	23	14	10	4.2	3.6
18	2.9	2.5	2.0	9.0	540	31	28	23	14	10	4.1	3.6
19	2.9	2.4	2.0	8.0	520	31	30	22	14	10	4.1	3.6
20	5.0	2.4	2.0	6.0	420	30	30	22	14	10	4.1	3.6
21	3.5	2.4	2.0	4.0	470	30	31	22	14	10	4.1	3.6
22	3.0	2.4	2.0	3.3	250	31	31	22	13	10	4.0	3.6
23	3.0	2.4	1.9	2.7	200	31	30	23	13	10	4.0	3.6
24	3.0	2.3	1.9	2.3	175	30	28	23	13	10	4.0	3.4
25	3.0	2.3	1.9	2.0	150	32	28	22	13	9.7	4.0	3.4
26	2.9	2.3	1.9	1.9	132	32	28	22	12	9.7	4.0	3.4
27	2.9	2.3	1.9	1.7	118	32	28	21	12	9.3	3.8	3.4
28	2.9	2.3	1.9	10	110	32	28	21	12	8.9	3.8	3.2
29	2.9	2.3	1.9	250	102	32	28	21	12	8.2	3.8	3.2
30	2.8	2.3	1.8	150	---	32	27	21	12	6.2	3.8	3.2
31	2.8	---	1.8	95	---	31	---	20	---	5.6	3.8	---
TOTAL	91.4	75.2	63.2	906.5	5057	1539	878	733	442	314.6	136.0	109.0
MEAN	2.95	2.51	2.04	29.2	174	49.6	29.3	23.6	14.7	10.1	4.39	3.63
MAX	5.0	2.8	2.2	250	540	200	32	28	19	12	5.6	3.8
MIN	2.7	2.3	1.8	1.7	18	30	27	20	12	5.6	3.8	3.2
AC-FT	181	149	125	1800	10030	3050	1740	1450	877	624	270	216
CAL YR 1979 TOTAL	2269.1			MEAN 6.22	MAX 25	MIN 1.8	AC-FT 4500					
WTR YR 1980 TOTAL	10344.9			MEAN 28.3	MAX 540	MIN 1.7	AC-FT 20520					

SALTON SEA BASIN

10257710 CHINO CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°50'21", long 116°36'45", in SW¼SW¼NW¼ sec.7, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on left bank 800 ft (240 m) downstream from tram building, 3.7 mi (6.0 km) west of Highway 111 on road leading to Palm Springs aerial tramway and 5.5 mi (8.8 km) west of Palm Springs.

RAINAGE AREA.--3.88 mi² (10.05 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,500 ft (762 m), from topographic map.

REMARKS.--Records poor. Two diversions for the city of Palm Springs 0.5 mi (0.8 km) upstream.

AVERAGE DISCHARGE.--6 years, 1.02 ft³/s (0.029 m³/s), 739 acre-ft/yr (911,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 247 ft³/s (7.00 m³/s) Aug. 15, 1977, gage height, 5.93 ft (1.807 m), from floodmark, from rating curve extended above 61 ft³/s (1.73 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10.0 ft³/s (0.283 m³/s), revised, and maximum (*), from rating curve extended above 61 ft³/s (1.73 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 20	1300	18	0.51	4.40	1.341	Feb. 21	2230	*95	2.69	5.38	1.640
Jan. 29	0915	23	0.65	4.50	1.372	Mar. 6	0930	23	0.65	4.50	1.372

Minimum daily discharge, 0.03 ft³/s (<0.001 m³/s) many days July through September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	.16	.17	.17	3.2	17	5.7	3.9	1.5	1.0	.26	.10
2	.11	.16	.17	.17	2.6	16	5.5	3.0	1.5	.77	.17	.03
3	.11	.16	.17	.17	2.4	16	5.2	3.2	1.5	.44	.17	.03
4	.11	.16	.17	.17	2.0	14	5.0	3.1	1.5	.44	.17	.03
5	.11	.16	.17	.17	1.7	11	4.8	3.1	1.5	.35	.10	.03
6	.11	.16	.17	.17	1.7	17	4.7	3.1	1.4	.35	.10	.05
7	.11	.16	.17	.17	2.1	15	4.6	3.1	1.2	.35	.06	.05
8	.11	.30	.17	.17	2.1	13	4.4	3.6	1.4	.35	.06	.06
9	.10	.22	.17	5.0	2.1	11	4.3	3.7	1.4	.26	.06	.06
10	.10	.18	.17	3.0	2.1	10	4.2	3.0	1.2	.17	.05	.10
11	.10	.18	.17	2.0	2.1	9.5	4.1	2.8	1.2	.10	.05	.10
12	.10	.18	.17	1.5	2.1	8.7	4.0	2.7	1.2	.17	.05	.10
13	.10	.18	.17	1.5	2.1	8.3	3.9	2.6	1.2	.17	.05	.10
14	.10	.18	.17	1.4	30	7.6	3.9	2.5	1.2	.10	.05	.10
15	.10	.18	.17	1.3	50	7.2	3.8	2.4	1.0	.10	.05	.10
16	.09	.18	.17	.26	56	6.7	3.7	2.3	.91	.10	.05	.10
17	.08	.18	.17	.22	50	6.4	3.7	2.2	1.0	.05	.05	.09
18	.44	.18	.17	.17	65	6.1	3.6	2.1	.77	.17	.05	.08
19	.91	.18	.17	.38	63	5.9	3.6	2.1	.65	.05	.05	.17
20	1.5	.18	.17	.44	62	5.7	3.5	2.0	.65	.05	.03	.10
21	.70	.18	.17	.39	61	5.5	3.5	2.0	.65	.03	.03	.10
22	.30	.18	.17	.28	66	5.3	3.5	1.9	.65	.03	.03	.10
23	.16	.18	.17	.51	52	5.2	3.5	1.9	.65	.10	.03	.10
24	.16	.17	.17	.53	60	5.1	3.5	1.8	.65	.05	.03	.10
25	.16	.17	.17	.21	56	5.0	3.5	1.8	.65	.05	.03	.05
26	.16	.17	.17	.24	49	10	3.5	1.7	.54	.05	.03	.03
27	.16	.17	.17	.26	28	9.0	3.4	1.7	.54	.05	.03	.03
28	.16	.17	.17	.49	21	7.5	3.4	1.6	.54	.05	.03	.03
29	.16	.17	.17	7.3	20	7.0	3.4	1.6	.44	.65	.03	.03
30	.16	.17	.17	4.6	---	6.4	3.4	1.6	.77	.60	.03	.03
31	.16	---	.17	3.5	---	6.1	---	1.5	---	.35	.03	---
TOTAL	7.04	5.35	5.27	36.84	817.3	284.2	120.8	75.6	29.96	7.55	2.01	2.18
MEAN	.23	.18	.17	1.19	28.2	9.17	4.03	2.44	1.00	.24	.065	.073
MAX	1.5	.30	.17	7.3	66	17	5.7	3.9	1.5	1.0	.26	.17
MIN	.08	.16	.17	.17	1.7	5.0	3.4	1.5	.44	.03	.03	.03
AC-FT	14	11	10	73	1620	564	240	150	59	15	4.0	4.3

CAL YR 1979	TOTAL	347.80	MEAN	.95	MAX	7.6	MIN	0	AC-FT	690
WTR YR 1980	TOTAL	1394.10	MEAN	3.81	MAX	66	MIN	.03	AC-FT	2770

SALTON SEA BASIN

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10258000 TAHQUITZ CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°48'18", long 116°33'30", in NE&SW&SW& sec.22, T.4 S., R.4 E., Riverside County, Hydrologic Unit 18100200, 2.2 mi (3.5 km) southwest of Palm Springs, and 7 mi (11 km) upstream from mouth.

DRAINAGE AREA.--16.8 mi² (43.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 762.5 ft (232.41 m) National Geodetic Vertical Datum of 1929 (levels by Riverside County Flood Control District). Prior to Aug, 25, 1970, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records poor. No gage-height record January 29 to July 23 due to vandalism. No regulation or diversion above station.

AVERAGE DISCHARGE.--33 years, 5.25 ft³/s (0.149 m³/s), 3,800 acre-ft/yr (4.69 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,900 ft³/s (82.1 m³/s) Nov. 22, 1965, Jan. 25, 1969, gage height, 12.34 ft (3.761 m), from rating curve extended above 70 ft³/s (1.98 m³/s) on basis of slope-area measurements at gage heights 10.45 ft (3.185 m) and 12.34 ft (3.761 m); no flow for parts of most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 85 ft³/s (2.41 m³/s) and maximum (*), from rating curve extended above 70 ft³/s (1.98 m³/s) on basis of slope-area measurements at gage heights 10.45 ft (3.185 m) and 12.34 ft (3.761 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	1600	139 3.94	6.80 2.073
Jan. 29	0730	569 16.1	9.13 2.783

NOTE.--Other peaks above base probably occurred Jan. 11, Feb. 14, 21, Mar. 3, 6. Maximum discharge unknown but probably occurred Feb. 21.

Minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Oct. 14-18, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.0	1.8	1.9	60	39	45	50	62	56	11	4.2
2	1.8	2.0	1.8	1.9	50	85	45	50	62	49	9.9	4.1
3	1.7	2.0	1.8	1.9	40	68	44	51	62	45	9.8	4.0
4	1.6	2.0	1.8	1.9	35	64	44	51	62	43	8.9	3.9
5	1.6	2.0	1.8	2.0	33	60	44	52	62	42	8.2	4.3
6	1.5	2.0	1.8	2.0	30	76	44	52	62	40	8.1	4.0
7	1.5	2.0	1.8	2.0	28	70	44	53	61	38	7.7	3.9
8	1.6	2.0	1.8	2.0	26	62	44	54	61	36	7.2	3.7
9	1.6	2.0	1.8	7.0	24	58	44	54	60	34	7.2	3.7
10	1.6	2.0	1.8	7.0	22	65	44	54	60	32	7.1	4.6
11	1.5	2.0	1.8	30	21	60	44	55	60	30	6.7	4.1
12	1.5	2.0	1.8	25	20	57	44	56	60	28	6.7	3.8
13	1.5	1.9	1.8	21	21	56	44	56	60	26	7.2	3.7
14	1.4	1.9	1.8	17	400	54	44	57	59	24	6.4	3.5
15	1.4	1.9	1.7	14	300	53	44	57	59	22	6.1	3.4
16	1.4	1.9	1.8	13	220	52	45	58	58	20	5.9	3.2
17	1.4	1.9	1.8	12	200	51	45	58	58	18	5.7	3.1
18	1.4	1.9	1.8	11	290	50	45	59	58	17	5.6	3.0
19	1.5	1.9	1.8	10	230	49	45	59	57	16	5.4	3.0
20	28	1.9	1.8	9.5	190	49	45	60	57	15	5.4	3.1
21	1.4	1.9	1.8	9.1	480	49	45	60	56	14	5.2	3.1
22	5.1	1.9	1.8	8.7	200	48	45	60	56	14	5.1	2.9
23	3.5	1.8	1.8	8.3	140	48	46	60	55	14	4.8	3.0
24	2.8	1.8	1.8	8.1	90	48	46	61	54	14	4.8	2.9
25	2.4	1.8	1.8	7.9	65	47	46	61	54	13	5.1	2.8
26	2.3	1.8	2.1	7.7	55	90	46	61	53	13	4.6	2.8
27	2.2	1.9	1.9	7.4	50	58	47	62	52	13	4.3	2.7
28	2.2	1.9	1.8	9.3	45	46	50	62	51	11	4.3	2.7
29	2.0	1.9	1.9	300	40	46	55	62	50	13	4.3	2.6
30	2.0	1.9	1.9	100	---	45	48	62	60	11	4.2	2.6
31	2.1	---	1.9	80	---	45	---	62	---	11	4.2	---
TOTAL	85.4	57.8	56.4	738.6	3405	1748	1361	1769	1741	772	197.1	102.4
MEAN	2.75	1.93	1.82	23.8	117	56.4	45.4	57.1	58.0	24.9	6.36	3.41
MAX	28	2.0	2.1	300	480	90	55	62	62	56	11	4.6
MIN	1.4	1.8	1.7	1.9	20	39	44	50	50	11	4.2	2.6
AC-FT	169	115	112	1470	6750	3470	2700	3510	3450	1530	391	203

CAL YR 1979	TOTAL	4923.2	MEAN 13.5	MAX 75	MIN 1.4	AC-FT 9770
WTR YR 1980	TOTAL	12033.7	MEAN 32.9	MAX 480	MIN 1.4	AC-FT 23870

SALTON SEA BASIN

10258500 PALM CANYON CREEK NEAR PALM SPRINGS, CA

LOCATION.--Lat 33°44'42", long 116°32'05", in NE¼SW¼SE¼ sec.11, T.5 S., R.4 E., Riverside County, Hydrologic Unit 18100200, on right bank 0.8 mi (1.3 km) upstream from Murray Canyon Creek, and 6 mi (10 km) south of Palm Springs.

DRAINAGE AREA.--93.3 mi² (241.6 km²).

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

AGE.--Water-stage recorder. Altitude of gage is 700 ft (213 m), from topographic map. Prior to Jan. 14, 1942, at datum 0.2 ft (0.06 m) higher.

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

AVERAGE DISCHARGE.--44 years (water years 1931-41, 1948-80), 4.73 ft³/s (0.134 m³/s), 3,430 acre-ft/yr (4.23 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,000 ft³/s (198 m³/s) Feb. 21, 1980, gage height, 7.29 ft (2.222 m), from rating curve extended above 650 ft³/s (18.4 m³/s) on basis of slope-area measurement at gage height 6.38 ft (1.945 m); no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 650 ft³/s (18.4 m³/s) on basis of slope-area measurement at gage height 6.38 ft (1.945 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1300	138 3.91	3.10 0.945	Feb. 18	0930	2,750 77.9	5.59 1.704
Jan. 29	0700	2,950 83.5	5.70 1.737	Feb. 21	0130	*7,000 198	7.29 2.222
Feb. 14	1100	982 27.8	4.30 1.311	Mar. 6	1900	728 20.6	3.79 1.155
Feb. 15	1530	2,530 71.6	5.47 1.667	June 30	1700	819 23.2	4.11 1.253
Feb. 16	2100	2,480 70.2	5.44 1.658				

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) Oct. 18, 19, 27, Nov. 9, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.32	1.5	.60	55	118	48	26	12	13	2.9	3.4
2	.13	.32	1.5	.60	30	114	47	26	12	10	2.9	3.8
3	.12	.10	1.0	.60	22	179	45	18	12	6.0	3.2	3.8
4	.12	.10	.85	.60	20	287	44	15	12	5.0	3.2	3.4
5	.11	.10	.85	.60	16	295	43	15	10	4.6	2.9	3.4
6	.11	.10	.85	.60	10	515	42	15	10	4.3	2.9	3.2
7	.10	.10	.85	.60	7.4	370	41	15	10	4.0	2.4	3.2
8	.10	.10	.85	.60	6.4	350	40	15	10	3.7	2.4	3.2
9	.09	.05	.85	16	5.6	334	40	15	11	3.4	2.4	6.0
10	.09	.14	.85	11	5.2	314	39	15	11	3.3	2.6	4.0
11	.08	.07	.85	57	4.4	268	37	16	10	3.2	2.6	3.2
12	.08	.05	.85	8.4	3.8	210	36	12	9.4	3.1	2.9	3.2
13	.07	.10	.85	6.0	4.4	170	35	12	9.4	3.0	2.9	3.2
14	.07	.10	.85	4.4	393	145	33	12	9.4	3.0	3.2	3.2
15	.06	.14	.85	4.4	732	125	30	12	9.4	3.0	3.2	3.2
16	.06	.25	.85	4.1	677	112	27	12	8.9	3.0	3.2	3.1
17	.07	.19	.72	3.8	767	105	25	12	7.8	3.0	3.4	3.1
18	.05	.20	.72	3.2	983	99	23	12	7.8	3.0	3.4	3.1
19	.05	.20	.60	2.6	607	93	21	12	7.8	3.0	3.4	3.1
20	.25	.20	.60	2.3	915	86	20	12	7.4	3.0	3.4	3.1
21	.19	.20	.60	2.0	2040	81	26	12	6.9	3.0	3.4	3.1
22	.07	.20	.60	2.0	473	76	27	12	6.0	3.0	3.4	3.1
23	.07	.20	.60	2.0	342	71	24	12	6.0	2.9	3.4	3.1
24	.19	.20	.60	2.0	279	67	22	12	5.6	2.9	3.4	3.1
25	.10	.20	.60	2.0	214	63	21	12	5.2	2.9	3.4	3.0
26	.07	.20	.85	2.0	179	60	21	12	5.0	2.9	3.2	3.0
27	.05	.20	.60	2.0	157	57	19	12	5.0	2.6	2.9	3.0
28	.32	.20	.60	2.0	141	55	23	12	5.0	3.2	2.9	3.0
29	.19	.20	.60	757	127	53	33	12	5.0	3.2	2.9	3.0
30	.19	.72	.60	114	---	51	26	12	49	3.4	2.9	3.0
31	.32	---	.60	112	---	50	---	12	---	3.4	2.9	---
TOTAL	3.71	5.45	24.54	1127.00	9216.2	4973	958	431	296.0	121.0	94.1	99.3
MEAN	.12	.18	.79	36.4	318	160	31.9	13.9	9.87	3.90	3.04	3.31
MAX	.32	.72	1.5	757	2040	515	48	26	49	13	3.4	6.0
MIN	.05	.05	.60	.60	3.8	50	19	12	5.0	2.6	2.4	3.0
AC-FT	7.4	11	49	2240	18280	9860	1900	855	587	240	187	197
CAL YR 1979 TOTAL	4440.18	MEAN 12.2	MAX 439	MIN .04	AC-FT 8810							
WTR YR 1980 TOTAL	17349.30	MEAN 47.4	MAX 2040	MIN .05	AC-FT 34410							

LOCATION.--Lat 33°45'36", long 116°32'57", in NW¼SE¼SE¼ 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 (1.8 km) above mouth, and 5.1 mi (8.2 km) south of Palm Springs.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 800 ft (244 m), 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 (2 km) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,960 ft³/s (55.5 m³/s) Aug. 31, 1954, gage height, 7.11 ft (2.167 m), from rating curve extended above 80 ft³/s (2.27 m³/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 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of slope-area measurement at gage height 7.11 ft (2.167 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 20	1445	71	2.01	2.66	0.811	Feb. 21	0130	325	9.20	3.98	1.213
Jan. 11	1300	94	2.66	2.85	0.869	Mar. 3	0100	91	2.58	2.83	0.863
Jan. 29	0830	279	7.90	3.82	1.164	Mar. 6	1245	81	2.29	2.75	0.838
Feb. 18	0730	*411	11.6	4.38	1.335						

Minimum daily discharge, 1.5 ft³/s (0.042 m³/s) Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	5.3	1.8	1.7	13	36	22	12	6.9	4.6	3.3	3.4
2	1.5	4.9	1.8	1.7	10	36	22	11	6.8	4.6	3.3	3.8
3	1.6	4.9	2.7	1.7	10	52	21	11	6.7	4.3	3.4	3.8
4	1.8	4.9	2.9	1.7	10	37	21	11	6.7	4.3	3.2	3.8
5	1.7	4.9	2.6	1.7	9.7	35	20	11	6.7	4.2	3.2	3.4
6	1.8	4.9	1.9	1.7	8.6	50	20	11	6.4	4.3	3.1	3.4
7	1.8	4.5	1.9	1.7	7.1	48	19	11	6.4	4.2	3.1	3.3
8	1.8	4.5	1.9	1.7	6.4	43	19	10	6.2	4.1	3.1	3.3
9	1.8	4.5	1.9	5.7	6.0	40	18	10	6.1	3.7	3.1	3.6
10	1.8	4.1	1.8	3.4	5.7	39	18	10	5.8	3.7	3.4	3.0
11	1.8	4.1	1.8	40	5.4	38	17	9.8	6.7	3.9	3.4	2.6
12	1.8	3.4	1.8	11	5.1	37	17	9.7	6.3	4.0	3.4	2.8
13	1.8	3.4	1.8	5.7	5.0	36	16	9.5	6.6	4.1	3.4	2.8
14	1.8	3.8	1.7	9.0	31	35	16	9.4	5.7	3.7	3.1	2.7
15	1.8	3.4	1.7	6.7	60	34	16	9.2	5.5	3.6	3.1	2.7
16	1.8	3.4	1.7	6.2	69	33	15	9.1	5.8	3.6	3.1	2.7
17	2.4	3.4	1.7	6.7	105	33	15	8.9	5.3	3.6	3.1	2.9
18	2.6	3.8	1.7	7.8	189	32	14	8.7	5.0	3.7	3.1	3.0
19	2.9	4.1	1.7	6.7	137	31	14	8.6	5.1	3.3	3.4	3.2
20	15	3.8	1.7	5.7	132	30	14	8.5	5.2	3.3	3.4	3.5
21	8.5	4.1	2.6	5.1	239	29	13	8.3	5.1	3.4	3.4	3.7
22	5.7	3.8	2.1	5.4	137	28	13	8.2	4.7	3.5	3.4	4.1
23	5.3	3.4	1.7	5.5	109	28	13	8.1	4.8	3.1	3.4	4.8
24	4.5	3.4	1.7	5.1	89	27	12	7.9	4.8	3.1	3.1	4.9
25	3.8	3.4	1.7	4.9	62	27	12	7.8	4.8	3.1	3.1	5.2
26	4.1	3.1	1.7	4.9	53	30	12	7.7	4.8	3.4	3.1	5.3
27	4.5	2.8	1.7	4.9	45	26	12	7.5	4.8	3.1	3.1	5.2
28	4.5	2.6	1.7	7.2	40	25	12	7.4	4.5	3.1	3.4	4.9
29	4.9	2.6	1.7	86	37	24	12	7.3	4.5	3.4	3.4	4.6
30	5.7	2.3	1.7	23	---	23	12	7.1	4.5	3.4	3.4	3.9
31	5.3	---	1.7	18	---	23	---	7.0	---	3.1	3.4	---
TOTAL	107.6	115.5	58.5	298.2	1636.0	1045	477	283.7	169.2	114.5	100.9	110.3
MEAN	3.47	3.85	1.89	9.62	56.4	33.7	15.9	9.15	5.64	3.69	3.25	3.68
MAX	15	5.3	2.9	86	239	52	22	12	6.9	4.6	3.4	5.3
MIN	1.5	2.3	1.7	1.7	5.0	23	12	7.0	4.5	3.1	3.1	2.6
AC-FT	213	229	116	591	3250	2070	946	563	336	227	200	219
CAL YR 1979	TOTAL	2068.4	MEAN	5.67	MAX	53	MIN	1.2	AC-FT	4100		
WTR YR 1980	TOTAL	4516.4	MEAN	12.3	MAX	239	MIN	1.5	AC-FT	8960		

SALTON SEA BASIN

10259200 DEEP CREEK NEAR PALM DESERT, CA

LOCATION.--Lat 33°37'52", long 116°23'29", in SE&NE&SE& sec.19, T.6 S., R.6 E., Riverside County, Hydrologic Unit 18100200, on left bank 500 ft (150 m) downstream from unnamed tributary, and 6.3 mi (10.1 km) south of Palm Desert.

DRAINAGE AREA.--30.6 mi² (79.3 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,440 ft (439 m), from topographic map.

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

AVERAGE DISCHARGE.--18 years, 1.93 ft³/s (0.055 m³/s), 1,400 acre-ft/yr (1.73 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s (201 m³/s) Sept. 10, 1976, gage height, 7.84 ft (2.390 m), recorded in gage well, 9.85 ft (3.002 m) from floodmarks, from rating curve extended above 40 ft³/s (1.13 m³/s) on basis of slope-area measurements at gage heights 2.68 ft (0.817 m), 5.15 ft (1.570 m), and 7.84 ft (2.390 m); no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft³/s (0.566 m³/s) and maximum (*) on basis of rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1315	40 1.13	2.57 0.783	Feb. 21	0100	*1,170 33.1	5.08 1.548
Jan. 29	0730	1,050 29.7	4.97 1.515	Mar. 3	0345	59 1.67	2.81 0.856
Feb. 14	0530	885 25.1	4.80 1.463	Mar. 6	1415	80 2.27	3.01 0.917
Feb. 16	2145	1,020 28.9	4.94 1.506	Mar. 10	2015	53 1.50	2.75 0.838
Feb. 18	0915	932 26.4	4.85 1.478				

Minimum daily discharge, 0.39 ft³/s (0.011 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.52	.79	.91	35	28	13	9.5	5.0	2.8	1.3	.60
2	.40	.53	.79	.90	31	26	13	9.2	4.8	2.6	1.2	.67
3	.40	.54	.79	.85	28	42	12	8.8	4.6	2.6	1.2	.72
4	.41	.55	.76	.85	26	35	12	8.5	4.5	2.5	1.1	.78
5	.42	.56	.76	.85	24	31	11	8.3	4.4	2.5	.97	1.2
6	.43	.57	.77	.84	22	47	11	8.1	4.3	2.4	.95	1.1
7	.43	.58	.79	.82	20	42	11	7.7	4.3	2.4	.90	.97
8	.44	.58	.79	.89	19	35	11	7.6	4.1	2.3	.85	.85
9	.45	.59	.79	3.8	18	32	10	7.5	4.0	2.2	.87	.87
10	.46	.60	.79	3.9	17	35	11	7.8	3.8	2.2	.97	.92
11	.47	.61	.78	19	16	39	11	7.9	3.6	2.1	.94	.89
12	.48	.62	.79	10	15	33	11	7.5	3.5	2.1	.95	.84
13	.49	.63	.79	5.2	14	31	10	7.4	3.5	2.0	.98	.84
14	.50	.64	.79	3.4	388	28	10	7.2	3.4	2.0	.87	.82
15	.50	.65	.79	2.7	155	25	10	7.1	3.4	2.0	.77	.83
16	.51	.66	.79	2.2	207	23	10	6.8	3.3	1.9	.79	.80
17	.50	.67	.78	1.9	178	21	10	6.4	3.2	1.9	.84	.75
18	.50	.68	.78	1.8	347	22	10	6.2	3.1	1.8	.83	.68
19	.49	.70	.79	1.7	192	21	10	5.9	3.0	1.8	.82	.60
20	.56	.71	.79	1.2	224	19	9.9	5.7	3.0	1.8	.85	.58
21	.64	.72	.82	1.2	501	18	10	5.6	2.9	1.7	.83	.58
22	.67	.73	1.1	1.3	123	17	11	5.6	2.9	1.7	.78	.61
23	.63	.74	.93	1.2	78	17	11	5.4	2.8	1.7	.77	.65
24	.62	.75	.91	1.2	59	16	9.6	5.5	2.8	1.6	.81	.63
25	.58	.76	.91	1.1	49	16	9.2	5.5	2.8	1.6	.90	.60
26	.55	.77	.96	1.1	45	18	9.0	5.4	2.7	1.5	.82	.60
27	.56	.79	1.0	1.1	40	15	8.8	5.3	2.7	1.5	.72	.64
28	.54	.79	.91	1.2	33	15	9.2	5.2	2.6	1.5	.62	.60
29	.51	.79	.90	266	31	14	10	5.2	2.6	1.5	.60	.59
30	.50	.79	.90	59	---	13	9.8	5.0	3.5	1.5	.58	.55
31	.51	---	.91	42	---	13	---	5.0	---	1.5	.58	---
TOTAL	15.54	19.82	25.94	440.11	2935	787	314.5	209.8	105.1	61.2	26.96	22.36
MEAN	.50	.66	.84	14.2	101	25.4	10.5	6.77	3.50	1.97	.87	.75
MAX	.67	.79	1.1	266	501	47	13	9.5	5.0	2.8	1.3	1.2
MIN	.39	.52	.76	.82	14	13	8.8	5.0	2.6	1.5	.58	.55
AC-FT	31	39	51	873	5820	1560	624	416	208	121	53	44
CAL YR 1979	TOTAL	2037.78	MEAN	5.58	MAX	161	MIN	.21	AC-FT	4040		
WTR YR 1980	TOTAL	4963.33	MEAN	13.6	MAX	501	MIN	.39	AC-FT	9840		

10259300 WHITEWATER RIVER AT INDIO, CA

LOCATION.--Lat 33°44'14", long 116°14'07", in SW¼SE¼NE¼ sec.15, T.5 S., R.7 E., Riverside County, Hydrologic Unit 18100200, on right bank of concrete drop-structure, 1000 ft (305 m) upstream of Monroe Street bridge, and 1.7 mi (2.7 km) northwest of Indio.

DRAINAGE AREA.--1,073 mi² (2,779 km²).

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 October 1979, water-stage recorder at site 0.5 mi (0.8 km) upstream at different datum.

REMARKS.--Records good. No regulation above station. Water diverted from tributary streams for municipal supply in vicinity of Palm Springs. At times water is released at Coachella Canal crossing, 0.8 mi (1.3 km) upstream.

AVERAGE DISCHARGE.--14 years, 4.78 ft³/s (0.135 m³/s), 3,460 acre-ft/yr (4.27 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Jan. 25, 1969, gage height, 14.41 ft (4.392 m), site and datum then in use, from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement at gage height 15.3 ft (4.66 m); no flow all or most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 2 or 3, 1938, reached a discharge of 29,000 ft³/s (821 m³/s), on basis of slope-area measurement at site 5.0 mi (8.0 km) upstream. Flood of November 22, 1965, reached a stage of 15.3 ft (4.66 m) from floodmarks, site and datum then in use, discharge 14,100 ft³/s (399 m³/s) on basis of slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), on basis of critical-depth study of maximum discharge at gage height 4.12 ft (1.256 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	1430	*6,100 173	4.12 1.256	Feb. 18	1215	3,420 96.9	3.30 1.006
Feb. 15	1545	2,440 69.1	2.91 0.887	Feb. 21	0430	4,660 132	3.71 1.131
Feb. 17	0015	6,100 173	4.12 1.256				

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0		0	0						0	
2		0		0	0						0	
3		0		0	0						0	
4		0		0	0						0	
5		0		0	0						0	
6		0		0	0						0	
7		0		0	0						0	
8		0		0	0						0	
9		0		0	0						0	
10		0		0	0						0	
11		0		0	0						0	
12		0		0	0						0	
13		0		0	0						0	
14		0		0	252						0	
15		0		0	767						0	
16		0		0	458						0	
17		0		0	1960						.03	
18		0		0	1120						0	
19		0		0	695						0	
20		0		0	663						0	
21		0		0	1980						0	
22		0		0	158						0	
23		0		0	4.4						0	
24		0		0	.42						0	
25		0		0	0						0	
26		0		0	.06						0	
27		0		0	0						0	
28		0		0	0						0	
29		26		1300	0						0	
30		0		60	---						0	
31		---		0	---		---		---		0	---
TOTAL	0	26	0	1360	8057.88	0	0	0	0	0	.03	0
MEAN	0	.87	0	43.9	278	0	0	0	0	0	.001	0
MAX	0	26	0	1300	1980	0	0	0	0	0	.03	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	52	0	2700	15980	0	0	0	0	0	.06	0
CAL YR 1979	TOTAL	1450.10	MEAN	3.97	MAX	948	MIN	0	AC-FT	2880		
WTR YR 1980	TOTAL	9443.91	MEAN	25.8	MAX	1980	MIN	0	AC-FT	18730		

SALTON SEA BASIN

10259540 WHITEWATER RIVER NEAR MECCA, CA

LOCATION.--Lat 33°31'29", long 116°04'36", in NW¼NW¼NW¼ sec.32, T.7 S., R.9 E., Riverside County, Hydrologic Unit 18100200, on left bank 1.6 mi (2.6 km) upstream from mouth at Salton Sea and 3.3 mi (5.3 km) south of Mecca.

DRAINAGE AREA.--1,495 mi² (3,872 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 221.00 ft (67.361 m) below National Geodetic Vertical Datum of 1929 (levels by Coachella County Water District). Oct. 1, 1960, to Mar. 22, 1967, at site 1.3 mi (2.1 km) downstream and Mar. 23, 1967, to July 22, 1970, at site 0.7 mi (1.1 km) downstream at different datums.

REMARKS.--Records poor. Most of the flow represents seepage and return flow from irrigated areas.

COOPERATION.--Thirty-eight discharge measurements were furnished by Coachella Valley County Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,500 ft³/s (70.8 m³/s) Jan. 25, 1969, estimated; minimum daily, 37 ft³/s (1.05 m³/s) Nov. 25-29, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,100 ft³/s (59.5 m³/s) Feb. 21, estimated; minimum daily, 84 ft³/s (2.38 m³/s) July 18, estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	95	92	103	123	121	130	172	147	110	117	132
2	108	95	92	104	125	120	130	170	145	110	116	133
3	103	95	93	104	128	119	130	168	143	109	115	134
4	103	96	93	104	130	119	130	164	142	108	113	132
5	102	96	93	110	131	119	130	160	141	107	112	130
6	100	96	92	113	132	119	129	157	130	106	111	129
7	97	96	91	116	135	120	129	153	123	105	123	128
8	95	96	90	119	135	121	129	157	118	104	123	127
9	93	96	89	123	135	121	128	160	111	103	123	126
10	92	96	88	127	136	122	127	162	99	102	124	125
11	92	96	87	129	137	123	125	164	99	100	124	125
12	92	97	86	133	138	123	124	166	101	98	124	125
13	92	97	86	137	138	123	123	168	102	96	125	125
14	93	97	88	141	350	124	122	170	104	93	125	125
15	93	97	91	132	860	124	121	168	105	90	125	126
16	93	97	93	125	550	125	120	166	107	88	126	126
17	93	97	95	121	2000	126	123	164	109	86	126	126
18	93	96	97	118	1200	126	126	164	111	84	126	126
19	93	96	99	114	800	127	128	164	111	90	124	123
20	94	95	99	112	760	127	130	162	111	97	122	120
21	94	95	99	109	2100	128	132	162	111	102	120	118
22	94	94	100	108	250	129	134	160	111	109	119	116
23	94	94	100	106	130	130	137	159	110	116	120	114
24	95	93	101	108	128	130	174	158	110	122	122	111
25	95	93	101	109	127	131	175	157	110	122	123	107
26	95	93	101	110	125	131	176	156	110	122	125	103
27	95	92	101	111	124	131	176	154	110	121	127	99
28	95	92	102	112	122	131	177	152	110	120	128	95
29	95	92	102	1400	122	131	178	151	110	119	129	91
30	95	92	102	170	---	131	179	150	110	118	130	96
31	95	---	103	122	---	130	---	148	---	117	131	---
TOTAL	2965	2852	2946	4950	11471	3882	4172	4986	3461	3274	3798	3593
MEAN	95.6	95.1	95.0	160	396	125	139	161	115	106	123	120
MAX	108	97	103	1400	2100	131	179	172	147	122	131	134
MIN	92	92	86	103	122	119	120	148	99	84	111	91
AC-FT	5880	5660	5840	9820	22750	7700	8280	9890	6860	6490	7530	7130
CAL YR 1979	TOTAL	46787	MEAN	128	MAX	2450	MIN	86	AC-FT	92800		
WTR YR 1980	TOTAL	52350	MEAN	143	MAX	2100	MIN	84	AC-FT	103800		

10259920 WASTEWAY NO. 1 NEAR MECCA, CA

LOCATION.--Lat 33°31'40", long 115°58'23", in NW¼SW¼SW¼ sec.29, T.7 S., R.10 E., Riverside County, Hydrologic Unit 18100100, on right bank of channel, 1,000 ft (300 m) upstream from mouth, 2,250 ft (690 m) downstream from State Highway 111, and 6.6 mi (10.6 km) southeast of Mecca.

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

GAGE.--Water-stage recorder. Altitude of gage is -220 ft (-67.1 m), from topographic map.

REMARKS.--Records poor. Discharge represents seepage and return flows from irrigated areas. At times water is wasted from Coachella Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 586 ft³/s (16.6 m³/s) Aug. 18, 1977; minimum daily, 1.1 ft³/s (0.03 m³/s) Jan. 8, Apr. 9, 10, May 21-23, 1977.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.9	2.0	1.4	99	2.0	3.2	4.8	3.5	4.4	4.1	3.4
2	2.7	2.4	1.9	1.4	69	2.2	3.2	4.4	4.1	5.9	4.1	3.3
3	2.7	1.8	1.8	1.4	2.2	2.2	2.9	4.1	3.8	5.9	4.8	3.3
4	2.7	1.8	1.7	1.4	2.2	2.2	2.9	4.1	3.8	4.8	3.8	3.3
5	2.7	1.8	1.7	1.6	2.4	2.3	3.2	4.4	3.8	4.1	4.4	3.2
6	2.7	1.8	1.8	1.6	2.7	2.7	3.5	4.4	4.4	4.4	5.1	3.5
7	2.7	1.8	1.8	1.8	2.9	2.7	3.5	4.8	5.1	4.4	4.8	3.2
8	2.7	2.2	2.0	1.8	2.8	2.7	4.8	4.4	4.8	3.5	4.8	3.2
9	2.7	2.0	2.0	3.1	2.8	2.7	4.7	4.4	4.4	3.8	4.1	3.5
10	2.7	2.0	2.0	9.1	2.7	2.7	4.6	4.4	4.1	3.8	3.2	2.9
11	2.4	2.0	1.8	5.5	2.7	2.4	4.5	4.4	3.8	4.4	3.2	2.9
12	2.2	1.8	1.8	1.4	2.6	2.4	4.4	4.4	4.4	4.8	3.8	2.9
13	2.0	1.8	2.0	5.9	2.5	2.4	4.3	4.8	4.4	3.8	3.8	2.9
14	2.2	3.5	2.4	2.0	2.2	3.5	4.2	4.1	4.8	3.8	4.4	2.7
15	2.0	3.2	2.2	1.6	144	4.1	4.1	4.1	4.4	3.8	3.8	3.2
16	2.2	3.2	2.4	1.8	196	3.8	4.0	2.9	4.4	3.8	3.5	3.2
17	2.2	3.8	2.2	2.0	7.8	2.7	3.9	2.9	4.4	3.5	12	2.9
18	2.2	2.4	2.9	2.2	78	2.7	3.8	2.9	4.8	3.8	4.6	2.9
19	2.4	2.0	2.4	2.2	72	2.9	3.7	2.9	4.8	4.8	3.8	2.9
20	2.7	1.8	2.0	2.4	61	3.2	3.6	2.9	4.8	4.4	3.8	2.9
21	2.4	2.4	2.7	2.4	29	3.2	3.5	2.9	4.4	4.1	4.1	2.4
22	2.2	2.7	2.9	2.2	44	3.2	3.4	2.9	4.1	3.8	5.1	2.4
23	2.2	2.7	3.8	2.2	2.0	3.2	3.2	2.9	4.1	4.1	5.1	2.2
24	2.2	2.6	3.5	2.4	2.0	3.5	2.9	2.9	4.1	3.5	4.4	2.7
25	2.0	2.5	2.9	2.7	2.0	3.8	3.2	2.9	4.1	3.2	4.1	2.9
26	2.0	2.4	2.2	2.9	2.0	3.5	3.8	2.7	4.1	3.2	4.1	2.7
27	2.0	2.3	2.2	3.2	2.0	3.8	4.8	2.7	4.1	2.9	3.5	2.7
28	2.0	2.2	2.0	3.2	2.0	3.8	4.8	2.9	4.4	3.2	3.5	2.9
29	2.0	2.1	1.6	3.5	2.0	3.5	4.8	3.2	3.8	3.8	3.5	2.7
30	2.0	2.1	1.4	132	---	3.2	4.8	3.5	4.1	3.8	3.4	2.7
31	2.4	---	1.6	166	---	2.9	---	3.8	---	4.1	3.4	---
TOTAL	73.1	70.0	67.6	374.3	844.5	92.1	116.2	113.8	128.1	125.6	134.1	88.5
MEAN	2.36	2.33	2.18	12.1	29.1	2.97	3.87	3.67	4.27	4.05	4.33	2.95
MAX	2.9	3.8	3.8	166	196	4.1	4.8	4.8	5.1	5.9	12	3.5
MIN	2.0	1.8	1.4	1.4	2.0	2.0	2.9	2.7	3.5	2.9	3.2	2.2
AC-FT	145	139	134	742	1680	183	230	226	254	249	266	176

CAL YR 1979 TOTAL 3502.8 MEAN 9.60 MAX 536 MIN 1.4 AC-FT 6950
WTR YR 1980 TOTAL 2227.9 MEAN 6.09 MAX 196 MIN 1.4 AC-FT 4420

MOJAVE RIVER BASIN

10260500 DEEP CREEK NEAR HESPERIA, CA

LOCATION (REVISED).--Lat 34°20'28", long 117°13'39", in NW¼NE¼SE¼ sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 0.5 mi (0.8 km) upstream from confluence with West Fork Mojave River at Mojave River Forks Dam, 7 mi (11 km) southeast of Hesperia and 11 mi (18 km) downstream from Lake Arrowhead.

DRAINAGE AREA.--134 mi² (347 km²).

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

GAGE.--Water-stage recorder. Broad-crested weir since December 1938. Altitude of gage is 3,050 ft (930 m), from topographic map. See WSP 1314 for history of changes prior to Dec. 10, 1938.

REMARKS.--Records fair. Slight regulation by Lake Arrowhead, capacity, 48,000 acre-ft (59.2 hm³), used principally for recreation.

AVERAGE DISCHARGE.--69 years, 72.2 ft³/s (2.045 m³/s), 52,310 acre-ft/yr (64.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft³/s (1,320 m³/s) Mar. 2, 1938, gage height unknown, based on slope-area measurement of maximum flow; maximum gage height, 23.81 ft (7.257 m) Feb. 10, 1978, (back-water from Forks Reservoir); no flow July 17, 18, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*) from rating curve extended above 3,400 ft³/s (96.3 m³/s) on basis of slope-area measurement at gage height 11.30 ft (3.444 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1630	850 24.1	3.38 1.030	Feb. 19	1430	10,500 297	8.24 2.512
Jan. 15	0145	1,380 39.1	3.83 1.167	Mar. 2	2345	4,020 114	5.50 1.676
Jan. 29	0545	13,800 391	9.60 2.926	Mar. 6	1300	2,050 58.1	4.34 1.323
Feb. 17	0215	*16,400 464	10.62 3.237	May 10	1600	540 15.3	3.03 0.924

Minimum daily discharge, 6.1 ft³/s (0.173 m³/s) Oct. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	12	14	16	488	410	302	209	103	35	18	9.5
2	7.5	12	14	16	227	770	275	227	98	34	17	9.6
3	7.8	12	14	15	154	2150	255	195	93	34	17	9.5
4	7.7	12	14	15	130	1290	255	182	88	33	16	9.4
5	7.6	13	13	15	120	1030	255	182	85	32	16	9.4
6	7.2	13	13	15	111	1640	260	178	81	31	15	9.6
7	6.3	13	13	15	98	1130	281	170	74	28	15	9.9
8	6.1	13	13	15	88	780	281	166	68	27	15	9.6
9	6.1	14	13	92	78	678	281	158	64	27	14	9.9
10	6.3	14	14	215	68	661	291	297	62	26	13	11
11	6.4	14	13	463	62	619	282	320	64	26	12	11
12	6.4	14	14	203	57	563	273	265	57	25	12	11
13	6.3	13	13	114	202	533	264	255	55	24	12	10
14	6.6	13	13	261	3860	510	255	213	55	24	12	9.9
15	6.8	13	13	547	5060	469	246	166	54	23	12	9.8
16	7.5	13	13	171	4790	389	237	158	51	23	13	9.9
17	7.8	13	13	98	7700	363	228	154	48	22	13	9.7
18	7.8	13	13	72	4970	410	219	151	46	22	13	9.6
19	7.8	14	14	65	6480	462	210	151	46	21	13	9.3
20	36	14	14	50	3600	417	201	147	45	20	13	9.2
21	68	13	14	44	3870	417	192	137	44	20	13	9.3
22	23	13	15	41	1940	396	175	158	42	22	13	9.5
23	17	14	15	39	1050	356	185	158	41	23	12	9.6
24	15	14	14	36	880	356	190	158	40	22	12	9.5
25	13	14	14	36	730	338	195	151	38	20	13	9.2
26	12	15	16	35	620	344	200	140	37	21	13	9.2
27	11	15	16	35	550	325	218	117	36	19	11	9.0
28	11	15	15	424	480	308	200	114	35	21	10	8.8
29	11	15	14	7680	430	245	195	111	35	20	9.6	8.7
30	10	14	15	1550	---	255	195	109	35	19	9.4	8.6
31	11	---	15	739	---	270	---	106	---	18	9.3	---
TOTAL	371.0	404	431	13132	48893	18884	7096	5403	1720	762	406.3	288.2
MEAN	12.0	13.5	13.9	424	1686	609	237	174	57.3	24.6	13.1	9.61
MAX	68	15	16	7680	7700	2150	302	320	103	35	18	11
MIN	6.1	12	13	15	57	245	175	106	35	18	9.3	8.6
AC-FT	736	801	855	26050	96980	37460	14070	10720	3410	1510	806	572
CAL YR 1979	TOTAL	39008.1	MEAN	107	MAX	2920	MIN	3.4	AC-FT	77370		
WTR YR 1980	TOTAL	97790.5	MEAN	267	MAX	7700	MIN	6.1	AC-FT	194000		

10260620 HOUSTON CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'33", long 117°16'48", in NW¼NE¼SE¼ sec.22, T.2'N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 0.1 mi (0.2 km) east of Wildrose Road and 0.1 mi (0.2 km) southeast of intersection of Lake Gregory Road and Wildrose Road, and 0.3 mi (0.5 km) east of Crestline.

DRAINAGE AREA.--0.35 mi² (0.91 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,540 ft (1,384 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 272 ft³/s (7.70 m³/s) Feb. 19, 1980, gage height, 7.18 ft (2.188 m), from rating curve extended above 20 ft³/s (0.57 m³/s) on basis of slope-conveyance study at gage height 7.12 ft (2.170 m); minimum daily, no flow many days in September 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft³/s (0.425 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	0845	80 2.27	6.49 1.978	Feb. 19	0530	*272 7.70	7.18 2.188
Jan. 9	1130	66 1.87	6.40 1.951	Feb. 21	1100	113 3.20	6.31 1.923
Jan. 14	1215	44 1.25	6.22 1.896	Mar. 2	2130	117 3.31	6.34 1.932
Jan. 29	0445	248 7.02	7.12 2.170	Mar. 5	2100	114 3.23	6.32 1.926
Feb. 14	1815	124 3.51	6.39 1.948	Mar. 10	1400	80 2.27	6.04 1.841
Feb. 16	1615	218 6.17	6.96 2.121	May 10	0830	72 2.04	5.97 1.820

Minimum daily discharge, no flow Sept. 14-24, 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.01	.01	.01	2.0	3.9	2.3	1.0	.37	.17	.05	.01
2	.02	.01	.02	.01	1.4	23	2.0	.76	.36	.17	.06	.03
3	.01	.01	.03	.01	1.0	20	1.4	.73	.35	.17	.05	.04
4	.01	.01	.03	.01	.86	5.9	1.3	.66	.35	.15	.05	.04
5	.01	.02	.04	.01	.78	28	1.3	.69	.35	.15	.04	.04
6	.01	.03	.04	.01	.78	33	1.3	.57	.34	.14	.04	.05
7	.01	.04	.04	.01	.70	11	1.2	.66	.34	.14	.02	.04
8	.02	.01	.03	.01	.70	6.8	1.2	.63	.33	.14	.02	.04
9	.02	.01	.01	8.2	.70	6.8	1.5	.57	.33	.12	.02	.03
10	.02	.01	.01	5.3	.63	11	1.8	11	.33	.12	.02	.02
11	.02	.01	.01	5.2	.57	5.7	1.6	1.3	.34	.12	.02	.02
12	.02	.01	.01	.35	.55	4.8	1.8	.87	.32	.12	.02	.03
13	.02	.01	.02	4.3	.53	4.2	1.6	.74	.32	.12	.02	.02
14	.02	.01	.02	7.3	25	4.0	2.0	.73	.29	.10	.01	0
15	.02	.01	.03	.32	27	3.6	2.0	.63	.28	.10	.02	0
16	.02	.01	.03	.16	61	3.2	1.7	.63	.24	.10	.02	0
17	.03	.01	.03	.21	25	2.8	2.2	.51	.24	.10	.03	0
18	.03	.01	.03	.54	40	3.2	2.5	.53	.23	.09	.03	0
19	.07	.01	.04	.18	44	5.0	1.6	.50	.23	.09	.03	0
20	4.0	.01	.04	.20	41	4.6	1.2	.49	.22	.09	.03	0
21	.10	.01	.03	.19	37	4.2	1.2	.47	.21	.09	.02	0
22	.06	.01	.02	.20	8.8	3.8	1.1	.50	.21	.09	.02	0
23	.04	.01	.02	.40	5.9	3.4	1.1	.60	.21	.08	.03	0
24	.03	.01	.02	.44	5.1	3.0	.95	.50	.22	.08	.03	0
25	.03	.01	.05	.42	5.1	3.0	.86	.44	.21	.08	.03	.01
26	.02	.01	.02	.39	5.3	4.0	.95	.43	.18	.07	.03	.01
27	.02	.01	.02	.38	5.1	2.8	.78	.41	.18	.07	.03	.01
28	.02	.01	.02	21	4.9	2.6	.95	.40	.17	.06	.04	0
29	.02	.01	.02	69	4.4	2.5	.95	.39	.17	.06	.06	0
30	.02	.01	.02	5.6	---	2.1	.86	.38	.17	.06	.07	0
31	.01	---	.01	3.2	---	2.1	---	.37	---	.06	.03	---
TOTAL	4.77	.36	.77	133.56	355.80	224.0	43.20	29.09	8.09	3.30	.99	.44
MEAN	.15	.012	.025	4.31	12.3	7.23	1.44	.94	.27	.11	.032	.015
MAX	4.0	.04	.05	69	61	33	2.5	11	.37	.17	.07	.05
MIN	.01	.01	.01	.01	.53	2.1	.78	.37	.17	.06	.01	0
AC-FT	9.5	.7	1.5	265	706	444	86	58	16	6.5	2.0	.9

WTR YR 1980 TOTAL 804.37 MEAN 2.20 MAX 69 MIN 0 AC-FT 1600

MOJAVE RIVER BASIN

10260630 ABONDIGAS CREEK ABOVE LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'16", long 117°15'51", in SE¼SW¼SE¼ sec.23, T.2 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on right bank 80 ft (24 m) north of south gate for San Moritz Park, and 1.4 mi (2.3 km) east of Crestline.

DRAINAGE AREA.--1.15 mi² (2.98 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,550 ft (1,387 m), from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 380 ft³/s (10.8 m³/s) Jan. 29, 1980, gage height 7.28 ft (2.219 m), from rating curve extended above 50 ft³/s (1.416 m³/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 20 ft³/s (0.57 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	0900	85 2.41	5.86 1.786	Feb. 13	1600	23 0.65	5.25 1.600
Jan. 9	1145	69 1.95	5.73 1.747	Feb. 16	1615	184 5.21	6.44 1.963
Jan. 13	2115	49 1.39	5.56 1.695	Mar. 2	2015	98 2.78	5.95 1.814
Jan. 29	0430	*380 10.8	7.28 2.219				

Minimum daily discharge, no flow several days in October.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.06	.06	.09	4.4	8.5	5.0	2.9	1.7	.69	.19	.12
2	0	.05	.05	.08	3.4	27	5.3	2.6	1.7	.70	.22	.11
3	0	.06	.05	.08	3.0	38	4.9	2.3	1.7	.69	.21	.10
4	0	.07	.05	.08	2.5	20	4.6	2.2	1.6	.65	.21	.09
5	0	.07	.05	.07	2.2	23	4.2	2.1	1.5	.61	.21	.09
6	0	.07	.05	.07	1.8	31	4.2	2.0	1.5	.59	.19	.07
7	0	.08	.05	.09	1.7	21	3.8	2.0	1.4	.56	.15	.08
8	0	.08	.05	.16	1.6	17	3.7	2.0	1.3	.55	.14	.08
9	0	.07	.05	9.8	1.5	14	3.6	2.1	1.3	.49	.13	.08
10	0	.07	.05	9.9	1.4	15	3.5	11	1.2	.48	.13	.08
11	0	.07	.05	13	1.4	13	3.3	4.2	1.3	.46	.11	.08
12	0	.07	.05	3.0	1.4	11	3.2	3.4	1.3	.44	.12	.07
13	0	.06	.05	7.1	7.1	10	3.1	3.0	1.2	.43	.17	.07
14	.02	.06	.05	17	27	9.5	2.9	2.9	1.2	.42	.20	.09
15	.03	.06	.05	4.4	28	8.9	2.8	2.6	1.2	.40	.21	.08
16	.03	.06	.05	2.4	61	7.9	2.7	2.4	1.1	.39	.20	.07
17	.02	.08	.05	1.7	49	7.4	2.6	2.2	1.1	.38	.19	.06
18	.03	.08	.05	3.4	53	7.8	2.5	2.2	1.1	.36	.21	.06
19	.10	.08	.06	2.8	57	8.4	2.4	2.1	1.0	.33	.22	.07
20	13	.07	.06	4.3	61	8.1	2.4	2.0	.98	.31	.21	.07
21	.19	.07	.10	3.9	61	7.9	2.9	2.0	.93	.29	.15	.07
22	.09	.07	.09	3.0	29	7.2	3.1	2.2	.91	.27	.15	.06
23	.06	.07	.08	2.6	21	6.7	2.9	2.7	1.0	.25	.14	.05
24	.05	.07	.09	2.4	18	6.4	2.9	2.2	.93	.23	.15	.05
25	.04	.06	.28	2.1	13	6.3	2.7	2.0	.84	.22	.16	.05
26	.04	.06	.13	2.0	12	6.9	2.5	1.9	.81	.21	.13	.05
27	.04	.06	.09	2.3	11	6.1	2.4	1.9	.75	.19	.13	.05
28	.03	.06	.08	28	9.8	5.5	2.7	1.9	.75	.17	.12	.05
29	.04	.06	.09	103	9.1	4.9	2.9	1.7	.72	.16	.11	.05
30	.05	.06	.09	11	---	4.8	2.8	1.7	.70	.15	.11	.05
31	.05	---	.09	6.2	---	4.6	---	1.7	---	.19	.12	---
TOTAL	13.91	2.01	2.24	246.02	553.3	373.8	98.5	80.1	34.72	12.26	5.09	2.15
MEAN	.45	.067	.072	7.94	19.1	12.1	3.28	2.58	1.16	.40	.16	.072
MAX	13	.08	.28	103	61	38	5.3	11	1.7	.70	.22	.12
MIN	0	.05	.05	.07	1.4	4.6	2.4	1.7	.70	.15	.11	.05
AC-FT	28	4.0	4.4	488	1100	741	195	159	69	24	10	4.3
WTR YR 1980	TOTAL	1424.10	MEAN	3.89	MAX	103	MIN	0	AC-FT	2820		

10260640 LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'35", long 117°16'22", in NE¼NW¼SW¼ 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 (1.3 km) east of Lake Gregory Drive, and 0.9 mi (1.5 km) east of Crestline.

DRAINAGE AREA.--2.66 mi² (6.89 km²).

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 (1,374.648 m) based on map from land survey of 1892 (see Remarks paragraph); approximately 4,517.1 ft (1,376.81 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by earth-type dam. Dam was completed to a height of 90 ft (27.4 m) in 1938. Capacity table developed from land survey dated 1892 (furnished by California Department of Water Resources). Capacity is 2,070 acre-ft (2.55 hm³) below spillway elevation, 4,517.0 ft (1,376.78 m). Water is released from lake to Houston Creek for eventual water supply and recreational use in Silverwood Lake, 4.5 mi (7.2 km) 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 (2.91 hm³) Jan. 29, 1980, elevation, 4,520.33 ft (1,377.797 m); minimum 2,060 acre-ft (2.54 hm³) Sept. 30, 1980, elevation, 4,516.91 ft (1,376.754 m).

REVISIONS.--Contents for the period August 1978 to September 1979 have been revised based on revised capacity table superseding figures published in CA-79-1.

August to September 1978, revised: maximum contents, 2,230 acre-ft (2.75 hm³) Sept. 6, elevation, 4,518.88 ft (1,377.355 m); minimum, 2,100 acre-ft (2.59 hm³) Sept. 30, elevation, 4,517.32 ft (1,376.880 m).

Water year 1979, revised: maximum contents, 2,290 acre-ft (2.82 hm³) Apr. 30 and May 2, elevation, 4,519.49 ft (1,377.540 m); minimum, 2,070 acre-ft (2.55 hm³) Oct. 30, elevation, 4,517.01 ft (1,376.785 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents recorded, 2,360 acre-ft (2.91 hm³) Jan. 29, elevation, 4,520.33 ft (1,377.797 m); minimum, 2,060 acre-ft (2.54 hm³) Sept. 30, elevation 4,516.91 ft (1,376.754 m).

MONTHEND ELEVATION, 1892 DATUM, AND CONTENTS, AT 0800 HRS, WATER YEARS OCTOBER 1977 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Aug. 31.....	4,518.31	2,190	--
Sept. 30.....	4,517.41	2,110	-80
WTR YR 1978.....	--	--	--
Oct. 31.....	4,517.04	2,080	-30
Nov. 30.....	4,517.19	2,090	+10
Dec. 31.....	4,517.26	2,090	0
CAL YR 1978.....	--	--	--
Jan. 31.....	4,517.42	2,110	+20
Feb. 28.....	*4,517.42	2,110	0
Mar. 31.....	4,517.52	2,120	+10
Apr. 30.....	4,519.49	2,290	+170
May 31.....	4,519.14	2,260	-30
June 30.....	4,518.76	2,220	-40
July 31.....	4,518.62	2,210	-10
Aug. 31.....	4,518.34	2,190	-20
Sept. 30.....	4,518.04	2,160	-30
WTR YR 1979.....	--	+50	+50

* 0800 hr reading from observer on Mar. 1.

MONTHEND ELEVATION, 1892 DATUM, AND CONTENTS, AT 0800 HRS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	4,518.04	2,160	--
Oct. 31.....	4,517.09	2,080	-80
Nov. 30.....	4,517.13	2,080	0
Dec. 31.....	*4,517.28	2,100	+20
CAL YR 1979.....	--	+10	+10
Jan. 31.....	*4,517.76	2,140	+40
Feb. 29.....	*4,518.38	2,190	+50
Mar. 31.....	*4,517.36	2,100	-90
Apr. 30.....	4,518.00	2,160	+60
May 31.....	4,517.94	2,150	-10
June 30.....	4,518.51	2,200	+50
July 31.....	4,518.70	2,220	+20
Aug. 31.....	4,518.51	2,200	-20
Sept. 30.....	4,516.91	2,060	-140
WTR YR 1980.....	--	-100	-100

* 0800 hr reading from observer on first day of following month.

10260650 HOUSTON CREEK BELOW LAKE GREGORY AT CRESTLINE, CA

LOCATION.--Lat 34°14'54", long 117°16'05", SW¼NE¼NW¼ 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 (0.3 km) downstream from Lake Gregory spillway, 0.5 mi (0.8 km) east of the intersection of Gregory Lake Road and Lake Gregory Drive, and 1.2 mi (1.9 km) northeast of Crestline.

DRAINAGE AREA.--2.68 mi² (6.94 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (1,353 m), from topographic map.

REMARKS.--Records good. Flow regulated by Lake Gregory (10260640) 0.2 mi (0.3 km) upstream, usable capacity, 2,070 acre-ft (2.55 hm³), corrected.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 570 ft³/s (16.1 m³/s) Jan. 29, 1980, gage height, 7.31 ft (2.228 m) in gage well, gage subject to drawdown, actual outside gage reading unknown; from rating curve extended above 121 ft³/s (3.43 m³/s) on basis of velocity-area study of maximum flow; minimum daily, no flow Aug. 31, 1980 and several days in September 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 570 ft³/s (16.1 m³/s) Jan. 29, gage height, 7.31 ft (2.228 m) in gage well, gage subject to drawdown, actual outside gage reading unknown, from rating curve extended as explained above; minimum daily, no flow Aug. 31 and several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	.05	.11	.31	8.2	20	11	6.8	2.9	.08	.10	0
2	8.7	.05	.14	.30	5.6	30	13	6.8	3.0	.08	.13	.02
3	3.5	.06	.13	.29	5.2	130	12	6.2	2.8	.10	.17	.01
4	2.0	.05	.14	.30	4.5	60	11	5.7	2.7	.10	.18	.02
5	1.2	.05	.14	.28	4.0	70	4.4	5.3	2.6	.10	.16	.02
6	.98	.05	.14	.26	3.7	109	3.2	5.5	2.3	.15	.18	.01
7	.78	.06	.14	.24	3.5	64	5.9	5.1	2.1	.16	.14	.02
8	.59	.06	.14	.44	3.4	36	5.7	4.8	2.0	.11	.12	.03
9	.45	.07	.14	29	3.3	28	5.8	4.8	2.1	.10	.09	.03
10	.41	.08	.14	48	3.2	29	6.5	23	2.2	.09	.07	.02
11	.38	.08	.13	50	3.2	27	7.1	12	1.0	.11	.06	.01
12	.33	.08	.12	15	3.2	21	7.0	6.5	.29	.15	.10	.01
13	.30	.08	.12	10	20	19	6.9	5.5	.20	.24	.15	0
14	.28	.09	.12	50	100	17	7.1	4.9	.15	.14	.15	0
15	.26	.08	.13	22	114	15	5.0	4.6	.11	.10	.09	0
16	.25	.09	.13	8.7	153	14	4.2	4.5	.10	.13	.03	.01
17	.26	.10	.13	6.1	164	13	5.7	4.1	.09	.14	.03	2.0
18	.30	.11	.13	10	139	17	6.1	4.1	.09	.17	.05	4.0
19	.35	.11	.13	5.8	160	20	6.8	3.8	.08	.13	.03	4.0
20	15	.11	.13	3.8	165	19	6.6	3.5	.08	.10	.05	4.0
21	2.8	.10	.17	2.8	165	17	7.2	3.4	.08	.09	.09	4.0
22	.88	.10	.20	2.5	80	17	8.2	3.3	.08	.08	.09	4.0
23	.45	.10	.18	2.0	50	15	7.7	4.8	.08	.08	.10	4.0
24	.29	.10	.15	1.9	35	14	7.4	4.5	.08	.10	.12	4.0
25	.19	.10	.26	1.7	30	14	6.8	3.5	.08	.10	.11	14
26	.14	.11	.33	1.8	25	16	6.7	3.6	.08	.08	.11	11
27	.11	.11	.34	2.1	22	14	5.9	3.3	.08	.06	.09	5.0
28	.10	.11	.34	47	21	12	6.6	3.0	.08	.08	.09	3.5
29	.08	.10	.33	285	20	11	6.5	3.0	.08	.14	.07	1.5
30	.05	.10	.33	53	---	10	6.9	3.0	.08	.11	.04	.05
31	.05	---	.32	19	---	10	---	2.9	---	.09	0	---
TOTAL	60.46	2.54	5.58	679.62	1514.0	908	210.9	165.8	27.69	3.49	2.99	65.26
MEAN	1.95	.085	.18	21.9	52.2	29.3	7.03	5.35	.92	.11	.097	2.18
MAX	19	.11	.34	285	165	130	13	23	3.0	.24	.18	14
MIN	.05	.05	.11	.24	3.2	10	3.2	2.9	.08	.06	0	0
AC-FT	120	5.0	11	1350	3000	1800	418	329	55	6.9	5.9	129
WTR YR 1980 TOTAL	3646.33			MEAN 9.96	MAX	285	MIN 0	AC-FT 7230				

10261000 WEST FORK MOJAVE RIVER NEAR HESPERIA, CA

LOCATION.--Lat 34°20'20", long 117°15'25", in NW¼NW¼ 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 (0.2 km) northeast of junction with Highway 174, 4.5 mi (7.2 km) downstream from Cedar Springs Dam, and 6.5 mi (10.5 km) southeast of Hesperia.

DRAINAGE AREA.--70.3 mi² (182 km²).

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 (927 m), from topographic map. Prior to June 30, 1922, nonrecording gage or water-stage recorder 1.6 mi (2.6 km) downstream at different datum. June 30, 1922 to September 1971, water-stage recorder 1.5 mi (2.4 km) downstream at different datum. June 30, 1942 to April 14, 1966, at datum 2.00 ft (0.610 m) higher than datum then in use.

REMARKS.--Records good. Since 1972 regulated by Cedar Springs Dam (holding basin for imported water), total capacity, 78,000 acre-ft (96.2 hm³), 4.5 mi (7.24 km) upstream.

AVERAGE DISCHARGE.--60 years (water years 1905-22, 1930-71), 39.4 ft³/s (1.116 m³/s), 28,550 acre-ft/yr (35.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,100 ft³/s (739 m³/s) Mar. 2, 1938, gage height unknown, on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,380 ft³/s (237 m³/s) Feb. 16, gage height, 17.45 ft (5.319 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0			0	359	236	353	269	27	2.9		0
2	0			0	182	539	357	265	19	2.5		0
3	0			0	228	1050	357	248	13	2.8		0
4	0			0	192	273	361	236	9.5	2.9		0
5	0			0	91	395	361	216	7.6	2.2		0
6	0			0	87	920	357	213	6.2	2.0		0
7	0			0	78	764	357	169	5.0	1.7		0
8	0			0	44	677	361	236	4.0	1.1		0
9	0			14	29	700	300	169	26	.89		0
10	0			228	20	775	42	139	63	.49		0
11	0			349	11	814	51	81	63	.22		0
12	0			202	4.5	842	61	58	55	.21		0
13	0			16	62	830	63	44	44	.21		0
14	0			79	1090	727	112	34	7.2	.20		0
15	0			270	2000	743	308	31	5.5	.22		0
16	0			196	3150	700	284	25	5.0	34		0
17	0			2.5	2820	646	240	18	5.0	32		.06
18	0			2.5	1810	634	244	12	5.0	3.2		.19
19	0			2.5	3080	653	244	6.6	5.0	2.0		.74
20	0			1.1	2050	608	236	38	4.5	1.3		2.2
21	0			1.1	2110	572	257	51	4.5	.10		2.2
22	0			5.5	350	567	265	48	5.0	0		2.2
23	0			7.2	210	580	261	55	4.0	0		2.0
24	.15			7.9	150	588	257	51	4.5	0		1.7
25	0			7.9	120	588	248	40	4.0	0		1.5
26	0			7.2	140	584	248	42	3.6	0		1.7
27	0			6.6	181	580	244	58	3.2	0		1.7
28	0			242	300	492	257	55	3.2	0		1.7
29	0			2010	273	416	257	48	4.0	0		1.5
30	0			1240	---	386	257	46	3.2	0		1.3
31	0	---		547	---	357	---	33	---	0		---
TOTAL	.15	0	0	5445.0	21221.5	19236	7600	3034.6	418.7	92.64	0	20.69
MEAN	.005	0	0	176	732	621	253	97.9	14.0	2.99	0	.69
MAX	.15	0	0	2010	3150	1050	361	269	63	34	0	2.2
MIN	0	0	0	0	4.5	236	42	6.6	3.2	0	0	0
AC-FT	.3	0	0	10800	42090	38150	15070	6020	830	184	0	41
CAL YR 1979	TOTAL	14054.06	MEAN	38.5	MAX	883	MIN	0	AC-FT	27880		
WTR YR 1980	TOTAL	57069.18	MEAN	156	MAX	3150	MIN	0	AC-FT	113200		

MOJAVE RIVER BASIN¹

10261100 MOJAVE RIVER BELOW FORKS RESERVOIR, NEAR HESPERIA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°20'38", long 117°14'15", in SW¼NE¼SW¼ sec.18, T.3 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, on left bank of reservoir outlet channel, 6.5 mi (10.5 km) southeast of Hesperia.

DRAINAGE AREA.--211 mi² (546 km²).

PERIOD OF RECORD.--Water years 1967-71, 1974 to current year.

CHEMICAL ANALYSES: Water years 1967-71, 1974 to current year.

COOPERATION.--Chemical analyses were furnished by California Department of Water Resources; discharges were furnished by Corps of Engineers.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED AS (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 28...	1405	E15	--	8.4	9.0	0	10.7	94	28	6.0
FEB 01...	1250	E500	260	8.3	10.5	10	10.4	74	18	7.0
APR 16...	1320	E130	135	8.1	16.0	3	8.9	50	15	3.0
MAY 20...	1510	E95	--	--	21.0	--	--	--	--	--
JUL 23...	1245	E20	210	8.4	29.0	4	6.9	84	24	6.0

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
NOV 28...	28	39	1.3	2.0	--	24	8.0	1.4	105	.05
FEB 01...	30	46	1.5	2.0	61	25	36	.2	178	.72
APR 16...	12	34	.7	1.0	55	9.0	8.0	.3	83	.07
MAY 20...	--	--	--	--	--	--	--	--	--	--
JUL 23...	23	36	1.1	2.0	110	20	6.0	1.0	145	.05

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 28...	1405	--	100	--	--	--	--	--	--
FEB 01...	1250	--	100	--	--	--	--	--	--
APR 16...	1320	--	100	--	--	--	--	--	--
MAY 20...	1510	0	--	0	0	0	0	.0	0
JUL 23...	1245	--	100	--	--	--	--	--	--

E Estimated

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA
(National stream-quality accounting network station)

LOCATION.--Lat 34°34'23", long 117°19'11", in SW¼SW¼SE¼ sec.29, T.6 N., R.4 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 650 ft (198 m) upstream from bridge on county road, formerly U.S. Highway 66, 0.6 mi (1.0 km) downstream from Atchison, Topeka, and Santa Fe Railway bridge, 3 mi (5 km) northwest of Victorville, 28 mi (45 km) downstream from Mojave River Forks Reservoir, and 33 mi (53 km) downstream from Silverwood Lake.

DRAINAGE AREA.--513 mi² (1,329 km²).

WATER-DISCHARGE RECORDS

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 (805.589 m) 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 (107 m) upstream at datum 5.00 ft (1.524 m) higher; Apr. 14, 1966, to July 17, 1969, at site 350 ft (107 m) upstream at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records poor. Regulation by Silverwood Lake, capacity, 78,000 acre-ft (96.2 hm³) used for the storage and distribution of imported water and recreation, and by Mojave Forks Reservoir since June 1970, capacity, 89,700 acre-ft (111 hm³) with ungated opening, capacity, 23,500 ft³/s (666 m³/s). Diversions and pumping for irrigation of about 5,000 acres (20.2 km²) and Mojave State Fish Hatchery (since 1970) above station.

AVERAGE DISCHARGE.--57 years (water years 1900-06, 1931-80), 79.6 ft³/s (2.254 m³/s), 57,670 acre-ft/yr (71.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,600 ft³/s (2,000 m³/s) Mar. 2, 1938, gage height, 23.7 ft (7.22 m), present datum, from rating curve extended above 10,000 ft³/s (283 m³/s) on basis of slope-area measurement of maximum flow; minimum daily, 3.4 ft³/s (0.096 m³/s) July 25, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,000 ft³/s (425 m³/s) estimated, Feb. 16, gage height, 8.06 ft (2.457 m); minimum daily, 19 ft³/s (0.54 m³/s) July 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	35	45	68	370	400	363	287	46	26	20	25
2	32	30	45	59	330	900	332	270	45	26	20	25
3	32	30	47	73	300	2800	303	217	44	26	20	25
4	34	32	49	59	275	1500	292	160	43	26	21	25
5	34	32	49	61	250	880	303	157	42	25	21	25
6	32	34	53	68	230	2000	286	153	41	25	21	25
7	32	32	45	59	210	1200	292	123	40	25	21	25
8	35	35	45	55	195	1100	309	105	39	25	21	25
9	34	35	47	73	180	1040	309	123	38	24	22	25
10	34	35	47	90	168	990	231	82	37	24	22	25
11	32	34	53	250	155	950	196	277	36	24	22	25
12	31	35	55	100	145	910	192	220	35	24	23	25
13	31	38	59	70	450	880	172	180	34	23	23	25
14	30	51	57	150	1830	850	172	150	34	23	23	25
15	31	35	61	300	3430	830	196	128	32	23	23	25
16	30	35	61	80	10000	810	226	109	32	23	24	25
17	30	38	55	75	7200	790	231	100	31	22	24	25
18	29	37	59	71	6000	770	217	92	30	22	24	25
19	28	32	57	71	8500	760	213	84	30	22	25	25
20	32	34	53	59	5700	750	241	75	29	21	25	25
21	35	38	59	61	4800	720	241	69	29	21	25	25
22	34	37	61	60	4100	722	222	64	29	21	25	25
23	33	42	61	60	2200	665	236	60	28	21	25	25
24	32	34	57	60	1250	646	222	57	28	20	25	26
25	31	38	57	60	850	655	179	55	28	20	25	26
26	32	38	57	60	680	674	179	53	28	20	25	26
27	42	38	57	59	540	665	192	52	27	20	25	26
28	32	35	59	600	425	576	188	50	27	19	25	26
29	30	45	57	4450	422	369	150	49	27	19	25	26
30	28	45	66	1500	---	314	188	48	27	19	25	26
31	31	---	59	500	---	338	---	47	---	20	25	---
TOTAL	998	1089	1692	9361	61185	27454	7073	3696	1016	699	720	757
MEAN	32.2	36.3	54.6	302	2110	886	236	119	33.9	22.5	23.2	25.2
MAX	42	51	66	4450	10000	2800	363	287	46	26	25	26
MIN	28	30	45	55	145	314	150	47	27	19	20	25
AC-FT	1980	2160	3360	18570	121400	54450	14030	7330	2020	1390	1430	1500
CAL YR 1979	TOTAL	36901	MEAN 101	MAX 2330	MIN 10	AC-FT 73190						
WTR YR 1980	TOTAL	115740	MEAN 316	MAX 10000	MIN 19	AC-FT 229600						

MOJAVE RIVER BASIN

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-65, 1967 to current year.

CHEMICAL ANALYSES: Water years 1967 to current year; water years 1969-74 (partial-record station).

BIOLOGICAL DATA: Water years 1975 to current year.

WATER TEMPERATURES: Water years 1962-65, 1975 to current year.

SEDIMENT RECORDS: Water years 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1975 to current year.

WATER TEMPERATURES: March 1962 to September 1965, June 1975 to current year.

INSTRUMENTATION.--Specific conductance recorder since June 1975. Temperature recorder from March 1962 to September 1965 and since June 1975.

REMARKS.--Periods of missing conductivity and temperature data due to sand accumulation around probes, equipment malfunction, or vandalism.

COOPERATION.--The letter "A" following a date indicates chemical-quality data that was furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 806 micromhos Dec. 23, 1979; minimum recorded, 124 micromhos May 8, 1980.

WATER TEMPERATURES: Maximum recorded, 36.0°C Aug. 5, 1978; minimum recorded, 0.0°C Feb. 12, 1980.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 806 micromhos Dec. 23; minimum recorded, 124 micromhos Mar. 8.

WATER TEMPERATURES: Maximum recorded, 34.0 °C Oct. 7; minimum recorded, 0.0°C Feb. 12.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
25...	1250	31	450	7.5	19.5	--	1.9	6.2	36	67
NOV										
28...A	1605	35	430	8.2	11.0	0	--	8.8	--	--
29...	1230	35	225	7.5	12.0	--	1.8	9.6	K8	22
DEC										
20...	1245	50	425	7.7	6.0	--	2.5	10.8	188	62
FEB										
01... A	1520	E370	260	8.3	14.0	25	--	9.4	--	--
07...	1300	43	360	7.4	10.0	--	1.2	8.6	20	150
MAR										
21...	1340	720	215	7.2	14.0	--	7.6	9.2	<1	41
APR										
16... A	1525	213	250	7.9	25.5	4	--	7.3	--	--
23...	1300	234	240	7.6	10.0	--	5.8	9.6	>400	K800
MAY										
09...	1245	127	300	--	21.0	--	7.9	8.7	K25	167
20...A	1320	E75	--	--	28.0	--	--	--	--	--
28...	1130	51	380	--	20.0	--	4.2	8.4	20	77
JUN										
18...	1000	30	280	--	24.0	--	68	--	120	K440
JUL										
23...A	1510	E21	370	8.0	27.0	2	--	5.4	--	--
24...	1000	19	380	7.6	32.0	--	--	6.3	--	--
29...	1000	19	380	7.6	32.0	--	2.8	6.3	62	310
AUG										
19...	1200	25	540	8.3	24.0	--	28	6.5	>400	K390
SEP										
23...	1100	25	500	8.0	21.0	--	3.9	9.4	58	K240

E Estimated

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.

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)
OCT 25...	120	0	35	7.5	41	42	1.6	5.4	160	35
NOV 28... A	130	--	40	8.0	44	41	1.7	5.0	160	34
29...	130	0	39	8.0	47	43	1.8	4.8	160	36
DEC 20...	130	0	38	7.9	46	50	1.8	4.8	150	33
FEB 01... A	74	--	20	6.0	29	45	1.5	2.0	66	24
07...	110	0	30	7.3	36	42	1.5	3.6	110	37
MAR 21...	62	6	17	4.8	17	36	.9	2.2	56	16
APR 16... A	78	--	23	5.0	29	43	1.4	4.0	100	19
23...	68	0	20	4.3	25	42	1.3	4.8	86	20
MAY 09...	86	0	25	5.7	24	37	1.1	2.5	86	23
20... A	--	--	--	--	--	--	--	--	--	--
28...	96	0	29	5.8	33	41	1.5	4.1	120	22
JUN 18...	130	0	37	8.1	43	42	1.7	3.8	160	31
JUL 23... A	130	--	40	7.0	51	45	2.0	5.0	160	37
24...	--	--	--	--	--	--	--	--	--	--
29...	130	0	38	7.4	48	44	1.9	4.5	170	35
AUG 19...	130	0	40	8.0	55	46	2.1	5.6	170	37
SEP 23...	130	0	39	8.3	50	44	1.9	4.9	150	33

DATE	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT 25...	25	.5	25	289	275	--	1.2	1.0	.56	.53
NOV 28... A	27	.6	--	230	--	1.2	--	--	--	--
29...	26	.5	25	291	287	--	1.0	1.0	.83	.77
DEC 20...	24	.4	26	243	275	--	1.3	1.1	.24	.09
FEB 01... A	33	.2	--	174	--	.77	--	--	--	--
07...	30	.3	21	225	237	--	1.2	1.2	.68	.66
MAR 21...	14	.1	19	147	126	--	.49	.52	.23	.18
APR 16... A	14	.4	--	160	--	.61	--	--	--	--
23...	13	.3	20	172	161	--	.48	.47	.56	.59
MAY 09...	16	.2	23	178	175	--	.90	.79	.17	.20
20... A	--	--	--	--	--	--	--	--	--	--
28...	18	.3	22	229	211	--	.93	.94	1.1	1.0
JUN 18...	22	.3	24	266	269	--	.69	.71	.42	.39
JUL 23... A	28	.5	--	404	--	1.2	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
29...	25	.4	26	286	290	--	.84	.81	.91	.95
AUG 19...	32	.5	25	316	311	--	3.1	1.3	.78	.80
SEP 23...	29	.5	26	248	284	--	.60	.60	1.7	1.8

MOJAVE RIVER BASIN

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, DIS- SOLVED (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, ORTHOPH SPHATE DISSOL. (MG/L AS P)
OCT 25...	.54	.37	1.1	.20	.90	2.3	1.9	.38	.38	--
NOV 28... A	--	--	--	--	--	--	--	--	--	.24
29...	.00	.43	.51	.00	1.2	1.5	2.2	.40	.40	--
DEC 20...	.70	.41	.94	.44	.50	2.2	1.6	.29	.23	--
FEB 01... A	--	--	--	--	--	--	--	--	--	.10
07...	.62	.34	1.3	.30	1.0	2.5	2.2	.25	.24	--
MAR 21...	.87	.73	1.1	.19	.91	1.6	1.4	.14	.09	--
APR 16... A	--	--	--	--	--	--	--	--	--	.16
23...	.44	.51	1.0	.00	1.1	1.5	1.6	.06	.04	--
MAY 09...	2.0	.05	2.2	2.0	.25	3.1	1.0	.18	.14	--
20... A	--	--	--	--	--	--	--	--	--	--
28...	.30	.50	1.4	.00	1.5	2.3	2.4	.48	.45	--
JUN 18...	.98	.61	1.4	.40	1.0	2.1	1.7	.48	.27	--
JUL 23... A	--	--	--	--	--	--	--	--	--	.33
24...	--	--	--	--	--	--	--	--	--	--
29...	.69	.55	1.6	.10	1.5	2.4	2.3	.52	.44	--
AUG 19...	.82	.40	1.6	.40	1.2	4.7	2.5	.54	.37	--
SEP 23...	.40	.30	2.1	.00	2.1	2.7	2.7	.57	.53	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CB)	CADMIUM DIS- SOLVED (UG/L AS CD)
OCT 25...	1250	6	1	5	200	100	60	--	1	0	<1
NOV 28... A	1605	--	--	--	--	--	--	100	--	--	--
DEC 20...	1245	--	--	--	--	--	--	--	--	--	--
FEB 01... A	1520	--	--	--	--	--	--	100	--	--	--
07...	1300	2	0	5	--	--	--	--	1	0	<1
APR 16... A	1525	--	--	--	--	--	--	100	--	--	--
MAY 09...	1245	1	0	1	--	--	--	--	0	--	<1
20... A	1320	--	--	0	--	--	--	--	--	--	0
JUN 18...	1000	--	--	--	--	--	--	--	--	--	--
JUL 23... A	1510	--	--	--	--	--	--	200	--	--	--
29...	1000	6	2	4	100	60	40	--	0	--	<1
SEP 23...	1100	--	--	--	--	--	--	--	--	--	--

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

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUSPENDED RECOVERABLE (UG/L AS CR)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUSPENDED RECOVERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUSPENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE)
OCT 25...	8	8	0	0	0	<3	5	3	2	370	350
NOV 28... A	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--
FEB 01... A	--	--	--	--	--	--	--	--	--	--	--
07... A	0	0	0	0	0	<3	6	6	0	380	340
APR 16... A	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	0	0	0	2	--	<3	1	0	4	1200	1200
20... A	--	--	--	--	--	--	--	--	0	--	--
JUN 18...	--	--	--	--	--	--	--	--	--	--	--
JUL 23... A	--	--	--	--	--	--	--	--	--	--	--
29...	10	10	0	0	--	<3	4	2	2	500	--
SEP 23...	--	--	--	--	--	--	--	--	--	--	--
DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUSPENDED RECOVERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUSPENDED RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY, TOTAL RECOVERABLE (UG/L AS HG)	MERCURY, SUSPENDED RECOVERABLE (UG/L AS HG)	MERCURY, DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
OCT 25...	20	3	3	0	30	30	5	.3	.3	.0	4
NOV 28... A	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	--	--	--	--	--	--
FEB 01... A	--	--	--	--	--	--	--	--	--	--	--
07... A	40	15	15	0	20	10	10	.8	.7	.1	6
APR 16... A	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	20	9	6	3	40	40	2	.7	.0	.8	6
20... A	0	--	--	0	--	--	--	.0	--	--	--
JUN 18...	--	--	--	--	--	--	--	--	--	--	--
JUL 23... A	--	--	--	--	--	--	--	--	--	--	--
29...	<10	5	5	0	40	20	20	.1	.1	.0	3
SEP 23...	--	--	--	--	--	--	--	--	--	--	--
DATE	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUSPENDED (UG/L AS SE)	SELENIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOVERABLE (UG/L AS AG)	SILVER, SUSPENDED RECOVERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 25...	2	2	0	0	0	0	0	0	0	0	8
NOV 28... A	--	--	--	--	--	--	--	--	--	--	--
DEC 20...	--	--	--	--	--	0	--	--	--	--	--
FEB 01... A	--	--	--	--	--	--	--	--	--	--	--
07... A	6	0	0	0	0	0	0	0	80	40	40
APR 16... A	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	5	1	0	0	0	0	0	0	30	20	8
20... A	--	--	--	--	--	--	--	--	--	--	0
JUN 18...	--	--	--	--	--	0	--	--	--	--	--
JUL 23... A	--	--	--	--	--	--	--	--	--	--	--
29...	3	0	0	0	0	0	0	0	20	20	5
SEP 23...	--	--	--	--	--	0	--	--	--	--	--

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

MOJAVE RIVER BASIN

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
OCT					
25...	1250	--	5.6	.1	--
NOV					
28... A	1605	--	--	--	.10
DEC					
20...	1245	11	--	--	--
FEB					
01... A	1520	--	--	--	.03
07...	1300	--	8.4	.4	--
MAR					
21...	1340	4.1	--	--	--
APR					
16... A	1525	--	--	--	.09
23...	1300	3.9	--	--	--
MAY					
09...	1245	--	7.0	.4	--
28...	1130	3.8	--	--	--
JUN					
18...	1000	11	--	--	--
JUL					
23... A	1510	--	--	--	.08
29...	1000	--	3.8	.4	--
AUG					
19...	1200	18	--	--	--
SEP					
23...	1100	--	9.4	--	--

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	NOV 29,79 1230	APR 23,80 1300	MAY 28,80 1130	JUN 18,80 1000
TOTAL CELLS/ML	2000	520	940	9000
DIVERSITY: DIVISION	1.0	1.0	1.0	1.3
..CLASS	1.0	1.0	1.0	1.3
...ORDER	0.0	1.9	1.7	2.1
...FAMILY	0.0	2.6	2.8	2.7
...GENUS	0.0	2.7	2.8	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	340#	37	--	-
...HYDRODICTYACEAE								
....PEDIASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....MICRACTINIUM	--	-	--	-	69	7	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	28	3	--	-
...DICTYOSPHAERIUM	--	-	64	13	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	--	-	100#	20	83	9	3600#	40
..TETRASPORALES								
...PALMELLACEAE								
....SPHAEROCYSTIS	--	-	100#	20	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	--	-	69	7	1200	13
...VOLVOCAEAE								
....PANDORINA	--	-	--	-	--	-	1100	12
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCAEAE								
....CYCLOTELLA	160	8	64	13	110	12	200	2
....MELOSIRA	--	-	13	2	--	-	--	-
...PENNALES								
....ACHNANTHACEAE								
....ACHNANTHES	160	8	--	-	55	6	--	-
...CYMBELLACEAE								
....CYMBELLA	29	1	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	540	6
...SYNEDRA	58	3	--	-	--	-	--	-
...GOMPHONEMACEAE								
....GOMPHONEMA	29	1	13	2	--	-	--	-
...NAVICULACEAE								
....NAVICULA	250	12	39	7	41	4	100	1
...NITZSCHIACEAE								
....NITZSCHIA	690#	34	120#	22	120	13	870	10
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE	29	1	--	-	--	-	--	-
...CRYPTOMONADALES								
...CRYPTOCHRYSIDACEAE								
....CHROOMONAS	--	-	--	-	14	1	--	-
...CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
...CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	270	3
...ANACYSTIS	--	-	--	-	--	-	130	1
...HORMOGONALES								
...NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	340	4
...OSCILLATORIAEAE								
....OSCILLATORIA	--	-	--	-	--	-	600	7
...SCHIZOTHRIX	620#	30	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
....EUGLENA	14	1	--	-	--	-	--	-

See footnotes at end of table.

MOJAVE RIVER BASIN

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 24,80 1000	AUG 19,80 1200	SEP 23,80 1100
TOTAL CELLS/ML	3700	4700	1500
DIVERSITY: DIVISION	1.3	0.8	1.3
..CLASS	1.3	0.8	1.3
...ORDER	1.8	1.0	2.0
...FAMILY	2.3	1.3	2.7
....GENUS	2.3	1.3	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...COELASTRACEAE						
....COELASTRUM	--	-	--	-	--	-
...HYDRODICTYACEAE						
...PEDIASTRUM	520	14	520	11	--	-
...MICRACTINIACEAE						
....MICRACTINIUM	--	-	--	-	--	-
...OOCYSTACEAE						
...ANKISTRODESMUS	--	-	--	-	--	-
...DICTYOSPHAERIUM	39	1	--	-	--	-
...SCENEDESMACEAE						
...SCENEDESMUS	1200#	33	150	3	65	4
...TETRASPORALES						
...PALMELLACEAE						
...SPHAEROCYSTIS	--	-	--	-	--	-
...VOLVOCALES						
...CHLAMYDOMONADACEAE						
...CHLAMYDOMONAS	39	1	--	-	13	1
...VOLVOCAEAE						
...PANDORINA	--	-	--	-	--	-
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
...CYCLOTELLA	--	-	*	0	52	4
...MELOSIRA	--	-	--	-	--	-
...PENNALES						
...ACHNANTHACEAE						
...ACHNANTHES	--	-	--	-	--	-
...CYMBELLACEAE						
...CYMBELLA	--	-	--	-	--	-
...FRAGILARIACEAE						
...FRAGILARIA	--	-	26	1	--	-
...SYNEDRA	--	-	--	-	--	-
...GOMPHONEMATACEAE						
...GOMPHONEMA	--	-	--	-	--	-
...NAVICULACEAE						
...NAVICULA	64	2	39	1	100	7
...NITZSCHACEAE						
...NITZSCHIA	190	5	90	2	190	13
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE	--	-	--	-	--	-
...CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
...CHROOMONAS	--	-	--	-	13	1
...CRYPTOMONADACEAE						
...CRYPTOMONAS	--	-	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	--	-	--	-	--	-
...ANACYSTIS	500	14	65	1	250#	17
...HORMOGONALES						
...NOSTOCACEAE						
...ANABAENA	--	-	190	4	210	14
...OSCILLATORIAEAE						
...OSCILLATORIA	1100#	30	3500#	76	540#	37
...SCHIZOTHRIX	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
...EUGLENA	--	-	*	0	26	2

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR 1979 TO SEPTEMBER 1980

PERIPHYTON

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT 25...	1250	2566	.947	<.042	6.05	3.62	28
APR 23...	1300	3774	.159	.000	1.88	1.28	33

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	500	432	465				---	---	---	380	346	364
2	503	427	465				---	---	---	376	348	359
3	486	426	455				---	---	---	371	345	357
4	494	422	460				---	---	---	693	345	395
5	491	433	467				---	---	---	684	336	393
6	486	410	449				---	---	---	362	332	344
7	483	415	448				---	---	---	352	322	337
8	488	424	455				---	---	---	355	321	335
9	485	431	453				---	---	---	353	317	333
10	485	419	453				---	---	---	348	316	326
11	488	426	453				---	---	---	344	306	323
12	481	429	449				---	---	---	337	307	321
13	488	434	455				---	---	---	335	305	311
14	489	429	455				---	---	---	333	301	308
15	478	398	446				---	---	---	324	298	308
16	474	422	444				---	---	---	328	298	305
17	469	419	439				---	---	---	327	299	308
18	468	410	432				---	---	---	313	287	298
19	451	411	430				---	---	---	309	283	296
20	464	416	438				---	---	---	686	284	310
21	453	401	427				429	393	417	304	276	285
22	477	413	443				416	386	404	297	275	282
23	474	416	440				806	396	533	301	275	285
24	477	397	445				479	395	415	305	269	281
25	---	---	---				427	383	397	292	262	276
26	---	---	---				405	383	392	286	252	267
27	---	---	---				710	376	453	287	251	265
28	---	---	---				716	372	502	277	247	255
29	---	---	---				393	369	381	---	---	---
30	---	---	---				391	361	376	---	---	---
31	---	---	---				382	360	369	---	---	---
MONTH	---	---	---				---	---	---	693	247	315

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

10261500 MOJAVE RIVER AT LOWER NARROWS, NEAR VICTORVILLE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	11.5	7.0	9.5	14.5	8.5	11.0	22.5	10.0	15.0
2	---	---	---	11.5	8.0	10.0	19.0	8.0	13.0	26.5	10.5	17.0
3	---	---	---	11.0	8.5	9.5	20.5	10.0	15.0	20.0	10.5	20.0
4	---	---	---	14.0	8.0	11.0	20.0	11.0	15.0	29.5	12.5	21.5
5	7.5	5.5	7.0	12.0	9.0	10.5	20.0	11.0	15.0	29.0	12.5	19.5
6	7.5	6.0	6.5	11.0	8.0	10.0	20.5	12.0	15.0	29.0	11.5	18.5
7	5.5	4.0	5.0	13.5	6.0	10.0	22.0	10.0	16.0	26.5	11.5	17.5
8	4.5	1.5	3.0	13.0	7.5	10.0	23.0	12.0	17.0	28.0	11.0	18.5
9	5.5	2.0	4.0	13.5	7.0	10.0	22.0	12.0	16.5	21.0	12.0	15.5
10	5.0	1.0	3.0	11.5	7.0	9.5	24.0	12.5	17.5	24.0	12.5	17.5
11	4.5	1.0	2.5	14.5	8.0	11.0	20.5	11.5	15.5	---	---	---
12	3.0	0.0	1.5	15.0	8.0	11.5	22.5	9.5	15.5	---	---	---
13	6.5	1.0	4.0	16.5	7.5	12.0	24.0	11.0	17.5	---	---	---
14	8.5	5.5	7.0	17.0	8.0	12.5	24.5	13.5	18.5	---	---	---
15	7.5	5.5	6.5	15.5	9.0	12.0	26.0	14.0	19.5	---	---	---
16	9.0	6.0	7.5	15.0	7.0	11.0	26.5	9.0	18.5	---	---	---
17	10.0	6.0	8.0	16.5	7.5	11.5	23.5	8.5	15.5	---	---	---
18	9.5	7.0	8.0	11.0	7.5	9.5	25.0	10.5	17.0	---	---	---
19	9.0	7.0	8.0	16.0	7.5	11.5	23.5	10.5	16.0	---	---	---
20	9.5	6.0	8.0	17.0	9.0	12.5	20.5	7.5	13.5	---	---	---
21	10.5	7.0	8.5	12.0	9.0	11.0	---	---	---	---	---	---
22	12.0	6.0	9.0	11.5	7.0	9.5	---	---	---	---	---	---
23	12.0	7.0	9.5	16.0	7.0	11.0	12.5	8.5	9.5	---	---	---
24	11.0	6.5	9.0	15.0	8.5	11.5	20.5	8.5	13.5	---	---	---
25	12.5	6.5	9.5	13.0	7.5	10.5	22.0	9.0	15.5	---	---	---
26	14.5	7.0	10.5	16.5	8.5	12.0	24.5	12.0	17.5	---	---	---
27	14.5	7.0	10.5	17.0	8.5	12.0	21.5	10.5	15.5	---	---	---
28	11.5	7.0	9.5	17.0	9.5	13.0	20.5	10.0	13.5	---	---	---
29	12.5	7.0	10.0	19.5	9.0	14.0	24.0	11.0	18.0	---	---	---
30	---	---	---	17.5	10.0	13.5	25.5	12.5	17.0	---	---	---
31	---	---	---	17.0	10.0	13.0	---	---	---	---	---	---
MONTH	14.5	0.0	7.0	19.5	6.0	11.0	26.5	7.5	15.5	---	---	---

WATER YEAR 1980 MAX 34.0 MIN 0.0 MEAN 15.5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						
25...	1250	19.5	31	72	6.0	64
NOV						
29...	1230	12.0	35	14	1.3	59
DEC						
20...	1245	6.0	50	56	7.6	23
FEB						
07...	1300	10.0	43	96	11	9
MAR						
21...	1340	14.0	720	353	686	13
APR						
23...	1300	10.0	234	312	197	23
MAY						
09...	1245	21.0	127	59	20	51
28...	1130	20.0	51	82	11	34
JUN						
18...	1000	24.0	30	195	16	35
JUL						
29...	1000	32.0	19	156	8.0	9
AUG						
19...	1200	24.0	25	309	21	61
SEP						
23...	1100	21.0	25	96	6.6	45

10262000 MOJAVE RIVER NEAR HODGE, CA

LOCATION.--Lat 34°50'09", long 117°11'27", in SW¼SE¼SE¼ sec.28, T.9 N., R.3 W., San Bernardino County, Hydrologic Unit 18090208, at county bridge 1.5 mi (2.4 km) north of Hodge, 10.9 mi (17.5 km) southwest of Barstow, and 44.5 mi (71.6 km) downstream from Silverwood Lake.

DRAINAGE AREA.--1,091 mi² (2,826 km²).

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 (689 m), from topographic map. Prior to Oct. 1, 1970, at different datum.

REMARKS.--Records poor. No gage-height record Jan. 31 to Sept. 30. Regulation by Lake Arrowhead, capacity, 48,000 acre-ft (59.2 hm³) used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft (96.2 hm³) used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft (111 hm³), with ungated opening, capacity, 23,500 ft³/s (666 m³/s). Diversion and pumping for irrigation of about 12,000 acres (48.6 km²) above station.

AVERAGE DISCHARGE.--12 years, (water years 1931-32, 1971-80), 48.1 ft³/s (1,362 m³/s), 34,850 acre-ft/yr (43.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft³/s (360 m³/s) Feb. 10, 1978, gage height, 8.80 ft (2.682 m), no flow all or most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9,430 ft³/s (267 m³/s) Feb. 17; no flow for many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	200	300	185	160	2.4			
2				0	80	600	185	150	1.3			
3				0	55	2480	195	130	1.0			
4				0	41	1380	175	115	.50			
5				0	33	730	155	105	.20			
6				0	28	1600	130	92	0			
7				0	25	1680	130	82	0			
8				0	22	1350	160	74	0			
9				0	20	1200	200	64	0			
10				0	19	1100	180	56	0			
11				0	18	1020	150	48	0			
12				0	18	960	140	45	0			
13				0	17	930	135	42	0			
14				0	730	880	135	38	0			
15				0	3010	840	150	34	0			
16				0	1340	810	160	32	0			
17				0	9430	770	170	30	0			
18				0	5710	750	155	28	0			
19				0	7400	710	150	26	0			
20				0	8500	690	150	25	0			
21				0	4750	670	155	24	0			
22				0	3780	650	150	24	0			
23				0	2120	630	135	24	0			
24				0	1330	620	125	23	0			
25				0	844	610	115	21	0			
26				0	622	580	105	19	0			
27				0	484	550	95	16	0			
28				0	355	500	88	13	0			
29				594	333	400	92	10	0			
30				1510	---	270	115	6.5	0			
31		---		950	---	200	---	4.5	---			---
TOTAL	0	0	0	3054	51314	26460	4365	1561.0	5.40	0	0	0
MEAN	0	0	0	98.5	1769	854	146	50.4	.18	0	0	0
MAX	0	0	0	1510	9430	2480	200	160	2.4	0	0	0
MIN	0	0	0	0	17	200	88	4.5	0	0	0	0
AC-FT	0	0	0	6060	101800	52480	8660	3100	11	0	0	0
CAL YR 1979	TOTAL	16061.40	MEAN	44.0	MAX	1400	MIN	0	AC-FT	31860		
WTR YR 1980	TOTAL	86759.40	MEAN	237	MAX	9430	MIN	0	AC-FT	172100		

10262500 MOJAVE RIVER AT BARSTOW, CA

LOCATION.--Lat 34°54'25", long 117°01'19", in SE¼SW¼SW¼ sec.31, T.10 N., R.1 W., San Bernardino County, Hydrologic Unit 18090208, on left bank 75 ft (23 m) upstream from bridge on U.S. Highway 91 at Barstow.

DRAINAGE AREA.--1,291 mi² (3,344 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,089.34 ft (636.831 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Regulation by Lake Arrowhead, capacity, 48,000 acre-ft (59.2 hm³) used principally for recreation, Silverwood Lake, capacity, 78,000 acre-ft (96.2 hm³) used for the storage and distribution of imported water and recreation, and Mojave Forks Reservoir, capacity, 89,700 acre-ft (111 hm³) with ungated opening, capacity, 23,500 ft³/s (666 m³/s). Diversions and pumping for irrigation of about 15,000 acres (60.7 km²) above station.

AVERAGE DISCHARGE.--50 years, 25.7 ft³/s (0.728 m³/s), 18,620 acre-ft/yr (23.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,300 ft³/s (1,820 m³/s) Mar. 3, 1938, gage height, 8.60 ft (2.621 m), on basis of slope-area measurement of maximum flow; no flow for most months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,400 ft³/s (323 m³/s) Feb. 17, gage height, 3.80 ft (1.158 m); no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	1.5	150	125	32				
2				0	0	150	120	88				
3				0	0	2000	114	59				
4				0	0	900	138	34				
5				0	0	500	100	34				
6				0	0	1000	72	15				
7				0	0	1500	72	0				
8				0	0	1150	114	0				
9				0	0	1000	138	0				
10				0	0	920	114	0				
11				0	0	870	55	0				
12				0	0	860	88	0				
13				0	.04	830	39	0				
14				0	4.4	770	28	0				
15				0	2390	720	30	0				
16				0	3440	680	28	0				
17				0	8280	660	30	0				
18				0	5280	640	30	0				
19				0	5750	620	25	0				
20				0	7450	590	23	0				
21				0	4680	580	23	0				
22				0	3300	565	28	0				
23				0	2000	550	48	0				
24				0	1300	535	51	0				
25				0	830	520	34	0				
26				0	520	500	25	0				
27				0	400	460	26	0				
28				0	250	420	26	0				
29				50	200	250	37	0				
30				15	---	155	37	0				
31		---		4.5	---	130	---	0	---			---
TOTAL	0	0	0	69.5	46075.94	21175	1818	262	0	0	0	0
MEAN	0	0	0	2.24	1589	683	60.6	8.45	0	0	0	0
MAX	0	0	0	50	8280	2000	138	88	0	0	0	0
MIN	0	0	0	0	0	130	23	0	0	0	0	0
AC-FT	0	0	0	138	91390	42000	3610	520	0	0	0	0
CAL YR 1979	TOTAL	2803.11	MEAN	7.68	MAX	914	MIN	0	AC-FT	5560		
WTR YR 1980	TOTAL	69400.44	MEAN	190	MAX	8280	MIN	0	AC-FT	137700		

MOJAVE RIVER BASIN

10263000 MOJAVE RIVER AT AFTON, CA

LOCATION.--Lat 35°02'14", long 116°23'00", in SW¼NW¼SE¼ 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 (0.5 km) west of Afton.

DRAINAGE AREA.--2,121 mi² (5,493 km²).

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.

GAGE.--Water-stage recorder. Datum of gage is 1,390.15 ft (423.718 m) National Geodetic Vertical Datum of 1929. Dec. 21, 1929, to Sept. 30, 1932, at site 1.7 mi (2.7 km) downstream at different datum; Oct. 1952 to May 1978 at datum 10 ft (3.0 m) higher.

REMARKS.--Records poor. No gage-height record all year due to extreme scour condition caused by 1978 water year floods, making this site unsuitable for gage reinstallation this year. Natural flow affected by ground-water withdrawals, diversions, municipal use, and storage in upstream reservoirs 100 mi (160 km) upstream (station 10261500). Results of discharge measurements made during year given in table below.

AVERAGE DISCHARGE.--29 years (water years 1930-32, 1953-78), 7.19 ft³/s (0.204 m³/s), 5,210 acre-ft/yr (6.42 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,000 ft³/s (510 m³/s) Jan. 26, 1969, gage height, 10.40 ft (3.170 m), from rating curve extended above 3,200 ft³/s (90.6 m³/s) on basis of slope-area measurement of maximum flow; no flow at times many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,280 ft³/s (92.9 m³/s) Feb. 17, gage height 5.85 ft (1.783 m), on basis of slope-area measurement; minimum discharge, not determined this year.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Date	Time	Discharge (ft ³ /s) (m ³ /s)	
Oct. 3	1620	0.62	0.018	Apr. 1	0930	4.05	0.12
Nov. 29	1225	0.87	0.025	May 21	1140	2.03	0.057
Jan. 25	1325	1.23	0.035	July 14	1235	1.69	0.048
Feb. 7	1500	0.99	0.028	July 24	1205	1.82	0.052
Feb. 17	----	3,280	92.9	Sept. 24	1010	1.76	0.050
Feb. 29	1040	6.53	0.19				

10263500 BIG ROCK CREEK NEAR VALYERMO, CA

LOCATION.--Lat 34°25'15", long 117°50'19", in NW¼SE¼NE¼ sec.20, T.4 N., R.9 W., Los Angeles County, Hydrologic Unit 18090206, on left bank 0.1 mi (0.2 km) upstream from Punchbowl Canyon, and 1.9 mi (3.1 km) southeast of Valyermo.

DRAINAGE AREA.--22.9 mi² (59.3 km²).

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 (1,234 m), 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 (0.3 km) downstream (below Punchbowl Canyon) at different datum.

REMARKS.--Records good except those for period of no gage-height record, Jan. 30 to Apr. 15, which are poor. No regulation or diversion above station.

AVERAGE DISCHARGE.--57 years (water years 1924-80), 17.7 ft³/s (0.501 m³/s), 12,820 acre-ft/yr (15.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,300 ft³/s (235 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; minimum daily, 0.70 ft³/s (0.020 m³/s) Nov. 5, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curves extended above 150 ft³/s (4.25 m³/s) on basis of slope-area measurements at gage height 5.00 ft (1.524 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0230	670 19.0	3.69 1.125	Feb. 19	Unknown	Unknown	Unknown
Feb. 16	Unknown	*1,510 42.8	5.00 1.524	Mar. 1	Unknown	Unknown	Unknown

Minimum daily discharge, 5.1 ft³/s (0.14 m³/s) Dec. 28, 29; Jan. 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	6.2	5.7	5.4	47	200	87	73	58	21	20	14
2	8.3	6.6	6.0	5.4	38	175	84	74	57	20	20	14
3	8.4	6.3	5.7	5.3	30	155	81	74	55	30	20	14
4	8.3	6.5	5.7	5.2	24	140	78	75	54	29	20	13
5	8.3	6.6	5.8	5.2	20	130	75	75	53	28	20	13
6	7.8	6.6	6.0	5.1	18	139	74	76	52	28	20	13
7	7.8	6.7	6.0	5.1	17	152	72	76	51	27	19	13
8	7.9	6.3	5.7	5.1	16	137	70	76	49	27	19	13
9	7.9	6.3	5.7	7.3	15	120	68	76	48	26	19	13
10	7.8	6.2	5.7	13	14	108	67	76	47	25	19	12
11	7.6	6.1	5.7	25	13	98	65	76	46	25	19	12
12	7.6	6.2	5.7	21	13	93	64	76	46	24	19	12
13	7.7	5.9	5.4	18	13	87	63	75	45	24	19	12
14	7.7	5.9	5.4	22	60	85	62	75	44	24	19	12
15	7.7	5.9	5.6	21	400	82	62	75	43	24	19	12
16	7.6	5.9	5.7	17	1400	79	62	75	43	23	19	12
17	7.5	5.9	5.7	16	1200	77	69	74	42	23	19	12
18	7.5	5.7	5.4	15	1000	75	72	74	42	22	18	11
19	7.1	5.8	5.4	15	1200	73	73	74	40	22	19	11
20	7.6	5.4	5.3	15	860	71	74	73	40	22	18	11
21	7.6	5.9	5.4	14	550	70	73	72	39	20	18	11
22	7.5	5.8	5.4	14	430	70	72	71	38	20	17	9.7
23	7.5	5.6	5.4	14	330	70	68	73	38	19	17	9.6
24	7.1	5.5	5.5	14	240	70	65	71	37	19	17	9.4
25	6.9	5.4	5.6	14	220	70	64	70	37	19	17	9.2
26	6.2	5.6	5.4	13	180	71	66	70	35	19	16	9.1
27	6.4	5.7	5.3	13	155	82	69	68	34	19	16	8.9
28	6.9	5.6	5.1	21	140	98	70	67	33	21	15	9.3
29	6.7	5.7	5.1	189	135	95	71	64	33	21	15	9.3
30	6.8	5.7	5.3	110	---	91	72	62	32	20	15	9.2
31	6.5	---	5.3	70	---	88	---	60	---	20	15	---
TOTAL	232.6	179.5	172.1	733.1	8778	3151	2112	2246	1311	731	562	343.7
MEAN	7.50	5.98	5.55	23.6	303	102	70.4	72.5	43.7	23.6	18.1	11.5
MAX	8.4	6.7	6.0	189	1400	200	87	76	58	31	20	14
MIN	6.2	5.4	5.1	5.1	13	70	62	60	32	19	15	8.9
AC-FT	461	356	341	1450	17410	6250	4190	4450	2600	1450	1110	682
CAL YR 1979 TOTAL	9141.5			MEAN 25.0	MAX 95	MIN 5.1	AC-FT 18130					
WTR YR 1980 TOTAL	20552.0			MEAN 56.2	MAX 1400	MIN 5.1	AC-FT 40760					

ANTELOPE VALLEY

10264600 OAK CREEK NEAR MOJAVE, CA

LOCATION.--Lat 35°03'00", long 118°21'25", in NW¼ sec.15, T.11 N., R.14 W., Kern County, Hydrologic Unit 18090206, on upstream right wingwall of culvert, 100 ft (30 m) downstream from unnamed tributary, 0.1 mi (0.2 km) west of junction of Oak Creek and Willow Springs Roads, and 10.5 mi (16.9 km) west of Mojave.

DRAINAGE AREA.--15.8 mi² (40.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,100 ft (1,250 m), from topographic map.

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

AVERAGE DISCHARGE.--23 years, 1.01 ft³/s (0.029 m³/s), 732 acre-ft/yr (903,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,740 ft³/s (49.3 m³/s) May 14, 1973, by slope-area measurement, caused by failure of small earthen dam 4 mi (6 km) upstream during intense local thunderstorm; maximum gage height, 10.53 ft (3.210 m) May 14, 1973, ponding at culvert 0.1 mi (0.2 km) downstream; no flow for some months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44 ft³/s (1.25 m³/s) Feb. 16, gage height, 2.23 ft (0.680 m); minimum daily, 0.09 ft³/s (0.003 m³/s) Sept. 5-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.73	.76	.87	1.3	3.4	3.8	2.7	1.9	1.4	.31	.12
2	.62	.68	.77	.87	1.2	5.4	3.8	2.6	1.9	1.4	.28	.10
3	.63	.70	.75	.87	1.1	4.9	3.6	2.6	1.8	1.4	.28	.10
4	.62	.70	.71	.95	1.2	3.9	3.5	2.6	1.8	1.4	.28	.10
5	.61	.70	.71	.97	1.2	4.5	3.5	2.6	1.8	1.4	.28	.09
6	.56	.70	.76	.95	1.2	5.3	3.3	2.5	1.8	1.4	.28	.09
7	.59	.72	.83	.96	1.3	4.5	3.2	2.5	1.7	1.3	.25	.09
8	.63	.72	.77	.97	1.3	4.2	3.2	2.5	1.7	1.3	.22	.12
9	.62	.72	.78	1.3	1.2	4.1	3.1	2.5	1.7	1.2	.18	.12
10	.59	.72	.76	1.2	1.2	4.2	3.1	2.4	1.7	1.2	.16	.12
11	.59	.71	.74	2.4	1.2	4.1	3.1	2.4	1.6	1.1	.16	.12
12	.60	.69	.69	1.8	1.2	3.9	3.1	2.4	1.6	1.1	.14	.12
13	.63	.71	.70	1.4	1.5	4.0	3.1	2.4	1.7	1.0	.14	.12
14	.63	.71	.72	1.4	2.9	3.9	3.1	2.3	1.6	.99	.18	.12
15	.63	.71	.73	1.3	1.8	3.9	3.1	2.3	1.5	.94	.22	.12
16	.62	.72	.73	1.2	9.2	3.9	3.0	2.3	1.5	.89	.22	.12
17	.63	.74	.73	1.1	5.4	3.9	3.0	2.3	1.5	.85	.22	.12
18	.62	.72	.74	1.2	3.5	4.1	3.0	2.2	1.2	.80	.25	.12
19	.65	.74	.73	1.1	5.2	3.9	3.0	2.2	1.2	.76	.28	.13
20	.72	.74	.74	1.1	4.8	3.9	2.9	2.2	1.2	.71	.28	.14
21	.68	.72	.81	1.1	4.7	3.8	2.9	2.2	1.1	.66	.28	.13
22	.67	.73	.82	1.1	3.9	3.8	2.9	2.1	1.0	.62	.27	.15
23	.67	.71	.80	1.1	3.7	3.8	2.9	2.1	.99	.57	.16	.14
24	.66	.71	.85	1.1	3.7	3.8	2.8	2.1	1.0	.53	.16	.13
25	.63	.69	1.0	1.1	3.7	4.1	2.8	2.1	1.0	.48	.19	.13
26	.68	.73	.92	1.1	3.5	4.6	2.8	2.0	1.2	.43	.13	.12
27	.70	.74	.91	1.0	3.5	4.0	2.8	2.0	1.1	.43	.12	.12
28	.68	.74	.87	1.4	3.4	3.8	2.7	2.0	1.1	.43	.12	.13
29	.70	.74	.87	2.6	3.3	3.8	2.7	2.0	1.2	.39	.12	.12
30	.71	.76	.87	1.4	---	3.8	2.7	1.9	1.4	.39	.10	.12
31	.72	---	.87	1.3	---	3.8	---	1.9	---	.39	.12	---
TOTAL	19.91	21.55	24.44	38.21	82.3	127.0	92.5	70.9	43.49	27.86	6.38	3.57
MEAN	.64	.72	.79	1.23	2.84	4.10	3.08	2.29	1.45	.90	.21	.12
MAX	.72	.76	1.0	2.6	9.2	5.4	3.8	2.7	1.9	1.4	.31	.15
MIN	.56	.68	.69	.87	1.1	3.4	2.7	1.9	.99	.39	.10	.09
AC-FT	39	43	48	76	163	252	183	141	86	55	13	7.1
CAL YR 1979	TOTAL	865.02		MEAN 2.37	MAX 7.2	MIN .50	AC-FT 1720					
WTR YR 1980	TOTAL	558.11		MEAN 1.52	MAX 9.2	MIN .09	AC-FT 1110					

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

LOCATION.--Lat 37°20'59", long 118°27'41", in SE¼SE¼ sec.9, T.7 S., R.32 E., Inyo County, Hydrologic Unit 18090102, below powerplant No. 6 tailrace, and 3.6 mi (5.8 km) west of Bishop.

DRAINAGE AREA.--104 mi² or 269 km² (natural flow).

PERIOD OF RECORD.--October 1936 to current year. Monthly and yearly mean discharges 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 (25.5 hm³) 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).--⁴⁶45 years, 99.5 ft³/s (2.818 m³/s), 72,090 acre-ft/yr (88.9 hm³/yr).
(Natural flow).--⁴⁸45 years, 105 ft³/s (2.974 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 809 ft³/s (22.9 m³/s) Sept. 6, 1978; minimum daily, 32 ft³/s (0.91 m³/s) Dec. 19, 1977.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, ⁷³⁶442 ft³/s (12.5 m³/s) July 2; minimum daily, ⁵⁹49 ft³/s (1.39 m³/s) Jan. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	69	73	61	79	105	128	157	174	374	352	140
2	95	69	68	53	78	112	125	152	177	442	361	139
3	91	69	60	50	78	114	126	162	127	417	360	140
4	90	69	56	50	78	113	126	165	177	386	348	137
5	90	68	57	51	78	117	126	173	179	366	327	137
6	90	69	57	51	76	114	129	163	179	347	310	135
7	92	69	66	50	81	113	127	164	182	295	281	136
8	91	67	67	50	82	109	129	156	196	229	232	136
9	92	70	69	50	80	110	132	163	213	222	228	137
10	91	71	68	49	81	111	130	159	222	219	221	141
11	90	71	64	56	80	108	131	150	228	219	217	136
12	91	71	66	89	80	109	130	166	227	221	212	135
13	76	71	67	107	77	111	129	166	217	223	192	135
14	57	73	64	84	80	110	136	162	215	229	181	135
15	63	71	61	73	83	109	131	161	217	231	172	134
16	62	70	61	67	96	108	138	163	224	230	172	133
17	63	71	61	71	99	111	136	176	221	233	162	138
18	62	70	59	74	109	111	147	179	237	295	156	138
19	63	71	61	73	109	113	149	198	248	373	155	135
20	79	71	59	75	100	119	154	206	259	350	151	136
21	76	71	60	70	104	124	154	224	260	330	148	138
22	76	72	61	73	102	121	148	219	262	382	147	138
23	76	71	62	80	103	120	149	218	255	341	153	137
24	81	72	55	75	98	122	150	205	246	366	149	137
25	81	69	60	78	98	119	151	198	243	387	149	138
26	84	69	63	78	99	118	155	186	254	381	148	139
27	81	71	59	77	98	126	153	178	268	388	148	134
28	83	71	52	78	98	122	152	175	266	343	144	139
29	79	66	56	73	102	126	157	176	282	361	144	139
30	75	70	56	76	---	128	155	171	325	372	138	133
31	63	---	59	81	---	129	---	171	---	350	139	---
TOTAL	2496	2102	1907	2123	2606	3582	4183	5462	6780	9802	6397	4105
MEAN	80.5	70.1	61.5	68.5	89.9	116	139	176	226	316	206	137
MAX	113	73	73	107	109	129	157	224	325	442	361	141
MIN	57	66	52	49	76	105	125	150	127	219	138	133
AC-FT	4950	4170	3780	4210	5170	7100	8300	10830	13450	19440	12690	8140
a	2980	2320	2440	3570	2940	2670	3860	9760	21060	26790	12400	4570

CAL YR 1979 TOTAL 37651 MEAN 103 MAX 192 MIN 48 AC-FT 74680 a 68420
WTR YR 1980 TOTAL 51545 MEAN 141 MAX 442 MIN 49 AC-FT 102200 a 95360

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 SW¼NE¼ sec.26, T.10 S., R.34 E., Inyo County, Hydrologic Unit 18090102, about 100 ft (30 m) west of center of dam, and 8.4 mi (13.5 km) southeast of Big Pine.

DRAINAGE AREA.--1,964 mi² (5,087 km²).

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 (1,177 m), from topographic map.

REMARKS.--Records poor. Flow regulated since 1941 by Lake Crowley, capacity, 183,500 acre-ft (226 km³) and several small reservoirs, combined capacity, 41,400 acre-ft (51.0 km³). Diversions from both main stream and tributaries. Water imported from Mono Basin since 1941 for diversion to Los Angeles Aqueduct which diverts 4 mi (6 km) downstream.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 919 ft³/s (26.0 m³/s) Aug. 6, 1980; minimum daily, 5.0 ft³/s (0.14 m³/s) Sept. 15, 16, 25-30, 1976, Mar. 29, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 919 ft³/s (26.0 m³/s) Aug. 6; minimum daily, 10 ft³/s (0.28 m³/s) Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	678	252	651	556	438	597	772	743	772	613	828	698
2	678	248	651	556	438	597	772	743	769	676	828	695
3	648	250	624	556	438	595	566	743	746	678	831	701
4	371	254	600	556	435	595	10	743	654	678	834	704
5	246	461	600	556	435	600	11	746	624	678	876	676
6	426	648	595	556	435	692	11	718	579	678	919	654
7	538	648	574	556	433	766	11	673	553	676	913	656
8	587	645	543	556	433	763	11	654	553	704	916	656
9	587	654	545	556	433	752	11	651	505	726	910	656
10	584	651	548	556	430	772	12	651	430	723	904	656
11	582	643	545	556	433	772	12	648	403	723	793	654
12	553	643	548	556	435	775	12	695	430	726	698	654
13	561	645	550	556	435	775	12	720	464	726	643	654
14	569	645	553	495	433	778	12	720	478	640	605	651
15	553	643	553	449	433	775	12	720	481	571	603	645
16	540	556	553	449	433	778	12	692	493	582	600	645
17	530	500	553	454	433	778	12	648	456	584	597	648
18	528	500	553	454	433	772	15	648	426	579	597	648
19	471	561	553	454	435	793	252	648	428	574	600	645
20	403	645	553	454	438	807	746	603	430	576	665	651
21	405	645	553	454	440	798	746	579	428	579	701	651
22	403	645	556	345	440	795	781	579	426	582	704	651
23	401	645	556	250	438	790	825	548	428	582	698	651
24	407	645	556	250	419	787	810	530	428	584	695	648
25	407	645	553	250	419	781	793	528	405	651	692	648
26	407	645	556	250	419	778	787	525	449	706	690	648
27	312	645	556	252	421	778	790	656	574	706	687	648
28	252	645	556	250	520	775	798	723	571	775	690	645
29	256	645	556	248	595	775	775	723	571	825	692	643
30	254	645	556	248	---	772	743	746	574	825	690	643
31	252	---	556	318	---	772	---	772	---	825	695	---
TOTAL	14389	17142	17555	13552	12800	23133	11132	20716	15528	20751	22794	19723
MEAN	464	571	566	437	441	746	371	668	518	669	735	657
MAX	678	654	651	556	595	807	825	772	772	825	919	704
MIN	246	248	543	248	419	595	10	525	403	571	597	643
AC-FT	28540	34000	34820	26880	25390	45880	22080	41090	30800	41160	45210	39120
CAL YR 1979	TOTAL	216804.0	MEAN	594	MAX	801	MIN	5.0	AC-FT	430000		
WTR YR 1980	TOTAL	209215.0	MEAN	572	MAX	919	MIN	10	AC-FT	415000		

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

PERIOD OF DAILY RECORD.--
 SPECIFIC CONDUCTANCE: May 1975 to current year.
 WATER TEMPERATURES: February 1975 to current year.

INSTRUMENTATION.--Specific-conductance recorder since May 1975. Temperature recorder since February 1975.

REMARKS.--Records good. Periods of missing temperature and conductivity data due to equipment malfunction or no release of water..

COOPERATION.--Pesticide samples were collected by U.S. Geological Survey and analyzed by Environmental Protection Agency.

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.

EXTREMES FOR CURRENT YEAR.--
 SPECIFIC CONDUCTANCE: Maximum recorded, 337 micromhos Apr. 23; minimum recorded, 129 micromhos July 5.
 WATER TEMPERATURES: Maximum recorded, 24.0°C July 26; minimum recorded, 2.0°C Dec. 28, 29.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CAC03)
OCT										
24...	1300	457	245	8.3	12.0	--	11.2	K10	32	65
NOV										
28...	1415	646	260	7.8	6.0	.40	12.9	<1	K5	70
DEC										
19...	1315	556	210	7.4	4.5	2.9	18.2	<1	30	74
FEB										
06...	1430	425	250	7.6	8.0	3.5	--	K7	K2	74
MAR										
20...	1430	798	355	7.6	7.5	5.0	10.6	K21	99	67
APR										
22...	1330	749	340	8.0	14.0	4.1	9.0	K13	K13	66
MAY										
08...	1530	651	300	8.0	17.0	7.5	9.2	K10	K12	66
27...	1330	729	230	--	14.0	4.6	9.0	K4	K10	58
JUN										
16...	1320	505	220	--	18.0	3.4	--	K2	K17	61
16...	1445	505	--	--	18.0	--	--	--	--	--
JUL										
16...	1445	579	160	7.8	21.0	7.9	7.6	--	--	43
AUG										
18...	1245	595	215	9.6	20.0	--	7.4	<1	<1	--
SEP										
22...	1315	651	260	8.8	16.0	5.1	9.0	K2	70	58

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.

OWENS LAKE BASIN

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

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 24...	0	20	--	--	--	--	4.0	91	--
NOV 28...	0	22	3.7	32	48	1.7	3.4	98	22
DEC 19...	0	23	4.0	31	52	1.6	3.4	96	26
FEB 06...	0	23	4.1	38	51	1.9	4.6	99	40
MAR 20...	0	20	4.1	43	56	2.3	5.7	110	20
APR 22...	0	20	4.0	44	57	2.4	4.8	110	23
MAY 08...	0	20	3.8	34	51	1.8	4.1	98	19
27...	0	18	3.1	27	49	1.5	3.6	85	17
JUN 16...	0	19	3.3	25	46	1.4	3.1	84	17
16...	--	--	--	--	--	--	--	--	--
JUL 16...	0	14	2.0	16	43	1.1	2.2	51	16
AUG 18...	--	--	--	--	--	--	--	--	--
SEP 22...	0	18	3.1	30	51	1.7	4.3	100	15
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT 24...	11	.5	27	181	167	.10	.06	.04	.00
NOV 28...	11	.5	28	175	182	.05	.07	.08	.01
DEC 19...	13	.5	31	187	191	.25	.27	--	.03
FEB 06...	17	.6	27	222	215	.59	.14	.02	.01
MAR 20...	16	.6	30	218	206	.10	.15	.13	.14
APR 22...	18	.8	28	218	209	.01	.00	.00	.00
MAY 08...	13	.5	23	191	177	.03	.03	.15	.10
27...	11	.5	19	165	150	.01	.04	.02	.20
JUN 16...	8.8	.5	19	150	147	.04	.20	.03	.78
16...	--	--	--	--	--	--	--	--	--
JUL 16...	4.6	.4	14	112	103	.86	.71	.00	.00
AUG 18...	--	--	--	--	--	--	--	--	--
SEP 22...	12	.6	18	183	161	.00	.00	.00	.02
DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 24...	.66	.49	.70	.21	.49	.80	.55	.04	.04
NOV 28...	1.1	.56	1.2	.63	.57	1.3	.64	.04	.04
DEC 19...	--	.29	--	--	.32	--	.59	.03	.04
FEB 06...	.32	.22	.34	.11	.23	.93	.37	.07	.00
MAR 20...	.46	.37	.59	.08	.51	.69	.66	.12	.09
APR 22...	.49	.49	.49	.00	.49	.50	.49	.19	.05
MAY 08...	.32	.11	.47	.26	.21	.50	.24	.08	.05
27...	.40	.11	.42	.11	.31	.43	.35	.07	.06
JUN 16...	.43	2.7	.46	.00	3.5	.50	3.7	.07	.10
16...	--	--	--	--	--	--	--	--	--
JUL 16...	.83	.81	.83	.02	.81	1.7	1.5	.07	.05
AUG 18...	--	--	--	--	--	--	--	--	--
SEP 22...	.63	.51	.63	.10	.53	.63	.53	.10	.07

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC		ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
		ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)								
OCT 24...	1300	28	0	28	300	300	30	1	0	<1	0
DEC 19...	1315	--	--	--	--	--	--	--	--	--	--
FEB 06...	1430	21	0	21	--	--	20	0	0	<1	10
MAY 08...	1530	35	0	35	--	--	20	0	--	<1	0
JUN 16...	1320	--	--	--	--	--	--	--	--	--	--
JUL 16...	1445	11	1	10	100	80	20	0	--	<1	30
SEP 22...	1315	--	--	--	--	--	--	--	--	--	--
DATE	CHROMIUM, SUS- PENDED RECOV. (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDED RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 24...	0	4	2	0	<3	4	2	2	320	300	20
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	10	0	0	0	<3	0	0	0	470	420	50
MAY 08...	0	0	4	--	<3	8	2	6	530	490	40
JUN 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	20	10	0	--	<3	50	46	4	740	710	30
SEP 22...	--	--	--	--	--	--	--	--	--	--	--
DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGANESE, SUS- PENDED RECOV. (UG/L AS MN)	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDED RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, SUS- PENDED RECOV- ERABLE (UG/L AS NI)
OCT 24...	3	3	0	--	--	--	--	--	--	--	--
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
FEB 06...	8	8	0	30	30	2	.8	.1	.7	2	2
MAY 08...	11	11	0	40	40	5	--	--	1.2	6	5
JUN 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 16...	5	2	3	50	40	9	1.9	.9	1.0	5	0
SEP 22...	--	--	--	--	--	--	--	--	--	--	--
DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELENIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	
OCT 24...	--	0	0	0	0	0	0	--	--	--	
DEC 19...	--	--	--	--	0	--	--	--	--	--	
FEB 06...	0	0	0	0	0	0	0	20	20	<3	
MAY 08...	1	0	0	0	0	0	0	30	0	40	
JUN 16...	--	--	--	--	0	--	--	--	--	--	
JUL 16...	5	0	0	0	1	1	0	40	30	8	
SEP 22...	--	--	--	--	0	--	--	--	--	--	

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

OWENS LAKE BASIN

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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED (MG/L AS C)
OCT				
24...	1300	--	3.8	.3
NOV				
28...	1415	5.9	--	--
DEC				
19...	1315	5.1	--	--
FEB				
06...	1430	--	5.5	.3
MAR				
20...	1430	4.8	--	--
APR				
22...	1330	4.9	--	--
MAY				
08...	1530	--	4.9	.3
27...	1330	4.9	--	--
JUN				
16...	1320	6.6	--	--
JUL				
16...	1445	--	6.4	.5
SEP				
22...	1315	--	6.4	--

DATE	TIME	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	LINDANE TOTAL (UG/L)
NOV				
28...	1415	ND	ND	ND

ND Material specifically analyzed for but not detected.

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON				
DATE TIME	NOV 28,79 1415	APR 22,80 1330	MAY 27,80 1330	JUN 16,80 1320
TOTAL CELLS/ML	12000	3600	6900	1100
DIVERSITY: DIVISION	0.3	0.3	0.8	0.8
..CLASS	0.3	0.3	0.8	0.8
...ORDER	0.7	0.8	1.6	1.1
...FAMILY	0.8	0.9	1.8	1.4
...GENUS	0.9	1.6	2.2	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...CHARACIACEAE								
...SCHROEDERIA	--	-	--	-	52	1	26	2
...MICRACTINIACEAE								
...GOLENKINIA	--	-	--	-	--	-	13	1
...MICRACTINIUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
...ANKISTRODESMUS	--	-	--	-	--	-	26	2
...CHLORELLA	--	-	--	-	--	-	13	1
...DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
...OOCYSTIS	--	-	--	-	--	-	52	5
...TETRAEDRON	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
...CRUCIGENIA	--	-	--	-	--	-	52	5
...SCENEDESMUS	230	2	--	-	--	-	--	-
...TETRASTRUM	--	-	--	-	--	-	--	-
...TETRASPORALES								
...PALMELLACEAE								
...SPHAEROCYSTIS	--	-	--	-	--	-	52	5
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
...CHLAMYDOMONAS	--	-	34	1	*	0	26	2
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
..CENTRALES								
...COSCINODISCAEAE								
...CYCLOTELLA	10000#	85	2200#	63	990	14	65	6
...MELOSIRA	230	2	--	-	890	13	310#	28
...STEPHANODISCUS	--	-	770#	22	*	0	450#	41
..PENNALES								
...ACHNANTHACEAE								
...COCCONEIS	--	-	34	1	*	0	--	-
...FRAGILARIACEAE								
...ASTERIONELLA	--	-	--	-	3300#	48	13	1
...FRAGILARIA	--	-	--	-	130	2	--	-
...SYNEDRA	460	4	34	1	--	-	--	-
...NAVICULACEAE								
...NAVICULA	--	-	--	-	*	0	--	-
...NITZSCHIAEAE								
...NITZSCHIA	570	5	300	8	78	1	--	-
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
...CRYPTOMONADACEAE								
...CRYPTOMONAS	110	1	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
...CHROOCOCCACEAE								
...ANACYSTIS	--	-	34	1	160	2	--	-
...HORMOGONALES								
...NOSTOCACEAE								
...ANABAENA	--	-	--	-	1200#	17	--	-
...OSCILLATORIAEAE								
...OSCILLATORIA	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
...EUGLENA	--	-	--	-	--	-	--	-
...EUTREPTIA	110	1	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
...GLENODINIACEAE								
...GLENODINIUM	--	-	100	3	--	-	--	-

See footnotes at end of table.

OWENS LAKE BASIN

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 16,80 1445	AUG 18,80 1245	SEP 22,80 1315
TOTAL CELLS/ML	3800	3400	4800
DIVERSITY: DIVISION	0.6	1.2	1.0
..CLASS	0.6	1.2	1.0
...ORDER	0.7	1.6	1.4
...FAMILY	0.8	2.1	1.9
...GENUS	0.8	2.4	1.9

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...CHARACIACEAE						
...SCHROEDERIA	--	-	140	4	--	-
...MICRACTINIACEAE						
...GOLENKINIA	--	-	--	-	*	0
...MICRACTINIUM	--	-	--	-	130	3
...OOCYSTACEAE						
...ANKISTRODESMUS	*	0	77	2	--	-
...CHLORELLA	--	-	--	-	--	-
...DICTYOSPHAERIUM	*	0	1900#	56	3100#	65
...OOCYSTIS	--	-	39	1	*	0
...TETRAEDRON	*	0	--	-	--	-
...SCENEDESMACEAE						
...CRUCIGENIA	--	-	--	-	--	-
...SCENEDESMUS	90	2	77	2	180	4
...TETRASTRUM	--	-	52	2	52	1
..TETRASPORALES						
...PALMELLACEAE						
...SPHAEROCYSTIS	--	-	--	-	100	2
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
...CHLAMYDOMONAS	--	-	26	1	65	1
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
...CYCLOTELLA	39	1	150	5	490	10
...MELOSIRA	--	-	52	2	--	-
...STEPHANODISCUS	--	-	26	1	--	-
..PENNALES						
...ACHNANTHACEAE						
...COCONEIS	--	-	--	-	*	0
...FRAGILARIACEAE						
...ASTERIONELLA	--	-	--	-	--	-
...FRAGILARIA	--	-	*	0	--	-
...SYNEDRA	--	-	--	-	--	-
...NAVICULACEAE						
...NAVICULA	--	-	*	0	--	-
...NITZSCHIA	260	7	52	2	52	1
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONADALES						
...CRYPTOMONADACEAE						
...CRYPTOMONAS	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
...CHROOCOCCACEAE						
...ANACYSTIS	52	1	410	12	130	3
...HORMOGONALES						
...NOSTOCACEAE						
...ANABAENA	3300#	87	130	4	460	10
...OSCILLATORIACEAE						
...OSCILLATORIA	--	-	220	6	--	-
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
...EUGLENA	--	-	*	0	--	-
...EUTREPTIA	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...PERIDINIALES						
...GLENODINIACEAE						
...GLENODINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
NOV 28...	1415	1667	.060	.000	.290	.190	35
DEC 19...	1315	2841	.088	.000	.520	.270	21
APR 22...	1330	--	.000	.000	.090	.060	33
JUL 16...	1445	3490	.255	.033	3.03	2.14	16

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	256	250	253	266	264	265						
2	254	245	250	265	261	264						
3	264	254	257	263	260	262						
4	286	246	274	264	262	263						
5	289	272	282	265	262	263						
6	278	243	259	267	262	264						
7	260	252	258	266	263	265						
8	263	257	260	266	262	264						
9	261	256	259	267	263	265						
10	261	256	259	268	265	266						
11	269	263	267	269	265	267						
12	269	255	261	269	265	267						
13	261	254	257	269	266	267						
14	255	252	254	269	266	268						
15	260	255	256	268	264	267						
16	258	256	257	268	266	267						
17	259	256	258	273	264	268						
18	261	257	259	271	267	269						
19	265	256	260	278	268	273						
20	264	260	263	274	260	268						
21	265	259	262	264	249	257						
22	262	259	261	271	264	268						
23	265	259	263	273	266	270						
24	264	253	261	274	270	272						
25	265	260	263	272	269	271						
26	265	261	263	270	264	268						
27	265	262	264	271	266	269						
28	265	262	264	269	264	266						
29	267	264	266	---	---	---						
30	267	265	266	---	---	---						
31	266	263	264	---	---	---						
MONTH	289	243	261	278	249	267						

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

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
PERIPHYTON

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
NOV 28...	1415	1667	.060	.000	.290	.190	35
DEC 19...	1315	2841	.088	.000	.520	.270	21
APR 22...	1330	--	.000	.000	.090	.060	33
JUL 16...	1445	3490	.255	.033	3.03	2.14	16

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	256	250	253	266	264	265						
2	254	245	250	265	261	264						
3	264	254	257	263	260	262						
4	286	246	274	264	262	263						
5	289	272	282	265	262	263						
6	278	243	259	267	262	264						
7	260	252	258	266	263	265						
8	263	257	260	266	262	264						
9	261	256	259	267	263	265						
10	261	256	259	268	265	266						
11	269	263	267	269	265	267						
12	269	255	261	269	265	267						
13	261	254	257	269	266	267						
14	255	252	254	269	266	268						
15	260	255	256	268	264	267						
16	258	256	257	268	266	267						
17	259	256	258	273	264	268						
18	261	257	259	271	267	269						
19	265	256	260	278	268	273						
20	264	260	263	274	260	268						
21	265	259	262	264	249	257						
22	262	259	261	271	264	268						
23	265	259	263	273	266	270						
24	264	253	261	274	270	272						
25	265	260	263	272	269	271						
26	265	261	263	270	264	268						
27	265	262	264	271	266	269						
28	265	262	264	269	264	266						
29	267	264	266	---	---	---						
30	267	265	266	---	---	---						
31	266	263	264	---	---	---						
MONTH	289	243	261	278	249	267						

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

	FEBRUARY			MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.0	5.0	5.5	9.0	8.5	8.5				---	---	---
2	6.0	5.5	6.0	8.5	8.0	8.5				---	---	---
3	7.0	5.5	6.0	9.0	8.0	8.0				---	---	---
4	7.0	6.0	6.5	9.0	8.0	8.5				---	---	---
5	7.0	6.0	6.5	8.5	8.0	8.5				---	---	---
6	7.5	6.5	7.0	8.0	7.5	8.0				---	---	---
7	7.0	6.0	6.5	8.0	7.0	7.5				---	---	---
8	6.0	5.5	6.0	8.5	7.5	8.0				---	---	---
9	6.0	5.5	5.5	10.5	8.0	9.0				17.0	16.0	16.5
10	6.0	5.0	5.5	9.5	8.5	9.0				16.5	15.5	16.0
11	6.0	5.0	5.5	9.0	8.5	9.0				16.0	15.0	15.5
12	6.0	5.5	6.0	9.0	7.5	8.5				16.5	14.5	15.5
13	6.5	5.5	6.0	9.5	8.0	9.0				16.0	15.5	15.5
14	6.0	6.0	6.0	10.0	8.5	9.5				16.5	15.5	16.0
15	6.0	5.5	6.0	10.5	9.5	10.0				17.5	16.0	16.5
16	6.0	5.5	5.5	10.0	7.5	8.5				18.0	17.0	17.5
17	6.5	5.5	6.0	9.5	8.0	8.5				19.5	17.0	18.0
18	7.0	6.5	6.5	8.5	6.5	7.5				20.0	18.5	19.0
19	7.0	6.5	6.5	7.5	6.0	7.0				20.5	19.0	20.0
20	7.5	6.5	7.0	9.0	7.5	7.5				21.0	20.5	21.0
21	7.5	7.0	7.0	9.0	8.0	8.5				21.5	21.0	21.0
22	7.0	6.5	7.0	8.0	6.5	7.0				21.0	20.5	20.5
23	8.0	6.5	7.0	9.0	6.0	7.5				---	---	---
24	7.5	7.0	7.5	---	---	---				---	---	---
25	8.5	7.0	7.5	---	---	---				---	---	---
26	9.0	7.5	8.0	---	---	---				---	---	---
27	9.5	8.5	9.0	---	---	---				---	---	---
28	9.5	8.5	9.0	---	---	---				---	---	---
29	9.0	8.0	8.5	---	---	---				---	---	---
30	---	---	---	---	---	---				---	---	---
31	---	---	---	---	---	---				---	---	---
MONTH	9.5	5.0	6.5	---	---	---				---	---	---

OWENS LAKE BASIN

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

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	21.0	19.5	20.5	23.5	22.5	23.0	20.0	19.0	19.5
2	---	---	---	21.0	20.0	20.5	23.5	22.0	23.0	20.0	19.5	19.5
3	---	---	---	21.0	19.0	20.5	23.5	22.5	23.0	20.0	19.5	19.5
4	---	---	---	20.5	18.5	19.5	23.5	22.0	23.0	19.5	19.0	19.5
5	---	---	---	20.5	18.5	19.5	23.5	22.5	23.0	20.0	19.0	19.5
6	---	---	---	20.5	19.5	20.0	23.5	22.0	22.5	20.0	19.0	19.5
7	---	---	---	20.5	20.0	20.0	22.5	22.0	22.5	19.5	19.0	19.0
8	---	---	---	21.0	20.5	20.5	22.5	21.5	22.0	19.0	17.5	18.5
9	---	---	---	20.5	20.0	20.5	23.5	22.0	22.5	18.0	17.5	17.5
10	---	---	---	20.5	20.0	20.0	23.5	22.0	22.5	18.0	17.0	17.5
11	---	---	---	20.5	19.5	20.0	23.5	21.5	22.5	18.5	17.0	17.5
12	---	---	---	20.5	19.5	20.5	23.5	22.0	23.0	18.5	17.5	18.5
13	---	---	---	21.0	20.0	20.5	23.5	22.0	23.0	18.5	18.0	18.5
14	---	---	---	21.5	20.5	21.0	23.0	22.0	22.5	17.5	16.0	16.5
15	---	---	---	21.5	20.5	21.0	23.5	21.5	22.5	16.0	15.5	15.5
16	---	---	---	22.0	20.0	21.0	22.0	21.5	21.5	16.5	15.5	15.5
17	19.5	19.0	19.5	22.5	21.0	21.5	22.5	21.5	21.5	17.5	16.0	16.5
18	20.0	19.0	19.5	22.5	20.5	21.5	22.0	21.5	21.5	18.0	17.5	17.5
19	20.0	19.0	19.5	23.0	21.0	22.0	22.5	21.0	21.5	18.0	17.0	17.5
20	20.5	20.0	20.0	21.5	20.0	21.0	21.5	20.5	21.0	17.5	17.0	17.5
21	20.5	20.0	20.0	22.0	20.5	21.5	21.5	20.5	21.0	17.0	16.5	17.0
22	20.0	19.5	20.0	22.5	20.5	21.5	21.5	20.5	21.0	---	16.0	16.0
23	21.0	19.5	20.0	22.5	21.0	21.5	20.5	20.0	20.0	---	---	---
24	20.5	19.0	20.0	22.5	21.0	21.5	20.0	19.5	20.0	---	---	---
25	20.5	19.5	20.0	23.0	21.5	22.0	20.0	18.5	19.5	---	---	---
26	20.5	19.5	20.0	24.0	21.5	23.0	20.0	18.5	19.5	19.0	16.0	17.5
27	21.0	19.5	20.0	23.5	21.5	22.5	20.0	19.0	19.5	18.5	15.5	17.0
28	20.0	18.5	19.5	23.5	21.5	22.5	20.0	19.0	19.5	19.5	16.0	17.0
29	20.5	19.0	20.0	23.0	22.0	22.5	20.0	19.0	19.5	19.0	16.5	17.5
30	21.0	20.0	21.0	23.5	22.0	23.0	20.5	19.0	19.5	19.0	16.5	17.5
31	---	---	---	23.5	22.0	23.0	20.0	19.0	19.5	---	---	---
MONTH	---	---	---	24.0	18.5	21.0	23.5	18.5	21.5	20.0	15.5	18.0
YEAR	24.0	2.0	12.5									

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 28...	1415	6.0	646	10	17	47
FEB 06...	1430	8.0	425	18	21	21
MAR 20...	1430	7.5	798	41	88	62
APR 22...	1330	14.0	749	16	32	73
MAY 08...	1530	17.0	651	26	46	67
27...	1330	14.0	729	24	47	24
JUN 16...	1445	18.0	505	47	64	14
JUL 16...	1445	21.0	579	25	39	43
AUG 18...	1245	20.0	595	53	85	51
SEP 22...	1315	16.0	651	13	23	79

10287000 MONO LAKE NEAR MONO LAKE, CA

LOCATION.--Lat 37°58'46", long 119°08'11", in NW¼ sec.5, T.2 N., R.26 E., Mono County, Hydrologic Unit 18090101, on west bank 1 mi (2 km) south of town of Mono Lake.

DRAINAGE AREA.--785 mi² (2,033 km²).

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

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

REMARKS.--Since 1941 water diverted to Owens Lake basin via Mono tunnel, capacity, 200 ft³/s (5.66 m³/s).

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

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 6,428.1 ft (1.959.28 m) July 18, 1919, present datum; minimum observed, 6,372.62 ft (1.942.375 m) Nov. 28, Dec. 6, 12, and 19, 1980.

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

Date	Elevation	Date	Elevation	Date	Elevation	Date	Elevation
Oct. 4	6,373.10	Jan. 30	6,373.02	Apr. 30	6,373.82	July 23	6,373.76
12	6,373.00	Feb. 5	6,373.01	May 7	6,373.87	30	6,373.86
18	6,372.92	13	6,373.04	16	6,373.95	Aug. 7	6,373.96
Nov. 5	6,372.77	22	6,373.44	21	6,374.01	11	6,373.93
14	6,372.73	28	6,373.39	28	6,373.96	13	6,373.91
28	6,372.62	Mar. 5	6,373.43	June 5	6,373.93	15	6,373.89
Dec. 6	6,372.62	12	6,373.47	11	6,373.89	20	6,373.84
12	6,372.62	20	6,373.49	19	6,373.84	27	6,373.78
19	6,372.62	26	6,373.49	25	6,373.76	Sept. 3	6,373.72
26	6,372.63	Apr. 2	6,373.50	July 1	6,373.81	10	6,373.73
Jan. 8	6,372.66	9	6,373.54	7	6,373.82	17	6,373.64
16	6,373.02	16	6,373.65	16	6,373.71	24	6,373.54
22	6,373.00	23	6,373.75				

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

LOCATION.--Lat 38°01'58", long 119°12'53", in SE&NE& sec.16, T.2 N., R.25 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, at road crossing 1,500 ft (457 m) downstream from Lundy Lake Dam, and 4.9 mi (7.9 km) northwest of Mono Lake Post Office.

DRAINAGE AREA.--18.1 mi² or 46.9 km² (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 (2,365 m), from topographic map.

REMARKS.--Flow regulated for power development by Lundy Lake, capacity, 3,820 acre-ft (4.71 hm³). 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 were 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).--39 years, 28.5 ft³/s (0.807 m³/s), 20,650 acre-ft/yr (25.5 hm³/yr).
(Natural flow).--39 years, 30.2 ft³/s (0.855 m³/s), 21,880 acre-ft/yr (27.0 hm³/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, 141 ft³/s (3.99 m³/s) July 28, 1978; no flow many days in 1971 and 1974.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, 287 ft³/s (8.13 m³/s) July 2; minimum daily, 5.2 ft³/s (0.15 m³/s) Oct. 26, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	9.8	9.8	13	13	17	38	62	245	128	73
2	11	11	9.8	9.8	13	13	19	37	61	247	140	70
3	11	11	9.8	9.8	13	13	19	44	60	263	140	69
4	11	11	9.8	9.8	13	12	19	48	60	257	140	68
5	11	11	10	9.8	13	12	19	62	60	287	139	68
6	11	11	10	9.8	13	13	19	62	60	257	138	67
7	11	11	10	10	13	13	19	62	61	257	112	67
8	11	11	10	11	13	13	19	62	62	170	86	66
9	11	11	10	11	13	13	19	61	62	82	87	66
10	11	11	10	11	13	13	19	61	62	82	87	65
11	11	11	10	11	13	13	19	61	62	82	86	64
12	11	11	10	24	13	13	19	61	63	84	86	63
13	11	11	10	36	13	13	19	61	63	84	85	63
14	11	11	10	41	13	13	19	61	64	84	85	63
15	11	11	10	38	13	13	19	55	64	90	84	43
16	11	11	10	28	13	13	19	49	64	96	83	25
17	11	11	10	19	13	13	38	49	64	98	82	24
18	12	11	10	19	13	13	58	43	64	107	81	22
19	12	11	10	19	13	13	60	43	65	114	79	21
20	12	11	10	19	13	13	60	53	67	114	78	21
21	11	11	10	19	13	13	60	60	68	114	79	21
22	11	11	9.7	19	13	13	42	60	71	114	81	23
23	11	11	9.4	19	13	13	34	60	74	115	80	21
24	11	11	9.4	18	13	13	35	60	76	116	79	20
25	8.4	11	9.4	16	13	13	32	58	76	116	79	20
26	5.2	11	9.4	13	13	13	32	58	89	115	78	20
27	5.3	11	9.4	13	13	13	32	59	105	114	77	20
28	5.3	11	9.4	13	13	14	32	60	107	114	77	20
29	5.2	10	9.2	13	13	14	35	60	110	114	75	20
30	7.8	10	9.2	13	---	14	39	60	154	114	74	18
31	11	---	9.2	13	---	14	---	61	---	115	74	---
TOTAL	315.2	328	302.9	524.8	377	405	891	1729	2180	4371	2879	1291
MEAN	10.2	10.9	9.77	16.9	13.0	13.1	29.7	55.8	72.7	141	92.9	43.0
MAX	12	11	10	41	13	14	60	62	154	287	140	73
MIN	5.2	10	9.2	9.8	13	12	17	37	60	82	74	18
AC-FT	625	651	601	1040	748	803	1770	3430	4320	8670	5710	2560
a	742	688	611	1040	770	740	1430	3810	6370	9210	4300	1680

CAL YR 1979 TOTAL 10767.1 MEAN 29.5 MAX 91 MIN 5.2 AC-FT 21360 a 21730
WTR YR 1980 TOTAL 15593.9 MEAN 42.6 MAX 287 MIN 5.2 AC-FT 30930 a 31390

a Computed natural flow, in acre-feet.

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

LOCATION.--Lat 37°45'32", long 119°07'47", in NE¼SW¼ sec.20, T.2 S., R.26 E., Mono County, Hydrologic Unit 18090101, Inyo National Forest, 500 ft (152 m) downstream from Agnew Lake Dam, and 3.4 mi (5.5 km) southwest of town of June Lake.

DRAINAGE AREA.--23.3 mi² or 60.3 km² (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 (2,585 m), from topographic map.

REMARKS.--Flow regulated for power development by Waugh, Gem, and Agnew Lakes, combined capacity, 23,420 acre-ft (28.9 hm³) 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).--³⁰29 years, ^{55.1}55.3 ft³/s (1.566 m³/s), ^{39,920}40,060 acre-ft/yr (49.4 hm³/yr).
(Natural flow).--29 years, ^{59.1}59.6 ft³/s (1.688 m³/s), ^{43,180}43,180 acre-ft/yr (53.2 hm³/yr).

EXTREMES (ACTUAL FLOW) FOR PERIOD OF RECORD (SINCE 1970).--Maximum daily discharge, ⁴²¹421 ft³/s (11.9 m³/s) July 15, 1978; minimum daily, ^{0.90}0.90 ft³/s (0.025 m³/s) Aug. 31 to Sept. 2, 1976.

EXTREMES (ACTUAL FLOW) FOR CURRENT YEAR.--Maximum daily discharge, ³⁴⁶346 ft³/s (9.80 m³/s) July 18; minimum daily, ²⁶26 ft³/s (0.74 m³/s) Mar. 8-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	36	35	34	29	28	64	75	84	232	221	85
2	38	37	35	31	29	28	64	79	84	233	192	85
3	38	38	35	30	29	28	64	80	84	232	170	85
4	38	38	32	30	28	28	64	82	84	230	154	84
5	38	38	36	30	28	28	64	89	84	229	133	85
6	38	38	35	30	30	29	64	93	84	229	115	86
7	39	38	35	30	30	27	50	92	84	228	103	85
8	38	38	35	30	30	26	44	89	84	228	97	84
9	37	38	35	30	30	26	43	85	84	228	93	84
10	44	38	35	37	30	26	44	85	85	228	91	84
11	44	38	35	30	30	45	45	84	85	189	88	84
12	44	37	35	30	30	58	46	84	85	99	89	86
13	44	37	35	30	30	61	46	84	85	99	87	89
14	44	37	35	30	30	62	45	84	85	100	87	85
15	44	37	35	29	30	62	45	84	85	108	86	85
16	44	36	34	29	30	62	59	84	85	205	85	85
17	44	35	34	29	30	63	65	84	85	301	85	85
18	42	35	32	29	29	63	79	84	86	346	88	87
19	40	35	30	29	28	64	86	84	86	303	85	86
20	40	35	30	29	28	64	86	84	86	255	86	86
21	39	35	30	29	28	64	87	84	86	258	86	86
22	46	35	30	29	28	64	58	85	96	269	87	86
23	53	35	30	29	28	64	61	85	97	288	85	86
24	39	35	30	29	28	64	70	85	97	283	86	86
25	28	35	30	29	28	64	67	79	99	266	85	86
26	27	35	30	29	28	64	70	84	98	251	86	86
27	35	35	34	29	28	64	70	84	148	314	86	86
28	35	35	31	29	28	64	66	84	218	275	86	86
29	35	35	33	29	28	64	74	84	224	239	86	86
30	35	35	33	29	---	64	75	84	230	209	85	86
31	35	---	33	29	---	64	---	84	---	235	85	---
TOTAL	1223	1089	1027	925	840	1582	1865	2611	3087	7129	3178	2565
MEAN	39.5	36.3	33.1	29.8	29.0	51.0	62.2	84.2	103	230	103	85.5
MAX	53	38	36	37	30	64	87	93	230	346	221	89
MIN	27	35	30	29	28	26	43	75	84	99	85	84
AC-FT	2430	2160	2040	1830	1670	3140	3700	5180	6120	14140	6300	5090
a	326	401	410	895	848	437	2360	8490	20060	18210	4140	848
CAL YR 1979 TOTAL	20538		MEAN 56.3	MAX 108	MIN 27	AC-FT 40740	a 41310					
WTR YR 1980 TOTAL	27121		MEAN 74.1	MAX 346	MIN 26	AC-FT 53790	a 57430					

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 NW¼NW¼SW¼ sec.26, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on right bank 0.8 mi (1.3 km) upstream from confluence with Tecate Creek, and 5.1 mi (8.2 km) south of Dulzura.

DRAINAGE AREA.--310 mi² (803 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 569.40 ft (173.553 m) National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission).

REMARKS.--Records good. Flow regulated by Morena Reservoir, capacity, 50,120 acre-ft (61.8 hm³) and Barrett Reservoir, capacity, 44,760 acre-ft (55.2 hm³). Water diverted from Barrett Reservoir through San Diego and Dulzura conduits to Lower Otay Reservoir.

AVERAGE DISCHARGE.--44 years, 11.0 ft³/s (0.312 m³/s), 7,970 acre-ft/yr (9.83 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,700 ft³/s (331 m³/s) Feb. 21, 1980, gage height, 11.15 ft (3.399 m); no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,700 ft³/s (331 m³/s) Feb. 21, gage height, 11.15 ft (3.399 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.25	.40	460	378	404	345	139	64	33	16
2		0	.25	.40	317	357	465	364	137	65	33	16
3		0	.25	.40	233	488	528	364	138	62	33	16
4		0	.25	.40	186	498	462	317	136	61	32	16
5		0	.26	.42	151	441	448	144	133	58	31	15
6		0	.26	.40	122	839	406	125	131	57	30	15
7		0	.25	.43	101	1090	184	116	128	57	29	15
8		0	.25	.49	83	782	198	116	125	55	30	14
9		0	.26	1.2	69	685	221	106	118	55	29	13
10		0	.29	2.2	57	631	252	105	112	53	29	12
11		0	.31	15	48	1090	274	106	108	53	28	12
12		0	.28	6.1	42	810	290	109	107	54	27	12
13		0	.27	3.0	45	655	295	108	105	53	25	12
14		0	.27	2.0	311	533	303	111	101	49	24	12
15		0	.27	1.6	620	469	307	134	98	46	24	11
16		0	.27	1.3	534	417	310	226	94	46	24	11
17		0	.28	1.1	1440	378	311	226	92	45	23	10
18		0	.29	1.7	4650	365	313	218	89	44	22	9.6
19		0	.30	2.8	3040	395	311	208	86	43	22	9.8
20		0	.31	2.0	5190	361	308	192	82	43	21	8.8
21		0	.35	1.6	8430	345	305	184	79	42	21	8.1
22		0	.35	1.3	3380	395	310	177	76	40	21	7.7
23		0	.33	1.1	1620	382	352	171	78	40	20	7.7
24		0	.33	.94	1060	353	350	164	76	39	19	7.3
25		.19	.36	.86	736	345	348	158	75	39	20	7.2
26		.28	.38	.79	559	378	346	154	74	36	18	6.7
27		.29	.36	.76	474	382	338	150	70	34	19	6.4
28		.26	.34	1.1	431	374	330	152	69	34	18	6.2
29		.24	.33	1900	408	365	339	150	65	34	17	6.0
30		.24	.34	3220	---	370	342	146	63	35	17	5.7
31		---	.37	837	---	386	---	142	---	35	17	---
TOTAL	0	1.50	9.26	6008.79	34797	15737	9950	5488	2984	1471	756	325.2
MEAN	0	.050	.30	194	1200	508	332	177	99.5	47.5	24.4	10.8
MAX	0	.29	.38	3220	8430	1090	528	364	139	65	33	16
MIN	0	0	.25	.40	42	345	184	105	63	34	17	5.7
AC-FT	0	3.0	18	11920	69020	31210	19740	10890	5920	2920	1500	645
CAL YR 1979	TOTAL	6419.13	MEAN	17.6	MAX	356	MIN	0	AC-FT	12730		
WTR YR 1980	TOTAL	77527.75	MEAN	212	MAX	8430	MIN	0	AC-FT	153800		

11012500 CAMPO CREEK NEAR CAMPO, CA

LOCATION.--Lat 32°35'28", long 116°31'29", in SW¼NE¼SE¼ 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 (5.6 km) southwest of Campo.

DRAINAGE AREA.--85.0 mi² (220.2 km²), of which 3 mi² (8 km²) 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 (664.135 m) National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1954, at datum 1 ft (0.3 m) higher.

REMARKS.--Records good. Broad-crested weir completely buried by sand Mar. 28 to Sept. 30 and was ineffective as low-water control. Flow regulated by small conservation reservoir 1 mi (1.6 km) upstream August 1956 to February 1980, destroyed by flood. No diversion above station.

AVERAGE DISCHARGE.--44 years, 2.09 ft³/s (0.059 m³/s), 1,510 acre-ft/yr (1.86 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 880 ft³/s (24.9 m³/s) Feb. 6, 1937, gage height, 4.80 ft (1.463 m), present datum, from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of velocity-area study and cross-sectional area at control; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 652 ft³/s (18.5 m³/s) Feb. 20, gage height, 4.36 ft (1.329 m), from rating curve extended above 275 ft³/s (7.79 m³/s); minimum daily, 0.14 ft³/s (0.004 m³/s) Oct. 3-6, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.20	.32	.43	11	80	86	51	21	14	10	8.0
2	.23	.17	.31	.41	7.6	84	90	48	21	14	10	8.0
3	.14	.17	.32	.42	6.1	110	76	36	20	13	10	8.0
4	.14	.74	.31	.41	5.5	82	66	34	20	13	10	8.0
5	.14	.47	.33	.44	4.8	85	53	33	19	13	10	8.0
6	.14	.36	.35	.45	4.5	124	52	32	19	13	9.0	8.0
7	.33	.37	.34	.61	4.2	83	51	34	19	13	9.0	7.5
8	.35	.43	.34	.94	3.9	67	50	36	19	13	9.0	7.5
9	.28	.41	.35	2.0	2.7	67	49	38	18	13	9.0	7.5
10	.14	.36	.35	4.2	3.1	86	48	50	18	13	9.0	7.5
11	.17	.34	.38	6.1	3.3	144	48	35	18	12	9.0	7.5
12	.18	.31	.37	4.6	3.3	102	47	33	17	12	8.5	7.5
13	.19	.30	.37	3.3	4.3	110	46	36	17	12	8.5	7.5
14	.21	.30	.34	2.6	21	105	45	33	17	12	8.5	7.5
15	.21	.28	.35	2.3	29	106	45	31	17	12	8.5	7.5
16	.23	.29	.35	2.1	23	75	44	29	16	12	8.5	7.5
17	.28	.30	.35	2.0	68	88	43	28	16	12	8.0	7.5
18	.31	.36	.37	2.5	264	100	43	27	16	12	8.0	7.5
19	1.0	.35	.38	3.3	256	98	42	26	16	11	8.0	7.0
20	1.1	.34	.39	2.8	364	77	41	25	16	11	8.0	7.0
21	.62	.33	.40	2.4	307	81	40	25	15	11	8.0	7.0
22	.26	.32	.50	2.2	131	100	52	24	15	11	8.0	7.0
23	.29	.35	.45	2.1	103	69	73	24	15	11	8.0	7.0
24	.30	.36	.42	2.1	96	63	60	23	15	11	8.0	7.0
25	.28	.36	.43	2.1	93	60	53	23	15	11	8.0	7.0
26	.27	.37	.48	2.1	90	77	45	23	14	11	8.0	7.0
27	.27	.38	.46	2.1	87	63	50	23	14	10	8.0	7.0
28	.26	.34	.43	2.2	84	60	54	22	14	10	8.0	7.0
29	.57	.32	.41	43	81	60	61	22	14	10	8.0	7.0
30	.55	.32	.40	101	---	59	55	22	14	10	8.0	7.0
31	.18	---	.41	14	---	58	---	21	---	10	8.0	---
TOTAL	9.95	10.30	11.76	217.41	2161.3	2623	1608	947	505	366	266.5	222.0
MEAN	.32	.34	.38	7.01	74.5	84.6	53.6	30.5	16.8	11.8	8.60	7.40
MAX	1.1	.74	.50	101	364	144	90	51	21	14	10	8.0
MIN	.14	.17	.31	.41	2.7	58	40	21	14	10	8.0	7.0
AC-FT	20	20	23	431	4290	5200	3190	1880	1000	726	529	440
CAL YR 1979 TOTAL	753.18			2.06	45	12	AC-FT	1490				
WTR YR 1980 TOTAL	8948.22			24.4	364	14	AC-FT	17750				

TIJUANA RIVER BASIN

11013000 TIJUANA RIVER NEAR DULZURA, CA

LOCATION.--Lat 32°33'56", long 116°46'27", in E½ sec.33, T.18 S., R.2 E., San Diego County, Hydrologic Unit 18070305, on left bank 0.5 mi (0.8 km) downstream from confluence of Cottonwood and Tecate Creeks, and 5.5 mi (8.8 km) south of Dulzura.

RAINAGE AREA.--481 mi² (1,250 km²), of which 70 mi² (181 km²) are in Mexico.

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

AGE.--Water-stage recorder. Datum of gage is 542.42 ft (165.330 m) National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission). Prior to Sept. 19, 1939, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records poor. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft (61.9 hm³) and Barrett Reservoir, capacity, 44,760 acre-ft (55.2 hm³). Water diverted from Barrett Reservoir through San Diego and Dulzura conduits to Lower Otay Reservoir.

AVERAGE DISCHARGE.--44 years, 19.3 ft³/s (0.547 m³/s), 13,980 acre-ft/yr (17.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s (346 m³/s) estimated, Feb. 21, 1980, gage height, 10.66 ft (3.249 m), from rating curve extended above 200 ft³/s (5.66 m³/s) on basis of hydrographic comparison with upstream station; maximum gage height, 11.19 ft (3.411 m) Feb. 18, 1980; no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,200 ft³/s (346 m³/s) estimated, Feb. 21, 1980, gage height, 10.66 ft (3.249 m), from rating curve extended as explained above; maximum gage height, 11.19 ft (3.411 m) Feb. 18; minimum daily, 0.08 ft³/s (0.002 m³/s) Oct. 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	1.5	2.1	3.5	900	2560	440	430	170	75	38	19
2	.11	1.6	1.8	3.5	500	2320	500	440	160	74	37	19
3	.11	1.6	1.5	3.5	350	2890	580	450	160	72	36	18
4	.11	1.7	1.6	3.5	280	2360	500	430	150	69	35	18
5	.11	1.8	1.7	4.0	210	1850	480	250	150	68	34	17
6	.11	1.8	1.9	3.5	170	2860	460	160	140	66	34	17
7	.10	2.0	2.0	4.5	140	2580	200	150	140	65	33	16
8	.11	2.1	2.1	5.0	120	1590	230	140	140	64	32	16
9	.11	2.1	2.1	10	100	1090	260	140	130	62	32	16
10	.10	2.2	2.3	26	90	1080	290	130	130	61	31	16
11	.09	2.2	2.3	221	80	2120	320	130	130	60	30	15
12	.08	2.2	2.3	46	70	1310	350	130	120	58	29	15
13	.08	2.0	2.3	20	118	1250	370	130	120	57	29	14
14	.08	1.9	1.6	12	681	1240	380	130	120	56	28	14
15	.08	1.9	2.1	9.0	1060	1230	380	150	110	54	28	14
16	.09	1.7	2.2	7.0	912	933	380	240	110	53	27	14
17	.10	1.7	2.2	5.7	2340	664	390	240	110	52	26	13
18	.11	1.7	2.3	13	5480	656	390	230	100	51	26	13
19	.13	1.8	2.4	31	3700	691	390	230	100	50	25	13
20	.19	1.8	2.6	10	5600	644	390	220	95	49	25	12
21	.21	1.7	2.7	8.0	11000	400	380	220	95	48	24	12
22	.19	1.5	2.7	7.0	7790	450	380	210	90	47	24	12
23	.18	1.7	2.6	6.0	6050	400	420	210	90	46	23	12
24	.47	1.9	2.6	5.5	5370	390	430	200	85	45	23	11
25	.87	2.0	2.9	5.0	4860	390	440	200	85	44	22	11
26	.92	2.1	3.1	4.8	4260	420	430	190	82	43	22	11
27	1.0	2.1	2.5	4.5	3870	430	420	190	81	42	21	11
28	1.2	2.1	2.3	200	3330	410	410	180	80	41	21	10
29	1.3	2.1	2.3	3000	2910	400	410	180	79	40	20	10
30	1.3	2.1	2.4	5110	---	420	420	170	78	39	20	10
31	1.4	---	2.9	1690	---	430	---	170	---	38	19	---
TOTAL	11.15	56.6	70.4	10482.5	72341	36458	11820	6670	3430	1689	854	419
MEAN	.36	1.89	2.27	338	2495	1176	394	215	114	54.5	27.5	14.0
MAX	1.4	2.2	3.1	5110	11000	2890	580	450	170	75	38	19
MIN	.08	1.5	1.5	3.5	70	390	200	130	78	38	19	10
AC-FT	22	112	140	20790	143500	72310	23440	13230	6800	3350	1690	831
CAL YR 1979 TOTAL	12733.39			MEAN 34.9	MAX 798	MIN .08	AC-FT 25260					
WTR YR 1980 TOTAL	144301.65			MEAN 394	MAX 11000	MIN .08	AC-FT 286200					

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 (0.3 km) upstream from Arroyo Matanuco, and 10 mi (16 km) southeast of Tijuana.

DRAINAGE AREA.--977 mi² (2,530 km²), of which 10 mi² (26 km²) 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 (124.998 m), 111,070 acre-ft (137 hm³); at spillway lip, elevation, 380.08 ft (115.848 m), 74,580 acre-ft (92.0 hm³); dead storage below outlet, elevation, 267.39 ft (81.500 m), 1,650 acre-ft (2.03 hm³) included in contents. Reservoir stores water for irrigation of 3,000 acres (12.1 km²) on both banks 0.5 to 5.5 mi (0.8 to 8.8 km) downstream and municipal supply for city of Tijuana. Since August 1972, Colorado River water diverted through Otay aqueduct into the reservoir for Tijuana emergency use; this year none was imported.

COOPERATION.--Records were 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; reservoir dry Apr. 2, 1964, to Apr. 9, 1965, Aug. 21 to Nov. 22, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 118,000 acre-ft (145 hm³) Jan. 30; minimum observed, 71,240 acre-ft (87.8 hm³) Sept. 30.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Contents (acre- feet)	Change in contents (acre- feet)
Sept. 30.....	88,850	--
Oct. 31.....	87,060	-1,790
Nov. 30.....	85,340	-1,720
Dec. 31.....	83,630	-1,710
CAL YR 1979.....	--	+11,940
Jan. 31.....	97,270	+13,640
Feb. 29.....	88,690	-8,580
Mar. 31.....	85,890	-2,800
Apr. 30.....	81,590	-4,300
May 31.....	75,120	-6,470
June 30.....	74,990	-130
July 31.....	74,380	-610
Aug. 31.....	72,880	-1,500
Sept. 30.....	71,240	-1,640
WTR YR 1980.....	--	+17,610

NOTE.--The change in contents for Jan. 31 and May 31, 1979 water year were published in error. Corrected values are +2,280 acre-feet, and -1,270 acre-feet, respectively.

TIJUANA RIVER BASIN

11013500 TIJUANA RIVER NEAR NESTOR, CA

LOCATION.--Lat 32°33'06", long 117°05'00", on line between secs.3 and 4, T.19 S., R.2 W., San Diego County, Hydrologic Unit 18070305, on downstream side of Hollister Street bridge, 1.7 mi (2.7 km) south of Nestor, and 2.9 mi (4.7 km) upstream from mouth at Pacific Ocean.

DRAINAGE AREA.--1,695 mi² (4,390 km²), of which 1,236 mi² (3,201 km²) are in Mexico.

PERIOD OF RECORD.--October 1914 to September 1915, October 1936 to current year.

GAGE.--Water-stage recorder. Datum of gage is 15.14 ft (4.615 m) National Geodetic Vertical Datum of 1929. See WSP 1735 for history of changes prior to Aug. 5, 1958.

REMARKS.--Records good except those for estimated period Feb. 23 to June 17, which are fair. Flow regulated by Morena Reservoir, capacity, 50,210 acre-ft (61.9 hm³) and Barrett Reservoir, capacity, 44,760 acre-ft (55.2 hm³) in the United States, and Rodriguez Reservoir (station 11013200) in Mexico. Water diverted from Cottonwood Creek at Barrett Dam by Dulzura conduit to Jamul Creek. AVERAGE DISCHARGE represents flow to the ocean regardless of upstream development.

COOPERATION.--The International Boundary and Water Commission provided gage-height record for period of major flooding, and 65 discharge measurements during the year.

AVERAGE DISCHARGE.--45 years, 46.4 ft³/s (1.31 m³/s), 33,620 acre-ft/yr (41.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD (SINCE 1936).--Maximum discharge, 33,500 ft³/s (949 m³/s) Feb. 21, 1980, gage height, 8.70 ft (2.652 m), affected by channel outbreak; maximum gage height 11.50 ft (3.505 m) Jan. 30, 1980, prior to channel outbreak and major river movement caused by February 1980 floods; no flow parts of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,500 ft³/s (949 m³/s) Feb. 21, gage height, 8.70 ft (2.652 m), affected by channel outbreak; maximum gage height, 11.50 ft (3.505 m) Jan. 30, prior to channel outbreak and major river movement caused by February floods; no flow Dec. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.0	.07	2.7	4300	6770	940	780	250	66	43	11
2	3.0	3.0	0	2.7	444	3480	780	771	240	80	42	12
3	2.8	2.6	0	3.0	2060	2450	575	700	231	97	45	13
4	2.3	2.8	.03	3.0	4650	2800	490	630	220	92	28	12
5	2.3	2.6	.51	3.0	407	2280	400	565	210	77	32	10
6	2.3	2.6	.94	3.3	291	3550	320	487	200	71	31	9.5
7	2.3	3.0	1.1	4.4	275	3500	256	480	190	70	27	10
8	2.3	2.1	1.2	3.8	267	2720	606	460	182	55	41	11
9	2.2	4.1	1.3	55	260	2630	650	435	175	48	44	9.0
10	2.2	3.0	2.2	53	238	2110	690	415	168	51	43	9.7
11	2.3	2.8	2.3	157	224	3950	680	395	159	44	46	9.9
12	2.3	2.6	1.8	136	218	4350	680	380	150	104	38	11
13	2.3	2.8	1.2	56	252	3300	680	356	142	70	45	11
14	2.2	3.0	1.2	28	738	2150	680	365	137	68	34	11
15	2.0	2.6	2.0	14	3450	1900	672	385	130	77	31	37
16	2.0	2.3	2.2	9.6	4440	1750	680	400	123	56	38	12
17	2.2	2.3	2.2	11	5550	1500	700	425	109	49	31	11
18	2.3	2.6	2.6	71	11900	920	680	440	96	57	23	11
19	2.3	2.3	2.3	69	15600	900	680	475	89	53	20	8.3
20	47	2.0	1.0	52	24300	835	680	481	81	46	23	6.9
21	20	2.0	1.2	28	30200	800	670	450	100	62	26	6.4
22	5.8	2.2	1.3	18	22100	790	667	420	87	59	25	5.8
23	4.4	2.3	1.2	15	3650	755	720	395	86	42	24	5.4
24	4.1	2.3	1.6	14	2250	630	740	365	83	44	23	5.0
25	4.4	2.3	2.0	13	2230	680	768	340	90	60	22	5.0
26	4.1	2.8	2.6	9.6	2600	780	770	320	83	41	21	5.6
27	3.2	2.2	3.2	9.6	2000	830	770	299	89	48	20	6.1
28	2.8	1.8	3.0	20	3450	1150	780	285	92	44	19	5.7
29	2.8	.67	2.6	2950	7180	1320	785	275	74	34	17	5.5
30	2.6	.09	2.6	19400	---	1260	780	265	64	33	14	5.7
31	2.6	---	2.6	12300	---	1220	---	255	---	30	13	---
TOTAL	148.4	91.66	50.05	35514.7	155524	64060	19969	13494	4130	1828	929	292.5
MEAN	4.79	3.06	1.61	1146	5363	2066	666	435	138	59.0	30.0	9.75
MAX	47	21	3.2	19400	30200	6770	940	780	250	104	46	37
MIN	2.0	.09	0	2.7	218	630	256	255	64	30	13	5.0
AC-FT	294	182	99	70440	308500	127100	39610	26770	8190	3630	1840	580

CAL YR 1979 TOTAL 20245.56 MEAN 55.5 MAX 1460 MIN 0 AC-FT 40160
WTR YR 1980 TOTAL 296031.31 MEAN 809 MAX 30200 MIN 0 AC-FT 587200

11014550 LOWER OTAY LAKE NEAR CHULA VISTA, CA
(Formerly published as Lower Otay Reservoir near Chula Vista)

LOCATION.--Lat 32°36'33", long 116°55'45", in NE¼NE¼ sec.13, T.18 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on outlet tower near right bank, 1,000 ft (305 m) west of right end of Savage Dam on Otay River, and 9 mi (14 km) east of Chula Vista.

DRAINAGE AREA.--99.0 mi² (256.4 km²).

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 (105.827 m) National Geodetic Vertical Datum of 1929 (levels by County of San Diego); gage readings have been reduced to NGVD. Since October 1972 to current year, supplementary water-stage recorder for flood warning only 30 ft (9.1 m) upstream from right end of dam at datum 50.0 ft (15.24 m) 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 (69.7 hm³), elevation, 490.70 ft (149.565 m). Capacity at permanent spillway level, 49,510 acre-ft (61.0 hm³), elevation, 484.70 ft (147.737 m). Dead storage below lowest outlet, 1,150 acre-ft (1.42 hm³), elevation, 395.05 ft (120.411 m). 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, 50,070 acre-ft (61.7 hm³), spilling, Mar. 11, 1980, elevation, 485.22 ft (147.895 m). Maximum elevation prior to 1980, 483.87 ft (147.484 m) revised, Oct. 1, 1945; minimum observed, 3,160 acre-ft (3.90 hm³) Dec. 31, 1951, elevation, 407.56 ft (124.224 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 50,070 acre-ft (61.7 hm³), spilling, Mar. 11, elevation, 485.22 ft (147.895 m); minimum observed, 30,520 acre-ft (37.6 hm³) Jan. 28, elevation, 464.50 ft (141.580 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	469.86	34,980	--
Oct. 31.....	468.90	34,160	-820
Nov. 30.....	467.16	32,690	-1,470
Dec. 31.....	465.46	31,290	-1,400
CAL YR 1979.....	--	--	+2,500
Jan. 31.....	468.60	33,900	+2,610
Feb. 29.....	483.10	47,760	+13,860
Mar. 31.....	484.78	49,610	+1,850
Apr. 30.....	484.91	49,740	+130
May 31.....	484.64	49,460	-280
June 30.....	483.17	47,830	-1,630
July 31.....	481.46	46,010	-1,820
Aug. 31.....	480.64	45,160	-850
Sept. 30.....	480.94	45,470	+310
WTR YR 1980.....	--	--	+10,490

SWEETWATER RIVER BASIN

11015000 SWEETWATER RIVER NEAR DESCANSO, CA

LOCATION.--Lat 32°50'05", long 116°37'20", in NW¼SE¼ 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 (1.1 km) downstream from unnamed tributary, and 1.3 mi (2.1 km) south of Descanso.

DRAINAGE AREA.--45.4 mi² (117.6 km²).

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 (996.464 m) National Geodetic Vertical Datum of 1929. Prior to June 25, 1927, nonrecording gages at several sites within 0.1 mi (0.2 km) upstream at various datums. Diversion gage at different datum.

REMARKS.--Records fair. No regulation above station. Sweetwater River diversion diverts 0.3 mi (0.5 km) above station for irrigation below. No diversion since November 1976.

AVERAGE DISCHARGE.--Creek only: 46 years, 11.3 ft³/s (0.320 m³/s), 8,190 acre-ft/yr (10.1 hm³/yr).
Combined creek and diversion: 24 years, 7.41 ft³/s (0.210 m³/s), 5,370 acre-ft/yr (6.62 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 11,200 ft³/s (317 m³/s) Feb. 16, 1927, gage height, 13.2 ft (4.023 m), 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 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement of maximum (*) flow:

Date	Time	Creek Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Creek Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 11	1500	341	9.66	6.66	2.030	Mar. 6	1500	938	26.6	7.80	2.377
Jan. 29	2345	2,080	58.9	9.14	2.786	Mar. 10	2215	737	20.9	7.43	2.265
Feb. 20	2130	*6,750	191	12.31	3.752	May 2	0500	263	7.45	6.03	1.838
Mar. 3	0845	339	9.60	6.33	1.929	May 11	0345	157	4.45	5.68	1.731

Creek only: Minimum daily discharge, 0.44 ft³/s (0.012 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	1.0	1.7	1.8	62	156	97	60	28	14	4.7	1.7
2	.44	1.0	1.7	1.8	51	146	102	166	27	13	4.5	1.7
3	.49	1.0	1.7	1.7	36	304	83	76	26	13	4.5	1.7
4	.50	1.0	1.6	1.7	25	202	74	60	25	12	4.5	1.6
5	.50	1.0	1.6	1.7	21	165	72	55	24	12	4.0	1.6
6	.45	1.0	1.6	1.6	20	522	71	43	24	11	4.0	1.6
7	.45	1.0	1.6	2.9	20	348	69	39	24	11	4.0	1.6
8	.50	1.0	1.6	4.5	20	245	64	38	23	11	3.5	1.5
9	.50	1.0	1.6	19	20	194	61	37	22	10	3.5	1.5
10	.45	1.0	1.6	29	20	306	58	69	22	10	3.5	1.5
11	.45	1.0	1.6	182	20	427	56	115	21	9.5	3.5	1.5
12	.48	1.0	1.5	70	21	253	53	72	21	9.0	3.5	1.4
13	.49	1.0	1.4	33	28	212	50	59	21	9.0	3.0	1.4
14	.52	1.0	1.4	19	120	194	48	65	20	8.5	3.0	1.4
15	.52	1.0	1.4	13	190	183	46	66	20	8.5	3.0	1.4
16	.53	1.1	1.4	9.9	204	174	44	58	19	8.0	3.0	1.3
17	.52	1.2	1.4	7.4	418	165	42	47	19	8.0	2.5	1.3
18	.54	1.4	1.4	11	1170	173	39	44	19	7.5	2.5	1.3
19	.62	1.3	1.5	18	1150	158	37	39	18	7.5	2.5	1.3
20	3.1	1.0	1.5	11	2500	127	36	36	18	7.0	2.5	1.3
21	2.4	.97	1.8	6.1	1970	124	35	34	17	7.0	2.5	1.2
22	1.3	.98	2.9	3.8	374	141	60	34	16	6.5	2.5	1.2
23	1.2	1.1	2.1	2.8	246	119	91	36	17	6.5	2.0	1.2
24	1.1	1.1	1.9	2.3	171	106	80	33	17	6.0	2.0	1.2
25	1.1	1.3	1.8	2.0	164	97	67	32	16	7.0	2.0	1.2
26	1.1	1.4	2.1	1.7	194	122	55	31	16	6.0	2.0	1.2
27	1.1	1.5	2.2	1.6	178	106	45	30	15	5.5	2.0	1.1
28	1.1	1.7	2.0	8.5	172	92	40	30	15	5.5	2.0	1.1
29	1.1	1.7	1.9	869	165	85	86	29	14	5.0	1.8	1.1
30	1.1	1.7	1.8	533	---	84	75	28	15	7.5	1.7	1.1
31	1.1	---	1.8	104	---	80	---	28	---	7.2	1.7	---
TOTAL	26.21	34.45	53.1	1974.8	9750	5810	1836	1589	599	269.2	91.9	41.2
MEAN	.85	1.15	1.71	63.7	336	187	61.2	51.3	20.0	8.68	2.96	1.37
MAX	3.1	1.7	2.9	869	2500	522	102	166	28	14	4.7	1.7
MIN	.44	.97	1.4	1.6	20	80	35	28	14	5.0	1.7	1.1
AC-FT	52	68	105	3920	19340	11520	3640	3150	1190	534	182	82

CAL YR 1979 TOTAL 9142.67 MEAN 25.0 MAX 722 MIN .44 AC-FT 18130
WTR YR 1980 TOTAL 22074.86 MEAN 60.3 MAX 2500 MIN .44 AC-FT 43790

11016550 SWEETWATER RESERVOIR NEAR NATIONAL CITY, CA

LOCATION.--Lat 32°41'20", long 117°00'35", in La Nacion Grant, San Diego County, Hydrologic Unit 18070304, at Sweetwater Dam on Sweetwater River, 6 mi (10 km) east of National City, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--182 mi² (471 km²).

PERIOD OF RECORD.--October 1943 to September 1966 (published with Sweetwater River at Sweetwater Dam, station 11016500), October 1972 to current year. Records of monthend gage heights October 1891 to September 1943, in files of San Diego County Department of Sanitation and Flood Control.

GAGE.--Nonrecording gage. Datum of gage is 149.28 ft (45.501 m) National Geodetic Vertical Datum of 1929 (levels by San Diego County); gage readings have been reduced to elevations above NGVD. Prior to Oct. 1, 1972 non-recording gage at same site at datum 0.16 ft (0.049 m) lower. Oct. 1, 1972, to Mar. 6, 1975, water-stage recorder for flood warning only at same site and datum.

REMARKS.--Reservoir is formed by concrete-gravity dam. Dam completed Apr. 7, 1888, to elevation 223.82 ft (68.220 m), raised to elevation 228.82 ft (69.744 m) in 1895, and raised to elevation 243.82 ft (74.316 m) in 1911. In 1939 the spillway was completed at its present elevation. Capacity table dated December 1947. Capacity of reservoir at spillway level, 27,690 acre-ft (34.1 hm³), elevation, 238.82 ft (72.792 m). Dead storage below lowest outlet, 4.0 acre-ft (4,930 m³), elevation, 168.82 ft (51.456 m). Diversions for irrigation. Regulation at Loveland Reservoir. Water is released by California-American Water Co. as required for irrigation and domestic use in Chula Vista, National City, and contiguous areas.

COOPERATION.--Gage heights were furnished by Sweetwater Authority of South Bay Irrigation District.

EXTREMES FOR PERIOD OF RECORD (1943-66 AND SINCE 1972).--Maximum contents observed, 28,720 acre-ft (35.4 hm³), spilling, Feb. 21, 1980, elevation, 240.05 ft (73.167 m); minimum observed, 1,740 acre-ft (2.15 hm³) Nov. 1, 1949, elevation, 188.48 ft (57.449 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 28,720 acre-ft (35.4 hm³), spilling, Feb. 21, elevation, 240.05 ft (73.167 m); minimum observed, 18,390 acre-ft (22.7 hm³) Nov. 25, elevation, 227.77 ft (69.424 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	231.06	20,860	--
Oct. 31.....	229.24	19,470	-1,390
Nov. 30.....	227.86	18,450	-1,020
Dec. 31.....	229.28	19,500	+1,050
CAL YR 1979.....	--	--	+2,040
Jan. 31.....	233.72	23,000	+3,500
Feb. 29.....	237.90	26,680	+3,680
Mar. 31.....	237.52	26,330	-350
Apr. 30.....	239.08	27,780	+1,450
May 31.....	238.94	27,650	-130
June 30.....	238.34	27,090	-560
July 31.....	236.12	25,060	-2,030
Aug. 31.....	233.31	22,660	-2,400
Sept. 30.....	230.73	20,600	-2,060
WTR YR 1980.....	--	--	-260

SAN DIEGO RIVER BASIN

11020600 EL CAPITAN LAKE NEAR LAKESIDE, CA
(Formerly published as El Capitan Reservoir near Lakeside)

LOCATION.--Lat 32°53'00", long 116°48'25", in NE¼SE¼NE¼ sec.7, T.15 S., R.2 E., San Diego County, Hydrologic Unit 18070304, on outlet tower 100 ft (30 m) upstream of El Capitan Dam on San Diego, and 7 mi (11 km) east of Lakeside.

DRAINAGE AREA.--188 mi² (487 km²).

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 (168.55 m) 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 (33.53 m) 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 (139 hm³), elevation, 750.00 ft (228.600 m). Dead storage below lowest outlet, 59.2 acre-ft (73,000 m³), elevation, 574.00 ft (174.955 m). 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 (141 hm³), spilling, Mar. 7, 1980, elevation, 751.09 ft (228.932 m); minimum observed, 2,252 acre-ft (2.78 hm³) May 1, 1957, elevation, 606.28 ft (184.794 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 114,500 acre-ft (141 hm³), spilling, elevation, 751.09 ft (228.932 m); minimum observed, 53,370 acre-ft (65.8 hm³) Jan. 8, elevation, 702.76 ft (214.201 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	711.05	61,780	--
Oct. 31.....	706.76	57,330	-4,450
Nov. 30.....	704.88	55,450	-1,880
Dec. 31.....	703.22	53,820	-1,630
CAL YR 1979.....	--	--	+4,300
Jan. 31.....	712.54	63,380	+9,560
Feb. 29.....	750.52	113,600	+50,220
Mar. 31.....	750.37	113,400	-200
Apr. 30.....	749.97	112,800	-600
May 31.....	746.40	107,300	-5,500
June 30.....	739.30	96,790	-10,510
July 31.....	730.34	84,570	-12,220
Aug. 31.....	721.70	73,800	-10,770
Sept. 30.....	717.40	68,780	-5,020
WTR YR 1980.....	--	--	+7,000

11022100 SAN VICENTE RESERVOIR NEAR LAKESIDE, CA

LOCATION.--Lat 32°54'45", long 116°55'25", in SE¼SW¼NW¼ 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 (5.8 km) north of Lakeside.

DRAINAGE AREA.--74.2 mi² (192.2 km²).

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 (140.21 m) 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 (30.5 m) 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 (111 hm³), elevation, 650 ft (198.1 m). Dead storage below lowest outlet, 350 acre-ft (432,000 m³), elevation, 493.0 ft (150.27 m). 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 (116 hm³), spilling, Feb. 21, 1980, elevation, 653.54 ft (199.199 m); minimum observed, 12,390 acre-ft (15.3 hm³) Nov. 1, 1947, elevation, 549.22 ft (167.402 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 94,200 acre-ft (116 hm³), spilling, Feb. 21, elevation, 653.54 ft (199.199 m); minimum observed, 72,150 acre-ft (89.0 hm³) Nov. 7, elevation, 632.31 ft (192.728 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	635.74	75,510	--
Oct. 31.....	633.38	73,190	-2,320
Nov. 30.....	633.29	73,100	-90
Dec. 31.....	634.52	74,310	+1,210
CAL YR 1979.....	--	--	-2,160
Jan. 31.....	643.86	83,760	+9,450
Feb. 29.....	650.28	90,530	+6,770
Mar. 31.....	649.88	90,100	-430
Apr. 30.....	647.20	87,260	-2,840
May 31.....	648.45	88,580	+1,320
June 30.....	646.92	86,960	-1,620
July 31.....	646.23	86,240	-720
Aug. 31.....	645.14	85,100	-1,140
Sept. 30.....	640.32	80,120	-4,980
WTR YR 1980.....	--	--	+4,610

NOTE.--The change in contents for Apr. 30 and May 31, 1979 water year were incorrect. The corrected values are 0 acre-ft, and +4,710 acre-ft respectively.

SAN DIEGO RIVER BASIN

11022490 SAN DIEGO RIVER AT OLD MISSION DAM NEAR SANTEE, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 33°50'28", long 117°02'14", in Mission San Diego Land Grant, T.15 S., R.2 W., San Diego County, Hydrologic Unit 18070304, 5.5 mi (5.6 km) west of Santee.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: September 1979 to October 1980.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	HARD- NESS (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
DEC 13...	1340	E20	2310	8.1	10.0	10	10.2	--	710	430
MAR 27...	0925	E130	500	8.0	15.5	60	9.7	--	160	64
JUN 25...	1510	E120	410	8.2	25.0	35	8.5	--	150	56
AUG 27...	1810	E100	440	8.1	25.5	--	7.9	15	--	--
SEP 16...	0835	E20	--	--	23.0	--	--	19	--	--
23...	1450	E20	1270	8.3	24.5	--	9.1	--	--	--

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC ONE DET TOT(MG/ L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
DEC 13...	470	1660	--	1.5	.03	.00	.8	--	.49	.21
MAR 27...	69	330	--	1.2	.02	.00	.5	--	.13	.07
JUN 25...	59	250	--	.41	<.01	.00	.6	--	.13	.00
AUG 27...	--	--	26	.50	<.01	.00	--	.30	.08	.00
SEP 16...	--	--	15	--	--	--	--	--	--	--
23...	--	--	--	.36	<.01	.00	--	.50	.10	.03

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
DEC 13...	1340	0	100	10	0	10	20	10	270	.0	0
MAR 27...	0925	0	0	0	0	0	20	0	40	.0	0
JUN 25...	1510	0	150	0	0	0	30	0	10	.0	0

E Estimated

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

11022500 SAN DIEGO RIVER NEAR SANTEE, CA

LOCATION.--Lat 32°49'29", long 117°03'17", in Ex Mission San Diego Grant, San Diego County, Hydrologic Unit 18070304, on right bank in Mission Gorge, 0.2 mi (0.3 km) upstream from left tributary, 6 mi (10 km) west of Santee, and 18 mi (29 km) downstream from El Capitan Reservoir.

DRAINAGE AREA.--377 mi² (976 km²).

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 180 ft (54.9 m), from topographic map. Prior to Nov. 10, 1920, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. Nov. 10, 1920, to Dec. 1, 1954, water-stage recorder at present site at datum 1.0 ft (0.30 m) higher.

REMARKS.--Records poor. No gage-height record Oct. 1 to Dec. 6, Feb. 7 to Mar. 12. Flow regulated by Cuyamaca Reservoir, capacity, 11,540 acre-ft (46.7 hm³), 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. AVERAGE DISCHARGE represents flow to ocean during period of record, regardless of upstream development.

AVERAGE DISCHARGE.--67 years (water years 1913-15, 1917-80), 25.1 ft³/s (0.711 m³/s), 18,180 acre-ft/yr (22.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 70,200 ft³/s (1,990 m³/s) Jan. 27, 1916, based on slope-conveyance computation of peak flow, gage height, 25.1 ft (7.651 m), from floodmarks, site and datum then in use; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,420 ft³/s (96.9 m³/s) Feb. 21; gage height, 12.82 ft (3.908 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s); minimum daily, 4.6 ft³/s (0.130 m³/s) Dec. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	6.2	4.7	5.5	127	620	300	195	188	180	138	141
2	4.7	6.1	4.7	5.5	122	600	320	278	188	179	141	139
3	4.7	6.0	4.7	5.7	116	950	380	195	184	179	142	139
4	4.7	5.9	4.7	5.6	115	1000	340	191	183	181	141	138
5	4.7	5.8	4.7	5.4	111	800	310	190	183	179	143	138
6	4.7	5.8	4.7	5.3	111	900	300	191	160	177	142	59
7	4.7	5.8	4.7	7.8	110	1700	295	190	164	174	141	29
8	4.7	10	4.7	29	110	1100	290	180	178	172	140	23
9	4.7	8.0	4.7	245	110	900	450	188	180	170	140	19
10	4.7	6.8	4.8	159	110	800	440	212	180	169	140	23
11	4.7	6.0	4.9	423	110	1400	430	195	179	169	138	17
12	4.7	5.6	4.9	144	110	900	425	187	181	169	136	14
13	4.7	5.2	4.9	64	300	744	420	184	183	148	135	16
14	4.7	5.0	5.1	46	1000	663	420	191	185	147	139	17
15	4.7	4.9	5.2	37	550	596	350	189	185	145	137	16
16	4.7	4.8	5.0	31	350	544	360	184	186	144	135	15
17	4.7	4.7	5.0	26	1200	501	380	181	183	146	137	15
18	4.7	4.7	4.9	26	700	463	360	180	183	146	136	15
19	4.7	4.7	4.9	50	450	479	340	180	184	146	136	14
20	20	4.7	4.8	25	600	440	330	175	182	142	136	14
21	200	4.7	4.6	23	3000	398	320	185	181	144	138	14
22	15	4.7	5.3	22	1500	425	260	203	182	148	139	14
23	8.0	4.7	6.4	21	600	387	400	201	181	149	140	14
24	7.6	4.7	6.0	20	1200	359	380	187	181	146	138	14
25	7.4	4.7	6.0	20	980	340	300	185	179	142	138	13
26	7.2	4.7	6.1	20	800	437	230	185	179	147	137	14
27	7.0	4.7	6.2	20	700	370	200	182	180	146	139	15
28	6.8	4.7	6.0	60	660	332	200	183	182	142	138	16
29	6.6	4.7	5.9	1300	640	316	409	183	182	139	138	17
30	6.5	4.7	5.8	350	---	310	195	183	182	139	138	16
31	6.3	---	5.6	135	---	305	---	185	---	137	144	---
TOTAL	387.7	163.7	160.6	3336.8	16592	20079	10134	5918	5428	4841	4300	1148
MEAN	12.5	5.46	5.18	108	572	648	338	191	181	156	139	38.3
MAX	200	10	6.4	1300	3000	1700	450	278	188	181	144	141
MIN	4.7	4.7	4.6	5.3	110	305	195	175	160	137	135	13
AC-FT	769	325	319	6620	32910	39830	20100	11740	10770	9600	8530	2280

CAL YR 1979	TOTAL	11420.7	MEAN	31.3	MAX	1060	MIN	4.6	AC-FT	22650
WTR YR 1980	TOTAL	72488.8	MEAN	198	MAX	3000	MIN	4.6	AC-FT	143800

LOS PENASQUITOS CREEK BASIN
11023250 POWAY CREEK NEAR POWAY, CA

LOCATION.--Lat 32°57'13", long 117°00'50", in SE¼NE¼SE¼ sec.18, T.14 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on right bank 100 ft (30 m) downstream from unnamed tributary, 1,000 ft (300 m) upstream from bridge on Standish Drive, and 1.4 mi (2.3 km) southeast of Poway Post Office.

DRAINAGE AREA.--7.92 mi² (20.51 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 540 ft (165 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 755 ft³/s (21.4 m³/s) Feb. 21, 1980, gage height, 7.26 ft (2.213 m), on basis of rating extended above 40 ft³/s (1.13 m³/s) based on a step-backwater analysis up to 8.3 ft (2.53 m); no flow many months each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft³/s (0.283 m³/s) and maximum (*), on basis of rating extended above 40 ft³/s (1.13 m³/s) based on a step-backwater analysis up to 8.3 ft (2.53 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Oct. 20	1255	18	0.51	4.22	1.286	Mar. 3	0010	32	0.91	4.33	1.320
Jan. 9	Unknown	14	0.40	4.33	1.320	Mar. 6	1040	50	1.42	4.46	1.359
Jan. 11	1145	13	0.37	4.32	1.317	Mar. 10	1745	319	9.03	5.93	1.807
Jan. 29	Unknown	338	9.57	6.01	1.832	Mar. 26	0100	20	0.57	4.24	1.292
Feb. 16	2100	303	8.58	5.86	1.786	Apr. 23	0235	13	0.37	4.18	1.274
Feb. 21	0100	*755	21.4	7.26	2.213	Apr. 28	1655	11	0.31	4.16	1.268

Minimum daily discharge, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	10	9.4	4.0	1.4	.40	.04		
2	0	0	0	0	5.0	9.9	3.5	1.3	.40	.04		
3	0	.01	0	0	2.5	17	2.5	1.2	.35	.03		
4	0	.28	0	0	2.0	9.4	2.2	1.1	.35	.02		
5	0	.10	0	0	1.5	8.0	2.0	1.4	.35	.01		
6	0	.05	0	0	1.3	29	3.0	1.3	.30	0		
7	0	.31	0	.20	1.0	19	2.6	1.2	.30	0		
8	0	.20	0	.50	.80	16	2.4	1.1	.25	0		
9	0	.23	0	10	.60	12	2.2	1.1	.25	0		
10	0	.14	0	.37	.50	36	2.0	4.7	.20	0		
11	0	.10	0	3.0	.40	22	1.8	2.0	.20	0		
12	0	.05	0	.24	.30	18	1.6	1.5	.15	0		
13	0	.02	0	.05	1.0	14	1.4	1.0	.15	0		
14	0	.01	0	.05	40	12	1.2	1.0	.10	0		
15	0	.01	0	.07	30	11	3.0	.90	.10	0		
16	0	.01	0	.05	77	9.4	1.5	.75	.10	0		
17	0	.05	0	.07	83	8.5	1.1	.70	.10	0		
18	0	.05	0	.13	120	7.0	1.0	.65	.09	0		
19	0	.02	0	.12	107	6.0	.90	.60	.09	0		
20	6.2	.01	0	.04	156	5.0	.80	.60	.08	0		
21	.50	0	0	.01	186	4.0	1.5	.65	.08	0		
22	.10	0	.15	0	59	3.8	3.1	.60	.08	0		
23	.05	0	.10	0	40	3.5	6.9	.60	.07	0		
24	.05	0	.05	0	35	3.0	1.5	.59	.07	0		
25	.02	0	.08	0	30	2.5	1.2	.50	.06	0		
26	0	0	.05	0	25	8.3	1.0	.50	.06	0		
27	0	0	.01	.01	15	5.0	.90	.50	.06	0		
28	0	0	0	1.1	12	4.9	3.3	.45	.05	0		
29	0	0	0	250	10	4.5	8.0	.45	.05	0		
30	0	0	0	50	---	4.0	2.0	.45	.04	0		
31	0	---	0	24	---	3.5	---	.40	---	0		---
TOTAL	6.92	1.65	.44	340.01	1051.90	325.6	70.10	31.19	4.93	.14	0	0
MEAN	.22	.055	.014	11.0	36.3	10.5	2.34	1.01	.16	.005	0	0
MAX	6.2	.31	.15	250	186	36	8.0	4.7	.40	.04	0	0
MIN	0	0	0	0	.30	2.5	.80	.40	.04	0	0	0
AC-FT	14	3.3	.9	674	2090	646	139	62	9.8	.3	0	0

CAL YR 1979 TOTAL 570.10 MEAN 1.56 MAX 29 MIN 0 AC-FT 1130
WTR YR 1980 TOTAL 1832.88 MEAN 5.01 MAX 250 MIN 0 AC-FT 3640

11023310 RATTLESNAKE CREEK AT POWAY, CA

LOCATION.--Lat 32°57'07", long 117°02'56", in NE&SE&SE& sec.14, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right bank 400 ft (122 m) above mouth, and 1.0 mi (1.6 km) southwest of Poway Post Office.

DRAINAGE AREA.--8.13 mi² (21.1 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 457 ft (139 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,430 ft³/s (40.5 m³/s) Feb. 21, 1980, gage height, 2.88 ft (0.878 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of step-backwater computations and slope-conveyence study at 1.20 ft (0.366 m); no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) from rating curve extended as explained above, and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0100	109 3.09	0.82 0.250	Mar. 6	1030	272 7.70	1.20 0.366
Jan. 29	Unknown	567 16.1	1.74 0.530	Mar. 10	1800	325 9.20	1.31 0.399
Feb. 21	Unknown	*1,430 40.5	2.88 0.878	Mar. 26	0030	142 4.02	0.90 0.274
Mar. 3	0500	134 3.79	0.88 0.268	Apr. 23	Unknown	Unknown	Unknown

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	.01	.01	25	18	6.0	3.0	.64	.08	.04	.13
2	0	.02	.01	.01	10	23	5.0	2.7	.64	.08	.03	.04
3	0	.30	0	0	8.0	61	4.5	2.5	.54	.18	.02	.08
4	0	.40	0	0	5.0	18	4.4	2.3	.46	.24	.01	.04
5	0	.15	0	0	4.0	16	4.3	2.3	.46	.18	0	.02
6	0	.10	0	0	3.5	150	4.5	2.2	.37	.08	0	.01
7	0	.60	0	1.0	3.0	25	4.3	2.1	.37	.08	0	.02
8	0	3.0	0	4.0	2.5	23	4.0	2.0	.37	.08	0	.05
9	0	.80	0	13	2.0	18	3.9	1.9	.37	.05	0	.04
10	0	.20	0	2.3	1.5	75	3.8	10	.37	.02	0	.04
11	0	.15	0	41	1.3	42	3.5	4.5	.37	.02	0	.05
12	0	.15	0	60	1.0	23	3.0	1.7	.37	.01	0	.04
13	0	.10	0	2.6	3.0	23	2.5	1.7	.37	.01	0	.03
14	0	.05	0	1.5	150	21	3.0	1.7	.31	.02	0	.02
15	0	.05	0	1.0	120	21	3.3	1.6	.30	.05	0	.01
16	0	.05	0	.75	130	18	3.2	1.4	.46	.05	0	.04
17	0	.10	0	.50	170	21	3.1	1.2	.24	.02	0	.04
18	0	.10	0	3.3	200	21	3.1	1.2	.24	.02	0	.04
19	0	.08	0	3.5	170	20	3.2	1.1	.24	.01	0	.13
20	18	.06	0	2.0	200	18	3.0	1.3	.24	0	0	.04
21	1.5	.05	.05	1.5	230	19	3.5	1.4	.24	0	0	.02
22	.15	.05	.30	1.2	175	8.5	10	1.4	.37	0	0	.01
23	.10	.05	.35	1.0	100	7.1	30	1.3	.30	.01	0	0
24	.10	.05	.30	.90	60	7.1	4.0	1.1	.13	.02	.01	0
25	.08	.02	.25	.80	40	12	3.5	1.1	.13	.02	.02	0
26	.08	.02	.20	.70	25	26	3.3	.96	.30	.01	.05	0
27	.06	.02	.10	1.5	23	5.3	3.2	.85	.18	.17	.03	0
28	.06	.02	.05	10	21	5.2	7.0	.74	.30	.02	.08	0
29	.05	.01	.05	260	18	5.1	12	.64	.13	.05	.04	0
30	.05	.01	.02	100	---	5.0	5.5	.64	.13	.02	.02	0
31	.03	---	.02	50	---	4.9	---	.64	---	.05	.01	---
TOTAL	20.26	6.78	1.71	564.07	1901.8	760.2	157.6	59.17	9.94	1.65	.36	.94
MEAN	.65	.23	.055	18.2	65.6	24.5	5.25	1.91	.33	.053	.012	.031
MAX	18	3.0	.35	260	230	150	30	10	.64	.24	.08	.13
MIN	0	.01	0	0	1.0	4.9	2.5	.64	.13	0	0	0
AC-FT	40	13	3.4	1120	3770	1510	313	117	20	3.3	.7	1.9

CAL YR 1979	TOTAL	746.54	MEAN 2.05	MAX 53	MIN 0	AC-FT 1480
WTR YR 1980	TOTAL	3484.48	MEAN 9.52	MAX 260	MIN 0	AC-FT 6910

LOS PENASQUITOS CREEK BASIN

11023325 BEELER CREEK AT POMERADO ROAD NEAR POWAY, CA

LOCATION.--Lat 32°56'23", long 117°03'57", in SW¼NW¼SW¼ 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 (1.3 km) upstream from Poway Creek and 1.7 mi (2.7 km) southwest of Poway Post Office.

DRAINAGE AREA.--5.46 mi² (14.14 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 465 ft (142 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s (39.9 m³/s) Jan. 29, 1980, gage height, 9.20 ft (2.804 m) from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of slope-area measurement at gage height 8.79 ft (2.679 m); no flow for much of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*) from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0630	*1,410 39.9	9.20 2.804	Feb. 18	0830	363 10.3	7.43 2.265
Feb. 16	2100	575 16.3	7.90 2.408	Feb. 21	0100	1,240 35.1	9.00 2.743

Minimum daily discharge, no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	24	2.6	.96	.40	.12			
2				0	18	3.4	.87	.35	.12			
3				0	15	6.2	.81	.28	.11			
4				0	12	2.9	.75	.28	.10			
5				0	11	2.6	.72	.28	.09			
6				0	9.0	26	.68	.26	.08			
7				0	8.5	18	.55	.23	.08			
8				0	8.3	9.6	.55	.28	.07			
9				.01	6.3	6.5	.42	.28	.06			
10				.01	6.0	15	.40	.33	.06			
11				.09	5.8	21	.40	.28	.06			
12				.01	7.1	11	.40	.28	.06			
13				.01	6.6	7.3	.38	.33	.06			
14				.02	39	5.3	.30	.28	.06			
15				.03	41	4.1	.28	.28	.06			
16				.06	87	3.3	.26	.28	.07			
17				.07	52	2.7	.24	.28	.07			
18				.10	100	2.7	.23	.27	.07			
19				.14	46	2.4	.23	.21	.07			
20				.12	106	1.9	.23	.18	.06			
21				.10	130	1.8	.23	.18	.06			
22				.12	60	1.7	.32	.18	.05			
23				.12	35	1.4	.70	.18	.04			
24				.12	20	1.3	.55	.18	.04			
25				.12	14	1.3	.44	.21	.03			
26				.11	10	2.1	.40	.18	.03			
27				.13	4.3	1.3	.29	.16	.02			
28				.38	3.4	1.1	.36	.15	.02			
29				349	2.7	1.0	.41	.15	.01			
30				109	---	.95	.44	.15	0			
31		---		38	---	.87	---	.14	---			---
TOTAL	0	0	0	497.87	888.0	169.32	13.80	7.50	1.83	0	0	0
MEAN	0	0	0	16.1	30.6	5.46	.46	.24	.061	0	0	0
MAX	0	0	0	349	130	26	.96	.40	.12	0	0	0
MIN	0	0	0	0	2.7	.87	.23	.14	0	0	0	0
AC-FT	0	0	0	988	1760	336	27	15	3.6	0	0	0

CAL YR 1979	TOTAL	993.20	MEAN 2.72	MAX 104	MIN 0	AC-FT 1970
WTR YR 1980	TOTAL	1578.32	MEAN 4.31	MAX 349	MIN 0	AC-FT 3130

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

LOCATION.--Lat 32°56'58", long 117°04'08", in NW¼NE¼NE¼ sec.22, T.14 S., R.2 W., San Diego County, Hydrologic Unit 18070304, on right bank at Cobblestone Creek Road, 0.2 mi (0.3 km) downstream from confluence of Poway and Pomerado Creeks, and 2.0 mi (3.2 km) southwest of Poway.

DRAINAGE AREA.--31.2 mi² (80.8 km²).

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

GAGE.--Water-stage recorder and rain-gage attachment. Altitude of gage is 415 ft (126 m), from topographic map. Rainfall data in files of the Geological Survey.

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

AVERAGE DISCHARGE.--10 years, 6.57 ft³/s (0.186 m³/s), 4,760 acre-ft/yr (5.87 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,990 ft³/s (141 m³/s) Feb. 21, 1980, gage height, 11.11 ft (3.386 m), on basis of slope-area measurement of maximum flow; no flow for parts of some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), from rating curve extended above 170 ft³/s (4.81 m³/s) on basis of slope-area measurements at gage heights 9.58 ft (2.920 m) and 11.11 ft (3.386 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0100	493 14.0	6.94 2.115	Feb. 21	0305	*4,990 141	11.11 3.386
Jan. 29	0655	2,030 57.5	8.98 2.737	Mar. 2	2330	213 6.03	5.97 1.820
Feb. 14	0930	457 12.9	6.86 2.091	Mar. 6	0950	558 15.8	7.00 2.134
Feb. 18	1005	1,540 43.6	8.50 2.591	Mar. 10	1810	729 20.6	7.41 2.259

Minimum daily discharge, 0.10 ft³/s (0.003 m³/s) Sept. 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.17	.46	.58	46	35	13	6.2	2.4	.19	.31	.21
2	.13	.17	.46	.58	28	51	11	6.0	2.1	.26	.43	.20
3	.12	.17	.46	.58	21	92	9.5	4.9	2.1	.37	.46	.23
4	.13	3.0	.46	.58	16	37	9.2	4.8	2.1	.54	.35	.23
5	.12	.27	.46	.58	13	30	8.7	5.1	1.9	.56	.30	.23
6	.12	.20	.46	1.0	11	267	9.0	5.0	1.9	.57	.26	.18
7	.13	1.1	.46	4.0	9.1	82	8.3	4.9	1.6	.65	.25	.16
8	.14	5.8	.46	6.0	7.8	53	7.9	4.7	1.6	.66	.30	.15
9	.11	1.5	.46	54	6.0	43	7.0	4.5	1.4	.66	.36	.15
10	.12	.44	.46	26	5.5	186	6.9	17	1.4	.66	.40	.18
11	.12	.32	.46	205	5.3	129	6.5	7.2	1.4	.47	.27	.25
12	.12	.32	.46	23	4.7	66	5.6	4.7	1.1	.41	.25	.37
13	.11	.33	.46	3.9	12	50	5.5	4.5	1.1	.49	.25	.36
14	.15	.28	.46	2.2	245	43	6.0	4.6	1.0	.49	.24	.21
15	.18	.32	.46	1.4	162	39	6.3	4.6	.87	.49	.25	.21
16	.13	.29	.46	1.2	288	37	5.7	4.4	1.1	.49	.29	.31
17	.14	.39	.46	1.1	338	35	4.8	4.3	1.1	.49	.31	.31
18	.13	.39	.46	10	590	36	4.6	4.3	.87	.49	.28	.20
19	.42	.40	.62	5.0	461	37	4.6	4.9	.87	.29	.23	.18
20	36	.41	.54	3.5	543	22	4.4	4.4	.66	.29	.24	.16
21	2.9	.42	.56	2.5	1000	24	5.8	4.4	.49	.49	.27	.14
22	.25	.42	.64	2.3	275	20	16	4.1	.66	.46	.31	.13
23	.17	.42	.70	2.0	160	17	50	4.1	.66	.34	.28	.12
24	.16	.43	.62	1.8	110	16	6.1	3.9	.49	.24	.22	.11
25	.15	.43	.58	1.6	80	16	5.2	3.7	.29	.24	.22	.10
26	.14	.44	.58	1.4	65	45	4.8	3.6	.29	.33	.21	.10
27	.19	.45	.58	1.9	51	15	4.8	3.2	.29	.33	.21	.10
28	.21	.46	.58	18	43	14	13	3.0	.49	.23	.24	.10
29	.16	.46	.58	1050	38	12	26	2.7	.29	.41	.24	.10
30	.14	.46	.58	258	---	12	8.8	2.5	.29	.35	.21	.10
31	.16	---	.58	94	---	11	---	2.4	---	.33	.18	---
TOTAL	43.37	20.66	16.02	1783.70	4634.4	1572	285.0	148.6	32.81	13.47	8.62	5.58
MEAN	1.40	.69	.52	57.5	160	50.7	9.50	4.79	1.09	.43	.28	.19
MAX	36	5.8	.70	1050	1000	267	50	17	2.4	.66	.46	.37
MIN	.11	.17	.46	.58	4.7	11	4.4	2.4	.29	.19	.18	.10
AC-FT	86	41	32	3540	9190	3120	565	295	65	27	17	11

CAL YR 1979 TOTAL 3475.19 MEAN 9.52 MAX 310 MIN .05 AC-FT 6890
WTR YR 1980 TOTAL 8564.23 MEAN 23.4 MAX 1050 MIN .10 AC-FT 16990

LOS PENASQUITOS CREEK BASIN

11023340 LOS PENASQUITOS CREEK NEAR POWAY, CA

LOCATION.--Lat 32°56'35", long 117°07'15", in Los Penasquitos Grant, San Diego County, Hydrologic Unit 18070304, on left bank 1.0 mi (1.6 km) downstream from Cypress Creek, and 5.5 mi (8.8 km) southwest of Poway.

DRAINAGE AREA.--42.1 mi² (109 km²).

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 260 ft (79.2 m), 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.--16 years, 7.91 ft³/s (0.224 m³/s), 5,730 acre-ft/yr (7.07 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s (135 m³/s) Feb. 21, 1980, gage height, 10.26 ft (3.127 m) from rating curve extended above 1,400 ft³/s (39.6 m³/s); no flow at times in 1968, 1972, and 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*), from rating curve extended above 1,400 ft³/s (39.6 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0630	3,220 91.2	8.91 2.716	Feb. 21	0130	*4,750 135	10.26 3.127
Feb. 14	0900	442 12.5	4.49 1.369	Mar. 6	1145	574 16.3	4.90 1.494
Feb. 16	2230	1,990 56.4	7.49 2.283	Mar. 10	1915	772 21.9	5.42 1.652

Minimum daily discharge, 0.24 ft³/s (0.007 m³/s) Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.25	.43	1.1	1.5	63	43	15	8.7	3.9	.70	.40	.46
2	.27	.42	1.0	1.5	39	47	13	8.1	4.1	.66	.56	.43
3	.29	.40	.92	1.6	26	108	12	6.8	4.0	.66	.66	.49
4	.29	2.4	1.0	1.5	18	46	11	6.3	3.6	.74	.46	.49
5	.25	2.8	1.1	1.4	14	38	11	6.6	3.3	.83	.46	.49
6	.24	1.9	1.0	1.3	11	307	12	6.9	3.1	.74	.43	.46
7	.25	2.1	1.0	5.6	9.9	122	11	7.1	2.7	.70	.43	.40
8	.26	5.5	1.0	7.4	8.6	78	12	8.5	2.6	.70	.43	.43
9	.26	3.4	1.0	73	6.7	60	11	8.7	2.5	.70	.52	.43
10	.26	2.2	1.1	39	6.0	202	11	27	2.4	.63	.63	.49
11	.26	1.8	1.3	240	5.9	180	12	20	2.2	.59	.43	.64
12	.28	1.4	1.3	44	5.7	92	9.4	9.0	2.0	.56	.46	.52
13	.26	1.2	1.2	13	20	71	9.1	8.1	1.6	.56	.46	.55
14	.26	1.2	1.1	7.9	260	58	9.8	8.4	1.7	.52	.43	.56
15	.26	1.1	1.1	6.1	187	50	9.6	8.2	1.4	.59	.46	.54
16	.52	1.0	1.1	4.0	410	44	12	7.9	1.3	.56	.46	.50
17	.37	1.0	1.1	3.4	384	37	8.6	7.6	1.4	.52	.56	.45
18	.34	1.1	1.1	12	729	37	8.5	7.8	1.3	.56	.46	.43
19	.33	1.2	1.9	19	535	36	8.4	7.9	1.3	.56	.40	.44
20	42	1.2	1.5	4.0	1150	26	8.2	7.9	1.2	.56	.43	.48
21	11	1.1	1.3	2.9	1390	27	12	8.0	1.2	.56	.46	.53
22	1.5	1.1	1.8	2.6	306	25	25	8.0	.96	.56	.52	1.7
23	.99	1.2	2.4	2.3	185	19	66	7.6	1.0	.56	.56	2.4
24	.84	1.3	1.8	1.9	130	18	11	6.8	1.1	.59	.40	2.9
25	.77	1.3	1.6	1.9	97	18	7.9	6.1	.92	.59	.40	3.2
26	.71	1.3	1.6	2.0	77	54	7.6	6.2	.83	.59	.40	2.5
27	.70	1.3	1.6	2.0	65	22	7.0	6.0	.83	.59	.40	2.0
28	.70	1.4	1.6	22	54	16	15	5.7	.78	.56	.46	2.1
29	.71	1.2	1.5	1310	48	14	36	5.4	.78	.52	.46	1.2
30	1.2	1.2	1.5	392	---	13	13	4.7	.66	.46	.40	.48
31	.51	---	1.5	121	---	13	---	3.9	---	.46	.37	---
TOTAL	67.13	46.15	41.12	2347.8	6240.8	1921	415.1	255.9	56.66	18.68	14.36	28.69
MEAN	2.17	1.54	1.33	75.7	215	62.0	13.8	8.25	1.89	.60	.46	.96
MAX	.42	5.5	2.4	1310	1390	307	66	27	4.1	.83	.66	3.2
MIN	.24	.40	.92	1.3	5.7	13	7.0	3.9	.66	.46	.37	.40
AC-FT	133	92	82	4660	12380	3810	823	508	112	37	28	57

CAL YR 1979	TOTAL	5461.87	MEAN 15.0	MAX 416	MIN .14	AC-FT 10830
WTR YR 1980	TOTAL	11453.39	MEAN 31.3	MAX 1390	MIN .24	AC-FT 22720

11025500 SANTA YSABEL CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°06'25", long 116°51'55", in SW¼NW¼NE¼ sec.27, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank 1.6 mi (2.6 km) downstream from Temescal Creek, and 4.5 mi (7.2 km) north of Ramona.

DRAINAGE AREA.--112 mi² (290 km²).

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 (258.434 m) 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 except those for period of no gage-height record, Mar. 29 to May 6, which are fair. Flow regulated by Sutherland Reservoir (station 11024000) since July 1954. Some small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,400 ft³/s (804 m³/s) Jan. 27, 1916, gage height, 14.0 ft (4.27 m) datum then in use, from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-conveyance computation of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,700 ft³/s (303 m³/s) Feb. 21, gage height, 14.25 ft (4.343 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurement at gage height 9.28 ft (2.829 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Oct. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.1	2.6	2.6	100	365	180	105	38	18	9.2	7.9
2	1.1	2.1	2.5	2.5	80	359	190	110	38	18	9.6	7.5
3	1.0	2.1	2.5	2.4	60	965	180	105	36	19	10	7.5
4	1.0	2.3	2.5	2.4	50	602	175	100	34	18	11	7.3
5	1.0	2.3	2.7	2.5	40	442	170	98	33	17	11	7.4
6	1.0	2.2	2.7	2.5	36	1290	160	96	32	17	11	7.2
7	1.1	2.5	2.7	3.0	33	926	150	87	32	16	10	7.2
8	1.2	3.5	2.7	5.3	31	558	140	52	31	16	9.6	7.5
9	1.2	3.2	2.7	14	29	474	140	47	30	15	10	7.5
10	1.3	3.0	2.8	24	28	534	140	70	29	15	10	7.2
11	1.4	3.0	3.0	512	27	661	140	68	29	15	9.6	7.5
12	1.5	2.8	3.0	120	26	486	135	53	29	14	9.6	7.5
13	1.5	2.5	2.8	62	26	423	125	50	29	14	9.6	7.4
14	1.6	2.4	2.8	42	403	389	125	57	27	14	9.2	7.7
15	1.6	2.3	2.8	29	748	365	120	64	27	13	9.2	7.8
16	1.6	2.3	2.8	22	576	345	120	53	27	13	9.6	7.7
17	1.8	2.6	2.8	19	748	312	120	47	28	13	9.6	7.1
18	1.8	2.9	2.7	46	1960	331	140	44	27	13	10	6.9
19	1.9	2.9	2.8	139	1500	341	140	42	26	13	9.7	6.8
20	7.1	2.7	2.9	41	4510	292	145	42	25	13	9.6	7.2
21	6.9	2.8	3.6	28	6190	280	138	42	24	13	9.6	6.8
22	3.6	2.9	4.1	22	1710	287	95	42	24	13	9.2	6.8
23	3.0	3.0	3.9	18	990	265	105	42	23	12	9.2	6.8
24	2.8	3.1	3.3	16	732	247	98	41	23	12	8.5	6.5
25	2.6	3.2	2.9	15	621	242	98	40	22	12	7.9	6.4
26	2.5	3.4	3.0	14	532	300	88	39	22	11	7.9	6.1
27	2.4	3.4	2.8	14	466	255	92	39	21	11	7.9	6.2
28	2.4	2.9	2.7	64	421	236	95	38	20	10	7.9	6.4
29	2.2	2.8	2.6	1850	391	220	105	38	20	9.6	7.2	6.2
30	2.0	2.7	2.6	550	---	200	115	37	19	9.6	7.2	6.1
31	2.1	---	2.6	160	---	190	---	38	---	9.2	7.5	---
TOTAL	65.3	81.9	88.9	3844.2	23064	13182	3964	1826	825	426.4	287.1	212.1
MEAN	2.11	2.73	2.87	124	795	425	132	58.9	27.5	13.8	9.26	7.07
MAX	7.1	3.5	4.1	1850	6190	1290	190	110	38	19	11	7.9
MIN	1.0	2.1	2.5	2.4	26	190	88	37	19	9.2	7.2	6.1
AC-FT	130	162	176	7620	45750	26150	7860	3620	1640	846	569	421
CAL YR 1979	TOTAL	8236.12	MEAN	22.6	MAX	1070	MIN	.81	AC-FT	16340		
WTR YR 1980	TOTAL	47866.90	MEAN	131	MAX	6190	MIN	1.0	AC-FT	94940		

SAN DIEGUITO RIVER BASIN

11026000 SANTA YSABEL CREEK NEAR SAN PASQUAL, CA

LOCATION.--Lat 33°05'10", long 116°54'56", in NE¼NW¼SE¼ sec.31, T.12 S., R.1 E., San Diego County, Hydrologic Unit 18070304, on left bank 1.1 mi (1.8 km) downstream from Clevenger Canyon, and 2 mi (3 km) east of San Pasqual.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--December 1905 to September 1910 and May 1911 to September 1912 (published as "near Escondido"), April 1947 to November 1955 (irrigation seasons only), April 1956 to February 1980 (destroyed by flood of February 21, 1980, Feb. 21-29 estimated). Records for October to December 1910, published in WSP 447, have been found to be in error and should not be used.

GAGE.--Water-stage recorder. Concrete control since April 1947. Altitude of gage is 510 ft (155 m), from topographic map. Dec. 17, 1905, to Sept. 30, 1912, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for period of no gage-height record Feb. 7-29, which are fair. Flow regulated by Sutherland Reservoir, capacity, 29,680 acre-ft (36.6 hm³) since July 1954. Small diversion above station.

EXTREMES FOR PERIOD OF RECORD (1905-12 AND SINCE 1947).--Maximum discharge, 12,500 ft³/s (354 m³/s) estimated, Feb. 21, 1980, gage height unknown; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October 1979 to February 1980, 12,500 ft³/s (354 m³/s) estimated, Feb. 21, gage height unknown; minimum daily, 1.3 ft³/s (0.037 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	3.8	4.5	5.5	108							
2	1.5	3.7	4.3	5.5	76							
3	1.4	3.6	4.3	5.1	60							
4	1.4	3.9	4.2	5.0	52							
5	1.3	4.0	4.4	5.1	46							
6	1.4	3.8	4.4	5.1	41							
7	1.5	4.1	4.3	5.9	40							
8	1.7	6.0	4.1	9.6	37							
9	1.7	5.6	4.2	19	34							
10	1.7	5.4	4.6	39	32							
11	1.9	5.2	5.1	590	30							
12	2.1	4.8	5.0	161	29							
13	2.1	4.3	4.7	86	28							
14	2.1	4.1	4.7	57	500							
15	2.1	4.0	4.6	40	850							
16	2.3	4.1	4.5	29	720							
17	2.4	4.3	4.4	24	900							
18	2.6	5.0	4.2	38	2200							
19	2.7	5.0	4.2	178	1900							
20	9.6	4.6	4.4	58	5500							
21	11	4.7	5.2	34	7200							
22	6.0	4.9	6.7	26	2300							
23	4.9	5.1	6.6	21	1200							
24	4.5	5.2	6.3	18	850							
25	4.1	5.2	6.0	16	700							
26	4.0	5.5	6.5	16	600							
27	4.0	5.9	6.1	15	550							
28	4.0	5.3	5.9	53	450							
29	4.0	4.8	5.6	2150	420							
30	3.5	4.7	5.5	757	---							
31	3.7	---	5.4	198	---							
TOTAL	98.8	140.6	154.9	869.8	27453							
MEAN	3.19	4.69	5.00	151	947							
MAX	11	6.0	6.7	2150	7200							
MIN	1.3	3.6	4.1	5.0	28							
AC-FT	196	279	307	9260	54450							

CAL YR 1979 TOTAL 10412.55 MEAN 28.5 MAX 1350 MIN .89 AC-FT 20650

11027000 GUEJITO CREEK NEAR SAN PASQUAL, CA

LOCATION.--Lat 33°06'57", long 116°57'08", in NW¼NW¼SE¼ sec.23, T.12 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank 0.3 mi (0.5 km) upstream from Rockwood Canyon Creek, and 1.8 mi (2.9 km) north of San Pasqual.

DRAINAGE AREA.--22.5 mi² (58.3 km²).

PERIOD OF RECORD.--December 1946 to current year.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 560 ft (171 m), from topographic map.

REMARKS.--Records good except for periods of no gage-height record and indefinite stage-discharge relation Apr. 28 to July 1 and July 13 to Aug. 19, which are poor. No regulation above station. Diversion for irrigation 0.2 mi (0.3 km) upstream.

AVERAGE DISCHARGE.--33 years (water years 1948-80), 2.91 ft³/s (0.082 m³/s), 2,110 acre-ft/yr (2.60 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,940 ft³/s (112 m³/s) Feb. 20, 1980, gage height, 7.22 ft (2.201 m) from rating curve extended above 180 ft³/s (5.10 m³/s) on basis of slope-area measurements at gage heights 5.83 ft (1.777 m) and 6.30 ft (1.920 m); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1230	588 16.7	4.32 1.317	Mar. 3	0030	721 20.4	4.56 1.390
Jan. 19	0200	103 2.92	2.95 0.899	Mar. 6	0745	588 16.7	4.32 1.317
Jan. 29	0545	3,710 105	7.11 2.167	Mar. 10	2215	335 9.49	3.76 1.146
Feb. 16	2015	2,400 68.0	6.32 1.926	Mar. 26	0515	106 3.00	2.97 0.905
Feb. 20	2345	*3,940 112	7.22 2.201				

Minimum daily discharge, 0.97 ft³/s (0.027 m³/s) Oct. 3, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.5	1.3	1.5	26	44	29	15	10	6.0	2.7	2.0
2	1.0	1.5	1.2	1.5	21	58	29	15	10	5.8	2.7	2.1
3	.97	1.5	1.2	1.4	18	323	28	15	9.8	6.2	2.7	2.1
4	1.0	1.6	1.2	1.4	16	129	27	14	9.6	6.0	2.6	2.0
5	.97	1.6	1.3	1.4	14	81	26	14	9.5	5.4	2.6	1.9
6	.98	1.5	1.3	1.4	14	352	26	14	9.4	5.0	2.6	1.9
7	1.0	1.6	1.3	1.5	13	153	26	14	9.3	4.6	2.6	1.8
8	1.1	1.9	1.3	2.4	12	89	25	14	9.1	4.5	2.5	1.9
9	1.1	1.8	1.3	7.5	12	70	24	15	9.0	4.3	2.5	1.9
10	1.1	1.7	1.4	11	11	112	23	24	8.8	4.1	2.5	2.3
11	1.2	1.7	1.5	179	11	163	23	23	8.7	3.8	2.5	2.4
12	1.2	1.6	1.4	26	11	91	22	21	8.7	3.7	2.5	2.4
13	1.3	1.5	1.4	15	12	67	22	15	8.6	3.6	2.4	2.4
14	1.3	1.4	1.3	11	170	55	21	17	8.5	3.5	2.4	2.4
15	1.3	1.4	1.3	9.4	330	48	21	20	8.3	3.5	2.4	2.4
16	1.4	1.4	1.3	6.4	436	44	21	19	8.1	3.4	2.4	2.3
17	1.4	1.4	1.3	4.9	361	40	20	15	8.0	3.3	2.3	2.1
18	1.5	1.6	1.3	24	987	38	19	13	7.8	3.2	2.3	2.0
19	1.6	1.6	1.3	43	677	40	19	12	7.6	3.2	2.3	2.1
20	7.3	1.5	1.3	12	1310	37	19	12	7.6	3.2	2.3	2.2
21	5.8	1.4	1.6	9.5	977	35	18	12	7.2	3.1	2.3	2.2
22	2.0	1.4	1.9	7.3	193	36	18	12	7.2	3.1	2.3	2.2
23	1.7	1.5	1.7	5.4	117	34	18	12	7.2	3.0	2.2	2.3
24	1.6	1.5	1.6	4.7	89	33	17	12	6.8	3.0	2.1	2.2
25	1.5	1.6	1.6	4.6	74	31	17	11	6.8	2.9	2.1	2.1
26	1.5	1.6	1.7	4.4	63	83	16	11	6.6	2.9	2.1	2.0
27	1.5	1.7	1.6	4.3	56	50	16	11	6.6	2.9	2.0	2.0
28	1.6	1.6	1.6	38	51	36	16	11	6.4	2.9	2.0	2.1
29	1.5	1.4	1.5	1120	47	32	16	11	6.4	2.8	1.8	2.0
30	1.4	1.3	1.5	171	---	30	15	10	6.2	2.8	1.8	2.0
31	1.4	---	1.5	44	---	29	---	10	---	2.8	1.9	---
TOTAL	51.32	46.3	44.0	1775.0	6129	2463	637	444	243.8	118.5	72.4	63.7
MEAN	1.66	1.54	1.42	57.3	211	79.5	21.2	14.3	8.13	3.82	2.34	2.12
MAX	7.3	1.9	1.9	1120	1310	352	29	24	10	6.2	2.7	2.4
MIN	.97	1.3	1.2	1.4	11	29	15	10	6.2	2.8	1.8	1.8
AC-FT	102	92	87	3520	12160	4690	1260	881	484	235	144	126

CAL YR 1979 TOTAL 3536.17 MEAN 9.69 MAX 400 MIN .64 AC-FT 7010
WTR YR 1980 TOTAL 12088.02 MEAN 33.0 MAX 1310 MIN .97 AC-FT 23980

SAN DIEGUITO RIVER BASIN

11028500 SANTA MARIA CREEK NEAR RAMONA, CA

LOCATION.--Lat 33°03'08", long 116°56'41", in SE¼SE¼SE¼ sec.11, T.13 S., R.1 W., San Diego County, Hydrologic Unit 18070304, on left bank 3.8 mi (6.1 km) northwest of Ramona, and 4.6 mi (7.4 km) upstream from mouth.

DRAINAGE AREA.--57.6 mi² (149.2 km²).

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 (394.545 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1946, at datum 1.78 ft (0.543 m) lower.

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

AVERAGE DISCHARGE.--41 years (water years 1914-20, 1947-80) 5.61 ft³/s (0.159 m³/s), 4,060 acre-ft/yr (5.01 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,200 ft³/s (430 m³/s) Feb. 21, 1980, gage height, 14.39 ft (4.386 m) estimated on basis of slope-conveyance study of maximum flow; no flow for several months in most years.

EXTREME FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximum (*), from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement at gage height 4.56 ft (1.390 m) and slope-conveyance study at gage height 14.39 ft (4.386 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1345	375 10.6	2.94 0.896	Mar. 3	Unknown	Unknown	Unknown
Jan. 29	0730	3,310 93.7	6.89 2.100	Mar. 6	1345	1,190 33.7	4.59 1.399
Feb. 14	0915	804 22.8	3.84 1.170	Mar. 10	Unknown	Unknown	Unknown
Feb. 18	0945	2,640 74.8	6.23 1.899	Mar. 26	0345	301 8.52	2.75 0.838
Feb. 21	0130	*15,200 430	14.39 4.386				

Minimum daily discharge, 0.06 ft³/s (0.002 m³/s) July 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.13	.29	.10	99	120	57	16		.61	.10	.20
2	.17	.16	.38	.11	68	150	59	39		.51	.11	.28
3	.16	.24	.32	.11	50	320	53	27		.77	.12	.16
4	.16	.31	.09	.12	48	230	49	21		1.3	.17	.18
5	.21	.28	.09	.13	33	160	46	20		.51	.14	.13
6	.21	.13	.10	.14	32	430	48	19		.29	.13	.23
7	.20	.24	.10	.24	29	350	45	19		.26	.13	.25
8	.22	.36	.10	.48	24	200	39	20		.13	.10	.24
9	.16	.41	.11	1.1	12	150	36	21		.16	.14	.24
10	.18	.25	.15	5.2	18	170	37	28		.07	.15	.19
11	.19	.25	.59	171	17	210	34	37		.28	.15	.18
12	.12	.25	.49	81	15	170	27	26		.12	.15	.18
13	.13	.25	.08	20	26	130	26	23		.08	.16	.24
14	.12	.12	.07	25	473	122	26	25		.07	.23	.23
15	.11	.12	.08	35	433	118	25	27		.12	.17	.24
16	.11	.10	.08	14	537	102	24	23	4.6	.21	.14	.23
17	.11	.12	.08	13	688	89	23	20	4.2	.41	.15	.17
18	.12	.13	.09	16	1140	103	22	18	3.8	.48	.20	.23
19	.11	.13	.11	59	916	106	22	18	3.5	.33	.16	.24
20	.46	.11	.38	29	2010	85	21	18	3.2	.25	.16	.19
21	.13	.11	.18	15	4120	82	22	18	2.4	.27	.16	.18
22	.10	.11	.19	10	667	94	27	18	2.3	.10	.12	.27
23	.10	.13	.33	79	350	76	46	18	2.2	.09	.19	.24
24	.10	.12	.40	8.8	230	71	35	16	1.8	.10	.21	.23
25	.11	.12	.51	6.2	200	70	28	15	1.2	.12	.27	.22
26	.13	.14	.48	8.1	180	173	25	14	1.3	.13	.14	.16
27	.13	.13	.21	3.3	150	93	23	14	1.1	.10	.16	.22
28	.13	.12	.09	35	140	80	15	14	.86	.06	.14	.22
29	.11	.11	.09	1590	130	68	81	14	.89	.06	.10	.20
30	.11	.12	.09	511	---	61	---	13	.67	.06	.16	.26
31	.12	---	.09	163	---	55	---	14	---	.08	.19	---
TOTAL	4.68	5.30	6.44	2836.73	12836	4438	1090	653	188.62	8.13	4.80	6.43
MEAN	.15	.18	.21	91.5	443	143	36.3	21.1	6.29	.26	.15	.21
MAX	.46	.41	.59	1590	4120	430	81	39	16	1.3	.27	.28
MIN	.10	.10	.07	.10	15	55	21	13	.67	.06	.10	.13
AC-FT	9.3	11	13	5630	25460	8800	2160	1300	374	16	9.5	13

CAL YR 1979 TOTAL 7011.41 MEAN 19.2 MAX 676 MIN .03 AC-FT 13910
WTR YR 1980 TOTAL 22078.13 MEAN 60.3 MAX 4120 MIN .06 AC-FT 43790

11030020 LAKE HODGES NEAR ESCONDIDO, CA

LOCATION.--Lat 33°02'41", long 117°07'39", in SE¼SE¼NW¼ sec.18, T.13 S., R.2 W., San Diego County, Hydrologic Unit 18070304, 20 ft (6 m) upstream from right upstream end of Hodges Dam on San Dieguito River, 6.4 mi (10.3 km) southwest of Escondido, and 20 mi (32 km) southwest of Sutherland Reservoir.

DRAINAGE AREA.--303 mi² (785 km²).

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 (60.96 m) 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 (244 m) 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 (41.4 hm³), elevation, 315.0 ft (96.01 m). Dead storage below lowest outlet, 1,160 acre-ft (1.43 hm³), elevation, 254.0 ft (77.42 m) included in these records. Reservoir can be drawn down to 207 acre-ft (255,000 m³), elevation, 240.0 ft (73.15 m) 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, 41,620 acre-ft (51.3 hm³), spilling, Feb. 21, 1980, elevation, 321.50 ft (97.993 m); minimum, 114 acre-ft (141,000 m³) Oct. 31, 1965, elevation, 235.80 ft (71.872 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 41,620 acre-ft (51.3 hm³), spilling, Feb. 21, elevation, 321.50 ft (97.993 m); minimum observed, 29,210 acre-ft (36.0 hm³) Jan. 1, elevation, 311.30 ft (94.884 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	311.85	29,830	--
Oct. 31.....	311.90	29,880	+50
Nov. 30.....	311.90	29,880	0
Dec. 31.....	311.32	29,230	-650
CAL YR 1979.....	--	--	-2,150
Jan. 31.....	316.00	34,800	+5,570
Feb. 29.....	315.89	34,660	-140
Mar. 31.....	315.68	34,400	-260
Apr. 30.....	315.32	34,320	-80
May 31.....	315.60	34,300	-20
June 30.....	315.30	33,920	-380
July 31.....	315.00	33,550	-370
Aug. 31.....	314.18	32,550	-1,000
Sept. 30.....	313.49	31,720	-830
WTR YR 1980.....	--	--	+1,890

ESCONDIDO CREEK BASIN

11030700 LAKE WOHLFORD NEAR ESCONDIDO, CA

LOCATION.--Lat 33°10'00", long 117°00'14", in NW¼NE¼ sec.5, T.12 S., R.1 W., San Diego County, Hydrologic Unit 18070303, on face of Lake Wohlford Dam, 330 ft (100 m) left of spillway, 3.9 mi (6.3 km) southeast of Valley Center Post Office, and 5.7 mi (9.2 km) northeast of Escondido.

DRAINAGE AREA.--7.96 mi² (20.62 km²).

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 (422.15 m) 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 (4.57 m) 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 (8.56 hm³), elevation, 1,480.0 ft (451.10 m). Dead storage below lowest outlet, 131 acre-ft (162,000 m³), elevation, 1,420.0 ft (432.82 m). 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 (8.80 hm³) Feb. 21, 1980, elevation, 1,480.9 ft (451.38 m); minimum, 809 acre-ft (997,000 m³) Dec. 1, 1953, elevation, 1,437.0 ft (438.00 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 7,140 acre-ft (8.80 hm³) Feb. 21, elevation, 1,480.9 ft (451.38 m); minimum observed, 1,430 acre-ft (1.76 hm³) Nov. 25, elevation, 1,445.2 ft (440.50 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0700, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,464.1	3,860	--
Oct. 31.....	1,452.0	2,130	-1,730
Nov. 30.....	1,445.9	1,490	-640
Dec. 31.....	1,449.5	1,850	+360
CAL YR 1979.....	--	--	+240
Jan. 31.....	1,468.3	4,590	+2,740
Feb. 29.....	1,477.7	6,450	+1,860
Mar. 31.....	1,477.9	6,490	+40
Apr. 30.....	1,479.1	6,750	+260
May 31.....	1,477.9	6,490	-260
June 30.....	1,476.9	6,270	-220
July 31.....	1,478.6	6,640	+370
Aug. 31.....	1,479.6	6,860	+220
Sept. 30.....	1,472.5	5,380	-1,480
WTR YR 1980.....	--	--	+1,520

11031500 AGUA CALIENTE CREEK NEAR WARNER SPRINGS, CA

LOCATION.--Lat 33°17'19", long 116°39'11", in San Jose del Valle Grant, San Diego County, Hydrologic Unit 18070303, on downstream end of right pier of bridge on State Highway 79, 1.2 mi (1.9 km) upstream from Canada Verde Creek, and 1.2 mi (1.9 km) northwest of Warner Springs.

DRAINAGE AREA.--19.0 mi² (49.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 2,950 ft (899 m), from topographic map. Prior to Jan. 29, 1966, at site 120 ft (37 m) upstream at same datum, used as supplementary gage since Dec. 12, 1968.

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

AVERAGE DISCHARGE.--19 years, 2.46 ft³/s (0.070 m³/s), 1,780 acre-ft/yr (2.19 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) Feb. 21, 1980, gage height, 4.80 ft (1.463 m) from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 5.18 ft (1.579 m) Dec. 6, 1966; no flow for many days some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1030	120 3.40	2.21 0.674	Feb. 21	0030	*1,440 40.8	4.80 1.463
Jan. 29	0800	550 15.6	2.86 0.872	Mar. 6	1330	218 6.17	2.43 0.741
Feb. 16	2200	473 13.4	2.62 0.799	Mar. 10	2030	109 3.09	1.88 0.573
Feb. 18	0700	1,150 32.6	3.66 1.116				

Minimum daily discharge, 0.10 ft³/s (0.003 m³/s) several days during December and January.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	.14	.13	.10	20	25	21	15	7.4	3.8	2.2	1.2
2	.16	.14	.13	.10	13	50	24	26	7.4	3.5	1.7	1.2
3	.16	.14	.13	.10	11	100	22	14	7.0	3.5	1.6	1.2
4	.16	.14	.13	.10	10	60	20	12	6.7	3.3	1.6	1.2
5	.16	.14	.13	.10	9.5	50	19	11	6.3	3.1	1.4	1.2
6	.16	.14	.13	.10	8.8	122	18	9.4	6.7	2.9	1.4	1.2
7	.16	.14	.13	.20	8.0	89	17	9.0	6.3	2.9	1.4	1.2
8	.16	.14	.13	.20	7.5	42	16	9.0	6.0	2.9	1.3	1.2
9	.16	.14	.13	2.7	7.0	31	15	9.0	5.7	2.6	1.3	1.2
10	.15	.14	.13	3.3	6.6	46	15	14	5.7	2.4	1.3	1.2
11	.15	.14	.13	4.8	6.4	51	13	14	5.4	2.4	1.3	1.2
12	.15	.14	.13	15	6.2	36	12	11	5.4	2.3	1.3	1.2
13	.15	.14	.12	5.0	15	31	12	11	5.4	2.3	1.4	1.1
14	.15	.14	.12	7.5	26	28	12	11	5.4	2.3	1.4	1.1
15	.15	.13	.12	5.0	129	26	11	10	5.4	2.1	1.4	1.1
16	.15	.13	.12	4.0	149	23	11	9.4	5.1	1.9	1.6	1.0
17	.15	.13	.12	3.0	167	23	9.4	8.6	4.8	1.7	1.4	1.0
18	.15	.13	.12	7.0	419	26	9.4	8.6	4.8	1.7	1.4	1.0
19	.15	.13	.11	10	175	26	9.4	8.2	4.5	1.6	1.4	1.0
20	.15	.13	.11	7.0	251	24	8.6	7.8	4.3	1.6	1.4	1.0
21	1.0	.13	.11	5.0	624	24	9.0	8.2	4.0	1.6	1.4	.90
22	.50	.13	.11	4.0	440	24	10	8.2	4.0	1.6	1.4	.90
23	.30	.13	.11	2.6	383	23	12	8.6	4.0	1.7	1.4	.90
24	.20	.13	.11	1.7	273	23	11	8.6	4.0	2.2	1.3	.90
25	.15	.13	.11	1.3	169	24	10	8.2	3.8	2.1	1.3	.80
26	.15	.13	.10	1.0	100	27	9.4	7.8	3.8	2.4	1.3	.80
27	.14	.13	.10	.91	60	24	9.0	7.8	3.3	2.2	1.3	.80
28	.14	.13	.10	35	40	23	9.8	7.8	3.3	2.1	1.3	.70
29	.14	.13	.10	273	30	21	14	7.8	3.5	1.9	1.3	.70
30	.14	.13	.10	107	---	20	12	7.8	4.0	2.1	1.3	.70
31	.14	---	.10	60	---	19	---	7.8	---	7.8	1.3	---
TOTAL	6.09	4.04	3.65	610.01	3564.0	1161	401.0	316.6	153.4	97.4	43.8	30.80
MEAN	.20	.13	.12	19.7	123	37.5	13.4	10.2	5.11	3.14	1.41	1.03
MAX	1.0	.14	.13	273	624	122	24	26	7.4	2.1	2.2	1.2
MIN	.14	.13	.10	.10	6.2	19	8.6	7.8	3.3	1.6	1.3	.70
AC-FT	12	8.0	7.2	1210	7070	2300	795	628	304	193	87	61
CAL YR 1979	TOTAL	1860.53	MEAN	5.10	MAX	120	MIN	.10	AC-FT	3690		
WTR YR 1980	TOTAL	6391.79	MEAN	17.5	MAX	624	MIN	.10	AC-FT	12680		

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 (0.3 km) upstream from Fink Road, 2.6 mi (4.2 km) upstream from mouth, and 7.5 mi (12.1 km) west of Warner Springs.

DRAINAGE AREA.--25.5 mi² (66.0 km²).

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: 1973(P).

GAGE.--Water-stage recorder. Altitude of gage is 2,800 ft (853 m), from topographic map. Prior to Oct. 1, 1956, at different datum. Prior to Nov. 5, 1971, at site 500 ft (150 m) downstream at same datum.

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

AVERAGE DISCHARGE.--25 years (water years 1914-15, 1957-80), 10.1 ft³/s (0.286 m³/s), 7,290 acre-ft/yr (8.99 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,200 ft³/s (176 m³/s) Feb. 21, 1980, gage height, 15.60 ft (4.755 m), from high-water marks, from rating curve extended above 130 ft³/s (3.68 m³/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 ft³/s (8.50 m³/s) and maximum(*), from rating curve extended above 130 ft³/s (3.68 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1100	602 17.05	12.30 3.749	Feb. 21	Unknown	*6,200 176	15.60 4.755
Jan. 29	0645	3,290 93.2	14.14 4.310	Mar. 3	0015	577 16.3	12.72 3.877
Feb. 14	0930	1,320 37.4	12.13 3.697	Mar. 6	1230	492 13.9	12.60 3.840
Feb. 16	2030	1,410 39.9	12.42 3.786	Mar. 10	2000	312 8.84	12.29 3.746
Feb. 18	0500	5,230 148	14.75 4.496				

Minimum daily discharge, 0.30 ft³/s (0.008 m³/s) Oct. 1-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	1.0	.90	2.6	76	88	72	34	19	6.2	1.3	.75
2	.30	1.0	.90	3.5	54	184	74	38	18	6.3	1.2	.75
3	.30	1.0	.90	4.1	44	364	63	30	16	6.0	1.2	.68
4	.30	1.0	.90	4.3	38	177	58	28	15	5.7	1.2	.68
5	.30	1.0	.90	4.8	31	136	55	26	15	5.4	1.1	.62
6	.30	1.0	.90	5.8	28	358	55	25	14	4.9	1.1	.62
7	.30	1.0	1.2	7.3	26	214	51	23	14	4.9	1.2	.62
8	.30	1.0	.98	11	23	167	47	23	14	4.8	.82	.62
9	.30	1.0	.82	27	21	145	45	24	13	4.5	.82	.62
10	.30	1.0	.62	34	21	206	44	56	13	4.0	.75	.62
11	.30	1.0	.62	239	21	170	41	44	12	3.8	.75	.62
12	.30	1.0	.82	44	21	131	38	34	12	3.6	1.1	.56
13	.30	1.0	.82	17	33	120	38	31	18	3.6	1.2	.56
14	.30	1.0	.68	25	658	112	36	30	13	3.4	.98	.56
15	.30	1.0	.68	17	584	104	35	31	10	3.2	1.1	.56
16	.30	1.0	.62	13	412	102	32	27	10	2.9	1.2	.56
17	.30	1.0	.56	11	452	90	31	24	10	3.0	1.2	.56
18	.30	1.0	.62	26	1240	120	31	23	9.2	2.7	1.2	.50
19	.30	1.0	.45	31	450	104	30	21	9.3	2.5	1.1	.50
20	2.0	1.0	.40	22	650	90	29	20	8.8	2.4	1.1	.50
21	3.0	1.0	.62	21	1700	88	30	20	8.5	2.2	1.1	.50
22	1.6	1.0	2.0	18	1000	90	37	21	8.4	2.1	.98	.50
23	1.4	.90	1.9	15	800	80	44	22	8.1	2.0	.98	.45
24	1.2	.90	1.9	13	500	76	39	23	8.4	2.0	.90	.45
25	1.1	.90	1.7	12	300	72	34	21	8.4	2.1	.98	.40
26	1.0	.90	1.6	11	200	102	31	20	9.1	1.8	.98	.40
27	1.0	.90	1.5	10	150	80	29	19	7.1	1.7	.90	.40
28	1.0	.90	1.4	128	120	72	31	19	6.5	1.6	.82	.40
29	1.0	.90	1.3	1140	95	65	42	18	6.1	1.4	.82	.40
30	1.0	.90	1.3	260	---	63	40	18	6.0	1.3	.75	.40
31	1.0	---	1.5	114	---	60	---	18	---	1.4	.75	---
TOTAL	22.00	29.20	32.01	2291.4	9748	4030	1262	811	339.9	103.4	31.58	16.36
MEAN	.71	.97	1.03	73.9	336	130	42.1	26.2	11.3	3.34	1.02	.55
MAX	3.0	1.0	2.0	1140	1700	364	74	56	19	6.3	1.3	.75
MIN	.30	.90	.40	2.6	21	60	29	18	6.0	1.3	.75	.40
AC-FT	44	58	63	4540	19340	7990	2500	1610	674	205	63	32
CAL YR 1979 TOTAL	7389.97			MEAN 20.2	MAX 626	MIN .30	AC-FT 14660					
WTR YR 1980 TOTAL	18716.85			MEAN 51.1	MAX 1700	MIN .30	AC-FT 37120					

11037700 PAUMA CREEK NEAR PAUMA VALLEY, CA

LOCATION.--Lat 33°20'10", long 116°58'25", in Pauma Grant, San Diego County, Hydrologic Unit 18070303, on right bank 0.3 mi (0.5 km) downstream from unnamed tributary, and 2.2 mi (3.5 km) north of Pauma Valley.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

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

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on diversion. Altitude of creek gage is 1,240 ft (378 m), from topographic map. Diversion gage is at different datum.

REMARKS.--Records poor. No regulation above station. Pauma Valley Water Co. diverts from a site 0.2 mi (0.3 km) upstream. For records of combined discharge of Pauma Creek and Pauma Valley Water Co.'s diversion, see following page.

AVERAGE DISCHARGE.--Creek only: 16 years, 5.52 ft³/s (0.156 m³/s), 4,000 acre-ft/yr (4.93 hm³/yr).
Combined creek and diversion: 16 years, 6.17 ft³/s (0.175 m³/s), 4,470 acre-ft/yr (5.51 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 3,170 ft³/s (89.8 m³/s) Feb. 20, 1980, gage height, 8.51 ft (2.594 m), from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 8.60 ft (2.621 m) Dec. 6, 1966; no flow much of most years. Combined creek and diversion: Maximum discharge, 3,170 ft³/s (89.8 m³/s) Feb. 20, 1980; minimum daily, 0.78 ft³/s (0.022 m³/s) Oct. 1, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 29	Unknown	2,320	65.7	7.80	2.378	Feb. 20	2330	*3,170	89.8	8.51	2.594
Feb. 14	1145	436	12.3	4.88	1.487	Mar. 2	2400	370	10.5	4.50	1.372
Feb. 17	0300	452	12.8	4.92	1.500	Mar. 6	Unknown	Unknown		Unknown	
Feb. 18	0715	2,040	57.8	7.53	2.295						

Minimum daily discharge, 0.18 ft³/s (0.005 m³/s) Oct. 5, 6.

Combined creek and diversion: Maximum discharge, 3,170 ft³/s (89.9 m³/s) Feb. 20; minimum daily, 0.78 ft³/s (0.022 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	1.1	1.4	1.7	35	46	32	20	11	4.9	2.0	1.8
2	.30	1.1	1.4	1.7	30	61	33	18	11	4.7	2.0	1.8
3	.24	1.0	1.4	1.7	26	171	29	17	10	4.3	2.0	1.8
4	.22	.99	1.3	1.7	23	125	27	18	9.5	4.0	2.0	1.8
5	.18	.99	1.3	1.7	20	120	26	20	9.0	3.7	2.0	1.8
6	.18	.99	1.3	1.7	18	145	26	21	8.8	3.6	1.8	1.8
7	.22	1.0	1.3	1.8	16	125	24	22	8.6	3.4	1.8	1.8
8	.30	1.2	1.2	3.1	15	106	23	18	8.4	3.2	1.8	1.8
9	.35	1.2	1.2	15	14	93	22	16	8.2	3.1	1.8	1.8
10	.35	1.2	1.2	23	12	101	21	28	7.8	2.9	1.8	1.8
11	.28	1.4	1.3	21	11	95	21	22	7.6	2.7	1.8	2.0
12	.28	1.4	1.3	22	9.9	78	19	19	7.4	2.6	1.8	2.0
13	.33	1.2	1.3	17	15	71	18	17	7.2	2.6	1.8	2.0
14	.33	1.2	1.3	14	184	65	18	18	7.0	2.6	1.8	2.0
15	.47	1.2	1.3	14	227	60	17	18	6.8	2.4	1.8	2.0
16	.54	1.2	1.3	11	174	54	17	16	6.6	2.2	1.6	2.0
17	.54	1.3	1.3	9.2	227	50	16	15	6.4	2.1	1.6	2.0
18	.54	1.6	1.3	8.7	713	59	16	14	6.2	2.1	1.6	2.0
19	.58	1.6	1.2	20	381	59	15	13	6.0	2.1	1.6	2.0
20	10	1.6	1.2	15	566	49	15	13	5.7	2.1	1.6	2.0
21	4.9	1.7	2.0	12	555	46	16	13	5.6	2.1	1.6	2.0
22	2.3	1.7	2.4	11	175	44	20	13	5.5	2.1	1.6	2.0
23	1.7	1.3	1.9	10	110	40	21	13	5.5	2.1	1.6	2.0
24	1.4	1.1	1.8	10	90	38	20	13	5.4	2.1	1.6	2.0
25	1.3	1.2	1.9	9.5	78	36	18	12	5.3	2.1	1.6	2.0
26	1.2	1.2	2.3	9.2	70	44	17	12	5.1	2.0	1.6	2.0
27	.93	1.3	2.0	9.0	61	37	16	12	4.9	2.0	1.6	2.0
28	.77	1.4	1.9	40	56	33	19	12	4.8	2.0	1.6	2.0
29	.94	1.3	1.7	600	51	30	24	11	4.8	2.0	1.6	2.0
30	1.0	1.3	1.7	150	---	29	22	11	4.8	2.0	1.6	2.0
31	1.1	---	1.7	50	---	28	---	11	---	2.0	1.8	---
TOTAL	34.12	37.97	47.1	1115.7	3962.9	2138	628	496	210.9	83.8	53.8	58.0
MEAN	1.10	1.27	1.52	36.0	137	69.0	20.9	16.0	7.03	2.70	1.74	1.93
MAX	10	1.7	2.4	600	713	171	33	28	11	4.9	2.0	2.0
MIN	.18	.99	1.2	1.7	9.9	28	15	11	4.8	2.0	1.6	1.8
AC-FT	68	75	93	2210	7860	4240	1250	984	418	166	107	115
CAL YR 1979	TOTAL	3995.98	MEAN 10.9	MAX 300	MIN .11	AC-FT 7930						
WTR YR 1980	TOTAL	8866.29	MEAN 24.2	MAX 713	MIN .18	AC-FT 17590						

SAN LUIS REY RIVER BASIN

11037700 PAUMA CREEK NEAR PAUMA VALLEY, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF PAUMA CREEK AND PAUMA VALLEY
WATER CO.'S DIVERSION NEAR PAUMA VALLEY, CA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN VALUES											
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	1.5	1.7	2.2	35	47	32	20	12	5.5	2.8	2.4
2	.79	1.5	1.7	2.2	30	62	33	18	12	5.4	2.8	2.4
3	.84	1.4	1.7	2.2	26	172	29	17	11	5.1	2.8	2.4
4	.84	1.4	1.6	2.1	23	126	27	18	10	4.8	2.8	2.4
5	.84	1.4	1.6	2.1	20	121	26	20	9.6	4.5	2.8	2.4
6	.84	1.4	1.6	2.1	18	145	26	21	9.4	4.4	2.6	2.4
7	.84	1.4	1.6	2.2	16	125	24	22	9.2	4.2	2.6	2.4
8	.85	1.6	1.5	3.5	15	106	23	18	9.0	4.0	2.6	2.4
9	.84	1.6	1.5	15	14	93	22	16	8.8	3.9	2.6	2.4
10	.84	1.6	1.5	23	12	101	21	28	8.4	3.7	2.6	2.4
11	.88	1.6	1.6	21	12	95	21	23	8.2	3.5	2.6	2.4
12	.88	1.5	1.6	22	11	78	20	20	8.0	3.4	2.6	2.4
13	.90	1.5	1.6	17	16	72	19	18	7.8	3.4	2.6	2.4
14	.88	1.5	1.6	14	184	66	19	18	7.6	3.4	2.6	2.4
15	.90	1.5	1.6	14	227	61	18	18	7.4	3.2	2.6	2.4
16	.94	1.5	1.6	11	174	55	18	16	7.2	3.0	2.4	2.4
17	.97	1.5	1.7	9.3	227	51	17	15	7.0	2.9	2.4	2.4
18	.96	1.6	1.7	8.8	713	59	17	14	6.8	2.9	2.4	2.4
19	1.0	1.6	1.6	20	381	59	16	14	6.6	2.9	2.4	2.4
20	10	1.6	1.6	15	566	49	16	14	6.3	2.9	2.4	2.4
21	5.0	1.7	2.4	12	556	46	17	14	6.2	2.9	2.4	2.4
22	2.4	1.7	2.7	11	176	44	21	14	6.1	2.9	2.4	2.4
23	1.9	1.6	2.2	10	111	40	22	14	6.1	2.9	2.4	2.4
24	1.7	1.5	2.1	10	91	38	21	14	6.0	2.9	2.4	2.4
25	1.6	1.6	2.2	9.6	79	36	19	13	5.9	2.9	2.4	2.4
26	1.5	1.6	2.6	9.3	71	44	18	13	5.7	2.8	2.4	2.4
27	1.4	1.6	2.3	9.1	62	37	17	13	5.5	2.8	2.4	2.4
28	1.3	1.7	2.3	40	57	33	20	13	5.4	2.8	2.4	2.4
29	1.4	1.6	2.2	600	52	30	24	12	5.4	2.8	2.4	2.4
30	1.4	1.6	2.2	150	---	29	22	12	5.4	2.8	2.4	2.4
31	1.5	---	2.2	50	---	28	---	12	---	2.8	2.4	---
TOTAL	47.71	46.4	57.6	1119.7	3975	2148	645	512	230.0	108.3	78.4	72.0
MEAN	1.54	1.55	1.86	36.1	137	69.3	21.5	16.5	7.67	3.49	2.53	2.40
MAX	10	1.7	2.7	600	713	172	33	28	12	5.5	2.8	2.4
MIN	.78	1.4	1.5	2.1	11	28	16	12	5.4	2.8	2.4	2.4
AC-FT	95	92	114	2220	7880	4260	1280	1020	456	215	156	143
CAL YR 1979 TOTAL	4215.01			MEAN 11.5	MAX 300	MIN .56	AC-FT 8360					
WTR YR 1980 TOTAL	9040.11			MEAN 24.7	MAX 713	MIN .78	AC-FT 17930					

11037700 PAUMA CREEK NEAR PAUMA VALLEY, CA

LOCATION.--Lat 33°20'10", long 116°58'25", in Pauma Grant, San Diego County, Hydrologic Unit 18070303, on right bank 0.3 mi (0.5 km) downstream from unnamed tributary, and 2.2 mi (3.5 km) north of Pauma Valley.

DRAINAGE AREA.--11.0 mi² (28.5 km²).

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

GAGE.--Water-stage recorder on creek; water-stage recorder and Parshall flume on diversion. Altitude of creek gage is 1,240 ft (378 m), from topographic map. Diversion gage is at different datum.

REMARKS.--Records poor. No regulation above station. Pauma Valley Water Co. diverts from a site 0.2 mi (0.3 km) upstream. For records of combined discharge of Pauma Creek and Pauma Valley Water Co.'s diversion, see following page.

AVERAGE DISCHARGE.--Creek only: 16 years, 5.52 ft³/s (0.156 m³/s), 4,000 acre-ft/yr (4.93 hm³/yr).
Combined creek and diversion: 16 years, 6.17 ft³/s (0.175 m³/s), 4,470 acre-ft/yr (5.51 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 3,170 ft³/s (89.8 m³/s) Feb. 20, 1980, gage height, 8.51 ft (2.594 m), from rating curve extended above 130 ft³/s (3.68 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 8.60 ft (2.621 m) Dec. 6, 1966; no flow much of most years. Combined creek and diversion: Maximum discharge, 3,170 ft³/s (89.8 m³/s) Feb. 20, 1980; minimum daily, 0.78 ft³/s (0.022 m³/s) Oct. 1, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	Unknown	2,320 65.7	7.80 2.378	Feb. 20	2330	*3,170 89.8	8.51 2.594
Feb. 14	1145	436 12.3	4.88 1.487	Mar. 2	2400	370 10.5	4.50 1.372
Feb. 17	0300	452 12.8	4.92 1.500	Mar. 6	Unknown	Unknown	Unknown
Feb. 18	0715	2,040 57.8	7.53 2.295				

Minimum daily discharge, 0.18 ft³/s (0.005 m³/s) Oct. 5, 6.

Combined creek and diversion: Maximum discharge, 3,170 ft³/s (89.9 m³/s) Feb. 20; minimum daily, 0.78 ft³/s (0.022 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	1.1	1.4	1.7	35	46	32	20	11	4.9	2.0	1.8
2	.30	1.1	1.4	1.7	30	61	33	18	11	4.7	2.0	1.8
3	.24	1.0	1.4	1.7	26	171	29	17	10	4.3	2.0	1.8
4	.22	.99	1.3	1.7	23	125	27	18	9.5	4.0	2.0	1.8
5	.18	.99	1.3	1.7	20	120	26	20	9.0	3.7	2.0	1.8
6	.18	.99	1.3	1.7	18	145	26	21	8.8	3.6	1.8	1.8
7	.22	1.0	1.3	1.8	16	125	24	22	8.6	3.4	1.8	1.8
8	.30	1.2	1.2	3.1	15	106	23	18	8.4	3.2	1.8	1.8
9	.35	1.2	1.2	15	14	93	22	16	8.2	3.1	1.8	1.8
10	.35	1.2	1.2	23	12	101	21	28	7.8	2.9	1.8	1.8
11	.28	1.4	1.3	21	11	95	21	22	7.6	2.7	1.8	2.0
12	.28	1.4	1.3	22	9.9	78	19	19	7.4	2.6	1.8	2.0
13	.33	1.2	1.3	17	15	71	18	17	7.2	2.6	1.8	2.0
14	.33	1.2	1.3	14	184	65	18	18	7.0	2.6	1.8	2.0
15	.47	1.2	1.3	14	227	60	17	18	6.8	2.4	1.8	2.0
16	.54	1.2	1.3	11	174	54	17	16	6.6	2.2	1.6	2.0
17	.54	1.3	1.3	9.2	227	50	16	15	6.4	2.1	1.6	2.0
18	.54	1.6	1.3	8.7	713	59	16	14	6.2	2.1	1.6	2.0
19	.58	1.6	1.2	20	381	59	15	13	6.0	2.1	1.6	2.0
20	10	1.6	1.2	15	566	49	15	13	5.7	2.1	1.6	2.0
21	4.9	1.7	2.0	12	555	46	16	13	5.6	2.1	1.6	2.0
22	2.3	1.7	2.4	11	175	44	20	13	5.5	2.1	1.6	2.0
23	1.7	1.3	1.9	10	110	40	21	13	5.5	2.1	1.6	2.0
24	1.4	1.1	1.8	10	90	38	20	13	5.4	2.1	1.6	2.0
25	1.3	1.2	1.9	9.5	78	36	18	12	5.3	2.1	1.6	2.0
26	1.2	1.2	2.3	9.2	70	44	17	12	5.1	2.0	1.6	2.0
27	.93	1.3	2.0	9.0	61	37	16	12	4.9	2.0	1.6	2.0
28	.77	1.4	1.9	40	56	33	19	12	4.8	2.0	1.6	2.0
29	.94	1.3	1.7	600	51	30	24	11	4.8	2.0	1.6	2.0
30	1.0	1.3	1.7	150	---	29	22	11	4.8	2.0	1.6	2.0
31	1.1	---	1.7	50	---	28	---	11	---	2.0	1.8	---
TOTAL	34.12	37.97	47.1	1115.7	3962.9	2138	628	496	210.9	83.8	53.8	58.0
MEAN	1.10	1.27	1.52	36.0	137	69.0	20.9	16.0	7.03	2.70	1.74	1.93
MAX	10	1.7	2.4	600	713	171	33	28	11	4.9	2.0	2.0
MIN	.18	.99	1.2	1.7	9.9	28	15	11	4.8	2.0	1.6	1.8
AC-FT	68	75	93	2210	7860	4240	1250	984	418	166	107	115
CAL YR 1979	TOTAL	3995.98	MEAN 10.9	MAX 300	MIN .11	AC-FT 7930						
WTR YR 1980	TOTAL	8866.29	MEAN 24.2	MAX 713	MIN .18	AC-FT 17590						

SAN LUIS REY RIVER BASIN

11037700 PAUMA CREEK NEAR PAUMA VALLEY, CA--Continued

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF PAUMA CREEK AND PAUMA VALLEY
WATER CO.'S DIVERSION NEAR PAUMA VALLEY, CA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	1.5	1.7	2.2	35	47	32	20	12	5.5	2.8	2.4
2	.79	1.5	1.7	2.2	30	62	33	18	12	5.4	2.8	2.4
3	.84	1.4	1.7	2.2	26	172	29	17	11	5.1	2.8	2.4
4	.84	1.4	1.6	2.1	23	126	27	18	10	4.8	2.8	2.4
5	.84	1.4	1.6	2.1	20	121	26	20	9.6	4.5	2.8	2.4
6	.84	1.4	1.6	2.1	18	145	26	21	9.4	4.4	2.6	2.4
7	.84	1.4	1.6	2.2	16	125	24	22	9.2	4.2	2.6	2.4
8	.85	1.6	1.5	3.5	15	106	23	18	9.0	4.0	2.6	2.4
9	.84	1.6	1.5	15	14	93	22	16	8.8	3.9	2.6	2.4
10	.84	1.6	1.5	23	12	101	21	28	8.4	3.7	2.6	2.4
11	.88	1.6	1.6	21	12	95	21	23	8.2	3.5	2.6	2.4
12	.88	1.5	1.6	22	11	78	20	20	8.0	3.4	2.6	2.4
13	.90	1.5	1.6	17	16	72	19	18	7.8	3.4	2.6	2.4
14	.88	1.5	1.6	14	184	66	19	18	7.6	3.4	2.6	2.4
15	.90	1.5	1.6	14	227	61	18	18	7.4	3.2	2.6	2.4
16	.94	1.5	1.6	11	174	55	18	16	7.2	3.0	2.4	2.4
17	.97	1.5	1.7	9.3	227	51	17	15	7.0	2.9	2.4	2.4
18	.96	1.6	1.7	8.8	713	59	17	14	6.8	2.9	2.4	2.4
19	1.0	1.6	1.6	20	381	59	16	14	6.6	2.9	2.4	2.4
20	10	1.6	1.6	15	566	49	16	14	6.3	2.9	2.4	2.4
21	5.0	1.7	2.4	12	556	46	17	14	6.2	2.9	2.4	2.4
22	2.4	1.7	2.7	11	176	44	21	14	6.1	2.9	2.4	2.4
23	1.9	1.6	2.2	10	111	40	22	14	6.1	2.9	2.4	2.4
24	1.7	1.5	2.1	10	91	38	21	14	6.0	2.9	2.4	2.4
25	1.6	1.6	2.2	9.6	79	36	19	13	5.9	2.9	2.4	2.4
26	1.5	1.6	2.6	9.3	71	44	18	13	5.7	2.8	2.4	2.4
27	1.4	1.6	2.3	9.1	62	37	17	13	5.5	2.8	2.4	2.4
28	1.3	1.7	2.3	40	57	33	20	13	5.4	2.8	2.4	2.4
29	1.4	1.6	2.2	600	52	30	24	12	5.4	2.8	2.4	2.4
30	1.4	1.6	2.2	150	---	29	22	12	5.4	2.8	2.4	2.4
31	1.5	---	2.2	50	---	28	---	12	---	2.8	2.4	---
TOTAL	47.71	46.4	57.6	1119.7	3975	2148	645	512	230.0	108.3	78.4	72.0
MEAN	1.54	1.55	1.86	36.1	137	69.3	21.5	16.5	7.67	3.49	2.53	2.40
MAX	10	1.7	2.7	600	713	172	33	28	12	5.5	2.8	2.4
MIN	.78	1.4	1.5	2.1	11	28	16	12	5.4	2.8	2.4	2.4
AC-FT	95	92	114	2220	7880	4260	1280	1020	456	215	156	143
CAL YR 1979	TOTAL	4215.01	MEAN 11.5	MAX 300	MIN .56	AC-FT 8360						
WTR YR 1980	TOTAL	9040.11	MEAN 24.7	MAX 713	MIN .78	AC-FT 17930						

LOCATION.--Lat 33°20'14", long 117°08'07", in SW⁴SE⁴NW⁴ sec.6, T.10 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 4 mi (6 km) southwest of Pala, 6 mi (10 km) northeast of Bonsall, and 27 mi (43 km) downstream from Lake Henshaw.

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 (82.546 m) 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 (0.30 m) higher.

AVERAGE DISCHARGE.--37 years (water years 1939-41, 1947-80), 17.4 ft³/s (0.493 m³/s), 12,600 acre-ft/yr (15.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since 1938, 15,500 ft³/s (439 m³/s) Feb. 21, 1980, gage height, 9.68 ft (2.950 m) on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,500 ft³/s (439 m³/s) Feb. 21, gage height, 9.68 ft (2.950 m) on basis of slope-area measurement of maximum flow; minimum daily, 0.91 ft³/s (0.026 m³/s) Oct. 9.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.5	2.1	2.2	250	824	500	363	299	299	208	204
2	.95	1.5	2.2	1.4	236	865	540	356	291	302	211	194
3	.95	1.5	2.3	2.2	220	1200	450	341	281	294	209	191
4	.93	1.5	2.4	2.6	172	850	440	368	269	285	209	179
5	.94	1.6	2.2	2.0	154	800	445	386	292	275	206	174
6	.93	1.5	2.2	1.9	143	1150	416	356	283	268	209	172
7	1.0	1.6	2.3	3.5	132	900	270	329	264	262	206	168
8	1.0	1.7	2.0	4.9	126	790	271	335	258	248	209	162
9	.91	1.6	1.7	21	117	790	352	341	280	238	208	160
10	.93	1.7	2.1	55	113	800	371	382	290	221	206	54
11	1.0	1.8	2.2	347	106	840	362	389	296	225	209	33
12	1.0	1.6	2.3	156	97	750	352	236	278	223	213	30
13	1.4	1.7	2.5	81	107	730	340	223	276	216	223	28
14	2.0	1.8	2.7	65	1240	730	366	213	317	211	224	27
15	2.0	1.7	2.7	48	1810	735	348	187	289	124	220	26
16	2.0	1.8	2.7	38	1830	715	349	162	272	84	218	25
17	1.9	1.7	2.7	34	2240	690	340	148	268	173	219	22
18	1.8	1.8	2.7	45	4760	715	328	203	275	215	220	20
19	1.7	1.9	2.3	127	2100	720	310	284	286	209	219	19
20	5.1	1.8	2.5	60	3500	695	361	311	297	198	219	17
21	2.2	1.9	3.7	46	5140	675	348	300	295	81	224	19
22	1.3	1.9	6.3	41	1090	720	367	306	307	72	227	18
23	1.2	2.0	3.8	36	865	735	359	300	298	167	218	17
24	1.2	1.7	2.5	36	739	640	343	298	298	208	220	13
25	1.2	1.6	1.8	37	739	590	333	320	292	204	225	14
26	1.4	1.7	2.2	35	739	585	360	269	305	204	227	13
27	1.5	2.2	2.2	37	673	550	358	279	310	205	227	14
28	1.5	2.2	2.2	64	769	520	353	270	313	207	223	13
29	1.6	2.1	2.0	3360	787	495	374	287	320	210	215	13
30	1.5	1.9	1.7	1300	---	490	387	282	312	209	215	13
31	1.5	---	2.0	450	---	490	---	278	---	211	210	---
TOTAL	45.54	52.5	77.2	6539.7	30994	22779	11093	9102	8711	6558	6696	2052
MEAN	1.47	1.75	2.49	211	1069	735	370	294	290	212	216	68.4
MAX	5.1	2.2	6.3	3360	5140	1200	540	389	320	302	227	204
MIN	.91	1.5	1.7	1.4	97	490	270	148	258	72	206	13
AC-FT	90	104	153	12970	61480	45180	22000	18050	17280	13010	13280	4070
CAL YR 1979	TOTAL	23006.42	MEAN	63.0	MAX	1620	MIN	.82	AC-FT	45630		
WTR YR 1980	TOTAL	10										

SAN LUIS REY RIVER BASIN

11040200 KEYS CREEK TRIBUTARY AT VALLEY CENTER, CA

LOCATION.--Lat 33°13'45", long 117°02'09", in NW¼SE¼SE¼ sec.12, T.11 S., R.2 W., San Diego County, Hydrologic Unit 18070303, on left bank 140 ft (43 m) upstream from bridge on Valley Center Road, 0.3 mi (0.5 km) downstream from unnamed tributary, and 0.8 mi (1.3 km) north of Valley Center.

DRAINAGE AREA.--7.65 mi² (19.81 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,279.99 ft (390.141 m) San Diego County Special District Services datum.

REMARKS.--Records fair. No regulation above station. Some pumping for irrigation above station.

AVERAGE DISCHARGE.--10 years, 2.39 ft³/s (0.068 m³/s), 1,730 acre-ft/yr (2.13 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,680 ft³/s (47.6 m³/s) Feb. 21, 1980, gage height, 8.80 ft (2.682 m); no flow for part of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 990 ft³/s (28.0 m³/s), by San Diego County Special District Services.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s), and maximum (*);

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 19	Unknown	336 9.52	4.81 1.466	Feb. 21	Unknown	*1,680 47.6	8.80 2.682
Jan. 29	0630	1,580 44.7	8.59 2.618	Mar. 2	2315	774 21.9	6.58 2.006
Feb. 14	1030	346 9.80	4.86 1.481	Mar. 6	0300	183 5.18	3.94 1.201
Feb. 16	1945	737 20.9	6.42 1.957	Mar. 10	2115	113 3.20	3.37 1.027
Feb. 18	0630	961 27.2	7.10 2.164				

Minimum daily discharge, no flow Oct. 1-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.23	.09	.35	11	13	8.0	3.9	2.9	.47	.17	.21
2	0	.23	.10	.35	9.4	70	7.2	3.7	2.8	.55	.16	.19
3	0	.25	.08	.35	8.0	87	7.1	3.7	2.6	.55	.14	.17
4	0	.35	.09	.27	6.5	24	7.1	3.6	2.6	.51	.13	.14
5	0	.38	.12	.27	5.5	24	7.1	3.7	2.5	.51	.13	.16
6	0	.26	.13	.31	5.0	77	6.9	3.6	2.3	.51	.11	.16
7	0	.49	.12	.35	4.9	20	6.7	3.4	2.0	.51	.10	.17
8	0	1.1	.12	.81	4.2	18	6.4	3.0	1.9	.59	.10	.16
9	0	.64	.12	12	3.8	15	6.3	2.8	1.7	.55	.09	.16
10	0	.63	.13	15	3.9	36	6.0	3.3	1.5	.51	.09	.16
11	0	.56	.15	14	3.9	21	6.0	3.2	1.4	.51	.09	.14
12	0	.51	.12	15	3.7	15	5.2	3.0	1.3	.51	.09	.13
13	0	.37	.12	12	7.4	14	5.2	3.2	1.3	.51	.10	.13
14	0	.26	.14	10	114	13	5.2	2.9	1.4	.55	.08	.13
15	0	.22	.15	8.0	59	13	5.2	2.3	1.1	.51	.07	.13
16	0	.26	.15	6.0	112	13	5.0	2.1	1.1	.47	.07	.13
17	0	.32	.16	5.0	80	12	4.6	3.0	1.1	.36	.09	.11
18	0	.39	.14	4.3	390	15	4.6	3.6	1.0	.40	.07	.10
19	0	.38	.13	13	370	10	4.1	3.5	1.1	.33	.07	.11
20	.67	.33	.14	9.0	340	9.0	4.2	3.5	1.0	.36	.09	.11
21	.90	.27	.18	6.0	500	8.5	4.4	3.3	.90	.33	.28	.10
22	.22	.36	.27	4.3	200	8.2	4.7	3.3	.85	.30	.21	.10
23	.13	.48	.24	3.0	40	8.1	4.7	3.3	.74	.28	.25	.05
24	.14	.46	.24	2.6	20	8.1	4.3	3.1	.64	.28	.23	.07
25	.15	.47	.32	2.5	15	8.1	4.1	3.1	.55	.23	.23	.08
26	.13	.54	.39	2.3	14	12	3.9	3.1	.47	.21	.23	.10
27	.21	.34	.34	2.5	14	8.2	4.2	3.1	.55	.19	.21	.10
28	.30	.20	.31	25	13	8.0	4.3	3.1	.55	.19	.19	.10
29	.27	.14	.31	380	13	7.4	4.6	3.0	.51	.17	.17	.09
30	.16	.13	.29	40	---	7.2	4.3	2.9	.51	.19	.16	.09
31	.22	---	.31	14	---	7.2	---	3.0	---	.17	.19	---
TOTAL	3.50	11.55	5.70	608.56	2371.2	610.0	161.6	99.3	40.87	12.31	4.39	3.78
MEAN	.11	.39	.18	19.6	81.8	19.7	5.39	3.20	1.36	.40	.14	.13
MAX	.90	1.1	.39	380	500	87	8.0	3.9	2.9	.59	.28	.21
MIN	0	.13	.08	.27	3.7	7.2	3.9	2.1	.47	.17	.07	.05
AC-FT	6.9	23	11	1210	4700	1210	321	197	81	24	8.7	7.5
CAL YR 1979	TOTAL	1282.37	MEAN	3.51	MAX 106	MIN 0	AC-FT	2540				
WTR YR 1980	TOTAL	3932.76	MEAN	10.7	MAX 500	MIN 0	AC-FT	7800				

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°12'48", long 117°22'33", in SW¼SE¼SW¼ sec.14, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070303, on right bank 0.7 mi (1.1 km) upstream from bridge on Interstate Highway 5, 1.1 mi (1.8 km) upstream from mouth, and 1.2 mi (1.9 km) north of Oceanside.

DRAINAGE AREA.--558 mi² (1,450 km²).

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 (6.1 m), from topographic map. April 1912 to September 1914, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum. January 1916, nonrecording gage 0.2 mi (0.3 km) downstream at different datum. Prior to Oct. 1, 1978, at datum 10.00 ft (3.048 m) lower.

REMARKS.--Records poor. No gage-height record Nov. 14 to Jan. 28, Jan. 31 to Feb. 19, and Apr. 12 to July 16. Flow regulated by Lake Henshaw, capacity, 194,300 acre-ft (240 hm³). 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.--48 years (water years 1913-14, 1930-41, 1947-80), 30.4 ft³/s (0.861 m³/s), 22,020 acre-ft/yr (27.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,600 ft³/s (2,710 m³/s) Jan. 27, 1916, from hydrograph based on discharge measurements; no flow for several months in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,000 ft³/s (708 m³/s) Feb. 21, gage height, 14.00 ft (4.267 m); maximum gage height, 15.83 ft (4.825 m) Jan. 29; minimum daily, 3.6 ft³/s (0.10 m³/s) Oct. 1, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	20	21	25	650	1000	570	410	345	280	202	221
2	4.3	20	22	25	460	1100	650	390	335	285	206	215
3	4.0	21	23	25	430	1890	520	390	320	280	212	206
4	4.0	19	24	25	330	1100	510	420	305	270	206	196
5	4.0	18	23	25	300	1070	522	430	325	260	196	190
6	4.5	24	22	25	275	1790	389	400	315	255	199	185
7	4.3	26	20	30	250	1380	376	380	290	250	200	190
8	4.5	25	21	35	240	1210	412	385	285	245	200	182
9	6.0	24	23	50	225	1220	452	390	300	235	200	170
10	4.0	21	26	250	215	1230	418	425	310	230	200	70
11	3.8	22	27	1050	200	1290	447	435	310	225	200	50
12	3.6	20	27	450	180	1150	410	290	290	230	200	45
13	4.0	20	27	300	200	1120	400	280	285	220	210	43
14	5.7	20	27	250	2300	1120	425	270	320	220	210	41
15	6.6	20	27	220	3250	1130	410	250	290	135	210	40
16	6.3	20	25	200	3400	1100	420	230	270	110	210	38
17	8.5	20	25	190	4210	1060	430	210	265	134	210	37
18	9.0	20	25	250	8390	1100	410	260	270	244	210	36
19	12	20	24	450	3850	1110	390	330	280	226	215	36
20	27	20	25	200	6120	1070	410	360	280	210	220	35
21	39	20	30	165	9080	1040	390	350	280	180	220	35
22	48	20	55	150	1920	1110	410	360	290	90	220	35
23	42	19	35	123	1500	1130	390	350	275	130	220	35
24	33	19	25	110	1200	992	390	350	275	190	230	35
25	31	19	25	100	1000	903	390	375	260	190	230	35
26	27	19	25	100	950	900	390	350	270	190	230	35
27	26	21	25	100	900	842	390	340	280	190	234	35
28	26	22	25	250	900	800	390	330	280	196	228	35
29	26	22	25	5270	950	763	410	340	295	193	234	35
30	22	20	25	2500	---	650	430	335	290	193	224	35
31	20	---	25	1050	---	610	---	325	---	199	218	---
TOTAL	469.7	621	804	13993	53875	33980	12951	10740	8785	6405	6604	2576
MEAN	15.2	20.7	25.9	451	1858	1096	432	346	293	207	213	85.9
MAX	48	26	55	5270	9080	1890	650	435	345	285	234	221
MIN	3.6	18	20	25	180	610	376	210	260	90	196	35
AC-FT	932	1230	1590	27760	106900	67400	25690	21300	17430	12700	13100	5110
CAL YR 1979 TOTAL	252896.6		MEAN 693	MAX 12400	MIN 3.6	AC-FT 501600						
WTR YR 1980 TOTAL	151803.7		MEAN 415	MAX 9080	MIN 3.6	AC-FT 301100						

SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

BIOLOGICAL DATA: Water years 1978 to current year.

SPECIFIC CONDUCTANCE: Water year 1980.

WATER TEMPERATURES: Water years 1971 to current year.

SEDIMENT RECORDS: Water years 1969 to September 1978, 1979 to current year (periodic record only).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1970 to September 1978.

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 (54,200 metric tons) Jan. 17, 1978; minimum daily, 0.01 tons (0.01 metric tons) Nov. 4, 1969.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
OCT										
17...	1400	8.4	2190	8.3	23.0	1.4	8.9	K280	271	770
NOV										
15...	1230	20	2340	8.1	19.0	1.6	9.2	--	265	790
DEC										
19...	0830	22	2120	8.1	8.0	3.3	11.4	--	260	770
JAN										
22...	1100	146	1780	8.1	15.0	56	11.4	1100	830	600
FEB										
27...	1300	1100	1200	8.5	17.5	220	10.2	--	--	320
MAR										
26...	1145	580	900	7.5	16.5	260	11.0	--	K12600	290
APR										
17...	1530	427	840	8.3	26.0	120	7.8	4000	2830	270
MAY										
27...	1330	342	825	--	20.0	110	--	K40	1100	270
JUN										
26...	1430	272	750	8.1	24.5	64	--	--	K640	250
JUL										
23...	1100	83	1100	8.1	24.5	27	9.4	--	K380	--
AUG										
20...	1030	347	650	8.0	23.0	4.1	8.4	--	10400	230
SEP										
16...	1015	168	850	7.9	21.0	31	8.5	K450	860	450

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT									
17...	570	150	95	200	53	3.1	8.5	200	430
NOV									
15...	550	160	96	210	53	3.2	6.4	240	430
DEC									
19...	530	160	89	170	48	2.7	6.3	240	410
JAN									
22...	400	130	66	150	35	2.7	7.3	200	360
FEB									
27...	180	71	35	84	36	2.0	7.2	140	180
MAR									
26...	160	65	31	73	35	1.9	5.9	130	150
APR									
17...	140	65	27	63	33	1.7	6.4	130	150
MAY									
27...	140	62	28	68	35	1.8	5.0	130	130
JUN									
26...	120	60	24	60	34	1.7	6.2	130	110
JUL									
23...	--	--	--	--	--	--	--	--	--
AUG									
20...	95	54	22	54	34	1.6	5.1	130	100
SEP									
16...	250	100	48	120	37	2.5	5.5	200	220

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

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, 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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT 17...	360	.4	28	1460	1400	1.4	1.3	.08	.04
NOV 15...	360	.4	33	1470	1450	1.4	1.5	.10	.05
DEC 19...	340	.3	40	1400	1370	1.5	1.3	.08	.03
JAN 22...	270	.3	33	1180	1150	2.1	2.2	.07	.10
FEB 27...	140	.6	40	653	654	2.7	2.7	.20	.14
MAR 26...	120	.3	27	552	559	2.0	1.9	.24	.10
APR 17...	110	.3	27	518	534	1.5	1.6	.06	.08
MAY 27...	99	.3	27	528	504	1.4	1.4	.06	.00
JUN 26...	80	.3	26	446	449	.89	.88	.02	.00
JUL 23...	--	--	--	--	--	1.6	--	.01	--
AUG 20...	72	.3	21	394	409	.49	.50	.00	.00
SEP 16...	210	.4	28	807	859	1.5	1.5	.09	.10

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. 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)
OCT 17...	.85	.62	.93	.27	.66	2.3	2.0	.05	.04
NOV 15...	1.0	.68	1.1	.37	.73	2.5	2.2	5.2	.08
DEC 19...	.85	.81	.93	.09	.84	2.4	2.1	.07	.06
JAN 22...	.60	.42	.67	.15	.52	2.8	2.7	.25	.12
FEB 27...	3.5	1.2	3.7	2.4	1.3	6.4	4.0	1.5	.23
MAR 26...	2.0	1.7	2.2	.40	1.8	4.2	3.7	.55	.20
APR 17...	1.5	.92	1.6	.60	1.0	3.1	2.6	.60	.25
MAY 27...	1.9	1.2	2.0	.80	1.2	3.4	2.6	.52	.17
JUN 26...	1.1	.30	1.1	.80	.30	2.0	1.2	.17	.17
JUL 23...	1.1	--	1.1	--	--	2.7	--	.40	--
AUG 20...	.86	.26	.86	.60	.26	1.4	.76	.39	.23
SEP 16...	1.1	.78	1.2	.32	.88	2.7	2.4	.33	.23

SAN LUIS REY RIVER BASIN

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTMBER 1980

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)
OCT				JUL			
17...	1400	2190	23.0	01...	1530	759	29.0
NOV				02...	1500	753	31.0
15...	1230	2340	19.0	03...	1430	761	29.0
16...	1400	1940	19.0	04...	1315	762	29.0
17...	1400	2400	19.0	06...	1500	757	30.0
18...	1200	1970	18.0	07...	1300	755	31.0
20...	1700	1970	14.0	08...	1400	741	31.0
23...	1600	1980	18.0	09...	1600	759	30.0
24...	1500	1920	19.0	11...	1430	727	29.0
25...	1530	1960	19.0	12...	1600	726	30.0
27...	1615	1960	17.0	15...	1500	1010	30.0
28...	1645	1970	17.0	16...	1600	1020	31.0
29...	1400	1980	17.0	17...	1530	818	31.0
30...	1400	1890	16.0	18...	1400	806	31.0
DEC				19...	1600	769	30.0
02...	1700	1980	17.0	21...	1500	1120	29.0
03...	1600	1970	17.0	22...	1400	1140	29.0
04...	1630	1980	16.0	23...	1100	1100	24.5
05...	1600	1970	16.0	23...	1400	1160	29.0
06...	1530	1970	17.0	24...	1530	849	30.0
07...	1600	1980	17.0	25...	1500	798	30.0
08...	1600	1970	17.0	26...	1430	769	30.0
09...	1500	1970	17.0	27...	1430	762	29.0
10...	1600	1980	16.0	29...	1430	741	31.0
11...	1530	1970	18.0	31...	1530	731	33.0
12...	1530	1980	18.0	AUG			
13...	1630	1970	14.0	03...	1400	736	33.0
14...	1400	1980	15.0	04...	1500	733	32.0
15...	1630	1970	14.0	05...	1400	723	30.0
16...	1430	1950	15.0	06...	1500	721	30.0
19...	0830	2120	8.0	08...	1500	729	31.0
20...	1630	1930	--	09...	1400	715	31.0
22...	1330	1890	14.0	10...	1345	744	31.0
23...	1500	1890	13.0	11...	1500	723	--
26...	1630	1880	16.0	12...	1500	717	31.0
28...	1600	1900	14.0	13...	1530	702	31.0
JAN				15...	1200	701	30.0
22...	1100	1780	15.0	16...	1400	702	28.0
FEB				18...	1500	713	29.0
27...	1300	1200	17.5	19...	1530	716	29.0
MAR				20...	1030	650	23.0
26...	1145	900	16.5	21...	1530	712	29.0
APR				22...	1500	725	29.0
17...	1530	840	26.0	23...	1100	714	26.0
MAY				24...	1300	734	25.0
27...	1330	825	20.0	27...	1300	728	28.0
JUN				28...	1500	727	29.0
01...	1430	688	25.0	29...	1230	724	30.0
02...	1500	724	27.0	31...	1530	726	29.5
03...	1600	750	28.0	SEP			
04...	1630	831	27.0	01...	1500	734	28.0
05...	1700	798	27.0	02...	1600	731	28.0
06...	1600	783	28.0	05...	1630	744	29.0
07...	1430	788	27.0	06...	1400	739	28.0
10...	1700	745	28.0	09...	1500	783	28.0
11...	1600	788	29.0	10...	1600	782	27.0
12...	1600	767	29.0	11...	1530	1090	28.0
13...	1730	818	27.0	12...	1515	1200	25.0
14...	1500	779	29.0	14...	1600	1360	27.0
17...	1500	772	27.0	15...	1500	1370	27.0
18...	1430	777	28.0	16...	1015	850	21.0
21...	1530	782	29.0	16...	1500	1330	27.0
23...	1500	768	30.0	18...	1700	1430	28.0
25...	1500	710	30.0	19...	1530	1470	29.0
26...	1430	750	24.5	20...	1300	1460	29.0
26...	1530	774	30.0	21...	1230	1480	29.0
27...	1430	756	31.0	23...	1430	1520	25.0
28...	1200	747	28.0	24...	1530	1550	27.0
29...	1330	750	31.0	27...	1230	1560	26.0
30...	1500	763	29.0	28...	1300	1570	26.0
				29...	1500	1580	28.0

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
OCT 17...	1400	1	0	1	300	100	200	1	0	--	10
DEC 19...	0830	--	--	--	--	--	--	--	--	--	--
JAN 22...	1100	2	1	1	200	100	80	1	0	<1	10
MAR 26...	1145	--	--	--	--	--	--	--	--	--	--
APR 17...	1530	1	0	1	300	200	60	--	--	4	20
JUN 26...	1430	--	--	--	--	--	--	--	--	--	--
JUL 23...	1100	3	--	--	300	--	--	0	--	--	30
SEP 16...	1015	--	--	--	--	--	--	--	--	--	--

DATE	CHRO- MIUM, SUS- PENDE RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDE RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDE RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 17...	10	0	0	0	0	3	1	2	200	160	40
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
JAN 22...	10	0	4	1	<3	16	14	2	6700	6700	<10
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
APR 17...	20	0	10	7	<3	14	10	4	21000	21000	30
JUN 26...	--	--	--	--	--	--	--	--	--	--	--
JUL 23...	--	--	5	--	--	15	--	--	1800	--	--
SEP 16...	--	--	--	--	--	--	--	--	--	--	--

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, SUS- PENDE RECOV- ERABLE (UG/L AS NI)
OCT 17...	--	0	4	50	30	20	12	9.9	2.1	4	0
DEC 19...	--	--	--	--	--	--	--	--	--	--	--
JAN 22...	6	6	0	180	160	20	1.2	1.2	.0	7	3
MAR 26...	--	--	--	--	--	--	--	--	--	--	--
APR 17...	4	2	2	390	370	20	.9	.9	.0	13	13
JUN 26...	--	--	--	--	--	--	--	--	--	--	--
JUL 23...	10	--	--	290	--	--	.1	--	--	13	--
SEP 16...	--	--	--	--	--	--	--	--	--	--	--

< 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

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDED TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDED RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDED RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 17...	4	2	2	0	0	0	0	--	0	20
DEC 19...	--	--	--	--	0	--	--	--	--	--
JAN 22...	4	1	0	1	0	0	0	30	30	<3
MAR 26...	--	--	--	--	0	--	--	--	--	--
APR 17...	0	1	0	1	0	0	0	90	30	60
JUN 26...	--	--	--	--	0	--	--	--	--	--
JUL 23...	--	1	--	--	0	--	--	70	--	--
SEP 16...	--	--	--	--	0	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED (MG/L AS C)
OCT 17...	1400	--	6.4	.4
NOV 15...	1230	6.2	--	--
DEC 19...	0830	6.5	--	--
JAN 22...	1100	--	8.6	1.8
FEB 27...	1300	23	--	--
MAR 26...	1145	13	--	--
APR 17...	1530	--	15	5.6
MAY 27...	1330	11	--	--
JUN 26...	1430	11	--	--
AUG 20...	1030	10	--	--
SEP 16...	1015	7.9	--	--

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

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	NOV 15,79 1230	MAR 26,80 1145	MAY 27,80 1330	JUN 26,80 1430
TOTAL CELLS/ML	1000	14000	4100	2300
DIVERSITY: DIVISION	0.8	0.8	0.8	1.5
..CLASS	0.8	0.8	0.8	1.5
..ORDER	0.0	0.9	1.4	2.0
...FAMILY	0.0	1.0	1.7	2.6
....GENUS	0.0	1.1	1.8	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....CHLOROCOCCACEAE								
....CHLOROCOCCUM	9	1	--	-	--	-	--	-
....COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
....MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	--	-	--	-
....OOCYSTACEAE								
....ANKISTRODESMUS	9	1	--	-	--	-	--	-
....CHLORELLA	--	-	140	1	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-
....TREUBARIA	--	-	--	-	--	-	--	-
....SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	52	2
....SCENEDESMUS	--	-	--	-	--	-	130	6
....TETRASTRUM	--	-	550	4	--	-	--	-
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	9	1	--	-	--	-	230	10
....PLATYMONAS	19	2	--	-	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCAEAE								
....CYCLOTELLA	66	6	270	2	140	3	190	9
....HELOSIRA	--	-	140	1	--	-	--	-
...PENNALES								
....ACHNANTHACEAE								
....ACHNANTHES	9	1	--	-	--	-	--	-
....COCONEIS	19	2	--	-	69	2	--	-
....CYMBELLACEAE								
....CYMBELLA	66	6	--	-	--	-	13	1
....NAVICULACEAE								
....NAVICULA	450#	44	410	3	140	3	91	4
....NEIDIUM	--	-	--	-	210	5	--	-
....PLAGIOTROPIS	19	2	--	-	--	-	--	-
....NITZSCHIAEAE								
....HANTZSCHIA	--	-	--	-	--	-	--	-
....NITZSCHIA	220#	21	690	5	480	12	480#	21
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE	9	1	--	-	--	-	--	-
...CRYPTOMONADALES								
....CRYPTOCHRYSIDACEAE								
....CHROOMONAS	100	10	--	-	--	-	--	-
....CRYPTOMONADACEAE								
....CRYPTOMONAS	9	1	140	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
....ANACYSTIS	--	-	--	-	410	10	--	-
...HORMOGONALES								
....NOSTOCACEAE								
....ANABAENA	--	-	--	-	--	-	440#	20
....OSCILLATORIAEAE								
....OSCILLATORIA	--	-	12000#	84	2600#	64	620#	28
....PHORMIDIUM	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	--	-	--	-	--	-	--	-
....PHACUS	--	-	--	-	--	-	--	-

See footnotes at end of table.

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 23,80 1100	AUG 20,80 1030	SEP 16,80 1015
TOTAL CELLS/ML	3900	14000	1500
DIVERSITY: DIVISION	1.5	1.2	1.4
..CLASS	1.5	1.2	1.4
..ORDER	1.9	1.3	2.3
...FAMILY	2.2	1.6	2.4
....GENUS	2.7	1.9	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...CHLOROCOCCACEAE						
....CHLOROCOCCUM	--	-	--	-	--	-
...COELASTRACEAE						
....COELASTRUM	430	11	--	-	--	-
...MICRACTINIACEAE						
....GOLENKINIA	*	0	--	-	--	-
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	--	-
....CHLORELLA	--	-	--	-	--	-
...DICTYOSPHAERIUM	--	-	280	2	--	-
...OOCYSTIS	--	-	920	6	--	-
...TREUBARIA	--	-	*	0	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	--	-	--	-
...SCENEDESMUS	520	13	1400	10	78	5
...TETRASTRUM	--	-	1700	12	100	7
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	160	4	*	0	160	10
...PLATYMONAS	--	-	--	-	--	-
CHRYSTOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
....CYCLOTELLA	480	12	--	-	130	8
....MELOSIRA	--	-	8700#	61	310#	20
...PENNALES						
....ACHNANTHACEAE						
....ACHNANTHES	--	-	--	-	--	-
...COCCONEIS	--	-	--	-	--	-
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	--	-
...NAVICULACEAE						
....NAVICULA	52	1	*	0	65	4
...NEIDIUM	--	-	--	-	--	-
...PLAGIOTROPIS	--	-	--	-	--	-
...NITZSCHACEAE						
....HANTZSCHIA	*	0	--	-	--	-
...NITZSCHIA	130	3	140	1	440#	29
CRYPTOPHYTA (CRYPTOMONADS)						
..CRYPTOPHYCEAE						
...CRYPTOMONADALES						
...CRYPTOCHRYSIDACEAE						
....CHROOMONAS	--	-	--	-	--	-
...CRYPTOMONADACEAE						
....CRYPTOMONAS	--	-	920	6	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	39	1	--	-	--	-
...HORMOGONALES						
...NOSTOCACEAE						
....ANABAENA	--	-	--	-	--	-
...OSCILLATORIACEAE						
....OSCILLATORIA	1300#	34	--	-	230#	15
...PHORMIDIUM	730#	19	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
....EUGLENA	*	0	--	-	--	-
...PHACUS	--	-	--	-	13	1

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

11042000 SAN LUIS REY RIVER AT OCEANSIDE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PERIPHYTON

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M	LENGTH OF EXPOSURE (DAYS)
OCT 17...	1400	8640	.272	<.027	4.88	2.53	36

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
OCT 17...	1400	23.0	8.4	23	.52	--	--	--
NOV 15...	1230	19.0	20	40	2.2	--	--	--
DEC 19...	0830	8.0	22	136	8.1	--	--	--
JAN 22...	1215	15.0	146	330	136	--	--	--
APR 17...	1330	26.0	427	1110	1280	11	14	17
MAY 27...	1330	20.0	342	1370	1270	6	8	10
JUN 26...	1430	20.0	272	854	627	--	--	--
JUL 23...	1100	24.5	83	329	74	--	--	--
AUG 20...	1030	23.0	347	125	117	--	--	--
SEP 16...	1015	21.0	168	69	31	--	--	--
		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
DATE								
OCT 17...	--	--	47	--	--	--	--	--
NOV 15...	--	--	25	--	--	--	--	--
DEC 19...	--	--	48	--	--	--	--	--
JAN 22...	--	--	35	44	74	96	99	100
APR 17...	20	28	40	74	93	96	100	--
MAY 27...	12	15	22	57	89	97	99	100
JUN 26...	--	--	20	--	--	--	--	--
JUL 23...	--	--	24	--	--	--	--	--
AUG 20...	--	--	92	96	97	100	--	--
SEP 16...	--	--	78	--	--	--	--	--

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

SANTA MARGARITA RIVER BASIN

11042400 TEMECULA CREEK NEAR AGUANGA, CA

LOCATION.--Lat 33°27'33", long 116°55'22", in NE¼SW¼SW¼ sec.19, T.8 S., R.1 E., Riverside County, Hydrologic Unit 18070302, on right bank 1.6 mi (2.6 km) downstream from Long Canyon, and 3.5 mi (5.6 km) northwest of Aguanga.

DRAINAGE AREA.--131 mi² (339 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,590 ft (485 m), from topographic map.

REMARKS.--Records fair. No regulation above station. Pumping for irrigation above station.

AVERAGE DISCHARGE.--23 years, 6.49 ft³/s (0.184 m³/s), 4,700 acre-ft/yr (5.80 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,540 ft³/s (100 m³/s) Apr. 3, 1958, gage height, 6.57 ft (2.003 m), from rating curve extended above 1,200 ft³/s (34 m³/s); maximum gage height, 12.0 ft (3.66 m) from floodmarks, Feb. 21, 1980; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s), and maximum (*), from rating curve extended above 700 ft³/s (19.8 m³/s) on basis of slope-area measurement at gage height 7.34 ft (2.237 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0900	272 7.70	3.10 0.945	Feb. 21	Unknown	*3,420 96.9	12.0 3.658
Jan. 29	0345	2,640 74.8	7.59 2.313	Mar. 18	1900	106 3.00	2.33 0.710

NOTE.--Flows of Feb. 15, 18, Mar. 3 and 6, probably exceeded base but were not recorded.

Minimum daily discharge, 0.80 ft³/s (0.023 m³/s) Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	1.6	2.2	2.6	53	54	45	25	18	10	7.4	7.3
2	.80	1.6	2.1	2.6	37	52	44	25	18	10	7.4	6.9
3	.80	1.6	2.1	2.6	22	320	42	24	17	9.7	7.4	6.5
4	.85	1.7	2.1	2.6	17	100	41	23	16	9.4	7.4	6.5
5	.85	1.7	2.1	2.6	15	70	41	23	16	9.0	7.1	6.7
6	.85	1.7	2.2	2.5	14	330	41	21	16	9.0	7.4	6.8
7	.85	1.8	2.2	2.8	13	250	40	21	15	8.7	7.1	6.7
8	.90	3.1	2.2	3.6	12	180	39	22	15	8.7	7.1	6.9
9	.90	2.6	2.2	14	12	125	37	24	15	9.0	7.1	7.2
10	.90	2.3	2.2	23	11	105	38	26	14	8.4	7.1	7.3
11	.90	2.2	2.2	126	11	93	36	25	14	8.4	7.1	7.3
12	.90	2.0	2.2	41	11	84	36	24	13	8.1	7.1	7.3
13	.95	2.0	2.2	20	100	77	35	24	13	8.4	6.8	7.3
14	.95	1.9	2.2	19	700	73	34	24	13	8.1	6.8	7.5
15	.95	1.9	2.2	17	880	70	33	24	13	8.1	6.8	7.7
16	1.1	1.9	2.2	13	500	68	32	24	12	8.1	7.1	7.5
17	1.1	2.0	2.2	11	380	65	32	23	12	7.8	6.8	6.9
18	1.2	2.1	2.2	12	700	76	32	21	12	7.8	7.1	7.0
19	1.2	2.1	2.2	23	620	68	32	20	12	7.8	7.4	7.0
20	1.6	2.1	2.2	15	550	60	31	19	11	7.8	7.1	7.1
21	2.7	2.2	2.5	12	1800	58	31	20	11	7.8	7.4	7.2
22	2.0	2.2	2.7	10	700	57	35	20	12	7.8	7.4	7.1
23	1.6	2.2	2.7	9.4	150	52	36	20	11	7.4	7.4	7.1
24	1.5	2.2	2.7	8.6	88	49	36	20	11	7.4	7.4	6.5
25	1.4	2.2	2.7	8.3	76	48	24	19	11	7.4	7.4	6.3
26	1.4	2.2	2.9	7.7	67	54	24	19	11	7.4	7.1	6.4
27	1.4	2.2	2.8	7.5	60	47	24	18	10	7.1	7.1	6.5
28	1.4	2.2	2.7	55	57	45	25	18	10	7.1	7.1	6.5
29	1.5	2.2	2.7	732	56	42	27	18	10	7.4	6.2	6.5
30	1.5	2.2	2.6	123	---	42	26	17	10	7.4	6.1	6.5
31	1.5	---	2.6	68	---	41	---	18	---	7.4	6.9	---
TOTAL	37.25	61.9	73.2	1397.4	7712	2855	1029	669	392	253.9	220.1	208.0
MEAN	1.20	2.06	2.36	45.1	266	92.1	34.3	21.6	13.1	8.19	7.10	6.93
MAX	2.7	3.1	2.9	732	1800	330	45	26	18	10	7.4	7.7
MIN	.80	1.6	2.1	2.5	11	41	24	17	10	7.1	6.1	6.3
AC-FT	74	123	145	2770	15300	5660	2040	1330	778	504	437	413
CAL YR 1979 TOTAL	4475.97			MEAN 12.3	MAX 592	MIN .36	AC-FT 8880					
WTR YR 1980 TOTAL	14908.75			MEAN 40.7	MAX 1800	MIN .80	AC-FT 29570					

11042510 VAIL LAKE NEAR TEMECULA, CA

LOCATION.--Lat 33°29'44", long 116°58'33", in Pauba Grant, Riverside County, Hydrologic Unit 18070302, near center of Vail Dam, 0.2 mi (0.3 km) downstream from Arroyo Seco, and 10 mi (16 km) east of Temecula.

DRAINAGE AREA.--320 mi² (829 km²).

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 1,350.0 ft (411.48 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); 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 (corrected). Capacity of reservoir at spillway level, 49,370 acre-ft (60.9 hm³), elevation, 1,470 ft (448.1 m). Dead storage, 2.4 acre-ft (2,960 m³) below lowest outlet at elevation 1,352.5 ft (412.24 m). Area-capacity tables for reservoir are based on a survey made in 1947. There had been no spill from Nov. 13, 1948, date of closure, to Feb. 20, 1980, when a peak spill of about 8,000 ft³/s (227 m³/s) occurred (from theoretical discharge curve). Water is released as required down Temecula Creek for diversion about 1 mi (1.6 km) 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 (64.9 hm³), Feb. 21, 1980, elevation, 1,473.0 ft (448.97 m) from observed high-water mark; minimum, 1,038 acre-ft (1.28 hm³) Oct. 31, 1960, elevation, 1,379.44 ft (420.453 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, about 52,620 acre-ft (64.9 hm³) Feb. 21, elevation, 1,473.0 ft (448.97 m) from observed high-water mark; minimum, 29,170 acre-ft (36.0 hm³) Jan. 2-6, elevation 1,448.47 ft (441.494 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,452.00	32,090	--
Oct. 31.....	1,450.70	31,000	-1,090
Nov. 30.....	1,448.96	29,570	-1,430
Dec. 31.....	1,448.57	29,250	-320
CAL YR 1979.....	--	--	+17,090
Jan. 31.....	1,453.66	33,520	+4,270
Feb. 29.....	1,470.40	49,810	+16,290
Mar. 31.....	1,470.20	49,590	-220
Apr. 30.....	1,470.05	49,420	-170
May 31.....	1,469.36	48,690	-730
June 30.....	1,468.45	47,720	-970
July 31.....	1,464.96	44,110	-3,610
Aug. 31.....	1,461.59	40,800	-3,310
Sept. 30.....	1,461.55	40,760	-40
WTR YR 1980.....	--	--	+8,670

SANTA MARGARITA RIVER BASIN

11043000 MURRIETA CREEK AT TEMECULA, CA

LOCATION.--Lat 33°28'47", long 117°08'35", in Temecula Grant, Riverside County, Hydrologic Unit 18070302, on right bank 0.4 mi (0.6 km) upstream from confluence with Temecula Creek, 1.0 mi (1.6 km) south of Temecula, and about 12 mi (19 km) downstream from Skinner Reservoir on Tualota Creek, a tributary to Murrieta Creek.

DRAINAGE AREA.--222 mi² (575 km²).

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. Altitude of gage is 970 ft (296 m), from topographic map. See WSP 1735 for history of changes prior to Dec. 16, 1938.

REMARKS.--Records fair. Flow partly regulated since 1974 by Skinner Reservoir. Pumping above station for irrigation of about 2,500 acres (10.1 km²).

AVERAGE DISCHARGE.--56 years, 11.4 ft³/s (0.323 m³/s), 8,240 acre-ft/yr (10.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,800 ft³/s (617 m³/s) Feb. 21, 1980, gage height, 13.70 ft (4.176 m); minimum daily, 0.02 ft³/s (0.001 m³/s) at times in 1969, no flow Dec. 11, 1976 because of upstream channel work.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 11	1230	364	10.3	3.11	0.948	Feb. 18	0600	5,780	164	8.58	2.615
Jan. 29	0545	14,100	399	11.95	3.642	Feb. 19	1100	8,660	245	10.00	3.048
Feb. 14	0530	20,500	581	13.45	4.100	Feb. 21	0200	*21,800	617	13.70	4.176
Feb. 15	1200	9,720	275	10.45	3.185	Mar. 3	0300	1,800	51.0	4.32	1.317
Feb. 16	2130	13,200	374	11.70	3.566	Mar. 6	1430	1,400	39.6	4.05	1.234
						Mar. 10	2200	247	7.00	2.57	0.783

Minimum daily discharge, 0.34 ft³/s (0.010 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.34	.91	.78	.91	19	122	88	86	1.2	.66	.72	.99
2	.38	.91	.72	.91	9.2	120	85	86	1.2	.66	.66	1.1
3	.38	.78	.66	.91	5.5	1100	82	86	1.1	.72	.72	.91
4	.38	.78	.66	.91	3.8	450	82	86	.91	.72	.91	.99
5	.42	.72	.72	.91	3.3	240	82	85	.91	.72	.91	1.1
6	.42	.60	.84	.91	2.9	900	81	85	.99	.78	.91	1.1
7	.50	.72	.60	1.1	2.7	140	82	85	.99	.72	.99	1.1
8	.50	3.1	.84	1.2	2.6	110	80	85	.84	.78	.99	1.2
9	.50	1.2	.78	32	2.6	100	80	85	.78	.78	.99	1.2
10	.50	.84	.78	12	2.5	94	84	85	.78	.84	.91	1.2
11	.55	.78	.78	149	2.5	92	84	84	.78	.84	.99	1.2
12	.55	.78	.78	23	2.7	90	84	84	.91	.91	.99	1.2
13	.55	.72	.72	6.6	48	88	85	84	.91	.91	.91	1.2
14	.55	.72	.72	5.0	2760	86	85	84	.91	.84	.91	1.1
15	.55	.66	.78	3.8	3590	85	86	84	.91	.84	.84	.99
16	.60	.66	.78	2.7	3830	83	86	49	.91	.91	.78	.91
17	.72	.72	.72	2.1	1140	82	86	19	.91	.91	.78	.78
18	.66	.72	.72	2.1	2110	81	87	9.0	.99	.99	.78	.78
19	.78	.72	.72	2.5	2400	81	88	4.0	.91	.99	.78	.91
20	2.5	.72	.78	1.5	773	84	89	1.5	.84	.99	.72	.91
21	1.9	.72	1.1	.99	6170	61	89	1.3	.78	.91	.72	.84
22	1.1	.72	.99	1.1	355	66	89	1.3	.99	.84	.60	.84
23	.84	.84	.72	.91	200	68	89	1.2	.99	.84	.50	.84
24	.78	.78	.72	.99	175	71	88	1.2	.99	.91	.50	.91
25	.66	.78	.99	.84	158	68	88	1.2	.99	.99	.46	.78
26	.78	.84	1.1	.91	146	36	87	1.2	.99	.72	.55	.84
27	.72	.78	.91	1.2	137	68	87	1.2	.78	.60	.91	.99
28	.72	.78	.84	32	132	81	87	1.2	.66	.60	.91	1.1
29	.72	.84	.84	3570	129	87	87	1.2	.66	.55	.84	.84
30	.66	.84	.84	100	---	85	86	1.2	.66	.60	.84	.72
31	.78	---	.84	33	---	84	---	1.2	---	.66	.91	---
TOTAL	21.99	25.68	24.77	3992.00	24312.3	5003	2563	1369.9	27.17	24.73	24.93	29.57
MEAN	.71	.86	.80	129	838	161	85.4	44.2	.91	.80	.80	.99
MAX	2.5	3.1	1.1	3570	6170	1100	89	86	1.2	.99	.99	1.2
MIN	.34	.60	.60	.84	2.5	36	80	1.2	.66	.55	.46	.72
AC-FT	44	51	49	7920	48220	9920	5080	2720	54	49	49	59

CAL YR 1979 TOTAL 7218.66 MEAN 19.8 MAX 1830 MIN .31 AC-FT 14320
WTR YR 1980 TOTAL 37419.04 MEAN 102 MAX 6170 MIN .34 AC-FT 74220

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 (0.2 km) downstream from confluence of Murrieta and Temecula Creeks, 1.4 mi (2.3 km) south of Temecula, 10 mi (16 km) downstream from Vail Lake, and about 12 mi (19 km) downstream from Skinner Reservoir.

DRAINAGE AREA.--588 mi² (1,520 km²).

PERIOD OF RECORD.--January 1923 to current year. Prior to October 1952, published as Temecula Creek at Railroad Canyon, near Temecula.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 950 ft (290 m), from topographic map. Prior to Nov. 3, 1966, at site 100 ft (30 m) 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 Tualota Creek which is tributary to Murrieta Creek.

AVERAGE DISCHARGE.--25 years (water years 1924-48), unregulated, 28.2 ft³/s (0.799 m³/s), 20,420 acre-ft/yr (25.2 hm³/yr); 32 years (water years 1949-80), 16.1 ft³/s (0.456 m³/s), 11,660 acre-ft/yr (14.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s), Feb. 16, 1927, gage height, 14.6 ft (4.45 m), at site then in use, from rating curve extended above 10,000 ft³/s (283 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Aug. 18-22, 1965, regulation by construction work above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,000 ft³/s (623 m³/s), Feb. 21, gage height, 16.5 ft (5.03 m), from floodmarks, from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement on Murrieta Creek 0.5 mi (0.8 km) upstream; minimum daily, 0.68 ft³/s (0.019 m³/s) June 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.7	2.0	2.2	61	140	88	86	5.9	2.8	2.2	1.5
2	1.2	1.9	2.0	2.2	41	135	85	86	6.2	9.8	2.2	1.5
3	1.2	1.7	2.0	2.2	28	1500	82	86	6.2	11	2.5	1.2
4	1.2	1.6	2.0	2.2	22	900	82	86	5.8	9.2	2.5	1.1
5	1.2	1.6	2.0	2.2	16	760	82	85	3.6	8.9	2.3	1.3
6	1.2	1.6	2.0	2.2	12	1150	81	87	3.1	11	1.9	1.3
7	1.2	1.9	2.4	2.4	12	900	82	87	2.4	9.3	1.8	2.0
8	1.2	1.6	2.2	3.1	9.2	580	81	87	2.2	7.9	1.8	1.9
9	1.3	3.7	2.2	5.4	8.1	400	81	87	2.3	5.4	1.6	1.9
10	1.3	2.6	2.2	3.6	7.4	365	85	85	2.3	2.3	1.8	2.1
11	1.3	2.3	2.2	190	7.9	328	85	84	2.5	2.1	1.9	2.0
12	1.3	2.2	2.0	32	7.3	244	85	87	1.7	2.0	2.1	2.1
13	1.3	2.1	2.0	9.3	320	218	85	87	1.7	2.0	2.2	2.1
14	1.3	2.0	2.0	6.2	3270	196	86	87	1.2	2.0	2.3	2.0
15	1.3	2.0	2.0	4.0	4200	183	86	84	.99	1.9	2.2	1.9
16	1.3	2.0	2.0	2.4	2860	173	86	60	5.0	1.8	2.2	1.9
17	1.4	2.0	2.0	1.8	1760	125	86	20	.68	1.8	2.7	1.6
18	1.4	2.1	2.0	2.9	3360	63	87	10	.80	1.8	3.7	1.4
19	1.4	2.1	2.0	6.2	3200	92	88	8.0	1.1	1.8	4.1	1.5
20	8.7	1.8	2.0	1.6	1950	98	89	7.5	1.3	1.8	4.8	1.6
21	4.0	1.8	2.2	1.1	7500	114	89	6.2	1.7	1.8	6.4	1.6
22	1.8	1.8	2.4	1.0	1700	111	87	5.4	1.8	1.8	6.9	1.6
23	1.6	2.0	2.2	1.0	600	107	89	4.9	1.8	1.7	5.9	1.6
24	1.6	2.1	2.2	1.0	250	96	88	4.5	1.7	1.6	5.6	1.4
25	1.4	2.1	2.3	1.0	200	90	88	4.2	2.8	1.8	6.0	1.4
26	1.4	2.0	2.6	.90	175	90	87	4.0	3.8	1.7	1.7	1.6
27	1.4	2.0	2.2	1.0	160	88	87	3.8	2.7	2.7	1.7	1.6
28	1.4	2.0	2.2	60	155	87	87	3.8	2.8	14	1.8	1.6
29	1.3	2.0	2.2	4480	150	87	87	3.8	2.5	1.8	1.3	1.4
30	1.1	2.0	2.2	300	---	85	86	3.7	3.1	1.6	1.3	1.3
31	1.3	---	2.2	117	---	84	---	5.0	---	14	1.4	---
TOTAL	51.2	74.7	66.1	5329.10	32041.9	9589	2567	1445.8	81.67	141.1	88.8	49.0
MEAN	1.65	2.49	2.13	172	1105	309	85.6	46.6	2.72	4.55	2.86	1.63
MAX	8.7	16	2.6	4480	7500	1500	89	87	6.2	14	6.9	2.1
MIN	1.1	1.6	2.0	.90	7.3	63	81	3.7	.68	1.6	1.3	1.1
AC-FT	102	148	131	10570	63560	19020	5090	2870	162	280	176	97

CAL YR 1979 TOTAL 8375.83 MEAN 22.9 MAX 1850 MIN .83 AC-FT 16610
WTR YR 1980 TOTAL 51525.37 MEAN 141 MAX 7500 MIN .68 AC-FT 102200

SANTA MARGARITA RIVER BASIN

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA

LOCATION.--Lat 33°23'54", long 117°15'44", in NE¼SE¼NE¼ sec.14, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on right bank 180 ft (55 m) upstream from De Luz Road, 1.3 mi (2.1 km) northwest of Fallbrook, and 1.9 mi (3.1 km) downstream from Sandia Canyon.

DRAINAGE AREA.--644 mi² (1,668 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1924 to September 1980 (discontinued). Monthly discharge only for October and November 1924, published in WSP 1315-B.

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

GAGE.--Water-stage recorder. Concrete-road control since October 1955. Datum of gage is 267.96 ft (81.674 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). Prior to Oct. 1, 1955, at site 1.7 mi (2.7 km) upstream at different datum. Records equivalent except for extreme low flows.

REMARKS.--Records poor. Gage destroyed by flood of Feb. 20 or 21, 1980. Flow partly regulated since November 1948 by Vail Lake (station 11042500). Several small diversions above station for irrigation. The Fallbrook Public Utility District reports no water pumped during the current year from a well in the streambed 2.1 mi (3.4 km) upstream from the station.

AVERAGE DISCHARGE.--24 years (water years 1925-48), unregulated, 35.4 ft³/s (1.003 m³/s), 25,630 acre-ft/yr (31.6 hm³/yr); 32 years (water years 1949-80), 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft³/s (937 m³/s) Feb. 16, 1927, gage height, 15.6 ft (4.75 m), site and datum then in use, from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in recent years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,000 ft³/s (595 m³/s) Feb. 20 or 21, gage height, 14.4 ft (4.39 m), from floodmarks; minimum daily, 6.4 ft³/s (0.181 m³/s) Nov. 15, 16, 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	7.8	7.0	8.9	100	215	170	120	17	12	14	13
2	8.0	7.8	7.3	8.9	53	205	160	120	18	13	13	13
3	8.3	7.8	7.5	8.9	49	1750	160	119	17	15	13	13
4	8.3	8.3	8.5	8.9	48	1040	158	118	17	15	13	13
5	8.5	8.3	8.3	9.0	46	940	152	118	17	14	12	13
6	8.8	7.8	7.8	9.2	44	1350	150	117	17	14	12	12
7	8.5	7.3	7.5	9.6	44	1040	147	116	16	13	12	12
8	8.8	14	7.3	9.9	54	620	145	117	16	13	12	12
9	9.0	14	7.5	120	51	500	142	116	15	12	12	12
10	9.0	9.3	7.8	80	48	440	140	115	15	12	12	12
11	9.3	8.3	8.0	270	44	390	140	114	15	11	12	12
12	9.3	8.5	7.5	115	43	340	138	113	15	11	12	12
13	9.5	7.8	8.0	52	820	300	136	111	14	11	12	12
14	9.8	7.5	7.5	44	4000	250	135	110	14	11	12	12
15	9.8	6.4	7.7	37	5220	230	133	108	14	11	12	12
16	10	6.4	7.7	35	3450	210	131	105	14	11	12	12
17	10	6.8	7.8	34	2100	190	130	70	14	11	12	12
18	10	6.6	7.9	37	4200	140	130	38	14	11	13	12
19	8.8	6.6	8.3	55	3900	200	129	28	13	11	13	12
20	12	6.4	9.2	36	2300	260	129	25	13	11	13	12
21	13	6.4	10	31	10900	275	129	23	13	11	13	12
22	11	6.4	9.8	28	2000	260	128	20	13	10	13	12
23	10	6.4	9.0	25	720	250	127	18	13	10	13	12
24	9.5	7.0	9.0	25	340	230	125	17	13	10	13	12
25	8.8	6.8	8.9	24	270	215	125	17	13	10	13	12
26	8.8	7.5	8.9	24	240	208	125	16	12	10	13	12
27	8.8	8.8	8.9	23	230	197	125	16	12	12	13	12
28	8.5	8.8	8.9	85	220	185	125	15	12	15	13	12
29	8.3	8.3	8.9	4670	210	180	124	15	12	13	13	12
30	7.0	7.3	8.9	519	---	175	122	15	12	12	13	12
31	8.0	---	8.9	238	---	170	---	15	---	15	13	---
TOTAL	285.4	237.4	256.2	6680.3	41744	12955	4110	2185	430	371	391	365
MEAN	9.21	7.91	8.26	215	1439	418	137	70.5	14.3	12.0	12.6	12.2
MAX	13	14	10	4670	10900	1750	170	120	18	15	14	13
MIN	7.0	6.4	7.0	8.9	43	140	122	15	12	10	12	12
AC-FT	566	471	508	13250	82800	25700	8150	4330	853	736	776	724
CAL YR 1979 TOTAL	15921.6		MEAN 43.6		MAX 2030	MIN 4.7	AC-FT 31580					
WTR YR 1980 TOTAL	70010.3		MEAN 191		MAX 10900	MIN 6.4	AC-FT 138900					

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 (0.2 km) downstream from confluence of Murrieta and Temecula Creeks, 1.4 mi (2.3 km) south of Temecula, 10 mi (16 km) downstream from Vail Lake, and about 12 mi (19 km) downstream from Skinner Reservoir.

DRAINAGE AREA.--588 mi² (1,520 km²).

PERIOD OF RECORD.--January 1923 to current year. Prior to October 1952, published as Temecula Creek at Railroad Canyon, near Temecula.

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 950 ft (290 m), from topographic map. Prior to Nov. 3, 1966, at site 100 ft (30 m) 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 Tualota Creek which is tributary to Murrieta Creek.

AVERAGE DISCHARGE.--25 years (water years 1924-48), unregulated, 28.2 ft³/s (0.799 m³/s), 20,420 acre-ft/yr (25.2 hm³/yr); 32 years (water years 1949-80), 16.1 ft³/s (0.456 m³/s), 11,660 acre-ft/yr (14.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s), Feb. 16, 1927, gage height, 14.6 ft (4.45 m), at site then in use, from rating curve extended above 10,000 ft³/s (283 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Aug. 18-22, 1965, regulation by construction work above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,000 ft³/s (623 m³/s), Feb. 21, gage height, 16.5 ft (5.03 m), from floodmarks, from rating curve extended above 1,500 ft³/s (42.5 m³/s) on basis of slope-area measurement on Murrieta Creek 0.5 mi (0.8 km) upstream; minimum daily, 0.68 ft³/s (0.019 m³/s) June 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.7	2.0	2.2	61	140	88	86	5.9	2.8	2.2	1.5
2	1.2	1.9	2.0	2.2	41	135	85	86	6.2	9.8	2.2	1.5
3	1.2	1.7	2.0	2.2	28	1500	82	86	6.2	11	2.5	1.2
4	1.2	1.6	2.0	2.2	22	900	82	86	5.8	9.2	2.5	1.1
5	1.2	1.6	2.0	2.2	16	760	82	85	3.6	8.9	2.3	1.3
6	1.2	1.6	2.0	2.2	12	1150	81	87	3.1	11	1.9	1.3
7	1.2	1.9	2.4	2.4	12	900	82	87	2.4	9.3	1.8	2.0
8	1.2	1.6	2.2	3.1	9.2	580	81	87	2.2	7.9	1.8	1.9
9	1.3	3.7	2.2	5.4	8.1	400	81	87	2.3	5.4	1.6	1.9
10	1.3	2.6	2.2	3.6	7.4	365	85	85	2.3	2.3	1.8	2.1
11	1.3	2.3	2.2	190	7.9	328	85	84	2.5	2.1	1.9	2.0
12	1.3	2.2	2.0	32	7.3	244	85	87	1.7	2.0	2.1	2.1
13	1.3	2.1	2.0	9.3	320	218	85	87	1.7	2.0	2.2	2.1
14	1.3	2.0	2.0	6.2	3270	196	86	87	1.2	2.0	2.3	2.0
15	1.3	2.0	2.0	4.0	4200	183	86	84	.99	1.9	2.2	1.9
16	1.3	2.0	2.0	2.4	2860	173	86	60	5.0	1.8	2.2	1.9
17	1.4	2.0	2.0	1.8	1760	125	86	20	.68	1.8	2.7	1.6
18	1.4	2.1	2.0	2.9	3360	63	87	10	.80	1.8	3.7	1.4
19	1.4	2.1	2.0	6.2	3200	92	88	8.0	1.1	1.8	4.1	1.5
20	8.7	1.8	2.0	1.6	1950	98	89	7.5	1.3	1.8	4.8	1.6
21	4.0	1.8	2.2	1.1	7500	114	89	6.2	1.7	1.8	6.4	1.6
22	1.8	1.8	2.4	1.0	1700	111	87	5.4	1.8	1.8	6.9	1.6
23	1.6	2.0	2.2	1.0	600	107	89	4.9	1.8	1.7	5.9	1.6
24	1.6	2.1	2.2	1.0	250	96	88	4.5	1.7	1.6	5.6	1.4
25	1.4	2.1	2.3	1.0	200	90	88	4.2	2.8	1.8	6.0	1.4
26	1.4	2.0	2.6	.90	175	90	87	4.0	3.8	1.7	1.7	1.6
27	1.4	2.0	2.2	1.0	160	88	87	3.8	2.7	2.7	1.7	1.6
28	1.4	2.0	2.2	60	155	87	87	3.8	2.8	1.4	1.8	1.6
29	1.3	2.0	2.2	4480	150	87	87	3.8	2.5	1.8	1.3	1.4
30	1.1	2.0	2.2	300	---	85	86	3.7	3.1	1.6	1.3	1.3
31	1.3	---	2.2	117	---	84	---	5.0	---	1.4	1.4	---
TOTAL	51.2	74.7	66.1	5329.10	32041.9	9589	2567	1445.8	81.67	141.1	88.8	49.0
MEAN	1.65	2.49	2.13	172	1105	309	85.6	46.6	2.72	4.55	2.86	1.63
MAX	8.7	16	2.6	4480	7500	1500	89	87	6.2	14	6.9	2.1
MIN	1.1	1.6	2.0	.90	7.3	63	81	3.7	.68	1.6	1.3	1.1
AC-FT	102	148	131	10570	63560	19020	5090	2870	162	280	176	97
CAL YR 1979 TOTAL	8375.83			MEAN 22.9	MAX 1850	MIN .83	AC-FT 16610					
WTR YR 1980 TOTAL	51525.37			MEAN 141	MAX 7500	MIN .68	AC-FT 102200					

SANTA MARGARITA RIVER BASIN

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA

LOCATION.--Lat 33°23'54", long 117°15'44", in NE¼SE¼NE¼ sec.14, T.9 S., R.4 W., San Diego County, Hydrologic Unit 18070302, on right bank 180 ft (55 m) upstream from De Luz Road, 1.3 mi (2.1 km) northwest of Fallbrook, and 1.9 mi (3.1 km) downstream from Sandia Canyon.

DRAINAGE AREA.--644 mi² (1,668 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1924 to September 1980 (discontinued). Monthly discharge only for October and November 1924, published in WSP 1315-B.

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

GAGE.--Water-stage recorder. Concrete-road control since October 1955. Datum of gage is 267.96 ft (81.674 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). Prior to Oct. 1, 1955, at site 1.7 mi (2.7 km) upstream at different datum. Records equivalent except for extreme low flows.

REMARKS.--Records poor. Gage destroyed by flood of Feb. 20 or 21, 1980. Flow partly regulated since November 1948 by Vail Lake (station 11042500). Several small diversions above station for irrigation. The Fallbrook Public Utility District reports no water pumped during the current year from a well in the streambed 2.1 mi (3.4 km) upstream from the station.

AVERAGE DISCHARGE.--24 years (water years 1925-48), unregulated, 35.4 ft³/s (1.003 m³/s), 25,630 acre-ft/yr (31.6 hm³/yr); 32 years (water years 1949-80), 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft³/s (937 m³/s) Feb. 16, 1927, gage height, 15.6 ft (4.75 m), site and datum then in use, from rating curve extended above 8,800 ft³/s (249 m³/s) on basis of slope-area measurement of maximum flow; no flow at times in recent years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,000 ft³/s (595 m³/s) Feb. 20 or 21, gage height, 14.4 ft (4.39 m), from floodmarks; minimum daily, 6.4 ft³/s (0.181 m³/s) Nov. 15, 16, 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	7.8	7.0	8.9	100	215	170	120	17	12	14	13
2	8.0	7.8	7.3	8.9	53	205	160	120	18	13	13	13
3	8.3	7.8	7.5	8.9	49	1750	160	119	17	15	13	13
4	8.3	8.3	8.5	8.9	48	1040	158	118	17	15	13	13
5	8.5	8.3	8.3	9.0	46	940	152	118	17	14	12	13
6	8.8	7.8	7.8	9.2	44	1350	150	117	17	14	12	12
7	8.5	7.3	7.5	9.6	44	1040	147	116	16	13	12	12
8	8.8	14	7.3	9.9	54	620	145	117	16	13	12	12
9	9.0	14	7.5	120	51	500	142	116	15	12	12	12
10	9.0	9.3	7.8	80	48	440	140	115	15	12	12	12
11	9.3	8.3	8.0	270	44	390	140	114	15	11	12	12
12	9.3	8.5	7.5	115	43	340	138	113	15	11	12	12
13	9.5	7.8	8.0	52	820	300	136	111	14	11	12	12
14	9.8	7.5	7.5	44	4000	250	135	110	14	11	12	12
15	9.8	6.4	7.7	37	5220	230	133	108	14	11	12	12
16	10	6.4	7.7	35	3450	210	131	105	14	11	12	12
17	10	6.8	7.8	34	2100	190	130	70	14	11	12	12
18	10	6.6	7.9	37	4200	140	130	38	14	11	13	12
19	8.8	6.6	8.3	55	3900	200	129	28	13	11	13	12
20	12	6.4	9.2	36	2300	260	129	25	13	11	13	12
21	13	6.4	10	31	10900	275	129	23	13	11	13	12
22	11	6.4	9.8	28	2000	260	128	20	13	10	13	12
23	10	6.4	9.0	25	720	250	127	18	13	10	13	12
24	9.5	7.0	9.0	25	340	230	125	17	13	10	13	12
25	8.8	6.8	8.9	24	270	215	125	17	13	10	13	12
26	8.8	7.5	8.9	24	240	208	125	16	12	10	13	12
27	8.8	8.8	8.9	23	230	197	125	16	12	12	13	12
28	8.5	8.8	8.9	85	220	185	125	15	12	15	13	12
29	8.3	8.3	8.9	4670	210	180	124	15	12	13	13	12
30	7.0	7.3	8.9	519	---	175	122	15	12	12	13	12
31	8.0	---	8.9	238	---	170	---	15	---	15	13	---
TOTAL	285.4	237.4	256.2	6680.3	41744	12955	4110	2185	430	371	391	365
MEAN	9.21	7.91	8.26	215	1439	418	137	70.5	14.3	12.0	12.6	12.2
MAX	13	14	10	4670	10900	1750	170	120	18	15	14	13
MIN	7.0	6.4	7.0	8.9	43	140	122	15	12	10	12	12
AC-FT	566	471	508	13250	82800	25700	8150	4330	853	736	776	724
CAL YR 1979 TOTAL	15921.6		MEAN 43.6		MAX 2030	MIN 4.7	AC-FT 31580					
WTR YR 1980 TOTAL	70010.3		MEAN 191		MAX 10900	MIN 6.4	AC-FT 138900					

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

CHEMICAL ANALYSES: Water years 1967 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM 5 DAY (MG/L)	HARD- NESS (MG/L AS CAC03)
DEC										
14...	1310	8.5	1080	8.3	13.0	1	9.9	--	--	430
JAN										
24...	1425	25	1040	8.3	12.0	40	10.3	--	--	390
FEB										
29...	1050	--	730	8.4	14.5	140	9.8	--	--	250
MAR										
20...	1820	--	--	--	16.5	--	--	22	1.4	--
26...	1345	--	740	8.3	17.0	370	9.0	--	--	260
JUN										
26...	1125	--	920	8.2	31.0	5	7.0	--	--	350
SEP										
22...	1800	--	1000	8.1	22.0	4	8.6	--	--	360

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC									
14...	100	45	110	35	2.3	4.0	250	180	160
JAN									
24...	90	40	100	36	2.2	4.0	210	170	150
FEB									
29...	59	24	81	41	2.2	6.0	150	130	94
MAR									
20...	--	--	--	--	--	--	--	--	--
26...	61	25	84	41	2.3	4.0	160	140	98
JUN									
26...	81	36	86	35	2.0	3.0	210	140	130
SEP									
22...	86	36	92	35	2.1	3.0	220	150	140

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
DEC									
14...	.4	767	--	.94	<.01	.00	.35	.17	.10
JAN									
24...	.4	743	--	1.8	.01	.00	.36	.17	.14
FEB									
29...	.4	530	--	1.9	.01	.00	1.1	.29	.20
MAR									
20...	--	--	458	--	--	--	--	--	--
26...	.4	573	--	1.2	.01	.00	.60	.22	.17
JUN									
26...	.4	671	--	.95	<.01	.00	.51	.13	.11
SEP									
22...	.4	633	--	.61	<.01	.00	.27	.15	.11

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

SANTA MARGARITA RIVER BASIN

11044500 SANTA MARGARITA RIVER NEAR FALLBROOK, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
DEC 14...	1310	--	--	100	--	--	--	--	--	--	--	--
JAN 24...	1425	--	--	100	--	--	--	--	--	--	--	--
FEB 29...	1050	--	--	100	--	--	--	--	--	--	--	--
MAR 26...	1345	0	100	100	0	0	0	20	0	30	.0	0
JUN 26...	1125	--	--	100	--	--	--	--	--	--	--	--
SEP 22...	1800	--	--	100	--	--	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
MAR 20...	1820	6.0	.23

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA

LOCATION.--Lat 33°14'13", long 117°23'14", in NE¼SW¼NE¼ sec.10, T.11 S., R.5 W., San Diego County, Hydrologic Unit 18070302, on Camp Joseph H. Pendleton Naval Reservation, on left bank 1.7 mi (2.7 km) upstream from mouth at Pacific Ocean, and 2.0 mi (3.2 km) southwest of Ysidora.

DRAINAGE AREA.--740 mi² (1,917 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1923 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft (1.524 m) below National Geodetic Vertical Datum of 1929 (U.S. Navy reference mark). See WSP 1735 for history of changes prior to Nov. 27, 1935. Nov. 27, 1935, to Feb. 25, 1970, at site 0.8 mi (1.3 km) upstream at different datum.

REMARKS.--Records poor. Indefinite stage-discharge relation during year. Flow partly regulated by Vail Lake since November 1948 (station 11042500). Diversions for irrigation on Rancho California (formerly Santa Margarita Ranch and Pauba Ranch). Large conservation pools, starting 0.5 mi (0.8 km) upstream can detain flow. AVERAGE DISCHARGE represents flow to ocean during period of record, regardless of upstream development.

AVERAGE DISCHARGE.--57 years, 34.1 ft³/s (0.966 m³/s), 24,700 acre-ft/yr (30.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,600 ft³/s (952 m³/s) Feb. 16, 1927, gage height, 18.00 ft (5.486 m), site and datum then in use, on basis of slope-area measurement of maximum flow; maximum gage height, 18.80 ft (5.730 m) Feb. 18, 1980, possibly affected by tide; no flow for all or part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,000 ft³/s (680 m³/s) estimated, Feb. 18, gage height, 18.80 ft (5.730 m), possibly affected by tide; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	210	310	235	101	3.7	1.7	1.1	.61
2				0	185	305	230	99	3.5	2.0	1.1	.61
3				0	160	2600	225	97	3.3	2.1	1.1	.61
4				0	148	1460	215	96	3.1	2.2	1.0	.61
5				0	132	1250	205	95	2.9	2.2	1.0	.61
6				0	123	1900	200	95	2.8	2.2	.98	.62
7				2.5	116	1500	192	94	2.7	2.2	.96	.62
8				30	109	1200	185	94	2.6	2.1	.94	.62
9				130	105	850	178	93	2.5	2.1	.92	.62
10				80	102	700	170	92	2.4	2.1	.90	.62
11				385	101	550	165	92	2.3	2.1	.88	.70
12				280	100	480	160	91	2.3	2.0	.86	.70
13				235	600	430	155	91	2.2	1.9	.84	.70
14				200	6200	380	150	91	2.1	1.8	.82	.70
15				175	8300	340	145	90	2.0	1.8	.80	.70
16				160	5300	320	140	85	1.9	1.7	.78	.70
17				145	3100	170	135	27	1.8	1.7	.76	.70
18				135	6400	180	130	20	1.7	1.6	.74	.70
19				125	6100	210	130	13	1.6	1.6	.72	.70
20				120	3500	260	128	11	1.5	1.5	.70	.70
21				112	18000	370	126	9.3	1.4	1.5	.68	.70
22				107	2900	360	123	8.4	1.3	1.4	.66	.70
23				103	990	345	119	7.5	1.3	1.4	.64	.70
24				97	475	330	116	6.8	1.2	1.3	.62	.70
25				95	400	315	113	6.3	1.2	1.3	.62	.70
26				92	360	300	111	5.8	1.2	1.3	.61	.70
27				90	340	290	109	5.3	1.2	1.2	.60	.70
28				180	330	280	107	4.9	1.2	1.2	.60	.70
29				9100	325	265	105	4.6	1.3	1.2	.60	.70
30				550	---	255	103	4.3	1.4	1.1	.60	.70
31		---		250	---	245	---	4.0	---	1.1	.61	---
TOTAL	0	0	0	12978.5	65211	18750	4605	1634.2	61.6	52.6	24.74	20.15
MEAN	0	0	0	419	2249	605	154	52.7	2.05	1.70	.80	.67
MAX	0	0	0	9100	18000	2600	235	101	3.7	2.2	1.1	.70
MIN	0	0	0	0	100	170	103	4.0	1.2	1.1	.60	.61
AC-FT	0	0	0	25740	129300	37190	9130	3240	122	104	49	40
CAL YR 1979	TOTAL	24566.90	MEAN	67.3	MAX	2600	MIN	0	AC-FT	48730		
WTR YR 1980	TOTAL	103337.79	MEAN	282	MAX	18000	MIN	0	AC-FT	205000		

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to September 1978.

CHEMICAL ANALYSES: October 1979 to September 1980.

WATER TEMPERATURES: Water years 1969 to September 1978.

SEDIMENT RECORDS: Water years 1969 to September 1978.

PERIOD OF DAILY RECORD. --

SEDIMENT RECORDS: October 1968 to September 1978.

REMARKS.--Water-quality records for the 1980 water year were collected 4.5 mi (7.2 km) upstream at Basilone Road.

COOPERATION.--Chemical-quality data was furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 13,000 mg/L Feb. 24, 1969; minimum daily mean, no flow for many days each year.

SEDIMENT DISCHARGE: Maximum daily, 534,000 tons (484,000 metric tons) Feb. 24, 1969; minimum daily, 0 tons on many days each year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	TURBIDITY (JTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (LOW LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 5 DAY (MG/L)	HARDNESS (MG/L AS CaCO3)	CALCIUM DISSOLVED (MG/L AS Ca)
DEC										
17...	1015	960	8.6	16.0	0	10.1	--	--	340	81
17...	1020	960	8.6	16.0	--	10.1	--	--	--	--
17...	1025	960	8.6	16.0	--	10.1	--	--	--	--
17...	1140	960	8.6	16.5	--	10.1	14	.5	--	--
17...	1141	960	8.6	16.5	--	10.1	--	--	--	--
JAN										
24...	1245	870	8.1	16.5	15	9.3	--	--	310	74
FEB										
29...	0910	590	8.3	14.5	120	9.1	--	--	200	49
MAR										
26...	1540	680	8.3	19.5	140	8.5	--	--	230	55
JUN										
26...	1335	850	8.5	33.0	6	7.3	12	1.2	300	71
26...	1336	850	8.5	33.0	--	7.3	--	--	--	--
SEP										
23...	0840	950	8.5	26.5	--	9.0	--	--	--	--

[illegible]

11046000 SANTA MARGARITA RIVER AT YSIDORA, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC ONE DET TOT(MG/ L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, OSPHATE TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
DEC									
17...	675	--	.27	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	.00	<.01	.00	.2	--	.12	.10
17...	--	50	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
JAN									
24...	583	--	.75	<.01	.00	.2	--	.12	.11
FEB									
29...	417	--	1.5	.01	.00	--	.90	.28	.16
MAR									
26...	458	--	1.2	.01	.00	.5	--	.24	.20
JUN									
26...	586	85	.02	<.01	.00	--	.40	.02	.07
26...	--	--	--	--	--	--	--	--	--
SEP									
23...	--	--	.04	<.01	.00	--	.20	.13	.11

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)
DEC												
17...	1015	--	--	200	--	--	--	--	--	--	--	--
17...	1020	0	100	--	0	0	10	20	10	20	1.0	--
JAN												
24...	1245	--	--	100	--	--	--	--	--	--	--	--
FEB												
29...	0910	--	--	100	--	--	--	--	--	--	--	--
MAR												
26...	1540	--	--	100	--	--	--	--	--	--	--	--
JUN												
26...	1335	0	150	100	0	0	0	20	0	0	.0	0

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)
DEC			
17...	1140	--	.14
17...	1141	4.2	--
JUN			
26...	1335	--	.24
26...	1336	4.0	--

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

SAN JUAN CREEK BASIN

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA

LOCATION (REVISED).--Lat 33°29'31", long 117°39'41", in SW¼SE¼NE¼ sec.12, T.8 S., R.8 W., Orange County, Hydrologic Unit 18070301, on left bank 300 ft (90 m) above Camino Capistrano bridge, 0.3 mi (0.5 km) upstream from Arroyo Trabuco, and 0.6 mi (1.0 km) south of San Juan Capistrano.

DRAINAGE AREA.--117 mi² (303 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 67 ft (20 m), from topographic map. Prior to Jan. 10, 1979, at datum 10.00 ft (3.048 m) higher. Prior to Aug. 29, 1979, at site 300 ft (90 m) downstream on downstream side of bridge.

REMARKS.--Records fair. No regulation above station. Capistrano Water Co. diverts 3.0 mi (4.8 km) upstream. Various amounts of diverted water reach station as irrigation return flow and rising ground water. Data for San Juan Creek near San Juan Capistrano (station 11046500) previously collected at site 2.8 mi (4.5 km) upstream was published as creek only and combined.

AVERAGE DISCHARGE.--11 years, 27.6 ft³/s (0.782 m³/s), 20,000 acre-ft/yr (24.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,700 ft³/s (416 m³/s), estimated, Mar. 4, 1978, gage height, 7.0 ft (2.13 m), from floodmarks, site and datum then in use; on basis of slope-conveyance study; maximum gage height, 17.8 ft (5.44 m) Feb. 18, 1980 (from floodmarks); no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1969, 22,400 ft³/s (634 m³/s), at site 2.8 mi (4.5 km) upstream, as station 11046500.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*).

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1730	459 13.0	13.35 4.069	Feb. 20	2400	*11,400 323	15.43 4.703
Jan. 29	0800	4,610 131	16.17 4.929	Mar. 3	0500	1,580 44.7	12.65 3.856
Feb. 18	Unknown	11,300† 320	*17.8† 5.43	Mar. 6	1730	1,540 43.6	12.63 3.850

†Estimated.

Minimum daily discharge, 0.52 ft³/s (0.015 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.76	1.1	3.0	189	275	123	51	24	8.1	4.3	3.7
2	.95	.76	1.1	3.1	153	401	98	49	24	8.7	4.3	3.7
3	.91	.82	1.1	3.1	124	1200	88	48	23	8.7	4.5	3.7
4	.87	.97	1.1	3.9	115	591	91	47	22	8.4	4.5	3.5
5	.82	.90	1.1	3.9	116	714	88	45	22	7.8	4.1	3.1
6	.69	.90	1.1	3.7	120	1260	83	44	21	8.4	3.9	3.0
7	.69	3.6	1.1	3.7	115	1070	79	42	21	8.4	4.5	3.0
8	.69	14	1.1	4.3	115	925	77	41	20	8.4	3.9	3.0
9	.69	2.4	1.3	4.2	112	938	76	40	20	8.1	3.7	2.8
10	.57	2.2	1.2	20	113	950	75	48	20	8.4	3.9	2.5
11	.63	2.0	1.3	218	112	839	74	40	21	8.4	4.5	2.5
12	.69	2.0	1.4	87	114	747	72	36	20	8.1	4.5	2.5
13	.69	1.7	1.4	23	189	641	71	35	18	7.8	4.3	2.4
14	.76	1.6	1.5	20	1390	544	70	34	17	8.4	4.5	2.4
15	.69	1.6	1.5	30	1870	482	70	33	16	7.5	4.5	2.4
16	.82	1.5	1.6	24	1700	424	70	32	15	6.7	4.3	2.1
17	.82	1.4	1.6	14	3500	393	69	31	14	7.5	4.3	2.0
18	.76	1.4	1.7	14	4500	393	69	30	14	7.8	4.3	1.7
19	.90	1.3	1.7	13	3200	371	69	29	13	8.4	4.5	1.7
20	1.9	1.3	1.8	12	3300	314	68	28	12	7.5	3.9	1.7
21	.97	1.2	2.2	12	3340	294	68	27	12	7.2	4.1	1.8
22	.90	1.3	2.1	12	1660	262	67	26	12	6.9	3.9	1.6
23	.90	1.2	2.2	12	1290	238	85	25	11	7.8	3.9	1.7
24	.90	1.3	2.4	13	1070	209	76	25	11	7.5	3.9	1.7
25	.90	1.2	3.3	14	692	204	62	25	10	6.1	4.3	1.7
26	.82	1.3	3.1	14	491	215	60	24	11	5.4	4.3	1.8
27	.82	1.2	3.1	14	301	178	58	23	10	5.4	4.1	1.8
28	.82	1.2	2.8	90	288	160	57	22	9.8	5.6	4.1	1.5
29	.90	1.2	2.5	1750	314	199	56	22	9.8	5.9	3.7	1.6
30	.76	1.1	2.5	418	---	169	54	23	9.1	5.4	3.7	1.6
31	.82	---	2.5	350	---	143	---	24	---	4.7	3.7	---
TOTAL	26.05	55.31	55.5	3244.7	30593	15743	2223	1049	482.7	229.4	128.9	70.2
MEAN	.84	1.84	1.79	105	1055	508	74.1	33.8	16.1	7.40	4.16	2.34
MAX	1.9	14	3.3	1750	4500	1260	123	51	24	8.7	4.5	3.7
MIN	.57	.76	1.1	3.0	112	143	54	22	9.1	4.7	3.7	1.5
AC-FT	52	110	110	6440	60680	31230	4410	2080	957	455	256	139

CAL YR 1979	TOTAL	12109.26	MEAN	33.2	MAX	874	MIN	.57	AC-FT	24020
WTR YR 1980	TOTAL	53900.76	MEAN	147	MAX	4500	MIN	.57	AC-FT	106900

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD. --

WATER TEMPERATURES: October 1970 to current year.

SEDIMENT RECORDS: October 1970 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD. --

SEDIMENT CONCENTRATIONS: Maximum daily mean, 22,000 mg/L Feb. 18, 1980; minimum daily mean, no flow for many days in 1970-72.

SEDIMENT DISCHARGE: Maximum daily, 331,000 tons (300,000 metric tons) Mar. 4, 1978; minimum daily, 0 tons on many days during most years.

EXTREMES FOR CURRENT YEAR. --

SEDIMENT CONCENTRATIONS: Maximum daily mean, 22,000 mg/L Feb. 18; minimum daily mean, 4 mg/L July 10, 11, 16, 19.

SEDIMENT DISCHARGE: Maximum daily, 250,000 tons (227,000 metric tons), Feb. 18; minimum daily, 0.04 tons (0.04 metric tons) several days during November and December.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

[illegible]

SAN JUAN CREEK BASIN

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	1.0	70	.11	.76	22	.05	1.1	21	.06
2	.95	70	.10	.76	20	.04	1.1	21	.06
3	.91	72	.11	.82	19	.04	1.1	20	.06
4	.87	78	.12	.97	19	.05	1.1	20	.06
5	.82	92	.20	.90	18	.04	1.1	20	.06
6	.69	68	.13	.90	17	.04	1.1	20	.06
7	.69	56	.10	3.6	355	15	1.1	19	.06
8	.69	50	.09	14	718	75	1.1	19	.06
9	.69	47	.09	2.4	10	.06	1.3	20	.07
10	.57	45	.07	2.2	13	.08	1.2	20	.06
11	.63	45	.08	2.0	15	.08	1.3	20	.07
12	.69	46	.09	2.0	15	.08	1.4	20	.08
13	.69	49	.09	1.7	16	.07	1.4	20	.08
14	.76	52	.11	1.6	17	.07	1.5	20	.08
15	.69	55	.10	1.6	18	.08	1.5	20	.08
16	.82	58	.13	1.5	18	.07	1.6	20	.09
17	.82	60	.13	1.4	18	.07	1.6	20	.09
18	.76	63	.13	1.4	18	.07	1.7	20	.09
19	.90	65	.16	1.3	18	.06	1.7	20	.09
20	1.9	96	.66	1.3	18	.06	1.8	20	.10
21	.97	58	.15	1.2	18	.06	2.2	23	.14
22	.90	47	.11	1.3	19	.07	2.1	23	.13
23	.90	44	.11	1.2	19	.06	2.2	22	.13
24	.90	39	.09	1.3	19	.07	2.4	24	.16
25	.90	36	.09	1.2	20	.06	3.3	28	.25
26	.82	33	.07	1.3	20	.07	3.1	20	.17
27	.82	30	.07	1.2	20	.06	3.1	10	.08
28	.82	28	.06	1.2	20	.06	2.8	8	.06
29	.90	26	.06	1.2	21	.07	2.5	6	.04
30	.76	25	.05	1.1	21	.06	2.5	6	.04
31	.82	23	.05	---	---	---	2.5	82	.55
TOTAL	26.05	---	3.71	55.31	---	91.75	55.5	---	3.21
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	3.0	76	.62	189	743	379	275	950	705
2	3.1	72	.60	153	450	186	401	1040	1460
3	3.1	68	.57	124	390	131	1200	1830	6000
4	3.9	64	.67	115	365	113	591	1500	2390
5	3.9	60	.63	116	348	109	714	1100	2120
6	3.7	57	.57	120	335	109	1260	2240	8050
7	3.7	54	.54	115	315	98	1070	2000	5780
8	4.3	80	.93	115	305	95	925	1800	4500
9	42	564	85	112	294	89	938	1650	4180
10	20	193	15	113	290	88	950	1550	3980
11	218	5060	4550	112	282	85	839	1500	3400
12	87	541	170	114	499	156	747	1450	2920
13	23	65	4.0	189	969	638	641	1400	2420
14	20	101	5.5	1390	3450	14000	544	1350	1980
15	30	400	32	1870	4140	22900	482	1320	1720
16	24	250	16	1700	3500	27000	424	1290	1480
17	14	150	5.7	3500	14000	48500	393	1270	1350
18	14	61	2.3	4500	22000	250000	393	1250	1330
19	13	51	1.8	3200	13000	70000	371	1230	1230
20	12	44	1.4	3300	7340	90600	314	1220	1030
21	12	39	1.3	3340	15000	192000	294	1200	953
22	12	35	1.1	1660	3950	17700	262	1180	835
23	12	32	1.0	1290	3500	12200	238	1160	745
24	13	29	1.0	1070	3050	8810	209	1150	649
25	14	25	.95	692	2650	4950	204	1140	628
26	14	24	.91	491	2390	3170	215	1130	656
27	14	22	.83	301	1380	1120	178	1110	533
28	90	1210	1170	288	1200	933	160	1110	480
29	1750	21000	119000.0	314	900	763	199	1170	702
30	418	6440	7980	---	---	---	169	1200	548
31	350	---	---	---	---	---	143	1120	432
TOTAL	3244.7	---	133050.9	30593	---	766922	15743	---	65186

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	123	1040	345	51	62	8.5	24	30	1.9
2	98	985	261	49	60	7.9	24	29	1.9
3	88	775	184	48	58	7.5	23	29	1.8
4	91	640	157	47	56	7.1	22	29	1.7
5	88	530	126	45	55	6.7	22	28	1.7
6	83	450	101	44	54	6.4	21	21	1.2
7	79	380	81	42	53	6.0	21	6	.34
8	77	330	69	41	52	5.8	20	20	1.1
9	76	285	58	40	51	5.5	20	21	1.1
10	75	255	52	48	150	19	20	22	1.2
11	74	232	46	40	76	8.2	21	24	1.4
12	72	218	42	36	64	6.2	20	26	1.4
13	71	200	38	35	56	5.3	18	28	1.4
14	70	180	34	34	52	4.8	17	32	1.5
15	70	170	32	33	48	4.3	16	36	1.6
16	70	155	29	32	44	3.8	15	42	1.7
17	69	143	27	31	42	3.5	14	47	1.8
18	69	133	25	30	40	3.2	14	50	1.9
19	69	123	23	29	38	3.0	13	54	1.9
20	68	114	21	28	36	2.7	12	57	1.8
21	68	108	20	27	35	2.6	12	40	1.3
22	67	99	18	26	34	2.4	12	35	1.1
23	85	200	46	25	33	2.2	11	33	.98
24	76	125	26	25	32	2.2	11	40	1.2
25	62	97	16	25	32	2.2	10	44	1.2
26	60	85	14	24	31	2.0	11	40	1.2
27	58	77	12	23	31	1.9	10	45	1.2
28	57	72	11	22	30	1.8	9.8	50	1.3
29	56	68	10	22	30	1.8	9.8	40	1.1
30	54	64	9.3	23	30	1.9	9.1	30	.74
31	---	---	---	24	30	1.9	---	---	---
TOTAL	2223	---	1933.3	1049	---	148.3	482.7	---	41.66
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	8.1	38	.83	4.3	80	.93	3.7	43	.43
2	8.7	31	.73	4.3	75	.87	3.7	41	.41
3	8.7	33	.78	4.5	90	1.1	3.7	39	.39
4	8.4	21	.48	4.5	120	1.5	3.5	37	.35
5	7.8	14	.29	4.1	150	1.7	3.1	35	.29
6	8.4	12	.27	3.9	100	1.1	3.0	34	.28
7	8.4	11	.25	4.5	700	8.5	3.0	33	.27
8	8.4	10	.23	3.9	200	2.1	3.0	32	.26
9	8.1	7	.15	3.7	70	.70	2.8	31	.23
10	8.4	4	.09	3.9	52	.55	2.5	30	.20
11	8.4	4	.09	4.5	44	.53	2.5	31	.21
12	8.1	5	.11	4.5	39	.47	2.5	30	.20
13	7.8	8	.17	4.3	36	.42	2.4	29	.19
14	8.4	15	.34	4.5	35	.43	2.4	29	.19
15	7.5	10	.20	4.5	35	.43	2.4	30	.19
16	6.7	4	.07	4.3	36	.42	2.1	31	.18
17	7.5	6	.12	4.3	39	.45	2.0	30	.16
18	7.8	8	.17	4.3	42	.49	1.7	29	.13
19	8.4	4	.09	4.5	46	.56	1.7	29	.13
20	7.5	5	.10	3.9	52	.55	1.7	28	.13
21	7.2	10	.19	4.1	56	.62	1.8	27	.13
22	6.9	16	.30	3.9	62	.65	1.6	26	.11
23	7.8	35	.74	3.9	66	.69	1.7	25	.11
24	7.5	60	1.2	3.9	67	.71	1.7	24	.11
25	6.1	70	1.2	4.3	65	.75	1.7	23	.11
26	5.4	75	1.1	4.3	61	.71	1.8	22	.11
27	5.4	80	1.2	4.1	56	.62	1.8	22	.11
28	5.6	84	1.3	4.1	52	.58	1.5	21	.09
29	5.9	88	1.4	3.7	50	.50	1.6	21	.09
30	5.4	92	1.3	3.7	48	.48	1.6	20	.09
31	4.7	89	1.1	3.7	45	.45	---	---	---
TOTAL	229.4	---	16.59	128.9	---	30.56	70.2	---	5.88
YEAR	53900.76		967433.9						

SAN JUAN CREEK BASIN

11046550 SAN JUAN CREEK AT SAN JUAN CAPISTRANO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
NOV								
08...	1200	22.0	5.2	401	5.6	81	90	92
11...	1105	20.0	2.0	440	2.4	78	89	93
JAN								
17...	1335	17.0	12	281	9.1	52	63	74
FEB								
17...	1240	--	3000	7390	59900	--	15	18

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								
08...	93	93	94	95	98	100	--	--
11...	97	99	100	--	--	--	--	--
JAN								
17...	86	92	98	98	99	100	--	--
FEB								
17...	24	32	42	54	68	84	95	98

11047000 ARROYO TRABUCO NEAR SAN JUAN CAPISTRANO, CA

LOCATION.--Lat 33°31'36", long 117°40'08", in NE&NE&NW¼ sec.36, T.7 S., R.8 W., Orange County, Hydrologic Unit 18070301, on downstream side of center pier of Camino Capistrano Road, (formerly U.S. Highway 101), 1.8 mi (2.9 km) north of San Juan Capistrano.

DRAINAGE AREA.--35.7 mi² (92.5 km²).

PERIOD OF RECORD.--October 1979 to September 1972, October 1979 to September 1980. Water years 1978 and 1979 not published due to lack of data. Prior to October 1956, published as Trabuco Creek near San Juan Capistrano.

GAGE.--Water-stage recorder. Divided concrete channel with two low-flow pilot channels. Since Mar. 20, 1969, supplementary water-stage recorder at site 0.3 mile upstream at different datum.

REMARKS.--Records poor. A sand and gravel mining operation 1 mi (1.6 km) upstream possibly affects flows.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--43 years (water years 1931-72, 80), 6.28 ft³/s (0.178 m³/s), 4,550 acre-ft/yr (5.61 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 9,240 ft³/s (262 m³/s), Feb. 6, 1937, gage height unknown, no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,140 ft³/s (88.9 m³/s) Feb. 18, gage height, 3.18 ft (0.969 m); no flow at times in October, November, December and August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	220	134	44	24	12	2.4	.10	1.4
2	0	0	0	0	128	172	44	22	13	2.6	.20	1.0
3	0	0	0	0	81	168	51	19	13	3.2	.10	.60
4	0	0	0	0	60	104	48	17	13	4.4	0	1.0
5	0	0	0	0	43	131	43	15	13	3.6	.10	1.0
6	0	0	0	0	29	113	42	13	11	1.8	.40	1.2
7	0	1.2	0	0	19	108	38	13	9.8	2.8	4.6	1.2
8	0	14	.20	0	18	93	32	13	8.4	2.6	1.6	1.6
9	0	0	0	32	18	93	29	13	7.4	2.2	2.2	2.0
10	0	0	0	5.0	17	89	27	18	5.8	2.0	1.4	1.6
11	0	0	.20	148	13	93	23	18	4.4	2.0	1.2	1.2
12	0	0	0	37	12	89	15	15	3.0	1.4	2.4	1.0
13	0	0	0	7.4	123	85	15	14	4.6	1.2	1.6	1.2
14	0	0	0	13	226	81	15	13	5.0	1.2	2.4	1.0
15	0	0	0	23	94	81	15	14	6.2	1.2	2.1	1.2
16	.20	0	0	11	658	74	17	14	11	1.0	2.4	1.2
17	0	0	0	7.8	752	74	18	13	11	1.0	2.2	.80
18	.20	0	0	6.6	1470	70	24	13	11	1.7	1.6	.60
19	.20	0	0	5.2	394	68	21	14	11	2.1	2.4	.80
20	1.0	0	0	3.8	720	58	21	15	10	1.6	1.9	1.0
21	.20	.40	0	2.2	542	56	25	15	8.2	1.8	1.8	1.2
22	0	.40	0	1.4	121	56	26	15	5.8	2.2	1.8	2.0
23	0	.40	0	.60	108	48	31	14	4.0	4.6	1.9	1.4
24	0	.20	0	.60	108	58	34	12	3.2	2.7	1.4	1.8
25	0	0	0	.60	128	56	29	12	2.6	2.1	1.4	2.2
26	0	0	0	.20	141	53	27	10	2.4	2.4	1.0	1.0
27	0	.20	0	.20	141	53	25	10	2.6	2.1	.60	1.6
28	0	0	0	74	141	51	25	9.8	3.0	1.5	1.1	1.2
29	0	0	0	1060	134	51	26	8.8	2.8	1.1	1.0	8.8
30	0	0	0	419	---	48	25	11	2.2	0	1.0	2.4
31	0	---	0	394	---	46	---	12	---	0	1.0	---
TOTAL	1.80	16.80	.40	2252.60	6659	2554	855	439.6	220.4	62.5	44.90	46.20
MEAN	.058	.56	.013	72.7	230	82.4	28.5	14.2	7.35	2.02	1.45	1.54
MAX	1.0	14	.20	1060	1470	172	51	24	13	4.6	4.6	8.8
MIN	0	0	0	0	12	46	15	8.8	2.2	0	0	.60
AC-FT	3.6	33	.8	4470	13210	5070	1700	872	437	124	89	92

WTR YR 1980 TOTAL 13153.20 MEAN 35.9 MAX 1470 MIN 0 AC-FT 26090

SAN JUAN CREEK BASIN

11047200 OSO CREEK AT CROWN VALLEY PARKWAY, NEAR MISSION VIEJO, CA

LOCATION.--Lat 33°33'29", long 117°40'33", in SE¼ sec.14, T.7 S., R.8 W., Orange County, Hydrologic Unit 18070301, on right upstream side of Crown Valley Parkway bridge, 2.7 mi (4.3 km) south of Mission Viejo, and 4.0 mi (6.4 km) north of San Juan Capistrano.

DRAINAGE AREA.--14.0 mi² (36.3 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), from topographic map.

REMARKS.--Records good except those above 200 cfs (5.66 m³/s), which are poor. No regulation or diversion above station.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--10 years (water years 1971-80), 5.72 ft³/s (0.162 m³/s), 4,140 acre-ft/yr (5.10 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,510 ft³/s (146 m³/s) Feb. 16, 1980, gage height, 7.60 ft (2.316 m); maximum gage height, 7.67 ft (2.338 m) Feb. 11, 1973 (backwater from channel growth); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,150 ft³/s (146 m³/s) Feb. 16, gage height, 7.60 ft (2.316 m); minimum daily, 0.8 ft³/s (0.023 m³/s) Dec. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.2	1.2	2.1	7.5	4.8	3.5	2.6	3.0	2.4	1.6	5.2
2	2.8	2.3	2.0	3.1	5.8	218	3.9	2.4	3.1	2.3	1.5	6.1
3	2.6	2.4	1.8	3.7	5.2	141	4.0	2.2	3.3	1.9	1.6	6.6
4	2.5	4.3	2.2	2.6	6.9	5.5	3.9	2.1	2.5	2.1	1.7	7.2
5	2.5	2.0	2.4	2.4	5.5	85	3.8	2.0	3.2	2.3	1.7	6.9
6	2.8	1.6	2.2	2.2	5.2	68	3.7	2.2	3.2	2.3	1.6	6.6
7	2.5	61	2.1	4.8	5.1	7.5	3.4	2.4	3.1	2.2	1.5	6.4
8	2.9	35	1.1	8.1	4.9	5.2	3.8	2.5	2.4	2.1	1.6	6.4
9	3.0	2.2	.90	352	3.9	4.6	3.8	2.4	2.0	2.2	1.5	6.6
10	3.2	1.8	1.0	28	3.4	22	3.7	13	1.9	2.1	1.4	6.1
11	3.3	1.7	.90	518	3.7	4.6	4.1	3.8	1.9	2.1	1.5	5.5
12	3.5	1.4	.80	44	4.1	4.7	4.4	3.3	1.6	2.1	1.5	5.5
13	3.4	1.7	.80	11	467	4.1	4.4	3.3	1.6	2.1	1.5	5.5
14	2.5	1.4	.90	13	304	4.1	4.6	3.3	1.6	2.2	1.6	4.8
15	2.8	.90	.90	12	232	4.1	4.4	3.4	1.6	2.1	1.5	4.5
16	2.9	1.2	.90	4.4	725	3.0	3.7	3.5	1.6	1.9	1.4	4.4
17	3.0	2.2	1.0	5.7	374	4.1	3.4	3.3	1.6	2.0	1.3	4.4
18	2.8	2.1	2.0	7.2	513	5.2	3.2	3.0	1.5	1.9	1.6	4.2
19	1.7	2.0	1.2	4.2	113	4.5	3.0	3.1	1.4	1.8	1.6	4.1
20	30	1.8	1.2	4.2	271	4.2	2.6	3.3	1.4	1.4	1.4	4.2
21	3.3	2.9	6.0	5.5	97	4.4	3.4	3.2	1.3	1.4	1.5	4.2
22	2.5	1.7	3.2	4.8	14	4.4	4.2	3.0	1.4	1.6	2.3	4.1
23	2.3	1.6	2.5	4.6	7.0	4.4	5.5	3.2	1.5	2.0	2.9	4.2
24	2.2	1.5	3.0	4.4	7.2	4.5	3.2	3.3	1.6	1.9	3.2	4.1
25	2.2	1.4	7.8	4.4	6.8	16	2.7	3.3	1.7	2.4	3.4	4.1
26	2.4	1.5	3.0	4.6	5.8	11	2.6	3.2	1.6	1.8	3.7	3.9
27	2.4	1.3	3.1	4.9	5.1	3.8	2.5	3.0	1.6	1.5	3.9	3.9
28	2.3	1.2	3.1	581	5.2	3.8	3.1	2.9	1.7	1.3	4.1	3.8
29	2.3	1.0	2.8	652	4.9	3.8	3.2	2.2	1.7	1.4	4.4	3.9
30	2.1	1.1	2.6	13	---	3.4	2.8	2.8	1.7	1.3	4.8	3.9
31	2.3	---	2.5	10	---	3.4	---	3.2	---	1.4	5.1	---
TOTAL	109.6	146.40	67.10	2321.9	3213.2	667.1	108.5	100.4	59.3	59.5	69.9	151.3
MEAN	3.54	4.88	2.16	74.9	111	21.5	3.62	3.24	1.98	1.92	2.25	5.04
MAX	30	61	7.8	652	725	218	5.5	13	3.3	2.4	5.1	7.2
MIN	1.7	.90	.80	2.1	3.4	3.0	2.5	2.0	1.3	1.3	1.3	3.8
AC-FT	217	290	133	4610	6370	1320	215	199	118	118	139	300
CAL YR 1979 TOTAL	3456.20		MEAN 9.47	MAX 438	MIN .80	AC-FT 6860						
WTR YR 1980 TOTAL	7074.20		MEAN 19.3	MAX 725	MIN .80	AC-FT 14030						

11047500 ALISO CREEK AT EL TORO, CA

LOCATION.--Lat 33°37'33", long 117°41'08", in Canada de los Alisos Grant, Orange County, Hydrologic Unit 18070301, on right bank 500 ft (150 m) downstream from Second Street Bridge at El Toro.

DRAINAGE AREA.--7.91 mi² (20.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 425 ft (130 m), from topographic map. Prior to July 1962, at different datum. July 1962 to Nov. 18, 1975, water-stage recorder at site 500 ft (150 m) upstream at different datum.

REMARKS.--Records poor. No regulation or diversion above station; some pumping from wells along stream. At times since 1964, Metropolitan Water District has wasted water to creek.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--50 years, 0.90 ft³/s (0.025 m³/s), 652 acre-ft/yr (804,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,500 ft³/s (70.8 m³/s) Feb. 24, 1969, gage height, 11.00 ft (3.353 m) from floodmark, site and datum then in use, from rating curve extended above 220 ft³/s (6.23 m³/s) on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,870 ft³/s (53.0 m³/s) Feb. 16, gage height, 3.27 ft (1.000 m); maximum gage height, 3.82 ft (1.164 m) Feb. 18 (backwater from channel aggradation); minimum daily, no flow Oct. 22, 24, 26, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	.10	.30	.90	5.8	3.4	2.1	.50	.40	.60	.60	.70
2	2.1	.30	.30	.90	3.4	40	2.0	.60	.40	.60	.60	.60
3	.80	1.5	.40	1.5	2.5	36	1.9	.60	.50	.50	.60	.70
4	1.5	.80	.60	1.5	2.1	6.0	1.8	.70	.40	.50	.70	.60
5	1.2	.10	.90	1.5	1.8	21	1.5	.80	.40	.50	.90	.70
6	1.2	.10	1.1	1.2	1.8	30	1.5	.90	.40	.50	.90	.70
7	.90	3.4	1.2	2.9	1.2	5.8	1.2	.90	.40	.50	1.0	.60
8	1.2	2.9	1.1	2.5	1.0	8.0	1.1	1.0	.40	.50	.70	.60
9	1.5	.30	.90	56	.90	8.5	.90	.90	.50	.50	.60	.60
10	2.5	.30	.90	9.1	.90	10	.90	.80	.50	.40	.50	.60
11	12	.30	.90	84	.90	14	.60	.70	.40	.50	.40	.80
12	9.7	.30	.90	10	.90	15	.30	.50	.40	.50	.40	.90
13	2.5	.30	.60	2.5	45	3.6	.20	.40	.40	.40	.40	.90
14	2.5	.30	.90	6.3	76	3.5	.40	.30	.40	.50	.40	.70
15	3.8	.30	.90	4.3	107	3.4	.60	.20	.40	.60	.40	.50
16	1.2	.30	.60	.60	362	3.3	.40	.30	.40	.50	.40	.50
17	.60	.30	.60	.90	403	3.3	1.0	.10	.40	.50	.40	.50
18	.40	.30	.90	1.1	436	3.6	1.0	.60	.50	.80	.50	.50
19	1.2	.30	1.1	.40	161	3.1	1.0	.80	.60	.80	.60	.50
20	18	.30	1.2	.10	65	3.0	1.0	.90	.70	.60	.90	.50
21	.10	.40	1.5	.10	75	3.0	.90	1.1	.60	.60	1.0	.50
22	0	.60	.10	.10	30	3.0	.90	1.2	.60	.70	1.0	.60
23	.10	.60	.10	.10	24	3.0	.90	1.1	.60	.60	1.2	.60
24	0	.60	.40	.60	19	3.0	.90	1.0	.70	.50	.80	.50
25	.10	.60	1.5	.20	14	8.0	.80	.90	.60	.60	.70	.60
26	0	.60	.40	.30	10	7.0	.80	.80	.80	.60	1.0	1.0
27	.10	.60	.60	.20	7.5	2.4	.70	.60	.70	.50	1.1	.50
28	0	.60	.90	124	5.6	2.3	.70	.50	.70	.60	1.2	.50
29	.10	.40	1.2	161	4.3	2.3	.60	.40	.70	.80	.80	.50
30	.10	.40	.90	22	---	2.2	.60	.40	.70	.60	.70	.50
31	.10	---	.90	14	---	2.1	---	.40	---	.60	.70	---
TOTAL	66.70	18.20	24.80	510.80	1867.60	262.8	29.20	20.90	15.60	17.80	22.10	18.50
MEAN	2.15	.61	.80	16.5	64.4	8.48	.97	.67	.52	.56	.71	.62
MAX	18	3.4	1.5	161	436	40	2.1	1.2	.80	.80	1.2	1.0
MIN	0	.10	.10	.10	.90	2.1	.20	.10	.40	.40	.40	.50
AC-FT	132	36	49	1010	3700	521	58	41	31	34	44	37

CAL YR 1979 TOTAL 1012.90 MEAN 2.78 MAX 122 MIN 0 AC-FT 2010
WTR YR 1980 TOTAL 2874.50 MEAN 7.85 MAX 436 MIN 0 AC-FT 5700

SAN DIEGO CREEK BASIN

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA

LOCATION.--Lat 33°39'50", long 117°46'16", in San Joaquin Grant, Orange County, Hydrologic Unit 18070204, on downstream side of Sand Canyon Avenue bridge, 1.0 mi (1.6 km) southwest of East Irvine, and 2.8 mi (4.5 km) east of Irvine.

DRAINAGE AREA.--40.5 mi² (104.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1976 published as "near Irvine".

GAGE.--Water-stage recorder. Altitude of gage is 140 ft (42.7 m), from topographic map. Prior to Oct. 1, 1976, at site 1.0 mi (1.6 km) downstream at different datum.

REMARKS.--Records poor. Sewage inflow and irrigation runoff cause low-flow fluctuations in discharge.

COOPERATION.--Eight discharge measurements were furnished by Orange County Environmental Management Agency.

AVERAGE DISCHARGE.--31 years, 5.81 ft³/s (0.165 m³/s), 4,210 acre-ft/yr (5.19 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,720 ft³/s (219 m³/s) Feb. 16, 1980, gage height, 21.17 ft (6.453 m), from rating curve extended above 605 ft³/s (17.1 m³/s) on basis of slope-area measurement at gage height 19.55 ft (5.959 m); no flow for long periods in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*), from rating curve extended as explained above.

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0630	4,050 115	18.61 5.672	Feb. 16	2030	*7,720 219	21.17 6.453
Jan. 29	0230	5,230 148	19.55 5.959	Feb. 20	2230	3,780 107	18.24 5.560
Feb. 13	1330	7,360 208	20.96 6.589	Mar. 2	1815	1,520 43.0	15.51 4.727

Minimum daily discharge, 0.83 ft³/s (0.024 m³/s) June. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	4.0	10	7.6	11	7.8	13	11	3.3	2.0	6.9	3.9
2	3.6	4.0	8.7	7.3	10	283	14	10	2.0	2.3	6.6	1.3
3	4.4	5.4	7.0	7.0	9.6	37	14	9.8	2.0	2.3	7.2	2.0
4	5.2	6.7	11	6.7	9.0	10	13	9.2	3.1	1.8	5.8	3.3
5	6.4	4.1	8.7	6.4	8.5	13	14	8.4	2.6	1.1	5.5	3.1
6	6.8	5.5	9.3	6.2	8.0	200	11	8.9	4.1	1.8	4.4	2.3
7	6.2	15	8.7	12	7.6	50	13	8.4	2.8	1.3	3.9	3.9
8	6.2	20	9.3	24	7.2	10	11	8.9	3.6	1.3	3.3	2.6
9	5.6	14	6.1	559	6.9	7.0	13	7.8	3.9	2.3	2.3	3.1
10	5.6	9.4	5.6	20	6.7	5.4	12	11	2.5	1.8	2.8	3.6
11	5.4	11	5.4	816	6.5	4.5	12	4.1	2.3	2.6	3.0	4.4
12	5.6	7.1	5.2	50	6.4	4.0	13	6.9	1.5	2.8	1.8	3.3
13	5.6	7.1	5.0	12	1110	3.7	10	6.9	3.1	3.3	2.8	4.4
14	5.6	4.8	4.8	11	600	3.4	13	7.5	3.3	3.6	2.6	5.0
15	4.7	6.5	4.6	13	382	3.3	12	7.2	1.1	4.7	2.3	3.9
16	4.8	2.9	4.4	5.8	1490	3.2	10	8.4	1.1	4.7	2.3	5.0
17	5.1	5.2	4.2	6.6	983	3.1	11	6.9	.83	4.4	2.3	4.4
18	4.9	7.0	4.0	13	909	3.0	11	7.8	1.3	4.7	3.3	4.1
19	5.1	9.3	4.0	9.1	232	15	11	6.6	2.6	5.2	2.0	5.5
20	25	8.7	9.0	9.6	614	11	10	6.6	1.3	5.0	2.3	5.8
21	4.4	10	19	5.3	66	10	10	6.6	1.5	5.0	2.8	5.5
22	4.1	14	15	5.7	6.6	10	10	7.2	1.3	5.2	2.6	5.8
23	4.1	11	11	5.6	5.6	10	13	5.8	1.5	5.5	3.1	6.1
24	4.7	13	13	7.4	5.4	10	12	5.8	2.6	6.9	2.6	5.8
25	4.7	8.7	13	6.9	5.2	25	11	6.6	2.0	6.6	2.6	5.8
26	5.2	9.3	11	7.3	5.2	19	11	6.1	1.5	7.2	3.9	6.1
27	4.0	8.1	10	7.1	5.5	14	11	4.4	2.6	8.9	2.8	5.8
28	4.1	10	9.3	1080	5.8	12	12	3.1	1.8	9.2	2.3	5.5
29	4.3	11	8.8	921	5.8	14	9.5	4.1	3.3	10	3.1	6.1
30	4.1	11	8.4	32	---	13	10	3.9	3.6	9.2	3.1	6.1
31	4.6	---	8.8	25	---	13	---	3.1	---	8.6	3.1	---
TOTAL	174.1	263.8	262.3	3705.6	6528.5	827.4	350.5	219.0	70.03	141.3	105.4	133.5
MEAN	5.62	8.79	8.46	120	225	26.7	11.7	7.06	2.33	4.56	3.40	4.45
MAX	25	20	19	1080	1490	283	14	11	4.1	10	7.2	6.1
MIN	3.6	2.9	4.0	5.3	5.2	3.0	9.5	3.1	.83	1.1	1.8	1.3
AC-FT	345	523	520	7350	12950	1640	695	434	139	280	209	265
CAL YR 1979	TOTAL	6846.70	MEAN 18.8	MAX 1460	MIN 1.8	AC-FT 13580						
WTR YR 1980	TOTAL	12781.43	MEAN 34.9	MAX 1490	MIN .83	AC-FT 25350						

WATER-QUALITY RECORDS

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily mean, 28,700 mg/L Feb. 16; minimum daily mean, 51 mg/L Nov. 16.
SEDIMENT DISCHARGE: Maximum daily, 246,000 tons (223,000 metric tons) Feb. 16; minimum daily, 0.40 tons
(0.36 metric tons) Nov. 16.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	20.0	---	---		---	30.5	---	---
2	---	---	---	---	---	---	---		---	31.5	28.5	30.0
3	---	---	---	---	---	17.0	---		---	32.5	---	---
4	24.0	---	---	---	---	---	---		---	---	28.0	26.5
5	---	---	---	---	---	---	---		---	33.0	27.5	21.5
6	---	---	---	---	---	---	---		---	---	30.5	---
7	---	---	---	---	---	---	---		28.0	---	19.5	---
8	---	---	---	14.0	---	---	---		---	32.5	---	23.5
9	---	---	---	14.0	---	---	---		---	28.0	25.5	25.5
10	---	---	---	16.0	---	---	---		---	32.5	---	26.0
11	---	---	---	15.0	---	---	---		---	---	36.0	25.5
12	---	---	---	---	---	---	---		---	26.5	36.5	---
13	---	12.0	---	---	---	---	---		---	---	36.0	---
14	---	---	---	18.0	---	---	---		---	30.5	34.0	---
15	---	---	---	19.0	---	---	---		---	---	32.5	26.0
16	---	16.0	---	---	---	---	---		---	25.5	---	27.0
17	---	---	---	16.0	---	---	---		---	28.5	---	28.0
18	---	---	---	14.0	---	17.0	---		---	30.5	31.0	25.5
19	---	---	---	---	---	---	---		---	28.5	32.0	---
20	---	---	---	---	---	---	---		27.5	---	---	25.0
21	---	---	---	---	---	---	---		---	31.0	35.0	---
22	---	---	---	---	---	---	---		---	32.0	34.5	25.5
23	14.5	---	---	---	---	---	16.0		27.5	30.5	29.5	25.5
24	---	---	---	---	---	---	---		31.5	---	---	28.0
25	---	---	---	---	22.0	---	---		31.5	27.5	35.0	26.0
26	---	---	---	---	---	19.0	---		33.5	31.5	34.5	25.0
27	---	---	---	---	---	---	---		---	---	34.0	---
28	---	---	---	15.0	---	---	---		27.5	26.0	33.5	---
29	---	---	---	---	---	---	---		---	19.0	22.0	26.0
30	---	---	---	---	---	---	---		27.5	31.5	---	26.0
31	---	---	11.0	---	---	---	---		---	28.5	---	---
MONTH	---	---	---	---	---	---	---		---	---	---	---

SAN DIEGO CREEK BASIN

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	4.0	300	3.2	4.0	150	1.6	10	150	4.1
2	3.6	280	2.7	4.0	140	1.5	8.7	150	3.5
3	4.4	280	3.3	5.4	130	1.9	7.0	150	2.8
4	5.2	270	3.8	6.7	306	10	11	160	4.8
5	6.4	270	4.7	4.1	200	2.2	8.7	160	3.8
6	6.8	260	4.8	5.5	190	2.8	9.3	160	4.0
7	6.2	260	4.4	15	818	87	8.7	160	3.8
8	6.2	250	4.2	20	1280	117	9.3	160	4.0
9	5.6	250	3.8	14	260	9.8	6.1	160	2.6
10	5.6	240	3.6	9.4	260	6.6	5.6	160	2.4
11	5.4	230	3.4	11	225	6.7	5.4	170	2.5
12	5.6	210	3.2	7.1	165	3.2	5.2	170	2.4
13	5.6	200	3.0	7.1	92	1.8	5.0	170	2.3
14	5.6	200	3.0	4.8	57	.74	4.8	170	2.2
15	4.7	200	2.5	6.5	52	.91	4.6	170	2.1
16	4.8	200	2.6	2.9	51	.40	4.4	170	2.0
17	5.1	200	2.8	5.2	59	.83	4.2	170	1.9
18	4.9	200	2.6	7.0	70	1.3	4.0	180	1.9
19	5.1	200	2.8	9.3	79	2.0	4.0	180	1.9
20	25	1380	222	8.7	88	2.1	9.0	180	4.4
21	4.4	110	1.3	10	97	2.6	19	180	9.2
22	4.1	117	1.3	14	108	4.1	15	180	7.3
23	4.1	122	1.4	11	120	3.6	11	180	5.3
24	4.7	150	1.9	13	128	4.5	13	180	6.3
25	4.7	160	2.0	8.7	138	3.2	13	190	6.7
26	5.2	150	2.1	9.3	150	3.8	11	190	5.6
27	4.0	150	1.6	8.1	150	3.3	10	190	5.1
28	4.1	150	1.7	10	150	4.1	9.3	190	4.8
29	4.3	150	1.7	11	150	4.5	8.8	190	4.5
30	4.1	150	1.7	11	150	4.5	8.4	190	4.3
31	4.6	150	1.9	---	---	---	8.8	200	4.8
TOTAL	174.1	---	305.0	263.8	---	298.58	262.3	---	123.3
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	7.6	200	4.1	11	650	19	7.8	400	8.4
2	7.3	200	3.9	10	635	17	283	9470	22600
3	7.0	200	3.8	9.6	620	16	37	1400	140
4	6.7	200	3.6	9.0	605	15	10	1200	32
5	6.4	200	3.5	8.5	590	14	13	1000	35
6	6.2	200	3.3	8.0	575	12	200	700	378
7	12	675	46	7.6	560	11	50	500	67
8	24	1470	165	7.2	545	11	10	450	12
9	559	8470	24900	6.9	530	9.9	7.0	430	8.1
10	20	1050	100	6.7	515	9.3	5.4	410	6.0
11	816	7750	34100	6.5	500	8.8	4.5	400	4.9
12	50	2920	637	6.4	500	8.6	4.0	400	4.3
13	12	600	19	1110	21400	178000	3.7	390	3.9
14	11	600	18	600	19200	65000	3.4	390	3.6
15	13	760	51	382	18100	23700	3.3	370	3.3
16	5.8	140	2.2	1490	28700	246000	3.2	370	3.2
17	6.6	135	2.4	983	24600	124000	3.1	360	3.0
18	13	918	40	909	26000	105000	3.0	360	2.9
19	9.1	460	11	232	14300	9380	15	360	15
20	9.6	450	12	614	21800	57500	11	360	11
21	5.3	450	6.4	66	4520	2800	10	360	9.7
22	5.7	440	6.8	6.6	1400	25	10	360	9.7
23	5.6	430	6.5	5.6	1200	18	10	360	9.7
24	7.4	430	8.6	5.4	1000	15	10	360	9.7
25	6.9	420	7.8	5.2	650	9.1	25	360	24
26	7.3	410	8.1	5.2	510	7.2	19	1050	54
27	7.1	400	7.7	5.5	445	6.6	14	850	32
28	1080	8070	49300	5.8	419	6.6	12	540	17
29	921	9030	43400	5.8	405	6.3	14	425	16
30	32	1600	145	---	---	---	13	435	15
31	25	1620	168	---	---	---	13	475	17
TOTAL	3705.6	---	153190.7	6528.5	---	811625.4	827.4	---	23555.4

WATER-QUALITY RECORDS

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	13	540	19	11	460	14	3.3	350	3.1		
2	14	600	23	10	460	12	2.0	350	1.9		
3	14	600	23	9.8	460	12	2.0	330	1.8		
4	13	600	21	9.2	460	11	3.1	330	2.8		
5	14	600	23	8.4	460	10	2.6	310	2.2		
6	11	900	27	8.9	460	11	4.1	750	8.3		
7	13	700	25	8.4	460	10	2.8	1150	8.7		
8	11	600	18	8.9	460	11	3.6	1250	12		
9	13	590	21	7.8	460	9.7	3.9	1220	13		
10	12	590	19	11	900	27	2.5	1180	8.0		
11	12	570	18	4.1	800	8.9	2.3	1150	7.1		
12	13	570	20	6.9	700	13	1.5	1130	4.6		
13	10	550	15	6.9	600	11	3.1	1100	9.2		
14	13	550	19	7.5	600	12	3.3	1050	9.4		
15	12	530	17	7.2	600	12	1.1	1000	3.0		
16	10	530	14	8.4	600	14	1.1	950	2.8		
17	11	510	15	6.9	550	10	.83	940	2.1		
18	11	510	15	7.8	550	12	1.3	925	3.2		
19	11	490	15	6.6	550	9.8	2.6	900	6.3		
20	10	490	13	6.6	550	9.8	1.3	825	2.9		
21	10	470	13	6.6	550	9.8	1.5	650	2.6		
22	10	470	13	7.2	500	9.7	1.3	550	1.9		
23	13	460	16	5.8	500	7.8	1.5	525	2.1		
24	12	460	15	5.8	500	7.8	2.6	930	6.5		
25	11	460	14	6.6	450	8.0	2.0	655	3.5		
26	11	460	14	6.1	450	7.4	1.5	540	2.2		
27	11	460	14	4.4	450	5.3	2.6	590	4.1		
28	12	460	15	3.1	450	3.8	1.8	680	3.3		
29	9.5	460	12	4.1	400	4.4	3.3	725	6.5		
30	10	460	12	3.9	400	4.2	3.6	550	5.3		
31	---	---	---	3.1	400	3.3	---	---	---		
TOTAL	350.5	---	518	219.0	---	311.7	70.03	---	150.4		
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	2.0	440	2.4	6.9	725	14	3.9	230	2.4		
2	2.3	775	4.8	6.6	750	13	1.3	225	1.79		
3	2.3	710	4.4	7.2	575	11	2.0	600	3.2		
4	1.8	150	.73	5.8	550	8.6	3.3	820	7.3		
5	1.1	430	1.3	5.5	640	9.5	3.1	580	4.9		
6	1.8	890	4.3	4.4	460	5.5	2.3	360	2.2		
7	1.3	1030	3.6	3.9	280	2.9	3.9	375	3.9		
8	1.3	1130	4.0	3.3	195	1.7	2.6	740	5.2		
9	2.3	1100	6.8	2.3	300	1.9	3.1	1180	9.9		
10	1.8	950	4.6	2.8	550	4.2	3.6	1280	12		
11	2.6	1230	8.6	3.0	690	5.6	4.4	1200	14		
12	2.8	1180	8.9	1.8	495	2.4	3.3	1160	10		
13	3.3	560	5.								

SAN DIEGO CREEK BASIN

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1979	174.10	305.00	197	502
NOVEMBER ...	263.80	298.58	413	712
DECEMBER ...	262.30	123.30	388	511
JANUARY 1980	3705.60	153190.70	26400	180000
FEBRUARY ...	6528.50	811625.40	47700	859000
MARCH	827.40	23555.40	5380	28900
APRIL	350.50	518.00	633	1150
MAY	219.00	311.70	249	561
JUNE	70.03	150.40	23	173
JULY	141.30	299.63	123	423
AUGUST	105.40	137.60	57	195
SEPTEMBER ..	133.50	172.59	90	263
TOTAL	12781.43	990688.30	81653	1072390

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
OCT										
04...	1025	24.0	7.5	179	3.6	--	--	--	--	--
23...	0910	14.5	5.1	118	1.6	--	--	--	--	--
NOV										
13...	0950	12.0	11	61	1.8	--	--	--	--	--
26...	1050	--	9.0	146	3.5	--	--	--	--	--
DEC										
31...	0935	11.0	8.8	200	4.8	--	--	--	--	--
JAN										
08...	1115	14.0	45	2640	321	--	19	22	25	28
09...	1130	14.0	145	18600	7280	--	--	--	--	--
09...	1445	--	900	8080	19600	--	28	30	36	43
09...	1530	14.0	470	5280	6700	--	40	41	50	58
10...	1455	16.0	8.7	446	10	--	--	--	--	--
11...	1030	15.0	2000	11500	62100	--	21	22	28	35
11...	1100	16.0	911	10200	25100	--	24	25	32	39
11...	1225	17.0	324	6900	6040	--	30	30	39	47
15...	1450	19.0	5.0	192	2.6	--	--	--	--	--
17...	1117	16.0	5.3	105	1.5	--	--	--	--	--
30...	1430	--	19	924	47	--	--	--	--	--
31...	1415	20.0	13	925	32	37	42	44	48	52
FEB										
21...	1415	--	8.5	3730	86	--	--	--	--	--
25...	1430	22.0	4.4	651	7.7	--	--	--	--	--
MAR										
03...	1715	17.0	37	2700	273	--	--	--	--	--
18...	1450	17.0	2.6	358	2.5	--	--	--	--	--
26...	1030	19.0	16	1080	47	--	--	--	--	--
27...	1300	--	20	874	47	--	--	--	--	--
APR										
23...	1255	16.0	10	459	13	50	55	62	69	77
JUL										
29...	1455	35.0	12	2060	65	--	--	--	--	--
SEP										
24...	1640	28.0	5.9	473	7.5	--	--	--	--	--
29...	1645	26.0	6.9	364	6.8	--	--	--	--	--

11048500 SAN DIEGO CREEK AT SAND CANYON AVENUE, NEAR IRVINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
OCT										
04...	--	56	--	--	--	--	--	--	--	--
23...	--	72	--	--	--	--	--	--	--	--
NOV										
13...	--	89	--	--	--	--	--	--	--	--
26...	--	95	--	--	--	--	--	--	--	--
DEC										
31...	--	78	--	--	--	--	--	--	--	--
JAN										
08...	32	--	36	--	57	--	96	--	100	--
09...	--	64	--	--	--	--	--	--	--	--
09...	53	--	71	--	89	--	99	--	100	--
09...	70	69	86	--	96	--	100	--	--	--
10...	--	94	--	--	--	--	--	--	--	--
11...	--	46	--	67	--	88	--	97	--	100
11...	--	50	--	70	--	91	--	98	--	100
11...	--	57	--	74	--	93	--	99	--	100
15...	--	98	--	--	--	--	--	--	--	--
17...	--	93	--	--	--	--	--	--	--	--
30...	--	63	--	--	--	--	--	--	--	--
31...	--	58	--	78	--	98	--	100	--	--
FEB										
21...	--	46	--	--	--	--	--	--	--	--
25...	--	97	--	--	--	--	--	--	--	--
MAR										
03...	--	74	--	--	--	--	--	--	--	--
18...	--	72	--	--	--	--	--	--	--	--
26...	--	64	--	--	--	--	--	--	--	--
27...	--	89	--	--	--	--	--	--	--	--
APR										
23...	--	85	--	95	--	100	--	--	--	--
JUL										
29...	--	70	--	--	--	--	--	--	--	--
SEP										
24...	--	40	--	--	--	--	--	--	--	--
29...	--	57	--	--	--	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
SEP											
24...	1710	28.0	4	5.9	0	3	27	67	91	99	100

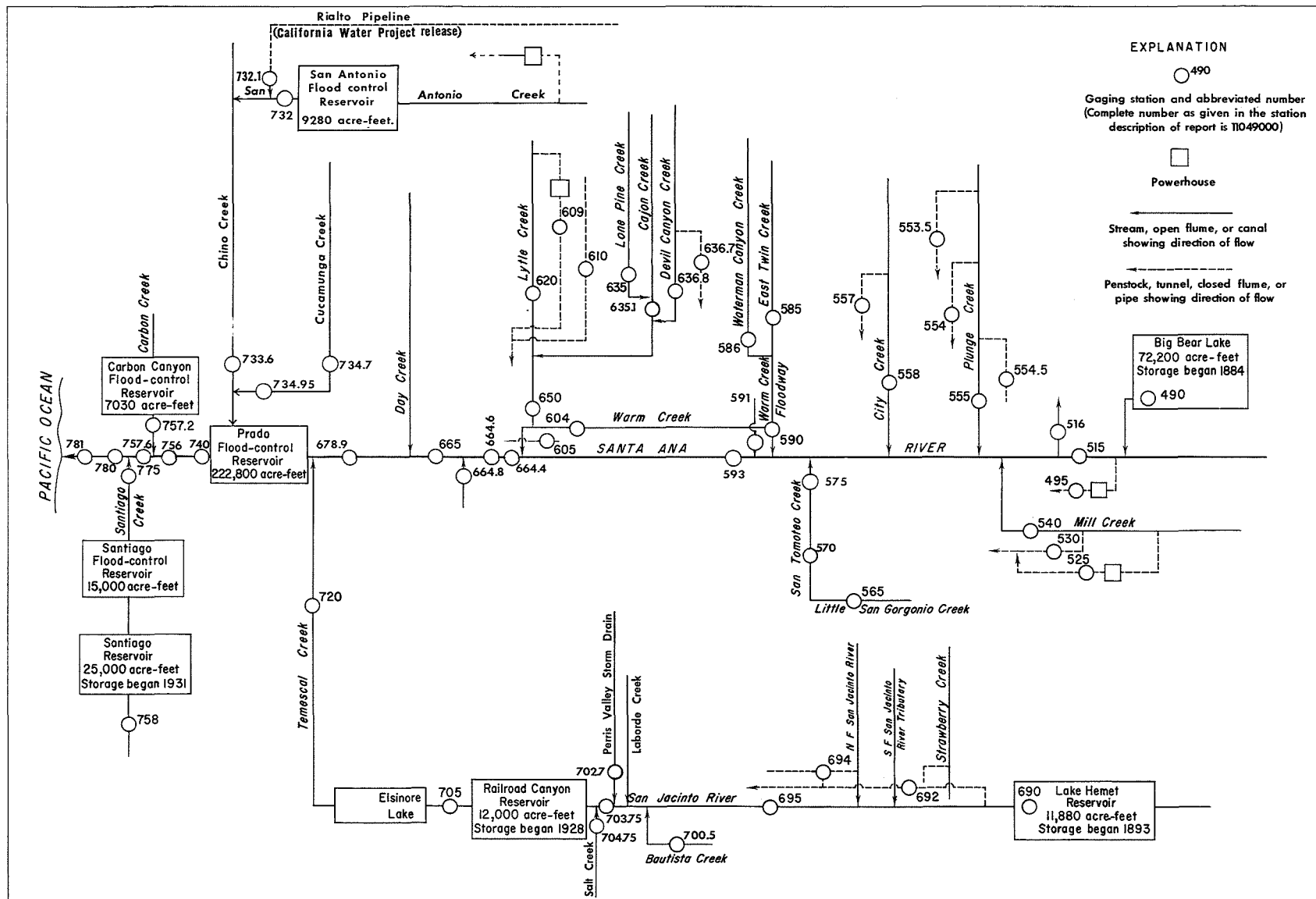


Figure 4.-- Schematic diagram showing diversions and storage in Santa Ana River basin.

11049000 BIG BEAR LAKE NEAR BIG BEAR LAKE, CA

LOCATION.--Lat 34°14'33", long 116°58'33", in SW¼ sec.22, T.2 N., R.1 W., San Bernardino County, Hydrologic Unit 18070203, at Big Bear Lake Dam on Bear Creek, 4 mi (6 km) west of town of Big Bear Lake, and 7.5 mi (12.1 km) upstream from mouth.

DRAINAGE AREA.--72.2 mi² (187.0 km²), including Baldwin Lake drainage.

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 (2,033.29 m) National Geodetic Vertical Datum of 1929 (levels by Bear Valley Mutual Water Co.). Prior to 1912 at old dam 200 ft (61 m) upstream at same datum; spillway at gage height 52.4 ft (15.97 m).

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 (90.4 hm³) at elevation 6,743.3 ft (2,055.36 m), top of dam. No dead storage. Water used for irrigation only. See schematic diagram of Santa Ana River basin.

COOPERATION.--Record of contents were furnished by Big Bear Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents unknown, lake spilled in 1916, 1917, 1922, 1923, 1938, 1939, 1969, 1970; lake dry October, November 1898, August to November 1899, October, November 1904.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 73,320 acre-ft (90.4 hm³) Apr. 15; minimum contents observed, 63,940 acre-ft (78.8 hm³) Dec. 1-31.

MONTHEND CONTENTS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	66,310	--
Oct. 31.....	64,650	-1,660
Nov. 30.....	63,940	-710
Dec. 31.....	63,940	0
CAL YR 1979.....	--	+2,560
Jan. 31.....	65,840	+1,900
Feb. 29.....	71,870	+6,030
Mar. 31.....	72,360	+490
Apr. 30.....	71,380	-980
May 31.....	70,890	-490
June 30.....	69,920	-970
July 31.....	68,710	-1,210
Aug. 31.....	66,540	-2,170
Sept. 30.....	66,650	+110
WTR YR 1980.....	--	+340

SANTA ANA RIVER BASIN

11051500 SANTA ANA RIVER NEAR MENTONE, CA

LOCATION.--Lat 34°06'30", long 117°05'59", in NE¼SW¼SW¼ sec.4, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on right bank at spreading ground diversion near mouth of canyon, 1.6 mi (2.6 km) upstream from Mill Creek, 3.2 mi (5.1 km) northeast of Mentone, and 16 mi (26 km) downstream from Big Bear Lake.

DRAINAGE AREA.--210 mi² (544 km²), including area tributary to Baldwin Lake at head of Bear Valley.

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 main and supplementary gages is 1,950 ft (594 m), from topographic map. Prior to Sept. 2, 1917, nonrecording gages at several sites within 1.5 mi (2.4 km) upstream at various datums. Sept. 3, 1917, to May 27, 1969, water-stage recorder at site 0.2 mi (0.3 km) upstream at different datum. Canal gage at different datum.

REMARKS.--Records poor prior to Feb. 19 and good thereafter. Flow partly regulated by Big Bear Lake (station 11049000) 16 mi (26 km) upstream. 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: 66 years (water years 1915-80), 36.8 ft³/s (1.042 m³/s), 26,660 acre-ft/yr (32.9 hm³/yr).

Combined river and canal: 84 years, 83.7 ft³/s (2.370 m³/s), 60,640 acre-ft/yr (74.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 52,300 ft³/s (1,480 m³/s) Mar. 2, 1938, gage height, 14.3 ft (4.36 m), 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 ft³/s (1,480 m³/s) Mar. 2, 1938; minimum daily, 7.4 ft³/s (0.21 m³/s) Sept. 21, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Combined river and canal: Flood of Feb. 23, 1891, 53,700 ft³/s (1,520 m³/s), from notes furnished by F. C. Finkle, consulting engineer, Los Angeles.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) revised, and maximum (*):

Date	Time	River Discharge		Gage height		Combined River and Diversion Discharge	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Oct. 20	1300	1,620	45.9	4.85	1.478	1,650	46.7
Jan. 9	1500	† 581	16.5	4.40	1.341	627	17.8
Jan. 11	1500	† 614	17.4	4.45	1.356	614	17.4
Jan. 14	1800	† 551	15.6	4.80	1.463	551	15.6
Jan. 18	0800	† 560	15.9	4.80	1.463	561	15.9
Jan. 29	0900	† 3,790	107	6.33	1.929	3,790	107
Feb. 14	1600	† 2,020	57.2	4.65	1.417	2,020	57.2
Feb. 15	1200	† 3,330	94.3	5.25	1.600	3,330	94.3
Feb. 17	1000	† 3,900	110	5.60	1.707	3,900	110
Feb. 21	0600	*† 5,930	168	7.85	2.393	* 5,930	168
Mar. 2	2300	† 1,510	42.8	5.75	1.753	1,510	42.8
Mar. 6	2000	† 1,620	45.9	5.85	1.783	1,620	45.9
Apr. 15	1800	† 927	26.3	5.15	1.570	934	26.5
Apr. 24	1500	† 576	16.3	6.32	1.926	616	17.4
May 10	1230	† 524	14.8	6.15	1.875	606	17.2

River only: Minimum daily discharge, 3.7 ft³/s (0.10 m³/s) Jan. 2-7.

Combined river and canal: Minimum daily discharge, 42 ft³/s (1.19 m³/s) Dec. 24, 25.

† Indicates peak caused by release from Big Bear Reservoir.

‡ Indicates peak affected by release from Big Bear Reservoir.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

COMBINED DISCHARGE, IN CUBIC FEET PER SECOND, OF SANTA ANA RIVER AND SOUTHERN CALIFORNIA EDISON CO.'S CANAL NEAR MENTONE, CA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	58	52	48	637	549	308	384	276	187	140	95
2	61	57	52	48	265	662	295	384	260	181	137	97
3	59	55	51	48	242	1140	287	383	226	178	135	96
4	58	54	51	48	225	877	283	384	217	178	133	94
5	56	55	51	48	208	738	288	391	213	174	128	95
6	56	54	51	47	192	1150	287	397	211	173	125	95
7	57	55	51	49	184	967	282	406	210	172	120	95
8	57	62	51	51	179	911	282	408	205	170	118	95
9	58	58	51	288	162	850	295	403	206	168	116	95
10	56	55	53	353	155	850	312	483	215	165	114	93
11	56	55	51	488	146	716	379	424	215	161	114	93
12	56	55	51	340	144	678	398	393	213	160	110	92
13	56	54	51	297	350	647	327	384	214	159	118	92
14	58	52	52	559	1190	617	359	385	214	157	115	92
15	57	51	51	569	1910	599	620	402	209	152	114	91
16	56	51	51	493	1870	582	737	398	208	152	114	117
17	73	51	51	484	2840	544	437	401	212	151	113	126
18	77	51	51	513	2350	477	410	407	212	149	112	128
19	79	51	53	345	1980	458	416	412	207	149	111	128
20	528	51	53	309	2930	431	407	418	209	146	112	130
21	171	51	55	267	3840	426	413	423	205	145	110	130
22	128	51	57	210	2240	400	449	433	202	145	108	129
23	133	52	53	227	1320	383	516	423	199	147	109	128
24	127	52	42	212	1100	367	582	410	195	157	104	138
25	83	52	42	129	911	355	559	394	192	151	106	140
26	81	52	48	104	806	351	448	379	188	150	106	139
27	82	52	57	82	770	338	446	369	186	153	103	140
28	80	52	51	463	703	325	453	303	189	149	102	132
29	74	52	51	2640	659	315	402	285	192	142	100	124
30	75	52	50	1400	---	302	396	281	195	143	98	126
31	72	---	49	900	---	299	---	278	---	145	98	---
TOTAL	2782	1603	1584	12059	30508	18304	12073	12025	6295	4909	3543	3365
MEAN	89.7	53.4	51.1	389	1052	590	402	388	210	158	114	112
MAX	528	62	57	2640	3840	1150	737	483	276	187	140	140
MIN	56	51	42	47	144	299	282	278	186	142	98	91
AC-FT	5520	3180	3140	23920	60510	36310	23950	23850	12490	9740	7030	6670
CAL YR 1979	TOTAL	51706										
WTR YR 1980	TOTAL	109050										
			MEAN 142	MAX 1300	MIN 42	AC-FT	102600					
			MEAN 298	MAX 3840	MIN 42	AC-FT	216300					

SANTA ANA RIVER BASIN

11054000 MILL CREEK NEAR YUCAIPA, CA

LOCATION.--Lat 34°05'27", long 117°02'12", in NW¼NE¼NE¼ sec.13, T.1 S., R.2 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 50 ft (15 m) downstream from bridge on State Highway 38, 3.9 mi (6.3 km) north of Yucaipa, and 5.3 mi (8.5 km) upstream from mouth.

DRAINAGE AREA.--42.4 mi² (109.8 km²).

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 (888.907 m) 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 (30 m), 3 mi (5 km), and 6 mi (10 km) 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: 52 years (water years 1920-38, 1948-80), 16.7 ft³/s (0.462 m³/s), 11,810 acre-ft/yr (14.6 hm³/yr).

Combined creek and canals: 52 years, 37.9 ft³/s (1.073 m³/s), 27,460 acre-ft/yr (33.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,400 ft³/s (1,000 m³/s) Jan. 25, 1969, gage height, 16.8 ft (5.12 m), from floodmark, from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of two field estimates at gage height 14.5 ft (4.42 m) and slope-area measurement of maximum flow; no flow at times in some years.

Combined creek and canals: Maximum discharge, 35,400 ft³/s (1,000 m³/s) Jan. 25, 1969; minimum daily, 2.7 ft³/s

(0.076 m³/s) Feb. 23, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurements made at gage heights 10.75 ft (3.277 m) and 10.9 ft (3.32 m):

Date	Time	Creek Discharge		Gage height		Combined Creek and Canals Discharge	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Oct. 20	1300	1,060	30.0	10.12	3.085	1,080	30.6
Jan. 9	1330	164	4.64	8.13	2.478	171	4.84
Jan. 11	0830	157	4.45	8.38	2.554	157	4.45
Jan. 14	1800	139	3.94	8.26	2.518	156	4.42
Jan. 29	0900	*5,540	157	11.08	3.377	*5,550	157
Feb. 14	1600	750	21.2	9.55	2.911	756	21.4
Feb. 16	1830	1,260	35.7	9.85	3.002	1,270	36.0
Feb. 18	0700	2,480	70.2	9.75	2.972	2,490	70.5
Feb. 19	1300	1,430	40.5	8.98	2.737	1,440	40.8
Feb. 21	0300	1,010	28.6	8.55	2.606	1,020	28.9
Mar. 2	Unknown	568	16.1	7.77	2.368	597	16.9
Mar. 6	Unknown	Unknown		Unknown		Unknown	

Creek only: Minimum daily discharge, 0.09 ft³/s (0.003 m³/s) Oct. 12, 13.

Combined creek and canals: Minimum daily discharge, 22 ft³/s (0.62 m³/s) Nov. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.11	7.5	5.8	7.6	52	185	121	138	126	87	20	4.2
2	.11	7.4	5.0	7.6	44	245	119	136	126	87	17	5.0
3	.11	7.3	6.2	7.6	40	450	112	136	126	83	16	6.0
4	.11	7.3	6.8	7.7	40	340	110	136	128	76	15	6.4
5	.11	7.3	7.2	7.8	32	300	110	133	126	72	14	4.7
6	.11	7.2	10	7.8	28	480	110	136	123	72	25	4.1
7	.11	7.2	15	8.2	28	434	110	141	121	58	23	4.1
8	.11	7.1	9.9	9.2	28	388	114	141	119	55	17	4.1
9	.11	7.0	8.9	48	28	342	119	141	121	57	10	3.9
10	.11	6.7	8.0	48	26	296	123	164	123	52	8.5	3.9
11	.11	6.6	8.0	80	25	250	126	159	123	61	7.4	3.6
12	.09	6.5	8.8	38	25	204	126	154	121	61	5.6	3.4
13	.09	6.3	8.0	34	36	164	126	143	121	47	5.0	3.4
14	.18	6.2	7.8	63	234	159	128	141	121	44	6.3	4.6
15	.21	6.0	7.6	22	472	146	133	138	119	39	5.6	3.4
16	.14	5.8	7.6	13	509	143	136	136	119	35	6.6	2.9
17	.14	5.6	7.6	10	1590	143	141	136	119	33	6.6	2.5
18	.14	5.5	7.7	15	1340	146	143	138	119	32	6.0	2.3
19	.13	5.3	7.8	13	929	151	151	143	114	32	4.7	2.3
20	138	5.2	8.4	11	598	143	156	143	110	29	4.4	2.3
21	75	5.0	9.9	10	574	141	156	148	103	28	11	2.5
22	50	4.9	13	9.0	460	138	151	154	101	24	8.5	2.3
23	32	4.7	10	8.9	385	133	141	148	101	22	4.4	2.3
24	24	4.6	12	8.4	312	133	138	143	97	26	4.4	1.9
25	16	4.4	17	8.1	278	133	138	138	89	24	4.2	4.8
26	12	4.3	17	8.4	260	131	138	136	83	35	3.7	9.4
27	9.8	4.2	13	8.9	246	123	138	133	83	44	3.7	4.6
28	8.4	4.1	10	32	225	121	143	128	85	54	3.4	5.2
29	8.0	4.1	9.2	985	219	119	141	126	83	57	3.2	.45
30	7.8	5.2	8.2	117	---	119	141	126	83	37	5.0	1.6
31	7.6	---	7.8	67	---	119	---	126	---	21	6.6	---
TOTAL	390.93	176.5	289.2	1721.2	9063	6519	3939	4339	3333	1464	281.8	112.15
MEAN	12.6	5.88	9.33	55.5	313	210	131	140	111	47.2	9.09	3.74
MAX	138	7.5	17	985	1590	480	156	164	128	87	25	9.4
MIN	.09	4.1	5.0	7.6	25	119	110	126	83	21	3.2	.45
AC-FT	775	350	574	3410	17980	12930	7810	8610	6610	2900	559	222
CAL YR 1979	TOTAL	7669.81	MEAN	21.0	MAX	138	MIN	.03	AC-FT	15210		
WTR YR 1980	TOTAL	31628.78	MEAN	86.4	MAX	1590	MIN	.09	AC-FT	62740		

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	30	26	36	61	213	155	176	160	119	70	50
2	31	29	27	34	69	273	152	172	159	119	70	50
3	31	29	25	33	67	479	144	172	159	123	72	49
4	31	29	27	33	67	369	144	173	162	120	71	49
5	30	29	31	33	62	329	144	170	161	116	68	48
6	30	29	37	33	59	509	144	174	160	114	66	48
7	30	29	38	31	59	463	144	180	158	99	65	48
8	30	31	38	31	58	417	148	181	156	102	63	48
9	30	30	40	69	57	370	153	181	158	102	64	48
10	30	29	39	56	56	324	158	200	159	97	62	48
11	30	29	39	80	55	278	162	192	159	97	62	47
12	30	29	38	38	55	231	160	191	158	97	62	45
13	30	28	35	34	66	190	160	180	158	93	61	45
14	30	28	35	68	240	186	164	177	156	91	60	47
15	29	28	35	38	479	174	171	174	155	87	61	47
16	28	27	35	30	517	175	175	172	154	82	61	47
17	28	27	35	27	1600	180	180	173	154	80	59	45
18	28	27	35	37	1350	183	184	176	153	80	58	44
19	29	25	35	41	937	189	192	179	150	81	58	44
20	155	26	35	39	606	181	197	180	141	78	57	44
21	82	27	38	39	582	179	197	185	132	75	55	45
22	57	27	37	38	468	174	192	192	135	74	55	43
23	39	27	39	38	402	168	180	184	134	72	55	43
24	35	27	37	37	337	168	176	181	130	77	55	43
25	38	26	39	37	303	168	176	175	129	73	55	43
26	34	26	38	37	288	166	176	173	128	77	54	42
27	32	26	36	38	276	156	176	170	124	78	54	43
28	30	22	38	62	254	153	182	162	122	89	53	41
29	28	23	36	997	247	151	179	160	122	89	52	41
30	29	23	36	125	---	152	179	160	122	79	51	41
31	30	---	36	75	---	152	---	160	---	71	50	---
TOTAL	1156	822	1095	2344	9677	7500	5044	5475	4408	2831	1859	1366
MEAN	37.3	27.4	35.3	75.6	334	242	168	177	147	91.3	60.0	45.5
MAX	155	31	40	997	1600	509	197	200	162	123	72	50
MIN	28	22	25	27	55	151	144	160	122	71	50	41
AC-FT	2290	1630	2170	4650	19190	14880	10000	10860	8740	5620	3690	2710
CAL YR 1979	TOTAL	19886		54.5	155	22	AC-FT	39440				
WTR YR 1980	TOTAL	43577		119	1600	22	AC-FT	86430				

SANTA ANA RIVER BASIN

11055500 PLUNGE CREEK NEAR EAST HIGHLANDS, CA

LOCATION.--Lat 34°07'06", long 117°08'27", in SW¼NE¼ 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, and 1.8 mi (2.9 km) northeast of East Highlands.

DRAINAGE AREA.--16.9 mi² (43.8 km²).

PERIOD OF RECORD.--January 1919 to current year; combined records of creek and diversions, March 1951 to current year.

GAGE.--Water-stage recorder on creek. Since March 1951 water-stage recorder and weir on upper diversion; water-stage recorder and concrete-lined canal on middle diversion; crest-stage gage and sharp-crested weir on lower diversion. Altitude of creek gage is 1,590 ft (485 m), from topographic map. Prior to Oct. 1, 1969, creek gage at datum 4.00 ft (1.219 m) 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 (0.8 km), 1.0 mi (1.6 km), and 2.5 mi (4.0 km) 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: 61 years, 6.83 ft³/s (0.193 m³/s), 4,950 acre-ft/yr (6.10 hm³/yr).
Combined creek and diversions: 29 years, 9.07 ft³/s (0.257 m³/s), 6,570 acre-ft/yr (8.10 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 5,340 ft³/s (151 m³/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 ft³/s (135 m³/s) Dec. 6, 1966; no flow Nov. 12, 1964, Sept. 29, 1965.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), from rating curve extended above 388 ft³/s (11.0 m³/s) on basis of slope-conveyance measurement at gage height 7.41 ft (2.259 m):

Date	Time	Creek Discharge		Gage height		Combined creek and diversions Discharge	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Jan. 14	1800	274	7.76	3.34	1.018	275	7.79
Jan. 29	0600	*1,780	50.4	6.29	1.917	*1,780	50.4
Feb. 16	1900	1,200	34.0	5.65	1.722	1,200	34.0
Feb. 18	0600	800	22.7	4.80	1.463	800	22.7
Feb. 21	0800	648	18.4	4.35	1.326	648	18.4
Mar. 2	2400	463	13.1	3.75	1.143	463	13.1
Mar. 6	2000	437	12.4	3.65	1.113	437	12.4

Creek only: Minimum daily discharge, 0.18 ft³/s (0.005 m³/s) Nov. 26-28.

Combined creek and diversions: 1.8 ft³/s (0.051 m³/s) Oct. 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	3.0	.24	.43	55	59	38	24	12	8.6	2.0	.88
2	.35	.68	.24	.39	47	129	38	22	12	8.9	2.0	.95
3	.24	.47	.24	.27	38	325	33	22	11	6.4	1.9	.88
4	.24	.39	.24	.27	29	200	32	23	11	6.0	1.9	.88
5	.24	.39	.24	.27	20	160	30	23	10	5.3	1.7	.88
6	.24	.35	.27	.27	19	296	32	21	10	4.9	1.5	.88
7	.21	.39	.31	.27	18	230	29	22	10	4.7	1.8	.95
8	.24	.39	.27	.52	17	186	28	22	9.4	4.5	1.8	.95
9	.31	.52	.21	46	16	166	26	22	10	4.3	1.7	1.0
10	.27	.47	.21	92	15	144	26	30	10	4.1	1.6	1.0
11	.27	.39	.24	128	13	123	25	28	11	3.6	1.5	1.0
12	.31	.35	.31	57	11	100	25	24	11	2.7	1.4	.95
13	.31	.35	.39	48	47	82	24	22	11	2.5	1.4	1.0
14	.39	.31	.43	127	188	79	24	21	11	2.6	1.4	1.1
15	.39	.31	.43	100	374	74	23	21	11	2.6	1.4	1.1
16	.43	.31	.43	55	418	69	22	19	11	2.5	1.4	1.0
17	.52	.31	.43	42	491	64	21	17	10	2.4	1.4	1.0
18	.57	.27	.39	71	442	64	20	17	10	2.4	1.4	1.0
19	.62	.27	.39	57	376	61	20	16	10	2.6	1.4	1.1
20	33	.35	.43	44	400	57	19	15	9.8	2.8	1.4	1.1
21	9.2	.21	.52	38	463	57	19	15	9.2	2.5	1.4	1.0
22	5.3	.21	.47	33	294	55	18	15	9.2	2.2	1.4	.39
23	4.5	.21	.39	31	206	50	21	16	9.2	2.4	1.4	.39
24	3.9	.21	.39	29	168	47	21	16	8.9	2.5	1.5	.35
25	3.7	.21	.39	27	140	46	20	16	8.0	2.5	1.5	.39
26	3.7	.18	.47	25	115	50	20	14	8.0	2.4	1.5	.31
27	3.7	.18	.47	25	80	44	19	14	8.6	2.5	1.5	.31
28	3.6	.18	.43	107	70	40	22	14	8.3	2.4	1.5	.31
29	3.2	.21	.43	490	64	37	26	13	8.0	2.2	1.4	.31
30	3.2	.24	.43	111	---	35	24	12	7.7	2.1	1.4	.27
31	3.6	---	.43	75	---	34	---	12	---	2.0	.95	---
TOTAL	87.27	12.31	11.16	1860.69	4634	3163	745	588	296.7	110.1	47.45	23.63
MEAN	2.82	.41	.36	60.0	160	102	24.8	19.0	9.89	3.55	1.53	.79
MAX	33	3.0	.52	490	491	325	38	30	12	8.9	2.0	1.1
MIN	.21	.18	.21	.27	11	34	18	12	7.7	2.0	.95	.27
AC-FT	173	24	22	3690	9190	6270	1480	1170	589	218	94	47

CAL YR 1979 TOTAL 3589.85 MEAN 9.84 MAX 156 MIN .14 AC-FT 7120
WTR YR 1980 TOTAL 11579.31 MEAN 31.6 MAX 491 MIN .18 AC-FT 22970

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	4.1	3.5	3.5	55	59	38	27	16	12	5.7	4.0
2	1.9	3.3	3.5	3.6	47	129	38	25	16	11	5.6	4.2
3	1.8	3.5	3.5	3.7	38	325	33	25	15	11	5.6	4.0
4	1.8	3.5	3.4	3.6	29	200	32	26	15	10	5.6	4.1
5	1.8	3.4	3.3	3.6	20	160	30	26	14	9.5	5.6	4.1
6	1.9	3.4	3.5	3.8	19	296	32	24	14	9.0	4.5	4.0
7	1.9	3.5	3.7	3.8	18	230	29	25	14	8.7	4.9	4.3
8	2.1	3.8	3.5	4.8	17	186	28	25	14	8.4	5.0	4.4
9	2.3	4.1	3.4	4.9	16	166	26	25	14	8.2	4.8	4.3
10	2.3	3.8	3.4	92	15	144	26	33	15	7.8	4.6	4.3
11	2.3	3.6	3.4	129	13	123	25	32	16	7.2	4.8	4.1
12	2.3	3.4	3.6	57	11	100	25	28	16	6.9	4.1	3.9
13	2.4	3.4	3.7	48	47	82	24	25	16	6.9	4.3	3.9
14	2.6	3.4	3.7	127	188	79	24	24	15	7.0	4.4	4.0
15	2.6	3.3	3.5	100	374	74	23	24	16	6.9	4.4	3.8
16	2.7	3.4	3.4	55	418	69	22	23	16	6.7	4.7	3.5
17	2.9	3.5	3.4	42	491	64	21	21	14	6.6	4.8	3.3
18	3.1	3.8	3.4	71	442	64	21	21	14	6.4	4.7	3.3
19	3.5	3.4	3.4	57	376	61	22	20	14	6.6	4.7	3.5
20	3.6	3.9	3.4	44	400	57	22	19	14	6.6	4.5	3.5
21	9.2	3.7	4.0	38	463	57	22	19	14	6.4	4.4	4.1
22	5.3	3.7	4.1	33	294	55	21	19	14	6.1	4.4	4.4
23	4.5	3.7	3.7	31	206	50	24	20	14	6.2	4.3	4.2
24	3.9	3.6	3.7	29	168	47	24	20	13	6.4	4.3	3.9
25	3.7	3.7	3.7	27	140	46	23	20	12	6.2	4.3	3.7
26	3.7	3.7	4.3	25	115	50	23	18	12	6.2	4.2	3.6
27	3.7	3.7	4.0	25	80	44	22	18	13	6.3	4.3	3.6
28	3.6	3.7	3.7	107	70	40	25	18	12	6.1	4.3	3.6
29	3.2	3.6	3.7	490	64	37	30	17	12	5.9	4.3	3.5
30	3.2	3.5	3.7	111	---	35	28	16	12	5.7	4.3	3.4
31	3.6	---	3.5	75	---	34	---	16	---	5.7	4.0	---
TOTAL	127.7	108.1	111.7	1892.4	4634	3163	783	699	426	230.6	144.4	116.5
MEAN	4.12	3.60	3.60	61.0	160	102	26.1	22.5	14.2	7.44	4.66	3.88
MAX	36	4.1	4.3	490	491	325	38	33	16	12	5.7	4.4
MIN	1.8	3.3	3.3	3.5	11	34	21	16	12	5.7	4.0	3.3
AC-FT	253	214	222	3750	9190	6270	1550	1390	845	457	286	231
CAL YR 1979 TOTAL	4316.5		MEAN 11.8	MAX 156	MIN 1.3	AC-FT 8560						
WTR YR 1980 TOTAL	12436.4		MEAN 34.0	MAX 491	MIN 1.8	AC-FT 24670						

SANTA ANA RIVER BASIN

11055800 CITY CREEK NEAR HIGHLAND, CA

LOCATION.--Lat 34°08'38", long 117°11'16", in SE&SW&NW& sec.27, T.1 N., R.3 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 0.6 mi (1.0 km) upstream from Highland Avenue, and 1.5 mi (2.4 km) northeast of Highland.

DRAINAGE AREA.--19.6 mi² (50.8 km²).

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 (482 m), from topographic map. Prior to Mar. 1, 1939, at site 0.2 mi (0.3 km) downstream at different datum. Canal gage at different datum.

REMARKS.--Records good. No regulation above station. City Creek Water Co.'s canal has diverted from point 0.5 mi (0.8 km) 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: 61 years, 9.76 ft³/s (0.276 m³/s), 7,070 acre-ft/yr (8.72 hm³/yr).
Combined creek and canal: 56 years, 11.4 ft³/s (0.323 m³/s), 8,260 acre-ft/yr (10.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 7,000 ft³/s (198 m³/s) Feb. 25, 1969, gage height, 9.39 ft (2.862 m), from rating curve extended above 580 ft³/s (16.4 m³/s) on basis of slope-area estimate at gage height 8.83 ft (2.691 m); no flow for several months in some years.
Combined creek and canal: Maximum discharge, 7,000 ft³/s (198 m³/s) Feb. 25, 1969; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Creek Discharge		Gage height		Combined creek and diversion Discharge	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Oct. 20	1215	165	4.67	4.50	1.372	166	4.70
Jan. 29	0515	*3,630	103	9.12	2.780	*3,630	103
Feb. 16	2330	2,790	79.0	8.44	2.573	2,790	79.0
Feb. 21	0645	1,270	36.0	6.76	2.060	1,270	36.0
Mar. 2	1930	700	19.8	5.82	1.774	700	19.8
Mar. 6	1130	595	16.9	5.60	1.707	595	16.9

Creek only: Minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Oct. 3-4.

Combined creek and diversion: 2.3 ft³/s (0.065 m³/s) Oct. 3-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	3.9	3.4	4.2	71	474	67	39	23	16	8.6	6.5
2	1.5	3.7	3.5	4.2	51	501	65	37	23	16	8.6	6.4
3	1.3	4.5	3.6	4.3	40	478	64	34	22	16	8.8	6.0
4	1.3	5.8	3.5	4.3	30	317	62	34	21	16	8.9	5.6
5	1.4	4.9	3.4	4.3	27	271	61	34	20	15	8.7	5.4
6	1.4	4.0	3.6	4.4	25	420	59	32	20	14	8.4	5.1
7	1.5	4.8	3.6	4.4	23	363	58	31	19	14	8.1	5.4
8	1.7	6.3	3.6	4.5	21	277	57	32	19	14	7.8	5.3
9	1.9	6.2	3.6	17	20	235	56	32	18	13	7.7	5.3
10	1.8	5.8	3.6	19	18	210	55	77	19	12	7.5	5.3
11	1.8	5.6	3.7	30	17	177	54	57	18	12	7.0	5.2
12	1.8	5.4	3.8	12	16	153	53	45	18	12	6.9	5.2
13	1.9	4.5	3.8	12	15	135	52	41	18	12	7.5	5.1
14	2.2	3.8	3.7	42	226	118	51	39	17	11	8.5	5.1
15	2.4	3.7	3.7	78	331	110	50	37	17	12	9.1	5.1
16	2.5	3.7	3.7	26	760	104	48	34	17	12	8.9	5.0
17	2.6	4.0	3.6	5.0	1170	96	47	32	17	11	8.7	5.0
18	2.8	5.1	3.5	20	741	105	46	30	17	11	8.5	4.9
19	3.1	4.4	3.6	8.1	615	96	45	29	16	10	8.9	4.9
20	48	4.3	3.7	7.0	645	89	44	28	16	10	8.5	4.9
21	12	4.3	4.4	6.4	746	89	43	29	16	10	7.8	4.8
22	6.6	4.2	4.7	6.0	474	86	41	29	16	9.7	7.5	4.8
23	5.3	4.0	4.1	5.6	370	83	40	32	16	9.4	7.1	4.7
24	4.7	4.0	4.0	5.4	280	81	39	28	16	9.9	7.0	4.7
25	4.4	3.8	4.3	5.2	213	81	38	26	16	9.9	7.3	4.7
26	4.4	3.6	4.7	5.0	170	79	37	25	16	9.5	6.7	4.6
27	4.3	3.4	4.4	4.9	139	77	36	25	15	9.2	6.3	4.6
28	4.3	3.4	4.1	120	120	74	42	25	15	8.9	6.3	4.5
29	3.9	3.2	4.0	1320	256	73	41	24	16	8.7	6.0	4.5
30	4.4	3.2	4.1	291	---	70	41	24	16	8.6	5.8	4.5
31	4.2	---	4.1	95	---	69	---	24	---	8.5	6.2	---
TOTAL	143.2	131.5	119.1	2175.2	7630	5591	1492	1045	533	361.3	239.6	153.1
MEAN	4.62	4.38	3.84	70.2	263	180	49.7	33.7	17.8	11.7	7.73	5.10
MAX	48	6.3	4.7	1320	1170	501	67	77	23	16	9.1	6.5
MIN	1.3	3.2	3.4	4.2	15	69	36	24	15	8.5	5.8	4.5
AC-FT	284	261	236	4310	15130	11090	2960	2070	1060	717	475	304

CAL YR 1979 TOTAL 4869.43 MEAN 13.3 MAX 167 MIN .77 AC-FT 9660
WTR YR 1980 TOTAL 19614.00 MEAN 53.6 MAX 1320 MIN 1.3 AC-FT 38900

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 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	5.2	4.5	5.5	71	474	67	40	25	17	9.5	7.0
2	2.6	5.1	4.6	5.4	51	501	65	38	25	17	9.5	6.9
3	2.3	5.0	4.7	5.5	40	478	64	35	24	17	9.7	6.4
4	2.3	5.8	4.5	5.4	30	317	62	35	23	17	9.8	6.0
5	2.4	5.6	4.5	5.4	27	271	61	34	22	16	9.7	5.8
6	2.4	5.2	4.7	5.5	25	420	59	33	22	15	9.2	6.3
7	2.6	5.5	4.7	5.5	23	363	58	32	21	15	8.9	7.3
8	3.0	6.3	4.7	5.1	21	277	57	33	21	15	8.5	7.3
9	3.3	6.2	4.7	17	20	235	56	33	20	14	8.3	6.9
10	3.1	5.8	4.7	19	18	210	55	78	21	13	8.1	6.9
11	3.1	5.6	4.8	31	17	177	54	58	20	13	7.6	6.8
12	3.1	5.4	4.9	12	16	153	53	46	20	13	7.5	6.8
13	3.3	5.1	4.9	12	15	135	52	42	19	13	8.1	6.8
14	3.8	4.9	4.8	42	226	118	51	40	18	12	9.3	6.8
15	4.1	4.8	4.8	78	331	110	50	38	18	13	10	6.7
16	4.2	4.8	4.8	26	761	104	48	35	18	13	9.7	6.6
17	4.3	5.1	4.7	5.0	1170	96	47	33	18	12	9.5	6.5
18	4.6	6.2	4.6	20	741	105	47	31	18	12	9.3	6.3
19	5.2	5.5	4.8	8.1	615	96	46	30	17	11	9.7	6.6
20	50	5.4	4.8	7.0	645	89	45	29	17	11	9.2	6.6
21	13	5.4	5.6	6.5	746	89	44	30	17	11	8.4	6.5
22	7.5	5.3	5.9	6.0	474	86	42	30	17	11	8.1	6.5
23	6.2	5.1	5.3	5.6	370	83	41	34	17	10	7.7	6.4
24	5.5	5.1	5.1	5.4	280	81	40	29	17	11	7.6	6.4
25	5.2	4.9	5.4	5.2	213	81	39	27	17	11	7.9	6.6
26	5.2	4.7	5.8	5.0	170	79	38	26	17	10	7.2	6.6
27	5.0	4.5	5.6	4.9	139	77	37	26	16	9.9	6.8	6.5
28	4.9	4.5	5.3	120	120	74	43	26	16	9.5	6.8	6.3
29	4.3	4.2	5.2	1320	256	73	42	25	17	9.3	6.5	6.0
30	4.5	4.2	5.4	291	---	70	42	25	17	9.0	6.2	5.9
31	5.0	---	5.4	95	---	69	---	26	---	9.2	6.7	---
TOTAL	179.1	156.4	154.2	2185.0	7631	5591	1505	1077	575	389.9	261.0	197.0
MEAN	5.78	5.21	4.97	70.5	263	180	50.2	34.7	19.2	12.6	8.42	6.57
MAX	50	6.3	5.9	1320	1170	501	67	78	25	17	10	7.3
MIN	2.3	4.2	4.5	4.9	15	69	37	25	16	9.0	6.2	5.8
AC-FT	355	310	306	4330	15140	11090	2990	2140	1140	773	518	391
CAL YR 1979	TOTAL	5135.3	MEAN	14.1	MAX	167	MIN	2.1	AC-FT	10190		
WTR YR 1980	TOTAL	19901.6	MEAN	54.4	MAX	1320	MIN	2.3	AC-FT	39470		

SANTA ANA RIVER BASIN

11056200 SANTA ANA RIVER AT WATERMAN AVENUE, AT SAN BERNARDINO, CA

LOCATION.--Lat 34°04'14", long 117°16'41", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on downstream end of fifth pier from left bank of southbound Waterman Avenue bridge, 0.1 mi (0.16 km) upstream from San Timoteo Creek, and 2.7 mi (4.3 km) southeast of San Bernardino.

DRAINAGE AREA.--359 mi² (930 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1954 to December 1961, January 1964 to September 1970, October 1976 to current year. Prior to January 1964, published as "near San Bernardino". Records, except for extremes for October 1928 to September 1937 at site 1.6 miles (2.6 km) upstream, not equivalent as a result of discharge from Mission Ditch.

GAGE.--Water-stage recorder. Altitude of gage is 995 ft (303.3 m), from topographic map. Prior to Jan. 21, 1964, at different datum.

REMARKS.--Records poor. Stage-discharge relation indefinite during year. Flow partly regulated by Big Bear Lake (station 11049000). Natural flow of stream affected by ground-water withdrawals and diversions for domestic use and irrigation above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--16 years (water years 1955-61, 1965-70, 1977-79), 34.3 ft³/s (0.971 m³/s), 24,850 acre-ft/yr (30.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s), estimated, Jan. 25, 1969, gage height, 8.5 ft (2.59 m); no flow for most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 75,700 ft³/s (2,140 m³/s) Mar. 2, 1938, from combined discharge of Santa Ana River near Mentone, Mill Creek near Yucaipa, and Plunge Creek near East Highlands.

NOTE.--Records for current year will not be published due to indefinite stage-discharge relation.

WATER-QUALITY RECORDS

REMARKS.--At time of samples, many water discharges not determined due to indefinite stage-discharge relation.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPERATURE, WATER (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 .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
OCT										
14...	1840	--	--	138	--	--	--	--	--	--
16...	1450	23.0	--	32	--	--	--	--	--	--
19...	1510	20.0	--	8	--	--	--	--	--	--
20...	1630	18.0	--	71500	--	13	21	32	38	--
22...	1510	23.5	--	664	--	--	--	--	--	--
23...	1500	23.0	--	79	--	--	--	--	--	--
24...	1310	24.0	--	8	--	--	--	--	--	--
29...	1530	16.0	--	45	--	--	--	--	--	--
NOV										
02...	1330	22.0	--	60	--	--	--	--	--	--
06...	1225	23.0	--	29	--	--	--	--	--	--
14...	--	9.5	.10	1	.00	--	--	--	--	--
26...	--	15.0	--	22	--	--	--	--	--	--
27...	--	14.0	--	23	--	--	--	--	--	--
JAN										
10...	--	14.0	151	3820	1560	--	--	--	--	--
15...	--	12.0	373	5830	5870	--	--	--	--	--
29...	1030	11.0	6440	29600	515000	--	--	--	--	--
FEB										
14...	1040	14.0	904	6380	15600	16	28	41	56	67
20...	1410	14.0	4190	3300	37300	16	27	41	58	80
25...	1250	18.0	1040	983	2760	--	--	--	--	--
AUG										
08...	0830	--	--	6	--	--	--	--	--	--
19...	1025	25.0	--	7	--	--	--	--	--	--
20...	1030	25.0	--	17	--	--	--	--	--	--
21...	1045	22.0	3.6	43	.42	--	--	--	--	--
21...	1335	32.0	--	10	--	--	--	--	--	--
26...	1845	--	--	4	--	--	--	--	--	--
29...	1850	--	--	5	--	--	--	--	--	--

[illegible]

SANTA ANA RIVER BASIN

11056500 LITTLE SAN GORGONIO CREEK NEAR BEAUMONT, CA

LOCATION.--Lat 34°01'45", long 116°56'43", in NW¼SW¼NW¼ 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 (4.8 km) upstream from Wallace Creek. and 7 mi (11 km) north of Beaumont.

DRAINAGE AREA, -1.74 mi² (4.51 km²).

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

REVISED RECORDS.--WDR-CA-79-1: 1969(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,320 ft (1,317 m), from topographic map. Prior to July 30, 1970, at site 42 ft (13 m) 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.--32 years, 0.61 ft³/s (0.017 m³/s), 442 acre-ft/yr (545,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,900 ft³/s (167 m³/s) Feb. 25, 1969, gage height, 8.50 ft (2.591 m), from floodmarks, from rating curve extended above 32 ft³/s (0.91 m³/s) on basis of slope-area measurements at gage heights 2.18 ft (0.664 m), 3.45 ft (1.052 m), and 8.50 ft (2.591 m); no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft³/s (0.57 m³/s) and maximum (*) from rating curve extended above 16 ft³/s (0.45 m³/s) on basis of slope-area measurement of maximum flow at gage height 4.16 ft (1.268 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 11	1130	30	0.85	3.68	1.122	Feb. 18	0700	48	1.36	3.38	1.030
Jan. 29	0630	*267	7.56	4.33	1.320	Feb. 19	1215	50	1.42	3.39	1.033
Feb. 16	1915	65	1.84	3.46	1.055	Feb. 21	0715	41	1.16	3.34	1.018

Minimum daily discharge, 0.28 ft³/s (0.008 m³/s) Nov. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.31	.59	.34	6.2	7.9	3.2	9.0	4.1	2.7	.84	.80
2	.36	.28	.50	.34	1.0	9.1	3.1	8.2	4.1	2.6	.87	.73
3	.36	.28	.34	.34	.40	7.4	3.1	7.6	4.1	2.6	.92	.99
4	.41	.88	.34	.34	.34	5.4	3.1	7.0	4.0	2.5	.85	.92
5	.41	.72	.34	.34	.34	5.7	3.1	6.5	3.9	2.5	.82	.67
6	.41	.59	.34	.34	.34	7.7	3.2	5.9	3.9	2.5	.81	.67
7	.41	.69	.34	.34	.34	6.5	3.3	6.0	3.8	2.4	.81	.73
8	.41	.71	.34	.34	.34	6.3	3.4	6.1	3.8	2.4	.82	.72
9	.41	.76	.34	2.5	.34	6.6	3.5	6.4	3.7	2.4	.77	.65
10	.41	.55	.34	4.0	.34	6.8	3.6	7.7	3.6	2.3	.74	.65
11	.41	.55	.34	13	.34	5.2	3.8	7.3	3.6	2.3	.76	.66
12	.41	.47	.34	6.3	.34	4.0	4.0	7.9	3.5	2.3	.72	.59
13	.41	.34	.34	5.8	.80	3.9	4.3	7.6	3.5	2.2	.74	.59
14	.41	.34	.34	6.8	1.5	3.8	4.5	7.8	3.4	2.2	.88	.76
15	.41	.34	.34	6.3	3.0	3.7	4.9	7.9	3.4	2.4	.89	.70
16	.50	.41	.34	.60	6.2	3.6	5.2	7.6	3.3	2.2	.91	.73
17	.50	.81	.34	.50	13	3.6	5.5	5.2	3.3	2.0	.90	.74
18	.50	1.3	.34	1.3	16	3.5	5.8	4.4	3.2	1.8	.88	.77
19	.50	1.3	.34	.82	18	3.5	6.2	5.0	3.2	1.6	.99	.98
20	7.2	1.4	.34	.82	18	3.5	6.5	5.4	3.1	1.9	.95	1.1
21	1.8	1.3	.34	.70	23	3.4	7.0	6.3	3.1	2.1	.89	.84
22	.70	.97	.34	.60	17	3.3	7.4	7.1	3.1	2.0	.91	.98
23	.53	.50	.34	.50	12	3.3	7.7	6.8	3.0	1.8	1.1	.66
24	1.3	.46	.40	.50	8.5	3.3	7.9	6.8	3.0	1.8	1.1	.76
25	.61	.46	.50	.41	8.5	3.3	8.0	6.9	2.9	1.9	1.0	.59
26	.89	.42	.34	.41	8.2	3.3	8.0	7.8	2.9	1.9	.95	.56
27	.95	.44	.34	.34	7.9	3.3	8.0	7.9	2.8	1.7	.90	.69
28	1.1	.50	.34	6.3	7.9	3.3	8.0	7.6	2.8	1.4	.88	1.3
29	1.4	.79	.34	35	7.9	3.3	8.0	7.2	2.8	1.2	1.0	.70
30	1.3	.76	.34	10	---	3.2	8.1	5.9	2.7	1.1	.89	.70
31	.38	---	.34	8.4	---	3.2	---	4.0	---	.96	.89	---
TOTAL	26.18	19.63	11.17	114.62	188.06	143.9	161.4	210.8	101.6	63.66	27.38	22.93
MEAN	.84	.65	.36	3.70	6.48	4.64	5.38	6.80	3.39	2.05	.88	.76
MAX	7.2	1.4	.59	35	23	9.1	8.1	9.0	4.1	2.7	1.1	1.3
MIN	.36	.28	.34	.34	.34	3.2	3.1	4.0	2.7	.96	.72	.56
AC-FT	52	39	22	227	373	285	320	418	202	126	54	45
CAL YR 1979	TOTAL	456.49	MEAN	1.25	MAX 21	MIN	.28	AC-FT	905			
WTR YR 1980	TOTAL	1091.33	MEAN	2.98	MAX 35	MIN	.28	AC-FT	2160			

LOCATION.--Lat 34°03'46", long 117°16'16", in SE¼NE¼NW¼ sec. 26, T.1 S., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 200 ft (61.0 m) upstream of Redlands Boulevard bridge, and 0.6 mi (0.97 km) northwest of Loma Linda.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Altitude of gage is 1,030 ft (314 m), from topographic map. Prior to April 1979, water-stage recorders at site 0.2 mi (0.3 km) downstream at different datum.

AVERAGE DISCHARGE.--17 years (1954-65, 1968-73, 1980), 2.84 ft³/s (0.080 m³/s), 2,060 acre-ft/yr (2.54 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s (425 m³/s) Feb. 25, 1969, gage height, 8.2 ft (2.50 m), from floodmark, from rating curve extended above 2,100 ft³/s (59.5 m³/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 ft³/s (4.25 m³/s) and maximum (*), from rating curve extended above 125 ft³/s (3.54 m³/s) on basis of slope-area measurement at gage height 7.50 ft (2.286 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 9	1500	220 6.23	4.25 1.295	Feb. 16	1800	*3,400 96.3	8.50 2.591
Jan. 29	0600	2,240 63.4	7.50 2.286	Mar. 2	Unknown	Unknown	Unknown

Minimum daily discharge, no flow for several days in most months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	0	3.4	1.7	0	1.0	0	.10	.33	.30	.35	.41
2	0	0	3.6	1.0	.04	60	0	.01	.33	.30	.30	.47
3	.02	0	3.6	1.1	0	48	0	0	.33	.15	.15	.17
4	.03	.03	4.6	2.0	.01	20	0	0	.33	0	.15	.07
5	.05	.30	4.3	3.1	.01	10	0	0	.15	0	.15	.30
6	.05	.19	2.7	2.3	0	.10	0	0	0	0	.15	.16
7	.02	.15	3.1	2.3	0	0	0	0	0	0	.15	.03
8	.01	.02	3.1	1.1	0	0	0	0	0	0	.15	.47
9	.03	0	3.6	4.9	.01	0	0	0	0	0	.15	.47
10	.09	.17	4.1	5.7	0	0	0	.13	0	0	.15	.47
11	.17	.30	4.3	30	0	0	0	.33	0	0	.15	.47
12	.17	.61	3.8	.90	0	0	0	.33	0	0	.15	.70
13	.25	1.7	3.6	8.0	53	0	0	.15	0	0	.17	.61
14	.25	.90	5.2	8.3	38	0	0	0	0	0	.79	.47
15	.41	.79	4.3	.24	150	0	0	0	0	0	.90	.14
16	.30	.21	2.9	.01	530	0	0	0	0	0	.30	.54
17	.14	.21	3.1	.34	130	0	0	0	0	0	.54	.61
18	.21	.07	.73	12	120	0	0	0	0	0	.35	.54
19	.30	.01	.51	3.2	55	0	0	0	0	0	.41	.41
20	19	0	1.1	.08	28	0	0	0	0	0	.17	.12
21	4.3	0	.61	.21	14	0	0	0	0	0	.35	.05
22	4.6	0	.15	.21	.03	0	0	0	0	0	.79	.20
23	4.9	0	.41	.41	0	0	0	0	0	0	.23	.15
24	1.7	.34	.23	.30	0	.05	0	0	0	0	.10	.03
25	.04	.30	.51	.54	0	.15	0	0	0	0	.47	0
26	.04	1.1	.92	.47	0	.30	0	0	0	0	.74	0
27	.03	.90	2.9	.54	0	.10	.28	0	.15	.15	.34	0
28	.02	2.9	3.1	71	0	0	.56	.15	.15	.30	.04	.14
29	.01	4.6	2.9	519	.33	0	.40	.33	.30	.40	.11	.12
30	.01	4.1	2.5	7.5	---	0	.20	.33	.30	.50	.07	0
31	0	---	2.5	0	---	0	---	.33	---	.40	.14	---
TOTAL	37.20	19.90	82.37	732.55	1118.43	139.70	1.44	2.19	2.37	2.50	9.16	8.32
MEAN	1.20	.66	2.66	23.6	38.6	4.51	.048	.071	.079	.081	.30	.28
MAX	19	4.6	5.2	519	530	60	.56	.33	.33	.50	.90	.70
MIN	0	0	.15	0	0	0	0	0	0	0	.04	0
AC-FT	74	39	163	1450	2220	277	2.9	4.3	4.7	5.0	18	1

WTR YR 1980	TOTAL	2156.13	MEAN	5.89	MAX	530	MIN	0	AC-FT	4280
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SANTA ANA RIVER BASIN

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--

WATER TEMPERATURES: April 1979 to current year.

SEDIMENT RECORDS: April 1979 to current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
OCT									
04...	0930	--	.61	5	.01	--	--	--	--
10...	0730	15.0	.30	5	.00	--	--	--	--
11...	1000	14.0	.41	26	.03	--	--	--	--
11...	1230	21.5	.41	15	.02	--	--	--	--
13...	1435	24.0	.30	17	.01	--	--	--	--
14...	1830	20.0	.54	5	.01	--	--	--	--
15...	1530	26.0	.70	6	.01	--	--	--	--
16...	1440	24.0	.41	11	.01	--	--	--	--
17...	0820	16.0	.41	3	.00	--	--	--	--
18...	0845	17.0	.54	3	.00	--	--	--	--
19...	1500	20.0	.30	33	.03	--	--	--	--
20...	1730	19.0	28	92000	6960	--	54	75	92
21...	1200	21.0	1.1	495	1.5	59	76	86	91
22...	1500	23.5	1.1	246	.73	--	--	--	--
23...	1510	21.0	1.1	175	.52	--	--	--	--
24...	1300	24.5	.54	124	.18	--	--	--	--
25...	0840	10.5	.21	28	.02	--	--	--	--
26...	1130	24.0	.21	30	.02	--	--	--	--
27...	1810	19.0	.03	25	.00	--	--	--	--
NOV									
05...	1010	17.0	.41	35	.04	--	--	--	--
06...	1215	22.0	.21	38	.02	--	--	--	--
13...	0845	10.0	2.7	33	.24	--	--	--	--
14...	0755	6.5	2.3	5	.03	--	--	--	--
14...	0800	6.5	2.3	5	.03	--	--	--	--
26...	1410	16.5	.79	64	.14	--	--	--	--
27...	1140	19.5	.61	187	.31	--	--	--	--
28...	1115	14.5	1.1	211	.63	--	--	--	--
FEB									
16...	1000	--	3.8	4940	51	--	49	76	85
20...	1400	15.5	27	27700	2020	--	44	60	73
AUG									
05...	1200	32.0	.15	131	.05	--	--	--	--
07...	0935	26.0	.16	142	.06	--	--	--	--
12...	1820	29.0	.14	80	.03	--	--	--	--
13...	0950	22.0	.01	20	.00	--	--	--	--
14...	1005	21.0	.79	15	.03	--	--	--	--
15...	0850	20.0	.90	17	.04	--	--	--	--
19...	1040	25.0	.41	23	.03	--	--	--	--
20...	1030	25.0	.17	389	.18	--	--	--	--

11057500 SAN TIMOTEO CREEK NEAR LOMA LINDA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. 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
OCT								
04...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
20...	98	--	99	--	99	--	100	--
21...	99	--	100	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
NOV								
05...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--
27...	99	--	100	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
FEB								
16...	91	96	--	98	--	100	--	--
20...	82	88	--	94	--	98	--	100
AUG								
05...	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--

DATE	TIME	TEMPER- ATURE, WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDE (T/DAY)
AUG					
21...	1355	30.0	.35	632	.60
SEP					
02...	1105	25.0	.47	11	.01
03...	1120	27.0	.17	70	.03
05...	1450	30.0	.41	19	.02
09...	1205	27.0	.47	25	.03
09...	1210	27.0	.47	25	.03
11...	0830	16.0	.47	24	.03

SUMMARY OF WATER AND SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS
OCTOBER 1979	37.20	3050
NOVEMBER ...	19.90	.87
DECEMBER ...	82.37	4.32
JANUARY 1980	732.55	110000
FEBRUARY ...	1118.43	209000
MARCH	139.70	27200
APRIL	1.44	.08
MAY	2.19	.10
JUNE	2.37	.12
JULY	2.50	.13
AUGUST	9.16	.67
SEPTEMBER ..	8.32	.43
TOTAL	2156.13	349256.72

SANTA ANA RIVER BASIN

11058500 EAST TWIN CREEK NEAR ARROWHEAD SPRINGS, CA

LOCATION.--Lat 34°10'45", long 117°15'53", in NW¼NE¼NE¼ sec.14, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 100 ft (30 m) upstream from Del Rosa Water Co.'s diversion, 0.5 mi (0.8 km) south of Arrowhead Springs, and 1.0 mi (1.6 km) downstream from Strawberry Creek.

DRAINAGE AREA.--8.80 mi² (22.79 km²).

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 (485 m), from topographic map.

REMARKS.--Records fair. No regulation above station. One small diversion for domestic use above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--60 years (water years 1921-80), 4.76 ft³/s (0.135 m³/s), 3,450 acre-ft/yr (4.25 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,710 ft³/s (105 m³/s) Jan. 29, 1980, gage height, 8.35 ft (2.545 m), 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 ft³/s (1.13 m³/s) and maximum (*), from rating curve extended above 90 ft³/s (2.55 m³/s) on basis of slope-area measurement at gage height 8.35 ft (2.545 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	1045	96 2.72	4.06 1.237	Feb. 20	Unknown	Unknown	Unknown
Jan. 14	2215	68 1.93	3.92 1.195	Mar. 2	2015	278 7.87	3.91 1.192
Jan. 29	0515	*3,710 105	8.35 2.545	Mar. 6	1100	292 8.27	3.95 1.204
Feb. 16	Unknown	919 26.0	5.30 1.615	May 10	1030	128 3.62	3.39 1.033
Feb. 18	Unknown	Unknown	Unknown				

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Oct. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.8	2.8	2.5	35	20	46	17	13	7.0	4.7	4.3
2	1.2	2.5	3.0	2.5	29	62	45	17	12	7.0	4.8	4.2
3	1.1	2.8	2.8	2.5	27	216	44	15	12	7.2	4.9	3.9
4	1.1	2.8	2.6	2.5	24	134	43	15	11	6.9	4.8	3.7
5	1.1	2.8	2.6	2.5	21	124	41	14	12	6.6	4.7	3.5
6	1.1	2.7	2.5	2.5	19	174	40	14	11	6.5	4.4	3.5
7	1.2	2.7	2.2	2.5	17	138	37	13	11	6.0	4.3	4.1
8	1.4	2.9	2.3	2.5	15	109	34	13	11	6.0	4.1	4.1
9	1.4	2.9	2.4	4.0	14	96	31	14	10	5.9	4.2	4.0
10	1.4	2.7	2.3	5.0	13	96	26	47	10	5.9	4.2	3.8
11	1.4	2.4	2.3	13	12	87	23	25	10	5.5	4.0	3.7
12	1.4	2.7	2.3	9.0	11	81	22	21	9.6	5.7	3.9	3.6
13	1.6	2.5	2.3	6.3	20	76	22	20	9.3	5.8	4.2	3.9
14	1.6	2.3	2.3	37	40	73	21	20	9.1	5.6	4.7	4.1
15	1.6	2.1	2.3	32	70	70	21	20	9.1	5.3	4.7	3.7
16	1.6	2.3	2.3	25	280	66	21	18	8.7	5.3	4.6	3.4
17	1.8	2.5	2.3	22	240	63	20	17	8.7	5.3	4.8	3.3
18	1.8	2.9	2.4	19	290	67	20	16	8.6	5.1	4.5	3.3
19	2.3	2.5	2.4	16	270	63	20	14	8.5	5.8	4.6	3.4
20	29	2.1	2.4	13	300	64	19	14	8.1	5.9	4.4	3.4
21	5.4	1.9	2.4	12	290	60	19	15	8.0	5.5	4.3	3.9
22	3.3	2.1	2.4	11	200	53	25	15	8.0	5.2	4.2	3.7
23	2.8	2.4	2.4	10	100	51	24	18	8.0	5.2	4.3	3.2
24	2.3	2.2	2.4	9.0	52	50	18	15	7.8	5.4	4.3	3.1
25	1.6	2.5	2.5	8.0	30	49	18	15	7.6	5.2	4.1	3.1
26	1.6	2.4	2.8	7.0	30	48	18	14	7.4	5.2	3.9	2.9
27	1.6	2.5	2.0	6.0	25	47	17	14	7.0	5.1	3.9	3.1
28	1.4	2.2	2.3	50	22	46	17	14	7.0	5.0	3.8	3.1
29	2.0	2.0	2.8	300	20	45	24	13	7.0	10	3.8	3.0
30	2.5	2.4	2.5	100	---	45	23	12	7.0	4.7	3.7	2.7
31	2.8	---	2.5	50	---	45	---	13	---	4.8	4.3	---
TOTAL	83.8	74.5	75.8	784.3	2516	2418	799	522	277.5	181.6	134.1	106.7
MEAN	2.70	2.48	2.45	25.3	86.8	78.0	26.6	16.8	9.25	5.86	4.33	3.56
MAX	29	2.9	3.0	300	300	216	46	47	13	10	4.9	4.3
MIN	1.1	1.9	2.0	2.5	11	20	17	12	7.0	4.7	3.7	2.7
AC-FT	166	148	150	1560	4990	4800	1580	1040	550	360	266	212
CAL YR 1979	TOTAL	1879.2	MEAN	5.15	MAX	70	MIN	1.1	AC-FT	3730		
WTR YR 1980	TOTAL	7973.3	MEAN	21.8	MAX	300	MIN	1.1	AC-FT	15820		

LOCATION.--Lat 34°11'36", long 117°16'25", in NE¼NW¼ sec.11, T.1 N., R.4 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 0.8 mi (1.3 km) northwest of Arrowhead Springs, and 1.3 mi (2.1 km) north of San Bernardino National Forest boundary.

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 (623.456 m) National Geodetic Vertical Datum of 1929. Prior to December 1919, nonrecording gage at site 300 ft (91 m) downstream at different datum.

AVERAGE DISCHARGE.--62 years, (water years 1913-14, 1921-80), 2.77 ft³/s (0.078 m³/s), 2,010 acre-ft/yr (2.48 hm³/yr).

EXTREMES FOR PERIOD OF RECORD (SINCE 1920).--Maximum discharge, 2,350 ft³/s (66.6 m³/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 ft³/s (0.99 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	1000	113 3.20	3.09 0.942	Feb. 18	0430	291 8.24	3.79 1.155
Jan. 11	0645	35 0.99	2.57 0.783	Feb. 20	0015	199 5.64	3.48 1.061
Jan. 13	1945	112 3.17	3.08 0.939	Mar. 2	Unknown	Unknown	Unknown
Jan. 29	0400	*925 26.1	5.03 1.533	Mar. 6	Unknown	Unknown	Unknown
Feb. 16	2130	545 15.4	4.41 1.344	May 10	0930	46 1.30	2.67 0.814

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Oct. 2-6, 12, Nov. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.3	1.6	1.6	19	30	40	13	8.8	4.9	3.2	2.4
2	1.1	1.3	1.7	1.6	15	50	40	12	8.7	5.1	3.1	2.4
3	1.1	1.4	1.6	1.6	13	135	40	12	8.5	5.2	3.2	2.3
4	1.1	1.4	1.5	1.6	11	80	35	11	8.1	5.0	3.3	2.3
5	1.1	1.1	1.3	1.6	11	75	30	11	7.9	4.9	3.3	2.3
6	1.1	1.3	1.4	1.6	9.6	110	28	11	7.8	4.7	3.2	2.1
7	1.2	1.3	1.5	1.7	9.0	85	20	11	7.6	4.7	3.2	2.4
8	1.2	1.4	1.5	2.0	8.3	70	15	11	7.7	4.7	3.1	2.5
9	1.2	1.4	1.5	7.7	8.0	60	15	11	7.	4.6	3.0	2.6
10	1.2	1.3	1.6	8.9	7.9	61	15	19	7.3	4.4	2.6	2.6
11	1.2	1.3	1.5	18	7.5	59	14	13	7.3	4.3	1.7	2.5
12	1.1	1.3	1.6	6.6	7.2	55	14	11	7.0	4.3	2.1	2.5
13	1.2	1.2	1.6	13	11	55	14	11	6.8	4.3	2.9	2.6
14	1.3	1.3	1.6	26	31	54	14	11	6.6	4.4	3.2	2.5
15	1.2	1.3	1.5	13	47	53	14	10	6.6	4.2	3.3	2.3
16	1.2	1.4	1.5	9.5	144	52	14	9.9	6.0	4.1	3.3	2.3
17	1.2	1.6	1.5	8.7	113	52	14	9.7	5.9	4.1	3.3	2.2
18	1.3	1.6	1.6	12	132	56	13	9.4	5.9	4.0	3.3	2.3
19	1.5	1.5	1.6	8.7	126	54	13	9.1	5.8	4.0	3.3	2.4
20	16	1.5	1.5	8.2	133	54	13	9.2	5.8	4.0	3.2	2.4
21	2.7	1.6	1.7	7.7	134	52	14	9.4	5.6	3.9	2.9	2.4
22	2.2	1.5	1.6	7.3	94	45	14	9.6	5.5	3.6	2.9	2.5
23	1.7	1.5	1.6	6.7	69	44	13	10	5.5	3.7	2.5	2.3
24	1.6	1.4	1.6	6.2	55	42	13	9.5	5.4	3.7	2.8	2.2
25	1.6	1.4	1.8	5.7	51	42	13	9.5	5.4	3.5	2.8	2.2
26	1.6	1.4	1.7	5.3	30	40	12	9.1	5.2	3.4	2.7	2.3
27	1.4	1.5	1.7	5.0	30	40	12	9.1	5.2	3.4	2.5	2.4
28	1.5	1.6	1.7	31	30	40	13	9.0	5.1	3.3	2.5	2.4
29	1.3	1.6	1.6	173	30	39	13	8.8	4.5	3.1	2.4	2.3
30	1.3	1.6	1.6	12	---	39	13	8.8	4.4	3.2	2.4	2.2
31	1.2	---	1.6	16	---	39	---	8.8	---	3.3	2.5	---
TOTAL	56.8	42.3	48.9	429.5	1386.5	1762	545	326.9	194.6	128.3	89.7	71.1
MEAN	1.83	1.41	1.58	13.9	47.8	56.8	18.2	10.5	6.49	4.14	2.89	2.37
MAX	16	1.6	1.8	173	144	135	40	19	8.8	5.2	3.3	2.6
MIN	1.1	1.1	1.3	1.6	7.2	30	12	8.8	4.4	3.1	1.7	2.1
AC-FT	113	84	97	852	2750	3490	1080	648	386	254	178	141
CAL YR 1979	TOTAL	1296.41	MEAN	3.55	MAX	29	MIN	.76	AC-FT	2570		
WTR YR 1980	TOTAL	5081.60	MEAN	13.9	MAX	173	MIN	1.1	AC-FT	10080		

SANTA ANA RIVER BASIN

11059000 WARM CREEK FLOODWAY AT SAN BERNARDINO, CA

LOCATION.--Lat 34°05'45", long 117°16'30", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on left bank 0.4 mi (0.6 km) upstream from Mill Street, and 1.8 mi (2.9 km) upstream from mouth.

DRAINAGE AREA.--47.8 mi² (123.8 km²).

PERIOD OF RECORD.--January 1961 to current year. Prior to October 1965, published as "near San Bernardino."

GAGE.--Water-stage recorder. Altitude of gage is 1,000 ft (305 m), from topographic map. Prior to Dec. 21, 1967, at site 0.4 mi (0.6 km) downstream at different datum.

REMARKS.--Records poor. Flow partly regulated by percolation basins above Marshall Boulevard. Del Rosa Water Company diverts from East Twin Creek for domestic use and irrigation. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,600 ft³/s (272 m³/s) Feb. 25, 1969, gage height, 6.75 ft (2.057 m), from rating curve extended above 3,000 ft³/s (85.0 m³/s); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,510 ft³/s (128 m³/s) Feb. 16, gage height, 5.65 ft (1.722 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	0	1.0	88	259	38	27			
2	0		0	0	0	299	209	55	37			
3	0		0	0	0	738	175	100	41			
4	0		0	0	0	393	120	82	26			
5	0		0	0	0	453	183	96	21			
6	0		0	0	0	518	183	91	30			
7	0		0	0	0	217	162	133	17			
8	0		0	0	0	171	162	52	11			
9	0		0	144	0	120	151	44	11			
10	0		0	99	0	209	102	233	13			
11	0		0	205	0	162	93	127	14			
12	0		0	15	0	57	89	33	9.3			
13	0		0	54	163	67	83	31	9.1			
14	0		0	157	196	62	76	105	23			
15	0		0	58	214	111	71	65	12			
16	0		0	12	984	175	68	45	10			
17	0		0	7.9	630	80	65	55	7.4			
18	0		0	56	581	183	61	40	9.0			
19	5.0		0	15	348	46	59	29	2.4			
20	191		0	8.6	364	67	56	33	12			
21	0		.20	1.0	654	120	53	40	2.8			
22	0		0	0	183	111	51	37	4.3			
23	0		0	0	93	120	49	29	3.3			
24	0		0	0	31	183	47	36	3.7			
25	0		0	0	34	200	46	42	4.9			
26	0		0	0	106	94	44	35	2.2			
27	0		0	0	118	87	42	33	0			
28	0		0	243	102	140	41	37	0			
29	0		0	789	97	130	39	41	0			
30	0		0	38	---	94	36	32	0			
31	0	---	0	15	---	191	---	25	---			---
TOTAL	196.0	0	.20	1917.5	4899.0	5686	2875	1874	363.4	0	0	0
MEAN	6.32	0	.007	61.9	169	183	95.8	60.5	12.1	0	0	0
MAX	191	0	.20	789	984	738	259	233	41	0	0	0
MIN	0	0	0	0	0	46	36	25	0	0	0	0
AC-FT	389	0	.4	3800	9720	11280	5700	3720	721	0	0	0

CAL YR 1979 TOTAL 3028.50 MEAN 8.30 MAX 258 MIN 0 AC-FT 6010
WTR YR 1980 TOTAL 17811.10 MEAN 48.7 MAX 984 MIN 0 AC-FT 35330

LOCATION.--Lat 34°04'16", long 117°17'16", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, at effluent end of chlorine contact chamber, 0.5 mi (0.8 km) upstream from Santa Ana River at E Street bridge, in San Bernardino.

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

REMARKS. -- Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 43 ft³/s (1.22 m³/s) Jan. 24, 1978; minimum daily, 12 ft³/s (0.34 m³/s) Oct. 25, Nov. 4, 5, 7-9, 1972.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	26	25	26	28	28	28	27	28	29	27
2	28	28	26	26	25	33	29	29	28	28	29	29
3	28	28	26	26	25	34	29	28	28	28	28	28
4	27	28	26	26	33	29	28	27	28	28	29	29
5	28	28	26	26	17	29	28	28	28	28	29	28
6	27	28	26	25	25	32	27	28	28	28	30	28
7	27	28	25	34	28	29	28	28	27	28	28	28
8	28	28	27	28	28	28	28	28	27	28	29	29
9	28	28	27	34	27	28	28	27	28	28	28	29
10	28	28	28	30	27	29	28	28	28	28	28	29
11	28	27	27	33	28	31	28	28	27	28	30	28
12	28	28	28	28	28	29	27	29	27	28	29	29
13	28	28	27	28	31	28	27	29	28	28	29	28
14	27	28	27	30	32	29	28	28	27	28	28	28
15	28	28	27	28	34	28	28	28	27	28	30	30
16	27	28	27	27	42	27	27	29	29	29	28	28
17	28	27	28	28	34	29	28	28	29	29	27	29
18	27	28	27	30	36	29	27	28	28	29	30	28
19	28	27	21	29	30	28	27	29	27	28	29	28
20	33	28	25	28	31	28	27	28	28	27	28	29
21	28	28	26	28	30	28	28	28	27	29	29	28
22	29	27	26	28	29	28	28	28	27	29	30	28
23	28	27	25	28	28	28	28	28	28	28	27	28
24	28	27	26	28	27	29	28	28	28	28	27	29
25	28	27	24	28	28	29	28	26	28	28	30	28
26	28	26	26	27	28	30	27	28	28	28	28	29
27	28	25	27	27	28	28	27	28	28	27	30	29
28	28	26	26	31	28	28	28	27	28	28	28	29
29	28	26	26	41	28	28	28	28	28	28	29	29
30	28	21	25	25	---	28	29	27	28	29	27	29
31	27	---	27	26	---	28	---	27	---	28	27	---
TOTAL	867	817	811	886	841	897	834	866	832	872	887	855
MEAN	28.0	27.2	26.2	28.6	29.0	28.9	27.8	27.9	27.7	28.1	28.6	28.5
MAX	33	28	28	41	42	34	29	29	29	29	30	30
MIN	27	21	21	25	17	27	27	26	27	27	27	27
AC-FT	1720	1620	1610	1760	1670	1780	1650	1720	1650	1730	1760	1700
CAL YR 1979	TOTAL	9756	MEAN 26.7	MAX 33	MIN 21	AC-FT	19350					
WTR YR 1980	TOTAL	10265	MEAN 28.0	MAX 42	MIN 17	AC-FT	20360					

11059100 SAN BERNARDINO WATER QUALITY CONTROL PLANT AT SAN BERNARDINO, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

CHEMICAL ANALYSES: Water years 1973 to current year.

SPECIFIC CONDUCTANCE: Water years 1973 to current year.

PERIOD OF DAILY RECORD,--
SPECIFIC COMMENTS--

SPECIFIC CONDUCTANCE: October 1972 to current year.

INSTRUMENTATION.--Specific-conductance recorder since October 1972.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,820 micromhos July 14, 1980; minimum recorded, 485 micromhos Jan. 29, 1980.

EXTREMES FOR CURRENT YEAR. --
SPECIFIC COMPARISONS --

SPECIFIC CONDUCTANCE: Maximum recorded, 1,820 micromhos July 14; minimum recorded, 485 micromhos Jan. 29.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT					
09...	1140	34	900	28.0	567
18...	1045	38	900	27.0	548
NOV					
09...	1112	41	900	25.5	532
JAN					
07...	1020	22	970	27.0	496
FEB					
07...	1300	33	1010	22.0	535
26...	1400	31	1010	23.0	505
APR					
07...	1400	39	900	24.0	493
MAY					
05...	0825	22	900	23.0	522
JUN					
05...	1540	31	950	25.0	472
JUL					
03...	0810	9.6	1050	25.0	595
AUG					
06...	1430	36	850	30.0	514
21...	1325	38	970	29.0	528
SEP					
12...	0810	22	100	27.0	133
26...	0815	23	1025	25.5	534

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

[illegible]

11059100 SAN BERNARDINO WATER QUALITY CONTROL PLANT AT SAN BERNARDINO, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1020	862	947	934	810	868	1010	913	967	1050	943	1000
2	924	808	866	878	724	818	980	890	943	1050	948	1000
3	802	696	760	705	529	601	994	884	946	1040	921	988
4	861	715	771	769	657	703	965	875	935	969	871	929
5	945	819	879	810	684	750	975	901	945	1020	886	1010
6	1140	869	954	848	662	740	932	870	911	1040	946	1000
7	1130	939	1000	766	660	708	1100	864	962	1040	956	1010
8	1010	902	963	789	711	764	1130	993	1070	1030	982	1010
9	986	886	929	807	691	751	1160	1020	1090	1020	956	997
10	896	806	862	850	706	772	1160	1020	1100	1000	904	945
11	926	802	860	872	716	797	1130	991	1070	966	874	915
12	---	---	---	895	763	824	1060	967	1030	1030	892	949
13	---	---	---	963	807	881	1030	908	989	1060	960	1010
14	---	---	---	897	791	842	1130	943	1010	1000	922	970
15	---	---	---	902	784	836	1140	1000	1080	1020	930	991
16	---	---	---	862	734	807	1150	1010	1080	1030	960	1000
17	---	---	---	921	755	817	1150	1010	1070	1010	916	979
18	---	---	---	953	829	889	1060	957	1020	994	910	959
19	---	---	---	912	794	847	1070	998	1040	1040	914	965
20	---	---	---	966	816	893	1050	960	1010	1100	986	1040
21	---	---	---	947	827	892	1040	927	994	1030	968	1010
22	---	---	---	903	789	862	1060	988	1030	1040	944	999
23	---	---	---	871	781	839	1080	994	1050	1030	980	1010
24	---	---	---	946	798	868	1080	999	1040	1030	942	985
25	---	---	---	960	812	901	1060	976	1020	958	890	930
26	---	---	---	965	811	893	1040	930	998	992	892	932
27	1040	886	963	959	867	922	1040	925	981	1020	894	947
28	987	847	903	974	886	939	1080	908	994	1070	974	1030
29	959	819	895	966	864	924	1080	1010	1060	1040	984	1020
30	---	---	---	930	854	901	1080	941	1020	1060	946	1020
31	---	---	---	965	847	896	---	---	---	1030	922	980
MONTH	---	---	---	974	529	830	1160	864	1020	1100	871	985
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	968	910	943	959	849	908	780	676	727	964	846	898
2	1010	898	946	1010	939	977	689	609	663	1000	875	930
3	1040	948	1010	1040	844	928	677	591	635	1090	914	994
4	1050	938	991	938	838	895	697	599	634	1090	913	990
5	1070	952	1020	862	756	807	793	657	712	1010	914	966
6	1080	943	1020	881	777	820	834	658	746	1020	909	954
7	1020	901	969	853	799	827	860	820	841	955	873	906
8	960	882	924	917	853	883	900	816	862	1040	902	946
9	1010	877	932	961	845	905	891	801	853	1020	925	978
10	1010	916	971	972	884	924	874	826	853	1020	902	965
11	1020	920	973	996	906	954	934	810	852	1020	921	982
12	993	911	953	1130	912	1020	933	841	904	1040	904	973
13	958	890	930	1650	980	1290	990	842	910	1010	879	945
14	946	848	901	1820	862	1440	1010	857	951	883	793	853
15	903	831	870	911	827	867	1030	965	1010	914	770	849
16	964	828	876	923	811	870	976	898	936	939	817	883
17	981	881	936	873	799	845	919	831	881	1040	904	973
18	979	933	961	869	797	838	1010	914	963	924	782	862
19	974	868	930	810	742	778	1040	948	995	901	767	856
20	953	865	921	800	752	775	1160	939	1030	879	743	821
21	931	861	900	822	720	756	1160	964	1050	816	728	783
22	886	816	850	844	752	804	1190	975	1080	862	720	790
23	991	841	890	882	746	803	1140	946	1020	881	755	844
24	996	872	940	871	751	816	973	871	924	860	734	806
25	924	850	895	803	741	775	1030	858	939	866	764	817
26	869	809	846	767	679	726	1030	915	980	831	757	794
27	890	810	853	723	657	695	985	891	944	968	874	936
28	894	788	845	758	626	691	1040	936	994	930	854	905
29	847	743	795	782	696	746	1200	931	1020	980	846	906
30	844	768	803	786	678	734	1210	950	1060	980	914	954
31	---	---	---	774	680	735	941	853	901	---	---	---
MONTH	1080	743	920	1820	626	866	1210	591	899	1090	720	902
YEAR	1820	485	921									

SANTA ANA RIVER BASIN

11059300 SANTA ANA RIVER AT E STREET, NEAR SAN BERNARDINO, CA

LOCATION.--Lat 34°04'13", long 117°17'21", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, 500 feet (150 m) upstream from E Street bridge, 0.7 mi (1.1 km) downstream from San Timoteo Creek, 1 mi (2 km) upstream from Warm Creek, 3 mi (5 km) south of San Bernardino, and 26 mi (42 km) downstream from Big Bear Lake.

DRAINAGE AREA.--532 mi² (1,378 km²).

PERIOD OF RECORD.-- March 1939 to September 1954, October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 950 ft (289.6 m), from topographic map. Prior to Nov. 10, 1950, water-stage recorder on right bank 500 feet (150 m) downstream at datum 964.50 ft (293.980 m) National Geodetic Vertical Datum of 1929. Nov. 11, 1950 to Sept. 30, 1954, water-stage recorder on both banks 500 feet (150 m) downstream at datum 964.50 ft (293.980 m) NGVD. Oct. 1, 1966 to Sept. 30, 1976 water-stage recorder on right bank 500 feet (150 m) downstream at datum 954.50 ft (290.932 m) NGVD. Oct. 1, 1976 to Sept. 30, 1977 gage was removed for channel construction.

REMARKS.--Records poor. Flow partly regulated by Big Bear Lake (station 11049000) 26 mi (42 km) upstream. Natural flow of stream affected by ground-water withdrawals and diversion for domestic use and irrigation above station. Effluent from sewage reclamation plant 0.4 mi (0.6 km) 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 ft³/s (0.354 m³/s), 9,050 acre-ft/yr (11.2 hm³/yr); 14 years (water years 1967-80), 97.2 ft³/s (2.753 m³/s), 70,420 acre-ft/yr (86.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,000 ft³/s (793 m³/s) Feb. 25, 1969, gage height 11.9 ft (3.63 m), site and datum then in use; maximum gage height, 16.50 ft (5.029 m) Jan. 23, 1943, site and datum then in use, discharge uncertain, but was probably less than 8,000 ft³/s (227 m³/s); no flow many days prior to 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28.3 m³/s) and maximum(*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0900	11,000 312	11.15 3.399	Mar. 6	1630	4,000 113	11.60 3.536
Feb. 18	1000	*14,500 411	13.40 4.084	May 10	1100	1,190 33.7	9.92 3.024
Mar. 2	2100	4,800 136	11.90 3.627				

Minimum daily discharge, 25 ft³/s (0.708 m³/s) Nov. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	28	29	28	800	1500	517	670	206	168	42	40
2	28	28	28	29	400	2050	532	660	180	161	40	40
3	28	28	30	29	390	4010	592	554	168	161	39	38
4	27	28	29	29	350	3500	828	450	164	154	39	38
5	28	28	29	30	320	2000	978	435	157	151	39	38
6	27	28	28	29	300	2690	915	535	161	149	38	40
7	27	28	28	30	280	1940	800	612	157	130	38	40
8	28	28	27	30	270	1710	780	724	154	128	38	39
9	28	28	28	158	260	1530	760	749	149	118	36	36
10	28	28	28	306	250	1440	750	633	150	108	36	36
11	28	27	28	655	230	1100	740	262	150	104	37	37
12	28	28	28	206	220	1070	730	226	150	97	37	37
13	28	28	28	157	650	1100	720	243	150	92	34	36
14	27	28	28	435	2000	1090	720	275	150	90	33	36
15	28	28	28	357	3200	1190	800	226	150	86	34	36
16	27	28	28	237	4300	910	830	237	150	84	35	35
17	28	27	29	275	7200	940	700	231	150	79	36	34
18	27	28	28	392	7400	950	690	281	150	74	39	36
19	28	28	27	249	5300	885	680	281	151	71	42	36
20	33	28	27	184	5000	612	680	295	151	66	41	36
21	28	28	28	168	6000	517	710	249	161	66	40	36
22	29	27	28	160	4000	724	730	202	149	63	40	35
23	28	27	28	170	2500	677	780	231	140	59	39	34
24	28	27	28	160	2000	749	850	243	151	59	40	34
25	28	27	26	160	1600	655	810	220	149	55	42	34
26	28	28	28	160	1500	749	760	161	157	50	42	34
27	28	28	29	160	1400	573	750	151	168	48	40	34
28	28	27	28	920	1300	592	760	184	164	47	39	34
29	28	26	28	6500	1350	700	700	202	164	45	40	35
30	28	25	28	1900	---	915	680	184	168	45	39	33
31	27	---	29	1100	---	592	---	202	---	42	40	---
TOTAL	867	828	871	15403	60770	39660	22272	10808	4719	2840	1194	1087
MEAN	28.0	27.6	28.1	497	2096	1279	742	349	157	91.6	38.5	36.2
MAX	33	28	30	6500	7400	4010	978	749	206	168	42	40
MIN	27	25	26	28	220	517	517	151	140	42	33	33
AC-FT	1720	1640	1730	30550	120500	78670	44180	21440	9360	5630	2370	2160
CAL YR 1979	TOTAL	28045	MEAN	76.8	MAX	1680	MIN	24	AC-FT	55630		
WTR YR 1980	TOTAL	161319	MEAN	441	MAX	7400	MIN	25	AC-FT	320000		

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 (0.3 km) downstream from State Highway 395 bridge, and 2.0 mi (3.2 km) southeast of San Bernardino.

DRAINAGE AREA.--15.0 mi² (38.9 km²).

PERIOD OF RECORD.--February 1964 to September 1972, October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 960 ft (293 m), from topographic map. Prior to Oct. 1, 1974, at site 0.1 mi (0.2 km) upstream at different datum.

REMARKS.--Records fair. Natural channel prior to September 1972; concrete-lined channel October 1974 to current year. No regulation or diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--8 years (water years 1965-72), 1.61 ft³/s (0.046 m³/s), 1,170 acre-ft/yr (1.44 hm³/yr); 6 years (water years 1975-80), 18.2 ft³/s (0.515 m³/s), 13,190 acre-ft/yr (16.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft³/s (340 m³/s), estimated, March 1, 1978, gage height unknown; no flow some days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft³/s (66.0 m³/s), Feb. 16, gage height, 2.88 ft (0.878 m); no flow for several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	.02	.20	.19	.53	16	20	63	50	41	21	3.6
2	0	.10	.21	.19	.62	128	27	63	34	40	12	3.1
3	.05	.02	.21	.19	.53	67	30	60	43	40	9.7	2.7
4	.03	.29	.25	.34	.56	4.0	29	56	46	40	11	2.5
5	.02	0	.27	.19	.54	25	33	50	31	40	9.7	2.3
6	0	.07	.34	.19	.58	21	28	71	34	37	3.4	2.2
7	.05	.11	.34	1.4	.55	1.8	33	107	38	34	2.8	2.2
8	.01	.64	.32	4.6	.59	2.4	34	133	37	37	4.6	2.1
9	.01	.02	.34	122	.55	1.4	40	139	39	40	7.7	2.1
10	0	0	.34	60	.35	4.0	32	173	41	37	6.0	2.2
11	.15	.01	.33	88	.38	2.4	43	128	44	34	4.0	2.2
12	.04	.08	.23	6.8	.81	1.8	32	93	40	32	12	2.2
13	0	.03	.24	37	122	1.4	32	75	44	37	16	2.3
14	0	.01	.22	27	122	1.8	34	93	44	40	18	2.8
15	0	.10	.22	.80	107	4.6	36	88	44	34	15	3.1
16	.10	.07	.26	.80	610	4.0	41	88	45	30	15	3.9
17	.15	.91	.25	2.4	84	5.3	41	84	45	21	11	4.8
18	.15	.14	.39	40	173	19	36	79	44	27	12	5.8
19	6.2	.07	.47	.80	53	16	36	88	46	23	12	6.8
20	145	.07	.35	.80	46	8.7	31	88	47	30	16	7.7
21	.24	.10	5.0	.80	25	12	34	88	47	43	19	6.9
22	.08	.12	.09	.80	.85	18	45	88	45	40	19	9.2
23	.22	.15	0	.80	.67	15	46	88	47	34	17	11
24	.11	.04	.22	.80	.61	25	51	88	50	40	13	4.1
25	.13	.08	.34	.80	.41	29	53	88	49	37	10	1.8
26	.03	.10	.34	.80	9.7	22	46	88	46	34	8.0	2.1
27	.07	.10	.09	.80	21	18	50	75	47	34	6.6	2.3
28	.01	.14	.09	162	24	15	41	75	47	32	5.5	2.3
29	0	.15	.09	280	15	15	60	56	49	30	4.7	2.3
30	0	.13	.09	1.2	---	14	63	67	46	27	4.4	2.3
31	.05	---	.19	1.0	---	13	---	67	---	25	3.9	---
TOTAL	152.90	3.87	12.32	843.49	1420.83	531.6	1157	2687	1309	1070	330.0	110.9
MEAN	4.93	.13	.40	27.2	49.0	17.1	38.6	86.7	43.6	34.5	10.6	3.70
MAX	145	.91	5.0	280	610	128	63	173	50	43	21	11
MIN	0	0	0	.19	.35	1.4	20	50	31	21	2.8	1.8
AC-FT	303	7.7	24	1670	2820	1050	2290	5330	2600	2120	655	220
CAL YR 1979 TOTAL	1563.14			MEAN 4.28	MAX 145	MIN 0	AC-FT 3100					
WTR YR 1980 TOTAL	9628.91			MEAN 26.3	MAX 610	MIN 0	AC-FT 19100					

SANTA ANA RIVER BASIN

11060500 MEEKS AND DALEY CANAL NEAR COLTON, CA

LOCATION.--Lat 34°04'47", long 117°18'00", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, 1.5 mi (2.4 km) northeast of Colton.

PERIOD OF RECORD.--September 1920 to current year. Published with station Warm Creek near Colton, October 1950 to September 1961.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 965 ft (294 m), from topographic map.

REMARKS.--Records good. All flow passing station is pumped from ground-water basin for irrigation in vicinity of Colton, Riverside, and Corona. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 25 ft³/s (0.71 m³/s) Mar. 2, 1938; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	6.2	4.5	0	2.0	3.3	4.2	2.3	2.4	.70	2.4	1.2
2	5.0	6.2	4.4	7.8	2.1	3.4	3.9	2.6	2.6	.83	2.1	1.2
3	5.0	6.2	4.4	13	2.1	3.4	3.9	2.5	2.4	.91	2.1	1.2
4	5.0	6.2	4.3	13	2.2	3.4	3.9	2.6	2.4	.83	2.1	1.2
5	5.0	6.5	4.3	13	2.2	3.6	3.9	2.6	2.4	.70	2.0	1.2
6	5.0	6.3	4.2	13	2.1	3.6	3.9	2.6	1.9	.57	2.1	1.2
7	4.4	5.7	3.9	12	1.8	3.9	3.9	2.5	1.7	.83	2.1	1.2
8	4.1	5.3	3.9	12	1.5	3.9	3.9	2.4	1.6	.96	1.9	1.2
9	3.9	5.3	3.9	4.6	1.5	3.9	3.9	2.4	1.5	1.3	1.9	1.2
10	3.9	5.3	3.9	1.1	1.5	3.9	3.6	2.4	1.4	1.5	1.7	1.2
11	3.9	5.2	3.9	1.1	1.6	3.9	3.1	2.4	1.3	1.5	1.7	1.3
12	4.2	5.2	3.6	1.2	2.2	4.2	3.1	2.6	1.3	1.5	1.7	1.3
13	4.4	5.2	3.6	1.3	2.6	4.2	3.1	2.4	.99	1.3	1.5	1.3
14	4.2	5.1	3.6	1.4	2.8	4.2	3.1	2.4	.86	1.3	1.5	1.4
15	4.2	5.1	3.6	1.5	3.0	3.9	3.1	2.4	.83	1.3	1.5	1.4
16	4.2	5.1	3.4	1.6	3.2	3.9	2.6	2.4	.95	1.3	1.3	1.4
17	4.0	5.0	3.4	1.6	3.3	3.9	2.4	2.4	.85	1.3	1.3	1.5
18	4.2	5.0	3.4	1.7	3.3	3.9	1.9	2.4	.83	1.3	1.3	1.5
19	4.2	5.0	3.4	1.7	3.4	3.9	.97	2.4	.48	1.3	1.3	1.5
20	3.5	4.9	3.1	1.7	3.3	3.9	0	2.2	.57	1.7	1.3	1.6
21	.16	4.9	3.4	1.9	3.4	3.9	0	2.3	.57	2.4	1.3	1.6
22	0	4.9	1.1	1.9	3.3	3.9	0	2.6	.36	2.4	1.3	1.6
23	0	4.8	0	1.9	3.3	3.9	.47	2.6	0	2.4	1.3	1.7
24	0	4.8	0	1.9	3.5	3.9	1.7	2.6	0	2.4	1.3	1.7
25	0	4.8	0	1.7	3.6	4.0	1.8	2.6	.84	2.8	1.3	1.7
26	0	4.7	1.6	1.7	3.6	4.2	1.9	2.8	1.3	2.8	1.3	1.8
27	.48	4.7	.32	1.7	3.6	4.2	1.9	2.8	1.3	2.8	1.3	1.8
28	3.9	4.6	.10	1.7	3.3	4.2	1.9	2.8	.96	2.3	1.3	1.8
29	5.5	4.6	0	1.9	3.3	4.2	1.9	2.8	.70	2.1	1.3	1.9
30	6.2	4.5	0	1.9	---	4.2	2.0	2.7	.77	2.1	1.2	1.9
31	6.2	---	0	1.9	---	4.2	---	2.6	---	2.4	1.2	---
TOTAL	109.74	157.3	83.22	124.4	78.6	121.0	75.94	78.1	36.06	49.83	48.9	43.7
MEAN	3.54	5.24	2.68	4.01	2.71	3.90	2.53	2.52	1.20	1.61	1.58	1.46
MAX	6.2	6.5	4.5	13	3.6	4.2	4.2	2.8	2.6	2.8	2.4	1.9
MIN	0	4.5	0	0	1.5	3.3	0	2.2	0	.57	1.2	1.2
AC-FT	218	312	165	247	156	240	151	155	72	99	97	87
CAL YR 1979	TOTAL	1496.02	MEAN 4.10	MAX	8.6	MIN 0	AC-FT 2970					
WTR YR 1980	TOTAL	1006.79	MEAN 2.75	MAX	13	MIN 0	AC-FT 2000					

11062000 LYTLE CREEK NEAR FONTANA, CA

LOCATION.--Lat 34°12'44", long 117°27'26", in SB4NW4SE4 sec.36, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 75 ft (20 m) upstream from highway bridge, 0.7 mi (1.1 km) upstream from right tributary, 2.3 mi (3.7 km) downstream from Lytle Creek conduit, and 8 mi (13 km) north of Fontana.

DRAINAGE AREA.--46.3 mi² (119.9 km²).

PERIOD OF RECORD.--October 1918 to current year. Combined records of Lytle Creek and diversions, October 1898 to December 1899, October 1904 to current year (published as "at mouth of canyon near Rialto" 1898-99, as "near San Bernardino" 1904-18, and as Lytle Creek and Fontana pipeline near Fontana 1919-31). Monthly discharge only for some periods published in WSP 1315-B.

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 (725 m), from topographic map. October 1918 to Mar. 21, 1938, at site 1 mi (1.6 km) downstream at different datum. Mar. 22, 1938, to Nov. 20, 1963, at site 75 ft (20 m) downstream at datum 4.58 ft (1.396 m) lower. Sharp-crested weirs at different datum.

REMARKS.--Records, creek only, poor; combined creek and diversion, poor. No regulation above station. Southern California Edison Co.'s Lytle Creek conduit diverts 2.3 mi (3.7 km) 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: 62 years, 17.7 ft³/s (0.501 m³/s), 12,820 acre-ft/yr (15.8 hm³/yr).

Combined creek and diversions: 77 years (water years 1899, 1905-80), 45.3 ft³/s (1.283 m³/s), 32,820 acre-ft/yr (40.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 35,900 ft³/s (1,020 m³/s) Jan. 25, 1969, gage height, 15.0 ft (4.57 m), from floodmark, from rating curve extended above 570 ft³/s (16.1 m³/s) on basis of slope-area measurements at gage heights 10.78 ft (3.286 m) and 15.0 ft (4.57 m); no flow at times most years. Combined creek and diversions: Maximum discharge, 35,900 ft³/s (1,020 m³/s) Jan. 25, 1969; minimum daily, 0.12 ft³/s (0.003 m³/s) June 21, 22, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s), and maximum (*), from rating curve extended above 3,000 ft³/s (85.0 m³/s) on basis of slope-area measurement at gage height 10.6 ft (3.23 m):

Date	Time	Creek Discharge		Gage height		Combined Creek and Diversions Discharge	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Jan. 29	0300	6,490	184	10.6	3.23	6,500	184
Feb. 14	0230	799	22.6	5.26	1.603	808	22.9
Feb. 15	0800	2,690	76.2	6.06	1.847	2,700	76.5
Feb. 16	1900	*10,330	293	9.22	2.810	10,340	293
Feb. 18	1400	3,590	102	7.50	2.286	3,600	102
Feb. 19	1930	5,200	147	8.04	2.451	5,210	148
Feb. 21	1100	2,930	83.0	7.22	2.201	2,940	83.3
Mar. 2	2000	1,170	33.1	6.36	1.939	1,190	33.7
Mar. 5	2030	Unknown		4.78	1.457	Unknown	

Creek only: Minimum daily discharge, 3.4 ft³/s (0.096 m³/s) Jan. 1.

Combined creek and diversions: Minimum daily discharge, 27 ft³/s (0.76 m³/s) Jan. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	15	9.8	3.4	63	289	123	114	117	82	56	50
2	23	15	9.8	3.7	53	470	132	117	126	83	56	49
3	24	15	9.2	3.7	48	524	123	117	123	83	56	49
4	24	15	8.6	3.7	46	300	117	117	114	82	60	48
5	24	15	8.6	3.4	42	490	111	117	111	82	60	48
6	24	14	8.6	3.7	39	690	108	117	111	82	63	47
7	24	14	8.6	3.7	46	530	106	117	109	81	63	46
8	24	14	7.6	3.7	44	460	108	117	106	72	63	45
9	23	14	6.7	67	42	390	111	117	103	70	52	43
10	23	13	6.7	60	39	440	111	139	103	68	54	42
11	23	13	6.3	92	39	360	117	135	100	65	56	38
12	22	12	5.4	55	39	320	117	135	100	65	58	36
13	22	12	5.1	30	83	300	114	135	98	65	60	36
14	22	12	5.1	44	378	280	108	129	93	65	65	35
15	22	12	4.7	42	1150	260	108	117	86	65	63	31
16	23	12	4.7	26	2820	250	108	114	88	60	61	30
17	23	12	4.7	22	842	240	107	114	86	63	59	29
18	23	12	5.1	20	1700	220	106	114	88	65	58	26
19	23	12	5.1	17	1910	212	106	114	85	60	57	30
20	26	12	5.1	14	2240	209	106	114	85	63	56	36
21	22	12	5.4	13	2200	212	123	123	88	63	56	38
22	20	12	5.8	11	1220	200	114	123	83	63	55	35
23	19	11	5.8	9.4	740	195	103	123	78	63	54	31
24	18	10	5.8	8.3	591	195	90	123	81	63	53	29
25	18	10	5.8	7.3	501	186	83	123	81	65	53	26
26	17	10	5.4	7.3	437	183	83	117	81	63	53	26
27	17	10	5.1	7.3	374	166	88	117	81	65	52	22
28	17	10	5.1	123	341	158	98	117	81	65	52	18
29	17	10	4.4	1720	300	153	106	111	82	68	51	14
30	17	9.8	4.4	200	---	153	108	108	82	61	51	18
31	16	---	4.0	80	---	142	---	108	---	58	50	---
TOTAL	663	369.8	192.5	2704.6	18367	9177	3243	3703	2850	2118	1756	1051
MEAN	21.4	12.3	6.21	87.2	633	296	108	119	95.0	68.3	56.6	35.0
MAX	26	15	9.8	1720	2820	690	132	139	126	83	65	50
MIN	16	9.8	4.0	3.4	39	142	83	108	78	58	50	14
AC-FT	1320	733	382	5360	36430	18200	6430	7340	5650	4200	3480	2080
CAL YR 1979 TOTAL	13287.3		MEAN 36.4	MAX 183	MIN 4.0	AC-FT 26360						
WTR YR 1980 TOTAL	46194.9		MEAN 126	MAX 2820	MIN 3.4	AC-FT 91630						

SANTA ANA RIVER BASIN

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 1979 TO SEPTEMBER 1980

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	45	38	28	78	315	163	159	168	130	102	92
2	55	45	38	29	72	492	173	162	177	129	101	92
3	56	45	37	29	79	531	164	162	174	131	101	92
4	56	45	36	29	84	316	157	162	165	130	106	90
5	56	45	36	27	80	521	151	163	162	130	105	90
6	56	44	36	29	76	724	148	162	162	129	110	89
7	55	44	36	28	84	565	149	158	161	128	111	88
8	55	44	35	30	82	495	153	157	158	119	110	87
9	54	44	35	80	79	423	156	159	154	117	97	84
10	54	43	35	74	76	472	156	182	152	114	98	83
11	54	43	34	107	76	391	163	177	150	111	100	79
12	53	42	33	71	76	351	162	177	150	110	102	77
13	53	40	33	56	110	335	158	176	148	110	105	77
14	53	40	33	70	387	320	151	172	142	110	112	75
15	53	40	32	68	1150	301	153	161	134	110	110	71
16	54	40	32	56	2830	293	154	158	139	106	108	70
17	54	41	32	54	847	285	151	158	137	109	105	69
18	54	41	32	51	1700	267	150	158	139	110	103	66
19	54	41	32	49	1910	258	149	159	136	105	103	69
20	59	41	32	45	2240	254	147	160	137	108	101	75
21	55	41	32	44	2200	257	164	169	139	109	101	77
22	52	41	33	41	1220	245	155	169	135	108	100	74
23	51	40	33	39	746	238	144	169	129	108	99	69
24	49	38	33	37	596	238	131	169	131	108	97	67
25	49	38	33	36	515	229	124	169	132	110	97	65
26	48	38	32	36	464	223	124	162	130	107	97	65
27	48	38	32	36	401	208	129	160	129	109	95	60
28	48	38	30	151	367	200	140	161	130	111	95	56
29	48	37	29	1720	326	194	151	155	130	115	95	52
30	48	38	29	207	---	193	153	158	130	107	94	55
31	46	---	28	94	---	181	---	159	---	104	92	---
TOTAL	1635	1240	1031	3451	18951	10315	4523	5082	4360	3542	3152	2255
MEAN	52.7	41.3	33.3	111	653	333	151	164	145	114	102	75.2
MAX	59	45	38	1720	2830	724	173	182	177	131	112	92
MIN	46	37	28	27	72	181	124	155	129	104	92	52
AC-FT	3240	2460	2040	6850	37590	20460	8970	10080	8650	7030	6250	4470
CAL YR 1979	TOTAL	26063	MEAN	71.4	MAX	199	MIN	28	AC-FT	51700		
WTR YR 1980	TOTAL	59537	MEAN	163	MAX	2830	MIN	27	AC-FT	118100		

LOCATION.--Lat 34°16'01", long 117°27'33", in SE₄SW₄SE₄ sec.12, T.2 N., R.6 W., San Bernardino County, Hydrologic Unit 18070203, on left bank 1,300 ft (400 m) upstream from Lone Pine Creek and 1.2 mi (1.9 km) north of Keenbrook.

PERIOD OF RECORD.--December 1919 to September 1971, October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,630 ft (802 m), from topographic map. Prior to Oct. 24, 1935, at site 1,300 ft (400 m) downstream at different datum. Oct. 24, 1935, to Jan. 26, 1966, at site 500 ft (150 m) upstream at datum 6.68 ft (2.036 m) higher.

REMARKS.--Records poor. No gage-height record Mar. 6 to September 30. No regulation or diversion above station.
See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--54 years (water years 1921-71, 1978-80), 11.1 ft³/s (0.314 m³/s), 8,040 acre-ft/yr (9.91 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,500 ft³/s (411 m³/s) Mar. 2, 1938, gage height, 26.0 ft (7.92 m) datum then in use, on basis of slope-area measurement of peak flow; minimum daily, 0.05 ft³/s (0.001 m³/s) June 25, 1920.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 11	0645	329	9.32	4.13	1.259	Feb. 16	1745	*4,240	120	9.59	2.923
Jan. 29	0300	2,580	73.1	7.04	2.146	Feb. 19	Unknown	Unknown		Unknown	
Feb. 14	0130	2,230	63.2	6.65	2.027	Mar. 3	2000	Unknown		Unknown	
Feb. 15	0500	2,370	67.1	6.82	2.079						

Minimum daily discharge, 4.8 ft³/s (0.14 m³/s) Dec. 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	5.8	6.4	6.4	30	52	28	17	12	8.8	7.8	7.2
2	6.4	5.8	7.0	5.8	24	150	26	16	12	8.7	7.8	7.2
3	6.0	5.8	7.7	5.8	23	95	24	15	12	8.6	7.8	7.2
4	5.8	5.8	7.7	5.8	21	60	23	15	12	8.5	7.8	7.2
5	5.8	5.8	6.4	5.8	20	70	22	15	12	8.5	7.7	7.1
6	5.3	5.8	6.4	5.8	19	100	22	15	12	8.4	7.7	7.1
7	5.3	5.8	7.0	5.8	18	78	21	15	12	8.3	7.7	7.1
8	5.3	6.4	7.7	5.8	17	62	21	14	12	8.3	7.7	7.1
9	5.3	6.4	5.8	4.9	17	60	21	23	12	8.3	7.7	7.0
10	5.3	5.8	4.8	11	17	70	20	30	11	8.3	7.7	7.0
11	5.3	5.8	4.8	98	17	60	20	18	11	8.3	7.6	7.0
12	5.3	5.8	4.8	19	16	56	20	15	11	8.2	7.6	7.0
13	5.3	5.8	4.8	16	290	54	19	14	11	8.2	7.6	7.0
14	5.3	5.8	4.8	18	885	51	19	14	11	8.2	7.6	7.0
15	5.8	5.3	5.3	13	778	48	19	13	10	8.2	7.5	7.0
16	5.3	7.0	5.3	12	1380	45	19	13	10	8.1	7.5	7.0
17	5.3	7.0	5.3	11	492	44	18	13	10	8.1	7.5	7.0
18	5.3	7.0	5.3	9.8	660	48	18	13	9.9	8.1	7.5	7.0
19	5.3	7.0	5.3	9.8	1060	43	18	13	9.6	8.1	7.5	7.0
20	7.7	7.0	5.3	11	710	40	18	13	9.5	8.1	7.5	6.9
21	6.4	7.0	5.3	12	470	38	18	13	9.5	8.0	7.4	6.9
22	5.8	7.0	5.3	12	325	36	20	13	9.4	8.0	7.4	6.9
23	5.3	7.0	5.3	12	200	34	19	12	9.3	8.0	7.4	6.9
24	5.3	6.4	5.3	11	130	32	17	12	9.2	8.0	7.4	6.9
25	5.3	6.0	5.8	9.8	99	30	17	12	9.2	7.9	7.4	6.9
26	5.3	5.3	7.0	9.8	81	33	17	12	9.1	7.9	7.3	6.9
27	5.8	5.3	7.0	9.8	68	32	17	12	9.0	7.9	7.3	6.9
28	5.3	5.3	6.4	249	56	28	16	12	9.0	7.9	7.3	6.9
29	5.3	5.8	6.4	708	54	27	16	12	8.9	7.9	7.3	6.9
30	5.3	5.8	6.4	210	---	26	16	12	8.8	7.9	7.3	6.9
31	5.8	---	6.4	37	---	25	---	12	---	7.9	7.2	---
TOTAL	173.7	183.6	184.5	1605.0	7977	1627	589	448	313.4	253.6	233.5	210.1
MEAN	5.60	6.12	5.95	51.8	275	52.5	19.6	14.5	10.4	8.18	7.53	7.00
MAX	7.7	7.0	7.7	708	1380	150	28	30	12	8.8	7.8	7.2
MIN	5.3	5.3	4.8	5.8	16	25	16	12	8.8	7.9	7.2	6.9
AC-FT	345	364	366	3180	15820	3230	1170	889	622	503	463	417
CAL YR 1979	TOTAL	4332.4	MEAN	11.9	MAX	79	MIN	4.8	AC-FT	8590		
WTR YR 1980	TOTAL	13798.4	MEAN	37.7	MAX	1380	MIN	4.8	AC-FT	27370		

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 (1.0 km) downstream from confluence of East and West Forks, and 7.5 mi (12.1 km) northwest of San Bernardino.

DRAINAGE AREA.--5.49 mi² (14.22 km²).

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 (634 m), from topographic map. Prior to December 1919, nonrecording gage at site 0.5 mi (0.8 km) downstream at different datum. December 1919 to July 1969, at site 0.4 mi (0.6 km) 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 (0.8 km) 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.--61 years (water years 1914, 1921-80), 2.30 ft³/s (0.065 m³/s), 1.670 acre-ft/yr (2.06 hm³/yr).

EXTREMES FOR PERIOD OF RECORD (1913-14 AND SINCE 1919).--Maximum discharge, 3,720 ft³/s (105 m³/s) Jan. 25, 1969, gage height, 5.40 ft (1.646 m), 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 25 ft³/s (0.71 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	Unknown	Unknown	Unknown	Feb. 21	1130	654 18.5	6.66 2.030
Jan. 11	0900	30 0.85	4.65 1.417	Mar. 3	1100	171 4.84	5.16 1.573
Jan. 14	1300	38.1 1.08	4.67 1.423	Mar. 6	1000	162 4.59	5.02 1.530
Jan. 29	1145	217 6.14	5.48 1.670	Apr. 2	0815	41 1.16	4.28 1.304
Feb. 16	1600	390 11.0	5.98 1.823	May 10	0830	40 1.13	4.25 1.295
Feb. 19	0615	*672 19.0	6.70 2.042				

Minimum daily discharge, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0		0	0	16	55	29	10	8.2	2.8	.01	0
2	0		0	0	13	66	30	9.7	10	2.1	.01	0
3	0		0	0	12	92	27	9.1	13	2.1	.01	0
4	0		.05	0	10	86	25	9.1	12	2.0	.01	0
5	0		.10	0	8.0	86	24	8.5	11	1.8	.01	0
6	0		.07	0	6.9	51	23	8.2	9.1	1.7	.01	0
7	0		.05	0	6.2	45	22	8.5	6.6	1.4	.01	0
8	0		.04	0	4.6	50	21	8.2	6.3	1.3	.01	0
9	0		.04	13	3.4	45	20	8.5	6.3	1.2	0	.01
10	0		.03	15	2.8	46	19	26	6.3	1.1	0	0
11	0		.04	17	2.4	42	19	18	5.7	.98	0	0
12	0		.04	9.3	2.4	41	18	13	4.9	1.3	0	0
13	0		.04	10	15	41	17	11	4.6	2.6	0	0
14	0		.04	21	68	41	16	11	4.4	1.1	0	0
15	0		.03	14	31	41	16	10	3.7	.92	0	0
16	0		.02	8.4	93	40	15	10	3.7	.85	0	0
17	0		.02	6.2	191	40	14	9.7	3.7	.83	0	0
18	0		.02	8.7	254	40	14	9.4	3.7	.67	0	0
19	3.0		.02	6.6	278	41	14	9.1	3.5	.39	0	0
20	28		.02	5.6	249	42	13	9.1	3.5	.40	0	0
21	5.0		.02	4.7	441	41	15	9.1	3.2	.35	0	0
22	2.0		.02	4.2	430	40	16	9.1	3.2	.29	0	0
23	.50		.01	3.5	381	39	12	10	3.2	.22	0	0
24	.10		.01	3.1	220	38	12	9.1	3.0	.07	0	0
25	0		.01	2.6	130	38	12	8.8	2.8	.05	0	0
26	0		.01	2.2	68	38	11	8.8	2.7	.03	0	0
27	0		.01	2.0	65	35	10	8.8	2.4	.02	0	0
28	0		.01	15	64	33	12	8.5	2.4	.02	0	0
29	0		.01	77	59	32	12	8.2	2.2	.01	0	0
30	0		.01	37	---	31	11	8.2	2.2	.01	0	0
31	0	---	.01	15	---	29	---	8.2	---	.01	0	---
TOTAL	38.60	0	.80	301.1	3124.7	1425	519	312.9	157.5	28.02	.08	.01
MEAN	1.25	0	.026	9.71	108	46.0	17.3	10.1	5.25	.90	.003	.0003
MAX	28	0	.10	77	441	92	30	26	13	2.6	.01	.01
MIN	0	0	0	0	2.4	29	10	8.2	2.2	.01	0	0
AC-FT	77	0	1.6	597	6200	2830	1030	621	312	56	.2	.02
a	219	174	180	719	6370	3030	1300	927	575	384	303	249
CAL YR 1979 TOTAL	740.71		MEAN 2.03	MAX 35	MIN 0	AC-FT 1470	a 3400					
WTR YR 1980 TOTAL	5907.71		MEAN 16.1	MAX 441	MIN 0	AC-FT 11720	a 14430					

a Combined discharge, in acre-feet, of Devil Canyon Creek and city of San Bernardino diversion.

SANTA ANA RIVER BASIN

11065000 LYTLE CREEK AT COLTON, CA

LOCATION.--Lat 34°04'44", long 117°18'17", in San Bernardino Grant, San Bernardino County, Hydrologic Unit 18070203, on right bank 400 ft (120 m) downstream from Colton Avenue, 1,930 ft (588 m) upstream from outlet end of channel, and 1.3 mi (2.1 km) northeast of Colton.

DRAINAGE AREA.--172 mi² (445 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 974.67 ft (297.079 m) Corps of Engineers datum.

REMARKS.--Records poor. Flow partly regulated by Lytle Creek spreading grounds 3.2 mi (5.1 km) upstream. Diversions above station for irrigation, power development, domestic use, and ground-water replenishment. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft³/s (496 m³/s) Mar. 4, 1978, gage height, 14.8 ft (4.51 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of discharge for design flood at gage height 21.4 ft (6.52 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,070 ft³/s (229 m³/s) Feb. 16, gage height, 8.90 ft (2.713 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0			0	0	0	.10	0	0		0	18
2	0			0	0	192	0	0	0		0	16
3	0			0	0	323	0	0	0		0	18
4	0			0	0	41	0	0	0		.10	20
5	0			0	0	9.8	0	0	0		0	20
6	0			0	0	201	20	0	0		0	32
7	0			0	0	25	17	0	0		0	32
8	0			0	0	0	0	0	0		0	32
9	0			109	0	0	0	0	0		0	0
10	0			113	0	3.1	0	.78	0		0	2.5
11	0			167	0	0	0	0	0		0	1.8
12	0			6.5	0	0	0	0	0		0	5.8
13	0			7.5	95	0	0	0	0		0	12
14	0			26	580	0	0	0	0		0	12
15	0			.26	910	0	0	0	0		0	8.6
16	0			.20	2530	0	0	0	0		0	7.2
17	0			.10	1020	0	5.7	0	0		0	5.3
18	0			11	1440	6.8	6.4	0	0		0	3.3
19	0			.20	1620	0	0	0	0		0	.93
20	11			.20	880	0	0	0	0		0	5.1
21	0			.20	642	2.1	3.6	0	0		0	6.1
22	0			.20	315	0	.12	0	0		0	6.2
23	0			.10	217	0	0	0	0		0	7.2
24	0			.10	140	24	0	0	19		0	4.2
25	0			.10	98	1.0	0	0	41		0	2.7
26	0			.10	34	2.3	0	0	0		0	0
27	0			.10	.23	0	0	0	0		0	0
28	0			146	.23	0	0	0	0		0	.88
29	0			1370	0	0	.09	0	0		.12	4.2
30	0			1.0	---	0	0	0	.20		6.1	3.5
31	0	---		.50	---	0	---	0	---		18	---
TOTAL	11	0	0	1959.36	10521.46	831.1	53.01	.78	60.20	0	24.32	287.51
MEAN	.35	0	0	63.2	363	26.8	1.77	.025	2.01	0	.78	9.58
MAX	11	0	0	1370	2530	323	20	.78	41	0	18	32
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	22	0	0	3890	20870	1650	105	1.5	119	0	48	570
CAL YR 1979	TOTAL	1384.88	MEAN	3.79	MAX	340	MIN	0	AC-FT	2750		
WTR YR 1980	TOTAL	13748.74	MEAN	37.6	MAX	2530	MIN	0	AC-FT	27270		

11066440 SANTA ANA RIVER AT MISSION BOULEVARD, AT RIVERSIDE, CA

LOCATION.--Lat 33°59'28", long 117°23'36", in Jurupa Grant, Riverside County, Hydrologic Unit 18070203, near right bank on downstream end of pier of Mission Boulevard Bridge between Rubidoux and Riverside.

DRAINAGE AREA.--810 mi² (2,098 km²).

PERIOD OF RECORD.--February 1971 to September 1980 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 758.52 ft (231.197 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. The purpose of this station is to record surface flow entering Riverside narrows from upper Santa Ana River drainage. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--9 years, 79.1 ft³/s (2,240 m³/s), 57,310 acre-ft/yr (70.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s (552 m³/s) Feb. 18, 1980, gage height, 10.40 ft (3.170 m), on basis of slope-conveyance study of maximum flow; maximum gage height, 13.35 ft (4.069 m) Feb. 10, 1978; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum (*), on basis of rating extended to slope-conveyance studies of 16,600 ft³/s (470 m³/s) and 18,600 ft³/s (527 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0600	18,500 524	12.35 3.764	Feb. 21	0900	15,400 436	10.80 3.292
Feb. 15	1200	10,300 292	10.54 3.213	Mar. 3	0130	3,800 108	10.00 3.048
Feb. 18	0630	*19,500 552	10.40 3.170				

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.01	680	1900	500	720	205	131		
2	0	0	0	.01	475	2400	510	680	182	130		
3	0	0	0	.01	365	3400	525	610	180	126		
4	0	0	0	.01	285	2500	680	530	175	123		
5	0	0	0	.01	225	1600	850	500	158	117		
6	0	0	0	.01	190	2200	840	510	158	113		
7	0	0	0	.01	155	1750	790	530	157	112		
8	0	0	0	.45	129	1550	760	620	152	111		
9	0	0	0	380	102	1380	740	720	149	111		
10	0	0	0	500	84	1150	730	680	148	110		
11	0	0	0	1000	72	980	710	450	152	104		
12	0	0	0	250	66	1000	705	360	150	102		
13	0	.20	0	230	60	1010	700	360	149	98		
14	0	0	0	540	1100	990	710	420	0	96		
15	0	0	0	400	3000	1010	730	360	147	92		
16	0	0	0	270	9000	660	760	380	146	30		
17	0	0	0	315	5800	680	740	360	145	29		
18	0	0	0	500	9400	710	710	380	144	27		
19	0	0	0	300	5900	610	700	400	143	23		
20	120	0	0	225	3800	510	690	405	142	24		
21	10	0	.10	190	7500	450	710	330	141	23		
22	2.0	0	.01	165	2200	640	740	285	140	22		
23	0	0	.01	145	3100	520	770	290	138	21		
24	0	0	.01	132	2400	720	820	300	147	21		
25	0	0	.01	120	1900	530	790	260	163	20		
26	0	0	.01	110	1700	630	780	235	158	1.0		
27	0	0	.01	105	1550	360	780	220	140	0		
28	0	.42	.01	1400	1500	380	780	230	135	0		
29	0	.90	.01	6000	1520	440	750	230	135	0		
30	0	.10	.01	2000	---	700	730	230	132	0		
31	0	---	.01	1100	---	560	---	230	---	0		---
TOTAL	132.0	1.62	.20	16377.52	64258	33920	21730	12815	4411	1917.0	0	0
MEAN	4.26	.054	.007	528	2216	1094	724	413	147	61.8	0	0
MAX	120	.90	.10	6000	9400	3400	850	720	205	131	0	0
MIN	0	0	0	.01	60	360	500	220	0	0	0	0
AC-FT	262	3.2	.4	32480	127500	67280	43100	25420	8750	3800	0	0
CAL YR 1979	TOTAL	10023.32	MEAN	27.5	MAX	1600	MIN	0	AC-FT	19880		
WTR YR 1980	TOTAL	155562.34	MEAN	425	MAX	9400	MIN	0	AC-FT	308600		

SANTA ANA RIVER BASIN

11066460 SANTA ANA RIVER AT MWD CROSSING, NEAR ARLINGTON, CA

LOCATION.--Lat 33°58'04", long 117°26'46", in NE¼NE¼SW¼ sec.30, T.2 S., R.5 W., Riverside County, Hydrologic Unit 18070203, on left bank 300 ft (91 m) upstream from MWD crossing, 0.7 mi (1.1 km) downstream from Union Pacific Railroad bridge, 1.2 mi (1.9 km) upstream from bridge on Van Buren Boulevard, and 3.3 mi (5.3 km) north of Arlington.

DRAINAGE AREA.--854 mi² (2,110 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and concrete low-flow control. Altitude of gage is 685 ft (209 m), from topographic map.

REMARKS.--Records fair except for period of no gage-height record, Jan. 30 to Apr. 25, which are 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.--10 years, 92.1 ft³/s (2.608 m³/s), 66,700 acre-ft/yr (82.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 19,500 ft³/s (552 m³/s) Mar. 4, 1978, by flood routing, gage height, 20.23 ft (6.166 m); minimum daily, 15 ft³/s (0.42 m³/s) Sept. 7, 8, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1927, 100,000 ft³/s (2,830 m³/s) Mar. 2, 1938, on basis of slope-area measurement at site 1.2 mi (1.9 km) downstream. Flood of Jan. 22, 1862, 320,000 ft³/s (9,060 m³/s), by slope-conveyance measurement at site 8.1 mi (13.0 km) upstream. Stage at that site was 5 ft (2 m) higher than Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42.5 m³/s) and maximum(*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Oct. 20	1545	2,120 60.0	11.25 3.429	Jan. 15	0115	2,350 66.6	11.35 3.459
Jan. 9	1715	3,210 90.9	11.78 3.591	Jan. 18	0715	1,780 50.4	11.10 3.383
Jan. 11	1015	3,320 94.0	11.88 3.621	Jan. 29	Unknown	Unknown	Unknown

NOTE.--Flows of Feb. 16, 18, and 21, Mar. 3 and 6, probably exceeded base but were not recorded.

Minimum daily discharge, 15 ft³/s (0.42 m³/s) Sept. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	36	35	32	230	1300	400	535	250	130	17	21
2	37	36	35	32	100	1700	390	450	250	130	17	22
3	36	34	36	32	60	2500	380	360	250	130	17	22
4	37	33	36	30	49	2100	370	345	250	130	16	25
5	37	33	37	32	42	1800	370	330	250	130	16	29
6	38	33	36	32	41	3000	380	330	250	120	18	28
7	39	36	37	34	40	2200	400	340	250	120	19	15
8	38	35	37	35	39	2000	420	370	250	120	18	15
9	40	34	39	849	39	1700	450	450	240	120	19	24
10	39	36	40	331	39	1500	490	540	240	120	18	30
11	38	37	40	1580	39	1380	520	462	240	110	19	29
12	38	36	40	158	39	1220	540	430	240	110	19	21
13	38	34	41	100	86	1110	560	410	240	110	20	19
14	38	35	41	845	250	1000	500	380	240	110	22	18
15	38	34	43	1090	900	900	680	360	240	110	23	18
16	38	36	43	259	3000	820	880	370	240	105	20	22
17	37	36	43	391	1000	760	900	523	240	53	23	24
18	36	38	44	813	8300	700	620	445	226	55	22	22
19	37	37	45	258	3600	640	520	435	215	44	23	23
20	388	42	44	91	2000	600	490	403	191	48	22	24
21	45	38	45	90	5100	570	490	386	191	52	27	23
22	40	34	43	31	3600	540	530	377	170	45	26	23
23	40	42	38	31	2700	520	580	313	165	43	25	22
24	39	39	37	32	2200	500	620	303	160	48	22	24
25	39	30	38	34	1800	485	620	297	155	43	23	21
26	38	30	39	33	1600	470	573	352	155	28	22	25
27	38	36	38	37	1400	455	574	309	150	19	21	28
28	37	34	35	1040	1320	440	583	260	145	22	20	20
29	37	36	34	7400	1300	430	547	280	140	19	21	22
30	36	35	32	1300	---	415	534	254	138	18	20	25
31	36	---	33	600	---	405	---	250	---	19	22	---
TOTAL	1528	1065	1204	17652	40913	34160	15911	11649	6361	2461	637	684
MEAN	49.3	35.5	38.8	569	1411	1102	530	376	212	79.4	20.5	22.8
MAX	388	42	45	7400	8300	3000	900	540	250	130	27	30
MIN	36	30	32	30	39	405	370	250	138	18	16	15
AC-FT	3030	2110	2390	35010	81150	67760	31560	23110	12620	4880	1260	1360
CAL YR 1979	TOTAL	24534	MEAN	67.2	MAX	1330	MIN	26	AC-FT	48660		
WTR YR 1980	TOTAL	134225	MEAN	367	MAX	8300	MIN	15	AC-FT	266200		

SANTA ANA RIVER BASIN

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT					
01...	1310	35	800	25.0	461
22...	1225	40	1100	22.0	672
NOV					
08...	1215	35	1150	20.0	657
21...	1315	37	1040	16.0	684
FEB					
05...	1230	42	1080	21.0	946
APR					
25...	1240	617	440	24.0	263
MAY					
15...	1045	355	430	18.0	279
30...	1455	253	440	20.5	338
JUN					
17...	1300	241	425	28.5	311
30...	1245	138	490	30.0	335
JUL					
15...	1115	105	600	29.5	432
31...	1100	23	880	30.0	691
SEP					
04...	1115	25	1100	26.0	729
11...	1250	25	1110	26.5	777

SANTA ANA RIVER BASIN

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA

LOCATION.--Lat 33°57'53", long 117°27'26", in SE&NE&SE& sec.25, T.2 S., R.6 W., Riverside County, Hydrologic Unit 18070203, at effluent end of chlorine contact chambers, 0.4 mi (0.6 km) upstream from Van Buren Boulevard, and 3.1 mi (5.0 km) northwest of Arlington.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1947 to current year. Prior to May 25, 1967, published as "Sheehan ditch."

GAGE.--Two water-stage recorders with concrete controls for plants Nos. 1 and 2. Altitude of both gages are 690 ft (210 m), from topographic map.

REMARKS.--Records poor. Discharge reported is total effluent from city of Riverside's Water Quality Control Plants Nos. 1 and 2, released to river 1.0 mi (1.6 km) downstream from Santa Ana River at MWD crossing (station 11066460).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s (1.25 m³/s) Feb. 18, 1980, result of an additional 5 to 6 ft³/s (0.14 to 0.17 m³/s) effluent caused by transfer of sewage load from Jurupa plant; minimum daily, 16 ft³/s (0.45 m³/s) Feb. 11, 1978, due to temporary shutdown of Plant No. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	32	28	30	32	31	32	31	30	32	33	28
2	30	32	28	31	30	34	32	31	31	33	31	29
3	32	31	30	33	29	38	31	31	31	31	30	31
4	32	31	30	32	31	37	30	30	32	29	32	34
5	30	32	30	31	31	36	30	30	31	28	31	33
6	29	32	30	31	30	42	29	29	31	28	32	33
7	29	32	30	31	30	40	29	29	30	31	32	33
8	30	29	30	31	30	39	28	28	29	31	31	34
9	30	32	30	34	29	37	28	28	32	31	30	34
10	30	31	30	33	28	41	29	31	32	31	30	34
11	32	30	30	32	30	34	30	31	31	32	30	34
12	30	32	31	30	30	38	31	31	31	30	30	34
13	30	32	32	30	34	35	31	31	31	29	30	34
14	30	32	32	30	37	34	31	32	30	32	30	32
15	30	32	32	31	38	33	31	32	29	32	31	34
16	30	32	31	30	39	31	31	32	32	31	32	34
17	31	32	32	30	38	34	31	30	31	31	31	34
18	30	32	31	30	44	33	31	30	30	31	32	34
19	28	32	32	30	39	34	31	32	31	30	32	34
20	29	31	32	30	40	34	31	32	32	30	32	34
21	29	32	30	31	40	32	31	32	30	32	32	33
22	30	31	28	30	38	32	31	31	29	31	32	35
23	29	30	28	30	36	30	31	31	32	32	31	35
24	33	31	28	31	34	32	31	30	31	32	31	34
25	35	31	27	31	35	33	31	27	31	32	32	34
26	33	32	31	31	35	33	31	29	31	31	32	34
27	32	32	31	31	33	34	31	31	31	29	32	33
28	32	32	31	33	34	32	31	31	31	32	32	33
29	32	30	31	33	34	32	31	31	29	31	30	35
30	32	29	30	33	---	29	31	30	29	32	29	34
31	32	---	31	31	---	32	---	30	---	32	28	---
TOTAL	949	941	937	965	988	1066	917	944	921	959	963	1001
MEAN	30.6	31.4	30.2	31.1	34.1	34.4	30.6	30.5	30.7	30.9	31.1	33.4
MAX	35	32	32	34	44	42	32	32	32	33	33	35
MIN	28	29	27	30	28	29	28	27	29	28	28	28
AC-FT	1880	1870	1860	1910	1960	2110	1820	1870	1830	1900	1910	1990
CAL YR 1979	TOTAL	10841	MEAN 29.7	MAX 35	MIN 25	AC-FT 21500						
WTR YR 1980	TOTAL	11551	MEAN 31.6	MAX 44	MIN 27	AC-FT 22910						

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970 to current year.

CHEMICAL ANALYSES: Water years 1970 to current year.

SPECIFIC CONDUCTANCE: Water years 1970 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1969 to current year.

INSTRUMENTATION.--Specific-conductance recorder since October 1969.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,740 micromhos Oct. 29, 1971; minimum recorded, 480 micromhos Apr. 25, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,590 micromhos Feb. 19, 21; minimum recorded, 708 micromhos Sept. 28.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
OCT					
01...	1325	27	1010	27.0	571
22...	1255	35	900	25.0	541
NOV					
08...	1140	38	1080	21.0	591
21...	1025	E32	1080	22.5	631
DEC					
07...	0840	E30	1060	22.5	642
19...	1000	32	1060	21.5	737
FEB					
05...	1055	E31	750	22.5	625
MAR					
03...	1225	38	910	20.0	675
26...	1225	44	1210	21.0	695
MAY					
15...	1000	40	1000	20.0	633
30...	1200	40	1075	23.0	615
JUN					
17...	1330	38	940	25.5	623
30...	1400	40	960	26.5	639
JUL					
15...	1150	39	935	27.0	629
31...	1330	39	950	30.0	663
SEP					
04...	1115	39	975	27.0	606
11...	1300	40	960	27.0	550

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1160	966	1060	1110	1040	1070	1190	1060	1130	1030	960	997
2	1170	1000	1070	1130	1020	1070	1060	1010	1040	1070	942	1010
3	1150	980	1040	1090	978	1030	1160	970	1050	1100	1040	1070
4	1140	1020	1090	1040	974	990	1180	1060	1120	1100	1030	1070
5	1150	1040	1100	1070	952	1000	1170	1060	1120	1130	1060	1080
6	1080	958	1010	1050	952	1000	1110	1020	1070	1140	1050	1080
7	1170	900	975	1120	992	1040	1100	1060	1190	1090	966	1030
8	1120	938	1000	1120	910	1010	1150	1020	1100	1140	1020	1070
9	1110	952	1030	1110	1020	1050	1080	988	1030	1130	948	1010
10	1150	976	1050	1100	998	1050	1170	948	1020	---	---	---
11	1110	978	1050	1000	942	977	1170	1030	1090	1130	938	1010
12	1110	1020	1050	1140	940	1030	1200	1010	1120	1050	974	1020
13	1070	976	1020	1150	1050	1110	1200	1100	1160	974	928	951
14	984	926	956	1150	1040	1090	1220	1100	1170	1050	878	962
15	1090	892	969	1130	1020	1080	1190	1050	1120	1130	960	1030
16	1120	974	1040	1130	1040	1100	1170	1030	1100	1120	1010	1060
17	1140	848	1030	1140	1060	1110	1170	1010	1090	1140	1040	1080
18	1070	982	1020	1040	960	995	1220	1160	1150	1100	982	1040
19	1000	944	969	1110	966	1040	1240	1130	1190	1060	1000	1040
20	1040	910	969	1170	1080	1130	1230	1110	1180	1030	956	994
21	982	898	937	1250	1110	1160	1330	1130	1200	1080	938	1000
22	994	866	928	1100	988	1030	1140	1040	1100	1140	1040	1080
23	1080	980	1020	1150	986	1040	1040	984	1020	1130	1020	1070
24	1130	1020	1060	1100	1040	1070	1110	986	1040	1170	1040	1090
25	1120	1020	1080	1090	1020	1060	1080	976	1040	1160	1060	1110
26	1180	1080	1120	1100	974	1050	1120	936	1030	1100	992	1040
27	1070	982	1040	1180	1060	1120	1150	1030	1080	986	944	966
28	974	902	946	1290	1170	1230	1150	1050	1100	1030	872	942
29	1080	928	980	1320	1150	1210	1080	1040	1060	1090	730	895
30	1100	1000	1050	1160	1080	1130	1120	1020	1080	1120	1000	1060
31	1130	976	1040	---	---	---	1060	1020	1040	1130	1020	1070
MONTH	1180	848	1020	1320	910	1070	1330	936	1100	1170	730	1030

11066480 RIVERSIDE WATER QUALITY CONTROL PLANT AT RIVERSIDE NARROWS, NEAR ARLINGTON, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1140	1030	1090	1330	1190	1270	1390	1200	1270	1090	952	995
2	1150	1080	1120	1220	1080	1170	1290	1160	1210	---	---	---
3	1090	1030	1070	---	---	---	1170	1080	1130	---	---	---
4	1190	992	1090	---	---	---	1150	1060	1110	---	---	---
5	1190	1080	1140	---	---	---	1170	1050	1110	---	---	---
6	1200	1080	1140	---	---	---	1070	1010	1040	1170	1030	1090
7	1150	1030	1100	---	---	---	1180	992	1070	1120	882	1060
8	1120	1010	1060	---	---	---	1220	1110	1160	1120	890	1050
9	1050	958	1000	---	---	---	1200	1050	1130	1100	1010	1050
10	968	918	951	---	---	---	1280	1110	1180	1050	986	1020
11	1090	904	985	---	---	---	1270	1120	1180	984	934	962
12	1100	998	1050	---	---	---	1150	1040	1090	---	---	---
13	1110	1020	1060	---	---	---	1090	1010	1050	---	---	---
14	1250	832	994	---	---	---	1230	1010	1120	1100	1020	1050
15	1240	1080	1160	---	---	---	1230	1090	1170	---	---	---
16	1320	1080	1250	---	---	---	---	---	---	---	---	---
17	1390	1090	1260	---	---	---	1130	1030	1070	---	---	---
18	1490	1240	1350	---	---	---	---	---	---	---	---	---
19	1590	1480	1530	---	---	---	---	---	---	---	---	---
20	1580	1490	1530	---	---	---	1020	952	998	---	---	---
21	1590	1460	1500	---	---	---	1160	946	1030	---	---	---
22	1570	1500	1550	---	---	---	1130	998	1050	---	---	---
23	1580	1380	1500	---	---	---	1080	972	1020	---	---	---
24	1470	1340	1410	---	---	---	1060	986	1030	---	---	---
25	1470	1330	1400	---	---	---	1160	970	1040	---	---	---
26	1450	1370	1410	---	---	---	1150	946	1030	---	---	---
27	1430	1300	1350	1270	1160	1210	994	906	949	---	---	---
28	1390	1270	1310	1270	1160	1200	---	---	---	---	---	---
29	1330	1210	1260	1240	1080	1160	---	---	---	---	---	---
30	---	---	---	1160	1080	1120	1050	962	998	---	---	---
31	---	---	---	1420	1100	1220	---	---	---	---	---	---
MONTH	1590	832	1230	---	---	---	1390	906	1090	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	954	838	900
2							---	---	---	1030	894	971
3							---	---	---	1030	910	960
4							---	---	---	1010	886	943
5							---	---	---	998	902	936
6							1140	1050	1080	1010	900	937
7							1100	934	1000	914	870	890
8							1110	973	1030	964	862	908
9							1080	1000	1040	954	846	908
10							1050	997	1020	996	886	925
11							1100	969	1030	942	860	894
12							1170	1040	1080	950	842	888
13							1210	1070	1120	936	858	892
14							1130	994	1070	882	844	864
15							1120	875	1020	1040	860	935
16							1070	947	987	1120	972	1030
17							969	909	939	1160	976	1040
18							1030	890	951	1120	962	1030
19							1040	922	962	1060	918	979
20							1030	844	953	1020	890	942
21							1020	896	953	914	856	881
22							1020	930	971	1040	868	931
23							980	922	944	1100	918	991
24							916	880	895	1140	956	1020
25							1020	880	943	1090	982	1030
26							1020	908	976	1060	958	992
27							1030	930	985	998	990	995
28							1060	902	969	1030	708	912
29							1030	902	948	1110	778	974
30							960	896	921	1140	996	1040
31							928	770	834	---	---	---
MONTH							1210	770	985	1160	708	951
YEAR	1590	708	1060									

11067890 SANTA ANA RIVER AT PRADO PARK, NEAR CORONA, CA

LOCATION.--Lat 33°55'42", long 117°35'44", in Jurupa Grant, Riverside County, Hydrologic Unit 18070203, in Prado Park on right bank 0.4 mi (0.6 km) upstream from Auburndale Bridge, and 4.1 mi (6.6 km) northwest of Corona.

DRAINAGE AREA.--1,010 mi² (2,616 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1971 to September 1980 (discontinued). Records May 1930 to November 1966 (irrigation seasons only), October 1966 to September 1968 at site 0.4 mi (0.6 km) downstream (at Auburndale Bridge, station 11068000), equivalent if diversion to Durkee ditch added.

GAGE.--Water-stage recorder. Altitude of gage is 560 ft (171 m), from topographic map.

REMARKS.--Records poor. Flow partly regulated by Big Bear Lake (station 11049000) 44 mi (71 km) upstream. Natural streamflow affected by ground-water withdrawals, diversions for irrigation, and return flows from irrigated areas. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--9 years, 119 ft³/s (3.370 m³/s), 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 30,000 ft³/s (850 m³/s) Mar. 4, 1978, by flood routing, gage height, 9.82 ft (2.993 m); maximum gage height, 11.43 ft (3.484 m) Feb. 10, 1978, from backwater; minimum daily discharge, 10 ft³/s (0.28 m³/s) Aug. 7, Sept. 23, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 9	2200	1,760 49.8	6.17 1.881	Jan. 29	1100	12,760 361	10.1 3.078
Jan. 11	1400	2,110 59.8	6.35 1.935	Feb. 16	Unknown	*Unknown	
Jan. 18	1100	1,310 37.1	5.93 1.807				

Minimum daily discharge, 25 ft³/s (0.71 m³/s) Sept. 1-4.

NOTE.--Other peaks above base probably occurred Feb. 18, 21, Mar. 3, 6; gage height and discharge unknown.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	62	43	50	500	1300	410	300	98	94	28	25
2	36	61	43	50	430	1900	395	255	96	94	28	25
3	38	60	44	50	383	2600	380	220	94	89	28	25
4	39	60	44	50	255	2100	370	195	92	83	28	25
5	40	59	44	50	222	1800	365	188	90	78	28	26
6	40	58	44	50	168	2900	365	188	89	73	28	26
7	40	58	44	53	133	2500	370	210	88	68	28	26
8	40	57	45	60	103	2100	380	240	88	65	28	26
9	40	56	45	536	119	1850	390	275	87	61	28	26
10	40	56	45	477	124	1630	405	300	86	58	28	26
11	40	55	45	1260	74	1450	425	285	86	56	27	27
12	40	54	45	366	77	1300	420	258	86	54	27	27
13	40	54	46	99	75	1200	400	235	86	51	27	27
14	40	53	46	567	350	1090	410	215	86	48	27	27
15	40	52	46	971	900	1000	450	195	87	46	27	27
16	40	52	46	300	2900	930	540	210	87	43	27	28
17	40	51	47	357	1000	870	420	220	87	42	27	28
18	40	51	47	784	8200	825	360	218	88	40	27	28
19	40	50	47	451	2900	770	315	212	89	39	27	28
20	159	49	48	111	2000	740	285	199	89	38	27	28
21	91	49	55	158	4800	695	280	187	89	37	26	28
22	75	48	52	88	3200	655	315	171	90	35	26	29
23	70	47	52	81	2550	630	365	155	90	34	26	29
24	68	47	52	91	2100	600	372	140	90	33	26	29
25	67	46	52	103	1800	580	360	134	91	32	26	29
26	66	46	51	84	1600	560	355	137	91	32	26	29
27	66	45	51	99	1480	546	355	142	92	31	26	30
28	65	45	51	574	1350	525	345	132	92	30	26	30
29	64	44	51	7000	1320	495	328	120	93	30	26	30
30	64	43	51	1590	---	460	320	107	93	29	26	30
31	63	---	51	582	---	430	---	102	---	29	26	---
TOTAL	1666	1568	1473	17142	41113	37031	11250	6145	2690	1572	836	824
MEAN	53.7	52.3	47.5	553	1418	1195	375	198	89.7	50.7	27.0	27.5
MAX	159	62	55	7000	8200	2900	540	300	98	94	28	30
MIN	35	43	43	50	74	430	280	102	86	29	26	25
AC-FT	3300	3110	2920	34000	81550	73450	22310	12190	5340	3120	1660	1630
CAL YR 1979 TOTAL	34823			MEAN 95.4	MAX 1480	MIN 22	AC-FT 69070					
WTR YR 1980 TOTAL	123310			MEAN 337	MAX 8200	MIN 25	AC-FT 244600					

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to September 1980 (discontinued).
WATER TEMPERATURES: Water years 1976 to September 1980 (discontinued).
SEDIMENT RECORDS: Water years 1976 to September 1980 (discontinued).

PERIOD OF DAILY RECORD. --

WATER TEMPERATURES: October 1975 to September 1980 (discontinued).
SEDIMENT RECORDS: February 1976 to September 1980 (discontinued).

XTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 23,500 mg/L Mar. 4, 1978; minimum daily mean, 20 mg/L

July 15, 1976.

SEDIMENT DISCHARGE: Maximum daily, 842,000 tons (764,000 metric tons) Mar. 2, 1978; minimum daily, 1.2 tons (1.1 metric tons) July 15, 1976.

XTREMES FOR CURRENT YEAR. --

SEDIMENT CONCENTRATIONS: Maximum daily mean, 21,700 mg/L Feb. 19; minimum daily mean, 40 mg/L Nov. 26.

SEDIMENT DISCHARGE: Maximum daily, 390,000 tons (354,000 metric tons) Feb. 18; minimum daily, 4.5 tons (4.1 metric tons) Sept. 23.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

[illegible]

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	35	310	29	62	397	66	43	150	17
2	36	181	18	61	455	75	43	340	39
3	38	140	14	60	526	85	44	990	118
4	39	144	15	60	589	95	44	775	92
5	40	380	41	59	537	86	44	475	56
6	40	343	37	58	444	70	44	390	46
7	40	210	23	58	368	58	44	360	43
8	40	129	14	57	371	57	45	340	41
9	40	94	10	56	412	62	45	270	33
10	40	91	9.8	56	409	62	45	235	29
11	40	99	11	55	368	55	45	294	36
12	40	115	12	54	309	45	45	290	35
13	40	129	14	54	235	34	46	290	36
14	40	138	15	53	180	26	46	300	37
15	40	148	16	52	239	34	46	300	37
16	40	173	19	52	328	46	46	310	39
17	40	217	23	51	394	54	47	336	43
18	40	271	29	51	425	59	47	300	38
19	40	352	38	50	421	57	47	250	32
20	159	464	319	49	370	49	48	200	26
21	91	564	158	49	301	40	55	157	23
22	75	486	98	48	232	30	52	160	22
23	70	388	73	47	155	20	52	160	22
24	68	323	59	47	85	11	52	158	22
25	67	280	51	46	45	5.6	52	150	21
26	66	246	44	46	40	5.0	51	120	17
27	66	220	39	45	63	7.7	51	115	16
28	65	201	35	45	84	10	51	120	17
29	64	194	34	44	98	12	51	150	21
30	64	256	44	43	118	14	51	180	25
31	63	355	60	---	---	---	51	202	28
TOTAL	1666	---	1401.8	1568	---	1330.3	1473	---	1107
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	50	180	24	500	3080	4160	1300	1780	6250
2	50	180	24	430	1880	2180	1900	1710	8770
3	50	180	24	383	1230	1270	2600	1990	14000
4	50	185	25	255	1020	702	2100	2580	14600
5	50	135	18	222	1000	599	1800	2420	11800
6	50	180	24	168	990	449	2900	3920	30700
7	53	430	62	133	825	296	2500	4450	30000
8	60	375	61	103	680	189	2100	3140	17800
9	536	2680	9430	119	510	164	1850	2040	10200
10	477	4500	7670	124	450	151	1630	1980	8710
11	1260	3870	15300	74	640	128	1450	2190	8570
12	366	1820	1600	77	800	166	1300	1780	6250
13	99	515	138	75	3670	743	1200	1260	4080
14	567	3630	5760	350	19900	18800	1090	1250	3680
15	971	5450	17900	900	8250	20000	1000	1320	3560
16	300	3710	3010	2900	4250	33300	930	1100	2760
17	357	3980	3840	1000	12200	32900	870	920	2160
18	784	3410	8910	8200	17600	390000	825	955	2130
19	451	1150	1400	2900	21700	170000	770	1500	3120
20	111	1010	303	2000	16400	88600	740	2140	4280
21	158	1580	674	4800	5900	76500	695	1990	3730
22	88	1650	392	3200	2300	19900	655	1690	2990
23	81	520	114	2550	2790	19200	630	1530	2600
24	91	290	71	2100	2920	16600	600	1500	2430
25	103	465	129	1800	3080	15000	580	1510	2360
26	84	705	160	1600	3190	13800	560	1550	2340
27	99	630	168	1480	3890	15500	546	1470	2170
28	574	1040	3310	1350	5650	20600	525	1310	1860
29	7000	7290	104000	1320	2980	10600	495	1190	1590
30	1590	7330	28900	---	---	---	460	1080	1340
31	582	5360	8420	---	---	---	430	890	1030
TOTAL	17142	---	221861	41113	---	972497	37031	---	217860

SANTA ANA RIVER BASIN

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	410	905	1000	300	900	729	98	335	89
2	395	920	981	255	890	613	96	250	65
3	380	880	903	220	915	544	94	210	53
4	370	820	819	195	960	505	92	230	57
5	365	725	714	188	1050	533	90	375	91
6	365	720	710	188	1110	563	89	690	166
7	370	675	674	210	1080	612	88	665	158
8	380	530	544	240	1120	726	88	485	115
9	390	625	658	275	1090	809	87	425	100
10	405	950	1040	300	1040	842	86	420	98
11	425	955	1100	285	2060	1590	86	420	98
12	420	895	1010	258	1560	1090	86	425	99
13	400	900	972	235	1120	711	86	360	84
14	410	980	1080	215	875	508	86	225	52
15	450	1100	1340	195	740	390	87	175	41
16	540	1340	1950	210	775	439	87	175	41
17	420	1130	1280	220	805	478	87	250	59
18	360	1100	1070	218	840	494	88	360	86
19	315	1050	893	212	835	478	89	495	119
20	285	1040	800	199	820	441	89	600	144
21	280	1000	756	187	780	394	89	670	161
22	315	1100	936	171	785	362	90	720	175
23	365	1200	1180	155	745	312	90	795	193
24	372	1300	1310	140	610	231	90	940	228
25	360	1400	1360	134	675	244	91	1100	270
26	355	1470	1410	137	815	301	91	1230	302
27	355	1500	1440	142	780	299	92	1280	318
28	345	1340	1250	132	600	214	92	1180	293
29	328	1030	912	120	390	126	93	995	250
30	320	925	799	107	300	87	93	850	213
31	---	---	---	102	335	92	---	---	---
TOTAL	11250	---	30891	6145	---	15757	2690	---	4218
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	94	735	187	28	399	30	25	196	13
2	94	595	151	28	399	30	25	701	47
3	89	552	133	28	398	30	25	530	36
4	83	505	113	28	353	27	25	419	28
5	78	460	97	28	135	10	26	302	21
6	73	409	81	28	282	21	26	219	15
7	68	334	61	28	415	31	26	218	15
8	65	236	41	28	496	37	26	253	18
9	61	165	27	28	566	43	26	285	20
10	58	154	24	28	664	50	26	266	19
11	56	155	23	27	758	55	27	244	18
12	54	165	24	27	589	43	27	248	18
13	51	183	25	27	326	24	27	324	24
14	48	244	32	27	153	11	27	403	29
15	46	476	59	27	135	9.8	27	324	24
16	43	714	83	27	130	9.5	28	278	21
17	42	659	75	27	129	9.4	28	422	32
18	40	533	58	27	133	9.7	28	418	32
19	39	417	44	27	142	10	28	382	29
20	38	310	32	27	146	11	28	383	29
21	37	250	25	26	125	8.8	28	369	28
22	35	238	22	26	115	8.1	29	180	14
23	34	296	27	26	114	8.0	29	58	4.5
24	33	386	34	26	119	8.4	29	96	7.5
25	32	492	43	26	135	9.5	29	120	9.4
26	32	368	32	26	140	9.8	29	128	10
27	31	264	22	26	149	10	30	126	10
28	30	279	23	26	168	12	30	102	8.3
29	30	320	26	26	187	13	30	75	6.1
30	29	372	29	26	193	14	30	61	4.9
31	29	396	31	26	191	13	---	---	---
TOTAL	1572	---	1684	836	---	616.0	824	---	590.7
YEAR 123310.0			1469814						

11067890 SANTA ANA RIVER AT PRADO PARK NEAR CORONA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
JAN									
10...	1150	15.0	203	4140	2270	--	51	68	84
11...	1450	14.0	1900	3520	18100	--	58	63	80
15...	1440	17.0	830	3910	8760	--	40	57	74
29...	1230	13.0	12500	10400	351000	--	55	73	87
FEB									
14...	1005	12.0	4960	26800	359000	--	17	25	36
18...	0815	14.0	8200	17700	392000	--	14	21	32
MAR									
09...	1410	17.0	1850	1840	9190	13	17	23	32

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. 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
JAN								
10...	90	--	94	--	97	--	100	--
11...	92	--	98	--	98	--	100	--
15...	88	--	94	--	98	--	100	--
29...	95	--	99	--	100	--	--	--
FEB								
14...	50	72	--	93	--	99	--	100
18...	50	76	--	98	--	100	--	--
MAR								
09...	45	--	69	--	93	--	100	--

11069000 LAKE HEMET NEAR IDYLLWILD, CA

LOCATION.--Lat 33°39'56", long 116°42'19", in SE¼SW¼NE¼ 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 (8 km) southeast of Idyllwild, and 6.5 mi (10.5 km) upstream from mouth.

DRAINAGE AREA.--65.6 mi² (169.9 km²).

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

GAGE.--Nonrecording gage read once daily. Datum of gage is 4,201.5 ft (1,280.617 m) 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 (33.5 m) in 1893; raised to 122.5 ft (37.34 m) in 1895, and to 135 ft (41.1 m) 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 (1,321.77 m), 13,540 acre-ft (16.7 hm³). Capacity below spillway level (without flashboards), elevation, 4,333.0 ft (1,320.70 m), 12,170 acre-ft (15.0 hm³), revised. 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 were furnished by Lake Hemet Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 14,690 acre-ft (18.1 hm³) Feb. 21, 1980, elevation, 4,339.4 ft (1,322.65 m), from capacity table extended above 4,336.5 (1,321.77 m); minimum observed, 264 acre-ft (326 m³) Nov. 19, 1962, Nov. 19, 1963, elevation, 4,266.9 ft (1,300.55 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 14,690 acre-ft (18.1 hm³) Feb. 21, elevation, 4,339.4 ft (1,322.65 m), from capacity table extended above 4,336.5 ft (1,321.77 m); minimum observed, 11,110 acre-ft (13.7 hm³) Jan. 5, elevation, 4,330.5 ft (1,319.94 m).

MONTHEND ELEVATION, NGVD, AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	4,333.5	12,360	--
Oct. 31.....	4,332.2	11,870	-490
Nov. 30.....	4,331.2	11,440	-430
Dec. 31.....	4,330.5	11,180	-260
CAL YR 1979.....	--	--	-1,010
Jan. 31.....	4,336.7	13,630*	+2,450
Feb. 29.....	4,336.9	13,700*	+70
Mar. 31.....	4,336.2	13,410	-290
Apr. 30.....	4,336.5	13,540	+130
May 31.....	4,336.5	13,540	0
June 30.....	4,335.5	13,140	-400
July 31.....	4,335.8	13,240	+100
Aug. 31.....	4,333.6	12,390	-850
Sept. 30.....	4,332.1	11,800	-590
WTR YR 1980.....	--	--	-560

*Lake is spilling; contents from capacity table extended above 4,336.5 ft (1,321.77 m).

11069500 SAN JACINTO RIVER NEAR SAN JACINTO, CA

LOCATION.--Lat 33°44'10", long 116°49'26", in NE¼NE¼SE¼ sec.13, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on right bank 350 ft (107 m) upstream from bridge on State Highway 74, 1 mi (2 km) downstream from North Fork, 8.3 mi (13.4 km) southeast of San Jacinto, and 9 mi (14 km) downstream from Lake Hemet.

DRAINAGE AREA.--141 mi² (365 km²).

PERIOD OF RECORD.--October 1920 to February 1927, March 1927 to current year. Records since Oct. 1, 1969, equivalent to prior records if lower diversion is deducted from flow past station. 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 (604.342 m) Corps of Engineers datum. See WSP 1735 for history of changes prior to Jan. 23, 1948. Prior to Oct. 1, 1969, at site 350 ft (107 m) downstream at same datum. Canal gage at different datum.

REMARKS.--Records fair except those for periods of missing gage-height record, and flow under 50 ft³/s (1.42 m³/s) which are poor. Flow partly regulated by Lake Hemet (station 11069000). Lake Hemet Municipal Water District's upper canal diverts 4.0 mi (6.4 km) above station. One small diversion for domestic use above station. Diversion above station began prior to 1920. Since relocation of station above lower diversion on Oct. 1, 1969, the 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. Gage height of all peaks from auxiliary gage at old site 350 ft (107 m) downstream.

AVERAGE DISCHARGE.--River only: 48 years (water years 1921-26, 1928-69), 18.0 ft³/s (0.510 m³/s), 13,040 acre-ft/yr (16.1 hm³/yr); 11 years (water years 1970-80), 29.0 ft³/s (0.821 m³/s), 21,010 acre-ft/yr (25.9 hm³/yr).

Combined river and diversion: 32 years (water years 1949-80), 24.5 ft³/s (0.694 m³/s), 17,750 acre-ft/yr (21.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 45,000 ft³/s (1,270 m³/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 ft³/s (490 m³/s) Feb. 21, 1980; no flow at times in 1951, 1952, 1957, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s), and maximum (*), from rating curve extended above 5,770 ft³/s (163 m³/s):

Date	Time	River Discharge		Gage height		Combined River and Diversion Discharge	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)	(ft ³ /s)	(m ³ /s)
Jan. 11	1600	850	24.1	7.22	2.201	850	24.1
Jan. 29	0830	4,540	129	9.85	3.002	4,540	129
Feb. 15	1830	6,310	179	10.53	3.210	6,310	179
Feb. 17	0100	8,600	244	11.22	3.420	8,600	243
Feb. 18	1030	4,610	131	9.85	3.002	4,610	131
Feb. 21	0400	*17,300	490	12.70	3.871	*17,300	490
Mar. 3	0100	1,370	38.8	6.58	2.006	1,370	38.8
Mar. 6	1800	1,160	32.9	6.41	1.954	1,160	32.9
Mar. 11	0200	696	19.7	6.01	1.832	696	19.7

River only: Minimum daily discharge, 0.93 ft³/s (0.026 m³/s) July 23.

Combined river and diversion: Minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Aug. 29, 30 and Sept. 3,4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	7.3	6.8	4.3	180	155	195	140	64	32	1.3	1.6
2	6.5	7.0	5.1	4.5	163	130	250	138	60	27	1.2	1.6
3	6.5	7.0	4.2	4.7	147	1270	205	129	60	21	1.1	1.3
4	6.5	7.0	3.6	4.3	129	760	185	124	55	17	1.1	1.3
5	7.8	7.3	3.4	5.5	115	503	175	126	55	12	1.1	1.5
6	8.8	7.3	4.2	7.0	106	1020	166	122	50	10	1.1	1.6
7	9.1	7.9	4.5	8.8	102	926	156	120	53	10	.99	1.7
8	9.5	10	4.9	11	99	660	149	116	50	10	.99	1.7
9	9.5	13	4.9	55	96	538	141	116	50	8.1	.99	1.7
10	9.5	13	4.7	113	92	440	135	220	50	6.4	1.1	1.7
11	9.8	14	5.1	435	83	608	132	217	50	5.9	1.3	1.7
12	9.8	13	5.1	248	62	450	129	166	58	5.9	1.3	1.7
13	9.8	12	5.1	154	63	235	127	148	109	6.4	1.6	1.7
14	10	9.1	4.9	203	375	265	125	126	113	6.1	1.6	1.7
15	10	8.8	4.9	144	2670	220	123	124	113	5.9	1.6	1.8
16	10	9.8	4.9	93	2310	185	122	124	76	5.1	1.6	1.8
17	10	11	4.9	66	3700	160	122	113	58	4.9	1.6	1.8
18	11	13	4.7	94	2640	250	122	109	48	4.5	1.6	1.8
19	11	15	4.7	66	2180	300	122	102	47	4.1	1.9	1.8
20	123	14	4.7	46	2900	215	122	98	46	3.7	1.6	1.9
21	55	11	5.8	38	7590	160	122	94	45	3.2	1.6	2.0
22	22	8.8	17	37	1500	220	126	94	44	1.8	1.9	2.0
23	13	8.2	12	33	930	180	126	94	43	.93	1.9	2.0
24	9.4	7.9	7.6	33	630	160	126	89	41	1.2	2.1	1.9
25	7.6	8.5	7.3	29	390	215	135	82	40	1.1	2.1	1.9
26	6.3	8.8	15	24	300	270	153	76	38	1.3	1.9	1.8
27	6.3	9.8	9.8	23	230	220	118	73	36	2.2	1.6	1.9
28	6.0	11	5.8	91	185	200	124	70	35	1.8	1.6	1.8
29	6.5	11	4.7	1750	165	182	133	67	34	2.5	1.3	1.8
30	6.5	9.4	4.5	543	---	170	148	67	33	2.5	1.3	1.9
31	6.8	---	4.3	224	---	163	---	64	---	1.3	1.6	---
TOTAL	440.0	300.9	189.1	4592.1	30132	11430	4314	3548	1654	225.83	45.57	52.4
MEAN	14.2	10.0	6.10	148	1039	369	144	114	55.1	7.28	1.47	1.75
MAX	123	15	17	1750	7590	1270	250	220	113	32	2.1	2.0
MIN	6.0	7.0	3.4	4.3	62	130	118	64	33	.93	.99	1.3
AC-FT	873	597	375	9110	59770	22670	8560	7040	3280	448	90	104

CAL YR 1979 TOTAL 22673.50 MEAN 62.1 MAX 1270 MIN 1.4 AC-FT 44970
WTR YR 1980 TOTAL 56923.90 MEAN 156 MAX 7590 MIN .93 AC-FT 112900

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 1979 TO SEPTEMBER 1980

MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	10	8.4	6.4	180	155	195	143	64	34	5.8	1.6
2	7.3	9.7	6.8	6.6	163	130	250	141	60	29	5.6	1.6
3	7.2	9.6	5.8	6.9	147	1270	205	132	60	23	5.6	1.3
4	7.2	9.6	5.2	6.6	129	760	185	127	56	20	5.6	1.3
5	8.5	10	5.0	7.7	115	503	175	129	57	15	5.5	1.5
6	9.4	10	5.8	9.3	106	1020	166	125	52	13	5.5	1.6
7	9.7	10	6.1	11	102	926	156	123	54	13	5.3	1.7
8	10	12	6.5	14	99	660	149	119	50	12	5.1	1.7
9	10	15	6.6	58	96	538	141	119	50	9.2	4.5	1.7
10	10	15	6.4	114	92	440	135	223	50	8.3	4.2	1.7
11	10	16	6.8	435	83	608	132	220	50	8.1	4.2	1.7
12	10	15	6.8	248	62	450	129	169	58	8.1	3.9	1.7
13	10	14	6.8	154	63	235	127	151	109	8.6	5.2	1.7
14	11	11	6.6	203	375	265	125	128	113	8.3	4.8	1.7
15	11	11	6.6	144	2670	220	123	126	113	8.1	4.5	1.8
16	11	12	6.6	93	2310	185	123	126	78	7.3	4.4	1.8
17	11	13	6.6	66	3700	160	125	115	62	7.1	4.2	1.8
18	12	15	6.4	94	2640	250	125	109	51	6.7	4.2	1.8
19	12	17	6.4	66	2180	300	125	103	49	6.3	4.4	3.2
20	126	16	6.4	46	2900	215	125	100	48	5.9	4.1	3.3
21	56	13	7.5	38	7590	160	125	96	47	5.4	3.2	3.4
22	24	11	19	37	1500	220	129	95	46	4.0	2.5	3.4
23	17	9.9	14	33	930	180	129	95	45	3.1	2.4	3.3
24	13	9.6	9.3	33	630	160	129	90	43	3.6	2.6	2.8
25	11	10	9.0	29	390	215	138	84	42	3.7	2.8	2.1
26	9.8	11	17	24	300	270	156	77	40	4.1	2.4	1.8
27	9.6	12	12	23	230	220	121	73	38	5.2	1.7	1.9
28	9.0	13	7.9	91	185	200	127	70	37	4.8	1.6	1.8
29	9.3	13	6.8	1750	165	182	136	67	36	3.3	1.3	1.8
30	9.2	11	6.5	543	---	170	151	67	35	5.0	1.3	1.9
31	9.5	---	6.4	224	---	163	---	64	---	5.9	1.6	---
TOTAL	488.1	364.4	244.0	4614.5	30132	11430	4357	3606	1693	299.1	120.0	60.4
MEAN	15.7	12.1	7.87	149	1039	369	145	116	56.4	9.65	3.87	2.01
MAX	126	17	19	1750	7590	1270	250	223	113	34	5.8	3.4
MIN	7.2	9.6	5.0	6.4	62	130	121	64	35	3.1	1.3	1.3
AC-FT	968	723	484	9150	59770	22670	8640	7150	3360	593	238	120
CAL YR 1979 TOTAL	23544.1			64.5	1280	5.0	AC-FT	46700				
WTR YR 1980 TOTAL	57408.5			157	7590	1.3	AC-FT	113900				

11070050 BAUTISTA CREEK AT VALLE VISTA, CA

LOCATION.--Lat 33°44'04", long 116°53'33", in SE¼NE¼SE¼ sec.17, T.5 S., R.1 E., Riverside County, Hydrologic Unit 18070202, on left levee of flood channel, 1.0 mi (1.6 km) south of Valle Vista.

DRAINAGE AREA.--47.2 mi² (122.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,835 ft (559 m), from topographic map.

REMARKS.--Records poor. No gage-height record Oct. 1 to May 16. No major regulation above station but peaks are affected by detention dam. Diversion above station for irrigation of about 15 acres (61,000 m²). Some in infiltration in detention dam, 1.5 mi (2.4 km) upstream.

AVERAGE DISCHARGE.--11 years, 2.84 ft³/s (0.080 m³/s), 2,060 acre-ft/yr (2.54 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Feb. 21, 1980, gage height, 8.30 ft (2.530 m); from rating curve extended above 80 ft³/s (2.27 m³/s) on basis of computation of flow in concrete-lined channel at gage heights 1.50 ft (0.457 m), 2.00 ft (0.610 m), 3.00 ft (0.914 m), and 8.30 ft (2.530 m); no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,400 ft³/s (323 m³/s) Feb. 21 (time unknown), gage height, 8.30 ft (2.530 m), other peaks above base of 100 ft³/s (2.83 m³/s) probably occurred Jan. 11, 29, Feb. 15, 17, Mar. 3, 6; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	2.3	1.7	1.7	0	0	.22	1.0	1.8	2.3	.08	3.0
2	0	2.3	1.7	1.7	0	0	.50	1.1	1.0	.88	.51	.19
3	0	2.2	1.7	1.7	0	150	.04	1.0	.57	.18	1.7	.24
4	0	2.2	1.7	1.7	0	90	1.0	1.1	.09	.06	3.7	.35
5	0	2.2	1.7	1.7	0	60	1.0	1.0	.59	.41	1.4	1.0
6	0	2.2	1.7	1.7	0	120	1.0	1.0	1.2	2.4	.45	3.1
7	0	2.1	1.7	3.1	0	10	1.0	1.0	.32	2.7	.42	1.9
8	0	2.1	1.7	3.5	0	1.0	1.0	1.0	.45	1.1	.96	.26
9	0	2.1	1.7	4.0	0	0	1.0	1.1	1.5	1.8	.13	.43
10	0	2.0	1.7	18	0	0	1.0	1.4	0	.64	0	0
11	0	2.0	1.7	60	0	10	1.0	1.0	.40	.23	.02	0
12	0	2.0	1.7	28	0	0	1.0	1.0	0	.06	0	0
13	0	2.0	1.7	17	.70	0	1.0	1.0	1.3	.02	.94	1.4
14	0	1.9	1.7	25	15	0	1.0	1.0	1.5	0	1.7	1.4
15	0	1.9	1.7	1.5	350	0	1.0	1.0	1.8	.31	.55	.33
16	0	1.9	1.7	0	200	0	1.0	.10	2.1	1.2	.07	.07
17	0	1.9	1.7	0	500	0	1.0	0	1.3	1.0	1.2	0
18	0	1.8	1.7	0	300	0	1.0	0	.80	.03	1.4	.03
19	0	1.8	1.7	0	160	.50	1.0	0	.50	.19	2.7	0
20	15	1.8	1.7	0	450	0	1.0	.29	1.4	3.4	1.8	.86
21	3.0	1.8	1.7	0	2600	0	1.0	1.6	2.6	2.0	1.5	2.5
22	2.8	1.8	1.7	0	350	.50	1.5	1.5	2.8	1.0	1.1	1.9
23	2.6	1.7	1.7	0	27	.10	1.0	1.3	2.9	.09	2.4	.45
24	2.5	1.7	1.7	0	2.7	0	1.1	.30	2.7	0	3.2	.15
25	2.5	1.7	1.7	0	.30	0	1.0	1.4	1.0	0	3.0	.13
26	2.5	1.7	1.7	0	0	.50	1.0	.77	.82	.23	.69	.87
27	2.5	1.7	1.7	0	0	0	1.0	.30	1.3	1.0	0	2.0
28	2.4	1.7	1.7	3.0	0	0	1.0	.09	1.9	0	0	2.6
29	2.4	1.7	1.7	200	0	0	1.3	.04	1.7	.03	0	.83
30	2.4	1.7	1.7	30	---	0	1.1	0	3.7	.38	0	.01
31	2.3	---	1.7	0	---	0	---	.37	---	.45	2.7	---
TOTAL	42.9	57.9	52.7	403.3	4955.70	442.60	28.76	23.76	40.04	23.89	34.32	26.00
MEAN	1.38	1.93	1.70	13.0	171	14.3	.96	.77	1.33	.77	1.11	.87
MAX	15	2.3	1.7	200	2600	150	1.5	1.6	3.7	3.4	3.7	3.1
MIN	0	1.7	1.7	0	0	0	.04	0	0	0	0	0
AC-FT	85	115	105	800	9830	878	57	47	79	47	68	52
CAL YR 1979 TOTAL	314.81		MEAN .86	MAX 141	MIN 0	AC-FT 624						
WTR YR 1980 TOTAL	6131.87		MEAN 16.8	MAX 2600	MIN 0	AC-FT 12160						

11070375 SAN JACINTO RIVER AT RAILROAD CANYON WEIR, NEAR ELSINORE, CA

LOCATION.--Lat 33°44'10", long 117°15'08", in SW¼SE¼NW¼ sec.13, T.5 S., R.4 W., Riverside County, Hydrologic Unit 18070202, on right bank 4.3 mi (6.9 km) northeast of Railroad Canyon Dam, and 5.8 mi (9.3 km) northeast of Elsinore.

DRAINAGE AREA.--562 mi² (1,456 km²).

PERIOD OF RECORD.--October 1951 to current year. Monthly discharge only prior to October 1971. Daily discharge available in district files.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft (427 m), from topographic map. Prior to Sept. 28, 1960, at site 0.8 mi (1.3 km) 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 were published as furnished by Riverside County Flood Control and Water Conservation District.

AVERAGE DISCHARGE.--River only: 29 years, 13.1 ft³/s (0.371 m³/s), 9,490 acre-ft/yr (11.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,700 ft³/s (161 m³/s) Feb. 22, 1980, gage height, 7.27 ft (2.216 m); no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,700 ft³/s (161 m³/s) Feb. 22, gage height, 7.27 ft (2.216 m) no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67		0	.18	363	479	157	33	.81			
2	42		0	.18	246	438	153	48	.54			
3	12		0	.18	105	671	148	49	.49			
4	1.9		0	.09	43	612	145	46	.92			
5	.99		0	0	22	743	142	37	.54			
6	.63		0	0	13	945	129	26	0			
7	.45		0	0	8.0	857	120	22	0			
8	.27		0	0	4.6	952	108	15	0			
9	.18		0	26	2.5	930	98	11	0			
10	.18		0	37	1.5	788	88	6.2	0			
11	.18		0	43	1.2	681	80	9.0	0			
12	.18		0	11	.99	603	77	31	0			
13	.18		0	1.4	134	551	72	48	0			
14	.18		0	.99	1420	486	67	44	0			
15	.18		0	.70	1050	424	79	36	0			
16	.18		0	.99	1670	377	87	32	0			
17	.18		0	.81	3620	357	69	29	0			
18	.18		0	.63	3280	317	53	23	0			
19	.18		0	.36	1200	300	51	17	0			
20	.18		0	.18	1050	277	43	13	0			
21	.18		0	.18	3300	251	36	5.3	0			
22	.18		0	.18	5310	235	32	2.9	0			
23	.18		0	.09	4280	222	46	1.5	0			
24	.18		0	0	2370	209	48	.90	0			
25	.18		0	0	1590	210	44	.90	0			
26	.18		.18	0	1150	248	39	1.0	0			
27	.18		.18	0	836	205	43	1.5	0			
28	.18		.18	3.9	675	191	47	1.1	0			
29	.05		.18	707	562	185	32	.90	0			
30	0		.18	190	---	176	23	.90	0			
31	0	---	.18	358	---	161	---	.90	---			---
TOTAL	128.89	0	1.08	1383.04	34307.79	14081	2356	593.00	3.30	0	0	0
MEAN	4.16	0	.035	44.6	1183	454	78.5	19.1	.11	0	0	0
MAX	67	0	.18	707	5310	952	157	49	.92	0	0	0
MIN	0	0	0	0	.99	161	23	.90	0	0	0	0
AC-FT	256	0	2.1	2740	68050	27930	4670	1180	6.5	0	0	0
a	256	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1979 TOTAL 7277.52 MEAN 19.9 MAX 1090 MIN 0 AC-FT 14430 AC-FT a 1680
WTR YR 1980 TOTAL 52854.10 MEAN 144 MAX 5310 MIN 0 AC-FT 104800 AC-FT a 256

a Imported Colorado River water, in acre-ft.

11070500 SAN JACINTO RIVER NEAR ELSINORE, CA

LOCATION.--Lat 33°39'51", long 117°17'35", in SE&SE&NE& sec.9, T.6 S., R.4 W., Riverside County, Hydrologic Unit 18070203, on right bank 2 mi (3 km) east of Elsinore, 2.1 mi (3.4 km) downstream from Railroad Canyon Dam, and 36 mi (58 km) downstream from Lake Hemet.

DRAINAGE AREA.--723 mi² (1,873 km²).

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 (387 m), from topographic map. Prior to Feb. 13, 1916, nonrecording gage at site 0.7 mi (1.1 km) 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 (14.8 hm³), 2.1 mi (3.4 km) above station. Diversion for irrigation and domestic use above Railroad Canyon Reservoir. Temescal Water Co. diverted 2.0 acre-ft (2,470 m³) during current year from Railroad Canyon Reservoir for irrigation below station in vicinity of Corona. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft³/s (453 m³/s) Feb. 17, 1927, gage height, 11.8 ft (3.60 m), from rating curve extended above 2,000 ft³/s (56.6 m³/s) on basis of slope-area measurement of maximum flow; no flow for several months in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,010 ft³/s (255 m³/s) Feb. 22, gage height, 9.53 ft (2.905 m); minimum daily, 0.34 ft³/s (0.010 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.97	.90	1.0	774	575	205	15	2.7	1.9	1.1	1.1
2	.37	.90	.90	1.0	578	493	200	24	2.7	1.9	1.1	1.2
3	.34	.83	.90	1.0	277	906	193	34	2.7	1.9	1.0	1.1
4	.41	.76	.90	1.0	83	852	184	39	2.6	1.9	1.1	.95
5	.41	.76	.90	1.0	37	854	178	32	2.6	1.6	1.1	.95
6	.41	.70	.90	1.0	17	1270	168	20	2.5	1.6	.97	.99
7	.45	.70	.90	1.1	10	1300	152	13	2.5	1.5	.93	1.1
8	.45	1.6	.90	1.2	6.7	1180	130	10	2.5	1.4	.90	1.1
9	.45	1.1	.90	4.5	2.3	1190	109	7.8	2.4	1.4	.89	1.2
10	.54	1.2	.90	2.6	2.0	1040	98	5.2	2.4	1.3	.84	1.2
11	.54	1.1	.90	11	1.7	933	93	4.3	2.3	1.4	.86	1.1
12	.59	.90	.90	4.7	1.5	768	67	7.1	2.3	1.4	1.0	.99
13	.64	.97	.90	3.4	62	678	63	21	2.3	1.3	1.0	1.0
14	.59	1.1	.90	3.4	4530	555	54	52	2.2	1.3	1.2	1.0
15	.64	.97	.90	3.2	3620	487	56	44	2.2	1.1	1.2	1.1
16	.64	.76	.90	3.0	3500	440	77	33	2.2	1.0	1.0	1.1
17	.64	.97	.90	2.9	7020	395	65	25	2.1	1.1	1.0	1.0
18	.70	.90	.90	2.9	7080	375	41	19	2.1	1.1	1.0	.94
19	.70	.83	.90	2.9	2700	357	29	13	2.1	1.0	.97	.97
20	.76	.97	.90	2.8	2010	336	22	7.4	2.1	1.0	.95	1.0
21	.70	.83	.90	2.6	5450	222	18	4.5	2.0	.98	.96	1.0
22	.59	.90	.90	2.3	8080	247	15	3.8	2.0	.96	1.0	1.1
23	.70	.90	.90	2.0	6560	267	23	3.4	2.0	.92	.98	1.0
24	.70	.90	1.2	1.7	3080	261	34	3.3	1.9	.91	.92	.98
25	.70	.90	1.1	1.4	1920	257	32	3.2	1.9	1.0	.97	.91
26	.70	.97	1.0	1.3	1410	332	24	3.1	1.9	1.0	.96	.91
27	.70	1.1	1.0	2.7	1040	292	23	3.0	1.8	1.0	.91	.91
28	.70	.90	1.0	6.2	838	254	29	2.9	1.8	1.1	.89	.91
29	.64	.90	1.0	929	672	238	25	2.9	1.7	1.3	.92	.90
30	.70	.90	1.0	957	---	230	16	2.8	1.8	1.5	.84	.86
31	.90	---	1.0	697	---	216	---	2.8	---	1.1	.92	---
TOTAL	18.37	28.19	29.00	2658.8	61362.2	17800	2423	461.5	66.3	39.87	30.38	30.57
MEAN	.59	.94	.94	85.8	2116	574	80.8	14.9	2.21	1.29	.98	1.02
MAX	.90	1.6	1.2	957	8080	1300	205	52	2.7	1.9	1.2	1.2
MIN	.34	.70	.90	1.0	1.5	216	15	2.8	1.7	.91	.84	.86
AC-FT	36	56	58	5270	121700	35310	4810	915	132	79	60	61

CAL YR 1979 TOTAL 11698.27 MEAN 32.1 MAX 1700 MIN .32 AC-FT 23200
WTR YR 1980 TOTAL 84948.18 MEAN 232 MAX 8080 MIN .34 AC-FT 168500

11072000 TEMESCAL CREEK NEAR CORONA, CA

LOCATION.--Lat 33°50'29", long 117°30'37", in El Sobrante de San Jacinto Grant, Riverside County, Hydrologic Unit 18070203, on left bank 0.2 mi (0.3 km) downstream from unnamed tributary, and 3.8 mi (6.1 km) southeast of Corona.

DRAINAGE AREA.--164 mi² (425 km²), excludes 768 mi² (1,989 km²) above Lake Elsinore. Includes flow diverted from Lake Elsinore by excavation of former outflow channel after Mar. 9, 1980. This additional flow is first known outflow from Lake Elsinore since 1916. May affect flow in Santa Ana River stations below Prado Dam slightly during spring months. Outflow from Elsinore ceased June 30.

PERIOD OF RECORD.--October 1927 to June 1980 (discontinued). Monthly discharge only for the period October 1928 to January 1929, published in WSP 1315-B.

GAGE.--Water-stage recorder. Concrete control since June 12, 1970. Altitude of gage is 730 ft (223 m), from topographic map. Prior to Feb. 11, 1943, at datum 6.00 ft (1.829 m) higher.

REMARKS.--Records poor. Flow regulated by several storage reservoirs. Many diversions above station for irrigation. July 1, 1980, station discontinued at this site and moved back to former site 5.4 mi (8.7 km) downstream. Former site is Temescal Creek at Corona (11072200) at different datum. Records at the two sites are not equivalent. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--52 years (water years 1928-79), 3.78 ft³/s (0.107 m³/s), 2,740 acre-ft/yr (3.38 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,900 ft³/s (422 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,500 ft³/s (99.1 m³/s) Feb. 18, gage height unknown; minimum daily, 1.0 ft³/s (0.028 m³/s) many days in November and December.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.6	1.2	1.0	60	150	330	170	84			
2	1.7	1.6	1.2	1.0	32	140	320	165	82			
3	1.7	1.7	1.2	1.0	13	300	320	160	80			
4	1.7	1.7	1.2	1.0	11	200	310	160	79			
5	1.7	1.8	1.1	1.0	10	150	300	155	78			
6	1.7	1.8	1.1	1.0	9.8	260	300	150	76			
7	1.7	1.9	1.1	1.1	8.2	200	290	145	74			
8	1.8	1.9	1.1	4.0	8.2	160	280	140	72			
9	1.8	1.9	1.1	10	7.4	190	270	140	70			
10	1.8	1.9	1.0	32	6.8	220	260	160	68			
11	1.8	1.9	1.0	80	6.4	250	260	150	66			
12	1.8	1.9	1.0	50	6.0	280	250	140	64			
13	1.8	1.9	1.0	25	100	300	240	135	62			
14	1.8	1.8	1.0	40	800	330	230	130	60			
15	1.8	1.8	1.0	25	600	340	230	125	58			
16	1.8	1.8	1.0	16	1200	340	220	120	56			
17	1.8	1.7	1.0	9.8	1000	350	220	120	54			
18	1.8	1.7	1.0	15	2500	350	210	120	52			
19	1.8	1.6	1.0	9.0	1100	350	210	115	50			
20	20	1.6	1.5	7.2	500	350	205	110	48			
21	10	1.6	2.5	6.0	1300	350	210	110	47			
22	4.0	1.5	2.0	5.2	900	350	210	110	45			
23	2.0	1.5	1.4	4.6	600	350	205	105	44			
24	1.8	1.5	1.3	4.0	400	350	200	100	42			
25	1.7	1.4	1.6	3.5	280	350	180	98	36			
26	1.6	1.4	1.4	2.0	220	350	190	69	32			
27	1.5	1.4	1.2	2.0	180	350	185	94	28			
28	1.5	1.3	1.2	32	160	350	180	92	25			
29	1.5	1.3	1.1	200	155	350	180	90	22			
30	1.5	1.3	1.1	100	---	340	175	88	19			
31	1.6	---	1.0	64	---	330	---	86	---			
TOTAL	82.1	49.7	37.6	753.4	12173.8	9030	7170	3852	1673			
MEAN	2.65	1.66	1.21	24.3	420	291	239	124	55.8			
MAX	20	1.9	2.5	200	2500	350	330	170	84			
MIN	1.5	1.3	1.0	1.0	6.0	140	175	69	19			
AC-FT	163	99	75	1490	24150	17910	14220	7640	3320			

CAL YR 1979 TOTAL 5142.6 MEAN 14.1 MAX 260 MIN 1.0 AC-FT 10200

SANTA ANA RIVER BASIN

229

11073200 SAN ANTONIO CREEK BELOW SAN ANTONIO DAM, CA

LOCATION.--Lat 34°09'26", long 117°40'50", in NE¼NE¼SE¼ sec.23, T.1 N., R.8 W., Los Angeles-San Bernardino County line, Hydrologic Unit 18070203, on left wall of outlet channel at toe of San Antonio Dam, and 4.7 mi (7.6 km) northeast of Claremont.

DRAINAGE AREA.--26.9 mi² (69.7 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 2,093.94 ft (638.233 m) Corps of Engineers datum.

REMARKS.--Records poor. Flow regulated by San Antonio flood-control reservoir, capacity, 7,620 acre-ft (9.40 hm³). Water diverted out of basin for power, domestic use, and irrigation. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,420 ft³/s (238 m³/s) Jan. 25, 1969, gage height, 11.22 ft (3.420 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of gate openings at dam; no flow much of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 470 ft³/s (13.3 m³/s) Feb. 20, estimated, gage height unknown; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	101	150	100	58	40	5.3	.15	
2				0	100	148	98	58	38	4.7	.14	
3				0	99	140	92	58	34	4.2	.12	
4				0	97	138	88	58	20	3.8	.11	
5				0	95	136	85	62	16	3.3	.10	
6				0	94	135	83	62	16	3.0	0	
7				0	92	134	81	62	14	2.7	.11	
8				0	80	133	79	62	14	2.4	0	
9				0	0	132	77	62	13	2.1	0	
10				0	0	132	76	62	13	1.9	0	
11				0	5.0	134	75	62	12	1.7	0	
12				0	11	136	74	62	12	1.5	0	
13				0	12	138	73	62	11	1.4	0	
14				0	12	160	72	62	11	1.2	0	
15				0	22	160	72	60	11	1.1	0	
16				0	31	160	32	56	10	.98	0	
17				0	35	160	32	53	9.6	.84	0	
18				0	37	160	35	53	9.4	.76	0	
19				0	210	160	44	52	9.0	.70	0	
20				0	450	160	48	52	8.7	.60	0	
21				0	250	160	52	52	8.3	.54	0	
22				0	230	160	56	52	8.0	.48	0	
23				0	210	160	58	52	7.7	.42	0	
24				0	195	160	58	52	7.4	.38	0	
25				0	180	160	58	52	7.2	.34	0	
26				0	170	160	58	52	7.0	.30	0	
27				0	165	160	58	52	6.6	.27	0	
28				0	160	160	58	48	6.4	.24	0	
29				35	155	160	58	44	6.2	.22	0	
30				95	---	160	58	40	6.0	.19	0	
31		---		105	---	115	---	40	---	.17	0	---
TOTAL	0	0	0	235	3298.0	4621	1988	1714	392.5	47.73	11.62	0
MEAN	0	0	0	7.58	114	149	66.3	55.3	13.1	1.54	.37	0
MAX	0	0	0	105	450	160	100	62	40	5.3	.11	0
MIN	0	0	0	0	0	115	32	40	6.0	.17	0	0
AC-FT	0	0	0	466	6540	9170	3940	3400	779	95	23	0
CAL YR 1979	TOTAL	2213.95	MEAN 6.07	MAX 63	MIN 0	AC-FT 4390						
WTR YR 1980	TOTAL	12307.85	MEAN 33.6	MAX 450	MIN 0	AC-FT 24410						

SANTA ANA RIVER BASIN

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 (91 m) downstream from Schaefer Avenue, 0.8 mi (1.3 km) downstream from San Antonio Creek, and 1.5 mi (2.4 km) southwest of Chino.

DRAINAGE AREA.--48.9 mi² (126.7 km²).

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

GAGE.--Water-stage recorder. Concrete wingwalls have formed low-water control since October 1975. Altitude of gage is 685 ft (209 m), from topographic map.

REMARKS.--Records fair. Flow mostly regulated by San Antonio flood-control reservoir, capacity, 7,620 acre-ft (9.40 hm³). 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 11,700 acre-ft (14.4 hm³) to basin at San Antonio Creek at Rialto pipeline below San Antonio Dam (station 11073210) at a point 10 mi (16 km) upstream. See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,190 ft³/s (175 m³/s) Mar. 1, 1978, gage height, 9.66 ft (2.944 m), from rating curve extended above 1,520 ft³/s (43.0 m³/s); no flow May 21, June 30, July 1, Oct. 30, Nov. 3, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, 9,200 ft³/s (261 m³/s), gage height, 9.23 ft (2.813 m), present datum, by contracted-opening measurement at site 6.1 mi (9.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,260 ft³/s (35.7 m³/s) Feb. 16, gage height, 7.07 ft (2.155 m); minimum daily 0.21 ft³/s (0.006 m³/s) Nov. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	.25	103	113	2.5	17	8.6	1.5	.64	2.3	.73	1.3
2	.51	.25	104	112	1.5	96	4.7	1.3	.64	2.1	.64	1.4
3	.51	.21	102	108	1.5	248	2.3	1.2	.64	1.7	.57	1.5
4	.51	.21	103	90	1.5	82	1.8	1.2	.73	2.8	.57	1.5
5	.51	.25	107	107	2.5	53	1.4	1.2	.82	2.3	.64	1.2
6	.51	.29	112	107	.92	99	1.4	1.2	.92	1.7	.92	1.5
7	.51	9.5	113	110	.92	57	1.3	1.2	.92	2.3	.92	1.5
8	.57	.73	115	47	.73	29	1.3	1.0	.92	1.7	1.0	1.5
9	.57	.64	115	66	.73	19	1.4	1.2	.92	1.4	.92	1.5
10	.57	.51	113	28	.92	23	1.3	3.0	1.0	2.1	.92	1.5
11	.57	.57	115	53	2.9	18	1.3	3.0	1.3	1.8	1.0	1.5
12	.57	.64	116	23	1.5	13	1.3	1.7	1.0	2.3	1.0	1.5
13	.57	.64	116	18	327	9.2	1.3	1.2	1.0	1.5	1.2	1.5
14	.51	.57	115	24	344	8.6	1.3	1.2	.92	1.2	1.0	1.3
15	.51	.64	115	4.3	498	8.0	1.3	1.0	1.2	2.3	1.2	1.2
16	.51	.73	115	1.7	496	6.0	1.7	.82	1.0	1.8	1.2	1.2
17	.51	9.5	115	4.3	319	5.5	1.7	.82	.82	1.8	1.0	1.2
18	.45	1.2	115	18	488	6.4	1.7	.82	.73	1.5	.82	1.3
19	.45	.92	115	2.5	194	5.5	1.4	.73	.73	1.3	.82	1.4
20	30	.92	116	1.5	954	4.3	1.3	.73	.73	1.0	1.0	1.3
21	2.6	1.0	125	1.3	585	3.3	1.4	.73	.64	.82	1.0	1.2
22	.39	1.0	115	1.3	270	3.0	3.3	.57	.82	.82	1.2	1.0
23	.39	1.2	94	1.4	383	3.3	2.3	.57	.82	.82	1.3	.92
24	.34	1.3	3.3	1.4	315	3.0	1.5	.57	.64	.64	1.2	1.0
25	.34	1.4	5.1	.92	241	4.7	1.5	.57	.57	.57	1.2	1.0
26	.34	42	34	.92	76	20	1.2	.57	.92	.73	1.3	.92
27	.29	100	109	1.3	43	14	1.3	.57	.82	.57	1.5	.82
28	.29	102	113	267	30	11	1.8	.57	.82	.64	1.3	1.4
29	.29	106	113	298	20	8.6	1.8	.57	.73	.73	1.2	1.4
30	.29	106	113	15	---	6.4	1.7	.57	1.0	.73	1.2	1.5
31	.25	---	115	6.0	---	6.4	---	.64	---	.57	1.2	---
TOTAL	45.74	491.07	3179.4	1632.84	5601.12	891.2	57.6	32.52	25.36	44.54	31.67	38.96
MEAN	1.48	16.4	103	52.7	193	28.7	1.92	1.05	.85	1.44	1.02	1.30
MAX	30	106	125	298	954	248	8.6	3.0	1.3	2.8	1.5	1.5
MIN	.25	.21	3.3	.92	.73	3.0	1.2	.57	.57	.57	.57	.82
AC-FT	91	974	6310	3240	11110	1770	114	65	50	88	63	77
CAL YR 1979 TOTAL	6047.22			MEAN 16.6	MAX 470	MIN .21	AC-FT 11990					
WTR YR 1980 TOTAL	12072.02			MEAN 33.0	MAX 954	MIN .21	AC-FT 23940					

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA

LOCATION.--Lat 33°58'58", long 117°35'55", in SW¼SW¼NE¼ sec.22, T.2 S., R.7 W., San Bernardino County, Hydrologic Unit 18070203, on right bank 300 ft (91 m) upstream from Merrill Avenue bridge, and 4.6 mi (7.4 km) west of Mira Loma.

DRAINAGE AREA.--75.8 mi² (196.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1968 to July 31, 1977, January 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 660 ft (201 m) above mean sea level, from topographic map. Prior to July 1977 at site 100 ft (30.5 m) downstream at different datum.

REMARKS.--Records poor. No gage-height record or indefinite stage-discharge relation Oct. 1 to Sept. 4. 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 are not equivalent.

AVERAGE DISCHARGE.--8 years (water years 1969-76) 2.74 ft³/s (0.078 m³/s), 1,990 acre-ft/yr (2.45 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,100 ft³/s (258 m³/s) Jan. 25, 1969, gage height, 7.08 ft (2.158 m), from floodmark, on basis of slope-area measurement of maximum flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,590 ft³/s (45.0 m³/s) Feb. 20; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	0	0	.01	.30	16	5.0	.05	.03	.07	.04	.04
2	.01	0	0	.01	.04	150	2.0	.05	.03	.07	.04	.04
3	0	0	0	.01	.01	450	1.0	.05	.03	.07	.04	.04
4	0	0	0	.01	.01	110	.52	.05	.03	.07	.04	.04
5	0	0	0	.01	.01	50	.28	.05	.03	.07	.06	.03
6	0	0	0	.01	.01	190	.27	.05	.03	.07	.08	.02
7	0	.06	0	.06	.01	32	.17	.05	.02	.07	.08	.03
8	0	0	0	.12	.01	8.0	.08	.05	.02	.06	.08	.02
9	0	0	0	70	.01	2.9	.05	.30	.02	.06	.08	.02
10	0	0	0	20	.01	20	.05	3.5	.02	.06	.07	.02
11	0	0	0	85	.01	15	.05	3.4	.02	.06	.07	.02
12	0	0	0	11	.01	6.0	.05	1.6	.02	.06	.07	.02
13	0	0	0	7.4	33	2.3	.05	.62	.03	.06	.07	.02
14	0	0	0	15	76	1.4	.05	.30	.03	.06	.07	.01
15	0	0	0	5.5	281	1.0	.05	.18	.03	.06	.07	.01
16	0	0	0	1.6	1090	.74	.05	.04	.03	.06	.06	.02
17	0	0	0	7.0	400	.54	.05	.04	.03	.06	.06	.02
18	0	0	0	32	1000	2.5	.05	.04	.04	.06	.06	.02
19	0	0	0	2.9	195	2.1	.05	.04	.04	.06	.06	.02
20	183	0	0	.35	1590	.90	.05	.04	.04	.06	.06	.02
21	3.6	0	.06	.01	1090	.58	.20	.04	.04	.06	.06	.02
22	.45	0	.02	.01	230	.43	3.5	.04	.05	.05	.06	.01
23	0	0	.01	.01	98	.31	2.4	.04	.05	.05	.05	.02
24	0	0	.01	.01	56	2.5	1.0	.04	.05	.05	.05	.02
25	0	0	.04	.01	40	16	.43	.04	.05	.05	.05	.02
26	0	0	.01	.01	31	35	.24	.04	.06	.05	.05	.02
27	0	0	.01	.01	24	5.0	.10	.04	.06	.05	.05	.02
28	0	0	.01	350	19	2.1	.05	.03	.06	.05	.05	.01
29	0	0	.01	550	17	1.1	.05	.03	.06	.05	.04	.01
30	0	0	.01	20	---	.55	.05	.03	.06	.05	.04	.02
31	0	---	.01	1.0	---	.34	---	.03	---	.05	.04	---
TOTAL	187.07	.06	.20	1179.06	6270.44	1125.29	17.94	10.90	1.11	1.83	1.80	.65
MEAN	6.03	.002	.007	38.0	216	36.3	.60	.35	.037	.059	.058	.022
MAX	183	.06	.06	550	1590	450	5.0	3.5	.06	.07	.08	.04
MIN	0	0	0	.01	.01	.31	.05	.03	.02	.05	.04	.01
AC-FT	371	.1	.4	2340	12440	2230	36	22	2.2	3.6	3.6	1.3
CAL YR 1979 TOTAL	1027.33			MEAN 2.81	MAX 199	MIN 0	AC-FT 2040					
WTR YR 1980 TOTAL	8796.35			MEAN 24.0	MAX 1590	MIN 0	AC-FT 17450					

SANTA ANA RIVER BASIN

11073495 CUCAMONGA CREEK NEAR MIRA LOMA, CA--Continued

WATER-QUALITY RECORDS

ERIOD OF RECORD.--Water years 1979 to September 1980 (discontinued).

WATER TEMPERATURES: Water years 1979 to September 1980 (discontinued).

SEDIMENT RECORDS: Water years 1979 to September 1980, periodic record (discontinued).

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
JAN 10...	1445	--	26	367	26	--	--	--
FEB 28...	1325	--	19	1270	65	23	34	50
MAR 27...	1400	--	6.0	38	.62	--	--	--
MAY 15...	1530	23.0	.18	4	.00	--	--	--
JUN 11...	1220	38.0	.02	13	.00	--	--	--
JUL 02...	0900	--	.07	12	.00	--	--	--
SEP 03...	0930	20.0	.04	9	.00	--	--	--

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
JAN 10...	--	--	66	74	89	99	100
FEB 28...	70	87	96	99	99	100	--
MAR 27...	--	--	--	--	--	--	--
MAY 15...	--	--	--	--	--	--	--
JUN 11...	--	--	--	--	--	--	--
JUL 02...	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	--	--

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 (762 m) downstream from axis of Prado Dam, and 4.5 mi (7.2 km) west of Corona.

DRAINAGE AREA.--1,490 mi² (3,859 km²), excludes 768 mi² (1,989 km²) 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 (136.9 m) 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 (248 hm³). Natural streamflow affected by extensive ground-water withdrawals, diversion for irrigation, and return flow from irrigated areas. California Water Project released 11,700 acre-ft (14.4 hm³) to basin (see station 11073360). See schematic diagram of Santa Ana River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,440 ft³/s (211 m³/s) Feb. 21, 1980, gage height, 6.88 ft (2.097 m); minimum daily 2.4 ft³/s (0.068 m³/s) July 29 to Aug. 3, Sept. 20, 1978 (result of gate closure).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 100,000 ft³/s (2,830 m³/s), by slope-area measurement at site 2.5 mi (4.0 km) downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,440 ft³/s (211 m³/s) Feb. 21, gage height, 6.88 ft (2.097 m); minimum daily, 8.7 ft³/s (0.246 m³/s) Oct. 21-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	122	203	211	2020	3080	1630	452	404	412	332	89
2	84	114	209	208	1990	5450	1610	399	414	427	327	89
3	81	113	212	201	1960	5150	1630	1350	415	437	322	89
4	79	111	212	200	2050	4620	1660	1340	419	446	306	83
5	79	109	205	209	1710	5130	1680	625	425	447	295	81
6	78	113	208	214	462	5120	1670	603	389	452	287	80
7	80	113	209	234	247	5190	1650	665	363	440	282	86
8	85	129	207	241	241	5160	1640	902	369	430	277	90
9	86	124	207	158	242	5040	1620	1570	412	430	271	92
10	89	118	215	123	240	3690	1610	1750	440	428	264	97
11	91	115	220	410	238	3060	1580	1700	442	372	273	96
12	90	114	209	613	236	3020	1560	1670	440	327	273	95
13	80	115	199	604	308	3040	1150	679	413	320	286	98
14	79	115	198	606	1200	3050	1160	232	372	317	286	96
15	81	114	207	620	2010	3000	1710	294	363	314	272	101
16	89	111	211	624	2250	2940	1690	340	372	314	244	98
17	93	107	212	617	2870	1720	1680	346	375	316	217	95
18	92	118	214	526	4520	17	1070	356	365	312	177	93
19	95	115	220	465	5590	17	308	366	328	311	110	86
20	40	111	218	464	5720	17	312	373	363	311	103	86
21	8.7	106	244	319	6220	17	315	384	363	312	72	91
22	8.7	109	243	221	6140	260	316	391	366	317	89	95
23	154	113	218	220	6440	1620	309	362	378	353	110	98
24	197	112	148	219	6370	460	308	315	422	359	97	100
25	192	114	130	264	4920	290	459	312	438	356	96	99
26	187	122	127	296	1940	890	765	315	442	355	98	95
27	182	198	213	296	4720	1450	765	312	420	364	91	98
28	177	213	213	245	3530	1720	556	312	393	349	88	97
29	170	206	214	1250	1370	1710	307	365	393	344	86	100
30	161	211	210	2010	---	1680	304	401	392	340	85	98
31	148	---	208	1900	---	1640	---	403	---	336	89	---
TOTAL	3231.4	3805	6363	14788	77754	79248	33024	19884	11890	11338	6205	2791
MEAN	104	127	205	477	2681	2556	1101	641	396	366	200	93.0
MAX	197	213	244	2010	6440	5450	1710	1750	442	452	332	101
MIN	8.7	106	127	123	236	17	304	232	328	311	72	80
AC-FT	6410	7550	12620	29330	154200	157200	65500	39440	23580	22490	12310	5540
CAL YR 1979 TOTAL	71133.4			MEAN 195	MAX 580	MIN 8.7	AC-FT 141100					
WTR YR 1980 TOTAL	270321.4			MEAN 739	MAX 6440	MIN 8.7	AC-FT 536200					

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 to current year.
 SPECIFIC CONDUCTANCE: Water years 1970 to current year.
 WATER TEMPERATURES: Water years 1970 to current year.
 SEDIMENT RECORDS: Water years 1974 to current year.

PERIOD OF DAILY RECORD.--
 CHLORIDE: October 1970 to September 1971.
 SPECIFIC CONDUCTANCE: October 1969 to current year.
 WATER TEMPERATURES: October 1969 to current year.
 SEDIMENT RECORDS:--October 1973 to current year.

INSTRUMENTATION.--Water-quality monitor October 1970 to September 1971. Specific-conductance recorder since October 1969. Temperature recorder since October 1969.

COOPERATION.--Pesticide samples were collected by U.S. Geological Survey and analyzed by Environmental Protection Agency. The letter "A" following a date indicates chemical-quality data furnished by California Department of Water Resources.

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.
 SEDIMENT DISCHARGE: Maximum daily, 18,900 tons (17,100 metric tons) Mar. 5, 1978; minimum daily, 0.58 tons (0.53 metric tons) Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.--
 SPECIFIC CONDUCTANCE: Maximum recorded, 1,390 micromhos Aug. 18; minimum recorded, 339 micromhos Feb. 25.
 WATER TEMPERATURES: Maximum recorded, 27.0°C Aug. 26, Sept. 17; minimum recorded, 7.0°C Dec. 13, 15.
 SEDIMENT CONCENTRATIONS: Maximum daily mean, 853 mg/L Feb. 17; minimum daily mean, 3 mg/L Apr. 2.
 SEDIMENT DISCHARGE: Maximum daily, 6,190 tons (5,620 metric tons) Feb. 17; minimum daily, 1.0 tons (0.91 metric tons) Oct. 22.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
03...	1245	82	--	--	20.5	--	--	--	--	--	--
10...	1040	96	--	--	18.0	--	--	--	--	--	--
10...	1125	84	--	--	--	--	--	--	--	--	--
10...	1200	97	1100	7.8	18.5	--	43	8.7	--	K24	K1063
18...A	1200	89	1100	8.0	19.0	40	--	7.8	--	--	--
NOV											
06...	1215	118	--	--	14.0	--	--	--	--	--	--
14...	1015	118	1080	7.3	12.0	--	15	10.6	38	--	1900
27...A	1320	210	430	7.9	14.5	60	--	8.6	--	--	--
DEC											
04...	1100	216	965	--	10.5	--	--	--	--	--	--
10...A	1315	221	820	7.8	13.0	10	--	8.9	--	--	--
18...	0800	216	920	7.8	8.5	--	32	10.2	--	84	400
18...	1000	216	920	--	8.5	--	--	--	--	--	--
JAN											
02...	1200	143	930	--	13.5	--	--	--	--	--	--
02...	1345	209	915	--	12.5	--	--	--	--	--	--
02...	1600	201	--	--	14.0	--	--	--	--	--	--
14...	1230	600	530	7.7	14.5	--	35	--	57	--	--
16...	1040	623	--	--	11.5	--	--	--	--	--	--
23...	1200	226	645	7.7	12.5	--	34	10.0	--	670	210
23...	1400	221	--	--	12.5	--	--	--	--	--	--
31...	1130	1029	395	7.7	14.0	--	340	--	68	--	--
31...A	1245	1140	350	8.0	13.0	200	--	9.8	--	--	--
FEB											
04...	1230	1690	--	--	16.0	--	--	--	--	--	--
05...	1440	1640	--	--	13.5	--	--	--	--	--	--
08...	1155	314	600	--	14.0	--	--	--	--	--	--
08...	1330	243	--	--	14.5	--	--	--	--	--	--
18...	0815	4270	--	--	13.0	--	--	--	--	--	--
20...	1145	4800	355	7.6	13.5	--	170	10.0	40	--	--
20...	1315	5740	--	--	14.0	--	--	--	--	--	--
20...	1500	5670	--	--	13.5	--	--	--	--	--	--
22...	0930	7040	--	--	14.0	--	--	--	--	--	--
22...	1430	1940	--	--	14.0	--	--	--	--	--	--
27...A	1255	4430	350	7.6	14.5	55	--	10.3	--	--	--
MAR											
03...	1545	5090	436	7.7	14.5	--	15	--	38	--	--
18...	1145	84	--	--	16.0	--	--	--	--	--	--
25...	1215	85	--	--	16.5	--	--	--	--	--	--

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

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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT											
03...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	350	97	96	26	120	42	2.8	8.7	250	140	140
18... A	380	--	110	28	120	39	2.6	9.0	260	150	140
NOV											
06...	--	--	--	--	--	--	--	--	--	--	--
14...	350	89	100	24	110	48	2.6	9.5	260	140	130
27... A	300	--	81	23	110	44	2.8	10	200	130	120
DEC											
04...	--	--	--	--	--	--	--	--	--	--	--
10... A	260	--	68	21	90	42	2.4	8.0	190	95	110
18...	260	81	70	21	93	52	2.5	7.1	180	95	110
18...	--	--	--	--	--	--	--	--	--	--	--
JAN											
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--	--	--
14...	150	43	45	9.8	42	36	1.5	7.6	110	58	52
16...	--	--	--	--	--	--	--	--	--	--	--
23...	190	49	56	12	49	35	1.6	8.4	140	63	60
23...	--	--	--	--	--	--	--	--	--	--	--
31...	120	32	37	7.2	29	32	1.1	9.1	90	42	35
31... A	120	--	35	8.0	31	34	1.2	9.0	110	39	30
FEB											
04...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
20...	110	26	32	7.3	25	31	1.0	7.0	84	39	23
20...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--
27... A	120	--	35	7.0	25	30	1.0	10	91	41	26
MAR											
03...	140	38	38	10	27	28	1.0	12	98	63	30
18...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
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, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	
OCT											
03...	--	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	--	
10...	7	28	740	743	--	--	7.4	7.5	2.8	2.8	
18... A	7	--	772	--	--	8					

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

[illegible]

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MAR										
25...	--	--	--	--	--	--	--	--	--	--
25... A	83	73	22	100	43	2.6	13	190	160	120
25...	--	80	25	110	43	2.8	15	210	160	120
APR										
15... A	--	66	17	76	40	2.2	8.0	190	91	80
21...	--	--	--	--	--	--	--	--	--	--
29...	41	62	16	78	43	2.3	6.7	180	93	86
MAY										
12... A	--	64	15	60	36	1.8	7.0	180	72	66
19... A	--	--	--	--	--	--	--	--	--	--
23...	61	74	21	98	43	2.6	7.4	210	100	93
JUN										
02...	--	--	--	--	--	--	--	--	--	--
19... A	--	76	20	77	37	2.0	7.0	210	98	89
30...	54	76	18	72	36	1.9	7.5	210	91	86
JUL										
02...	--	--	--	--	--	--	--	--	--	--
22... A	--	85	21	84	37	2.1	8.0	230	100	98
24...	55	81	20	79	37	2.0	7.8	230	99	94
28...	--	--	--	--	--	--	--	--	--	--
AUG										
01...	--	--	--	--	--	--	--	--	--	--
19...	120	110	32	130	40	2.8	8.5	290	160	160
28... A	--	120	29	120	38	2.6	10	270	160	150
SEP										
15...	120	110	29	120	39	2.6	7.8	270	160	160
18... A	--	110	28	120	39	2.6	10	260	150	140

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, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
MAR										
25...	--	--	--	--	--	--	--	--	--	--
25... A	.4	20	639	634	--	--	2.7	2.5	1.2	1.2
25...	.6	--	667	--	--	4.2	--	--	--	--
APR										
15... A	.6	--	486	--	7	2.3	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
29...	.4	16	514	476	--	--	2.2	2.2	--	.48
MAY										
12... A	.5	--	402	--	7	1.8	--	--	--	--
19... A	--	--	--	--	--	--	--	--	--	--
23...	.5	19	597	552	--	--	3.4	2.9	1.3	1.2
JUN										
02...	--	--	--	--	--	--	--	--	--	--
19... A	.5	--	526	--	4	3.5	--	--	--	--
30...	.5	15	531	502	--	--	2.2	2.3	.83	.75
JUL										
02...	--	--	--	--	--	--	--	--	--	--
22... A	.6	--	588	--	26	2.8	--	--	--	--
24...	.7	13	557	542	--	--	1.9	1.9	.41	.38
28...	--	--	--	--	--	--	--	--	--	--
AUG										
01...	--	--	--	--	--	--	--	--	--	--
19...	.6	26	855	835	--	--	7.9	7.6	2.6	2.5
28... A	.9	--	839	--	417	8.8	--	--	--	--
SEP										
15...	.7	27	762	800	--	--	6.5	5.2	2.5	2.3
18... A	.6	--	816	--	266	6.0	--	--	--	--

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, DIS- SOLVED TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
MAR										
25...	--	--	--	--	--	--	--	--	--	--
25... A	1.5	1.1	2.7	.40	2.3	5.4	4.8	.76	.67	--
25...	--	--	--	--	--	--	--	--	--	.62
APR										
15... A	--	--	--	--	--	--	--	--	--	.98
21...	--	--	--	--	--	--	--	--	--	--
29...	--	.82	1.4	.10	1.3	3.6	3.5	.62	.58	--
MAY										
12... A	--	--	--	--	--	--	--	--	--	.87
19... A	--	--	--	--	--	--	--	--	--	--
23...	.20	.00	1.5	.93	.57	4.9	3.5	1.3	.93	--
JUN										
02...	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	--	--	--	1.2
30...	.97	1.2	1.8	.00	1.9	4.0	4.2	1.2	1.3	--
JUL										
02...	--	--	--	--	--	--	--	--	--	--
22... A	--	--	--	--	--	--	--	--	--	1.3
24...	1.1	.82	1.5	.30	1.2	3.4	3.1	1.6	1.6	--
28...	--	--	--	--	--	--	--	--	--	--
AUG										
01...	--	--	--	--	--	--	--	--	--	--
19...	2.8	1.8	5.4	1.1	4.3	13	12	2.0	.55	--
28... A	--	--	--	--	--	--	--	--	--	1.4
SEP										
15...	1.4	1.6	3.9	.00	3.9	10	9.1	4.0	3.1	--
18... A	--	--	--	--	--	--	--	--	--	2.0

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDED TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDED RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDED RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)
OCT												
10...	1200	5	0	5	100	50	50	520	--	1	0	<1
18... A	1200	--	--	--	--	--	--	--	500	--	--	--
NOV												
27... A	1320	--	--	--	--	--	--	--	400	--	--	--
DEC												
10... A	1315	--	--	--	--	--	--	--	400	--	--	--
18...	0800	--	--	--	--	--	--	--	--	--	--	--
JAN												
14...	1230	4	--	--	200	--	--	190	--	1	--	--
23...	1200	4	4	0	200	200	50	220	--	1	0	<1
31...	1130	4	--	--	100	--	--	170	--	0	--	--
31... A	1245	--	--	--	--	--	--	--	200	--	--	--
FEB												
20...	1145	6	--	--	300	--	--	120	--	3	--	--
27... A	1255	--	--	--	--	--	--	--	100	--	--	--
MAR												
03...	1545	4	--	--	100	--	--	150	--	1	--	--
25... A	1245	--	--	--	--	--	--	--	--	--	--	--
25...	1410	--	--	--	--	--	--	--	300	--	--	--
APR												
15... A	1350	--	--	--	--	--	--	--	200	--	--	--
29...	1330	5	1	4	100	50	50	230	--	1	--	<1
MAY												
12... A	1410	--	--	--	--	--	--	--	200	--	--	--
19... A	1235	--	--	0	--	--	--	--	--	--	--	--
JUN												
19... A	1005	--	--	--	--	--	--	--	300	--	--	--
30...	1120	--	--	--	--	--	--	--	--	--	--	--
JUL												
22... A	1520	--	--	--	--	--	--	--	300	--	--	--
24...	1130	7	1	6	100	40	60	--	0	--	--	<1
AUG												
28... A	1420	--	--	--	--	--	--	--	500	--	--	--
SEP												
15...	1000	--	--	--	--	--	--	--	--	--	--	--
18... A	1610	--	--	--	--	--	--	--	500	--	--	--

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

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, SUS- PENDED RECOVERABLE (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, SUS- PENDED RECOVERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, SUS- PENDED RECOVERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, SUS- PENDED RECOVERABLE (UG/L AS FE)
OCT											
10...	20	10	10	2	0	<3	20	17	3	5800	5800
18... A	--	--	--	--	--	--	--	--	--	--	--
NOV											
27... A	--	--	--	--	--	--	--	--	--	--	--
DEC											
10... A	--	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--	--
JAN											
14...	0	--	--	4	--	--	20	--	--	5900	--
23...	0	0	0	2	0	<3	12	9	3	1300	1300
31...	0	--	--	0	--	--	70	--	--	28000	--
31... A	--	--	--	--	--	--	--	--	--	--	--
FEB											
20...	1	--	--	5	--	--	25	--	--	9500	--
27... A	--	--	--	--	--	--	--	--	--	--	--
MAR											
03...	4	--	--	0	--	--	8	--	--	1300	--
25... A	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
15... A	--	--	--	--	--	--	--	--	--	--	--
29...	0	0	0	0	--	<3	11	2	9	350	340
MAY											
12... A	--	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	--	--	0	--	--
JUN											
19... A	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22... A	--	--	--	--	--	--	--	--	--	--	--
24...	10	10	0	2	--	<3	8	5	3	1900	--
AUG											
28... A	--	--	--	--	--	--	--	--	--	--	--
SEP											
15...	--	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--	--
DATE	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, SUS- PENDED RECOVERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, SUS- PENDED RECOVERABLE (UG/L AS MN)	MANGANESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY SUS- PENDED RECOVERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)
OCT											
10...	<10	12	9	3	300	260	40	.0	.0	.0	--
18... A	--	--	--	--	--	--	--	--	--	--	--
NOV											
27... A	--	--	--	--	--	--	--	--	--	--	--
DEC											
10... A	--	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--	--
JAN											
14...	--	18	--	--	200	--	--	1.7	--	--	--
23...	20	9	9	0	170	90	80	.7	.0	.9	7
31...	--	40	--	--	830	--	--	2.5	--	--	--
31... A	--	--	--	--	--	--	--	--	--	--	--
FEB											
20...	--	17	--	--	240	--	--	1.3	--	--	--
27... A	--	--	--	--	--	--	--	--	--	--	--
MAR											
03...	--	5	--	--	80	--	--	.4	--	--	--
25... A	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
15... A	--	--	--	--	--	--	--	--	--	--	--
29...	10	3	3	0	230	70	160	.1	.1	.0	7
MAY											
12... A	--	--	--	--	--	--	--	--	--	--	--
19... A	10	--	--	0	--	--	--	.0	--	--	--
JUN											
19... A	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--
JUL											
22... A	--	--	--	--	--	--	--	--	--	--	--
24...	<10	13	10	3	380	160	220	.1	.1	.0	8
AUG											
28... A	--	--	--	--	--	--	--	--	--	--	--
SEP											
15...	--	--	--	--	--	--	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--	--

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

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued
 CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, SUS- PENDE RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT											
10...	--	--	1	0	1	0	0	0	50	30	20
18... A	--	--	--	--	--	--	--	--	--	--	--
NOV											
27... A	--	--	--	--	--	--	--	--	--	--	--
DEC											
10... A	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	0	--	--	--	--	--
JAN											
14...	--	--	0	--	--	0	--	--	70	--	--
23...	3	4	0	0	0	0	0	0	20	10	10
31...	--	--	0	--	--	0	--	--	270	--	--
31... A	--	--	--	--	--	--	--	--	--	--	--
FEB											
20...	--	--	1	--	--	1	--	--	50	--	--
27... A	--	--	--	--	--	--	--	--	--	--	--
MAR											
03...	--	--	0	--	--	0	--	--	40	--	--
25... A	--	--	--	--	--	0	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
15... A	--	--	--	--	--	--	--	--	--	--	--
29...	2	5	1	0	1	0	0	0	20	--	<3
MAY											
12... A	--	--	--	--	--	--	--	--	--	--	--
19... A	--	--	--	--	--	--	--	--	--	--	10
JUN											
19... A	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	0	--	--	--	--	--
JUL											
22... A	--	--	--	--	--	--	--	--	--	--	--
24...	2	6	1	0	1	0	0	0	50	50	4
AUG											
28... A	--	--	--	--	--	--	--	--	--	--	--
SEP											
15...	--	--	--	--	--	0	--	--	--	--	--
18... A	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	PCB TOTAL (UG/L)	AROCLO TOTAL 1254 PCB SERIES (UG/L)
OCT								
10...	1125	--	--	--	--	--	--	.1
10...	1200	--	31	1.7	.02	--	--	--
18... A	1200	--	--	--	--	.36	--	--
NOV								
14...	1015	--	--	--	--	--	ND	--
27... A	1320	--	--	--	--	.45	--	--
DEC								
10... A	1315	--	--	--	--	.52	--	--
18...	0800	7.3	--	--	--	--	--	--
JAN								
14...	1230	--	--	--	.01	.20	ND	--
23...	1200	--	11	1.3	.00	.10	ND	--
31...	1130	--	--	--	.00	.00	ND	--
31... A	1245	--	--	--	--	.06	--	--
FEB								
20...	1145	13	--	--	.01	.00	ND	--
27... A	1255	--	--	--	--	.07	--	--
MAR								
03...	1545	--	--	--	.00	.10	.10	--
25... A	1245	16	--	--	--	--	--	--
25...	1410	--	--	--	--	.26	--	--
APR								
15... A	1350	--	--	--	--	.37	--	--
29...	1330	--	8.4	.5	.00	.10	--	--
MAY								
12... A	1410	--	--	--	--	.25	--	--
23...	1300	8.2	--	--	--	--	--	--
JUN								
19... A	1005	--	--	--	--	.21	--	--
30...	1120	7.1	--	--	--	--	--	--
JUL								
22... A	1520	--	--	--	--	.21	--	--
24...	1130	10	--	--	.00	.00	ND	--
AUG								
19...	1100	74	74	--	--	--	--	--
28... A	1420	--	--	--	--	.25	--	--
SEP								
15...	1000	12	--	--	--	--	--	--
18... A	1610	--	--	--	--	.32	--	--

< Actual value is known to be less than the value shown.
 ND Material specifically analyzed for but not detected.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	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)
OCT									
10...	1125	ND	ND	ND	ND	ND	ND	ND	--
NOV									
14...	1015	ND	ND	ND	ND	ND	ND	ND	--
JAN									
14...	1230	ND	ND	ND	ND	ND	.08	ND	ND
23...	1200	ND	ND	ND	ND	ND	ND	ND	ND
31...	1130	ND	ND	ND	ND	ND	.03	ND	ND
FEB									
20...	1145	ND	ND	ND	.01	ND	.03	.01	ND
MAR									
03...	1545	ND	ND	ND	ND	ND	.01	ND	ND
APR									
29...	1330	--	--	--	--	--	ND	--	--
JUL									
24...	1130	ND	ND	ND	ND	ND	.02	ND	ND

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)
OCT									
10...	ND	ND	ND	ND	ND	ND	ND	ND	ND
NOV									
14...	ND	ND	ND	ND	ND	ND	ND	ND	ND
JAN									
14...	ND	ND	ND	ND	.03	.04	ND	ND	ND
23...	ND	ND	ND	ND	.02	.02	ND	ND	ND
31...	ND	ND	ND	ND	.01	ND	ND	ND	ND
FEB									
20...	ND	ND	ND	ND	.01	ND	ND	ND	ND
MAR									
03...	ND	ND	.01	ND	ND	ND	ND	ND	ND
APR									
29...	--	ND	--	--	--	ND	--	ND	ND
JUL									
24...	ND	ND	ND	ND	.01	ND	ND	.02	ND

DATE	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, 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)
OCT									
10...	ND	--	ND	ND	--	--	--	--	--
NOV									
14...	ND	--	ND	ND	--	--	--	--	--
JAN									
14...	.03	ND	ND	ND	.12	ND	ND	ND	ND
23...	ND	ND	ND	ND	.11	ND	ND	ND	ND
31...	ND	ND	ND	ND	.12	ND	ND	ND	ND
FEB									
20...	.01	ND	ND	ND	.05	ND	ND	ND	ND
MAR									
03...	ND	ND	ND	ND	.03	ND	ND	--	ND
APR									
29...	ND	--	--	ND	.07	ND	--	--	ND
JUL									
24...	ND	ND	ND	ND	.07	ND	ND	ND	ND

ND Material specifically analyzed for but not detected.

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	NOV 14,79 1015	JAN 23,80 1200	MAR 25,80 1245	MAY 23,80 1300
TOTAL CELLS/ML	3500	3800	3000	1700
DIVERSITY: DIVISION	0.7	0.4	1.5	0.8
..CLASS	0.7	0.4	1.5	0.8
..ORDER	1.7	0.7	1.7	1.4
...FAMILY	1.7	0.7	2.4	2.0
....GENUS	2.4	1.0	0.0	2.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....CHARACIACEAE								
....SCHROEDERIA	--	-	--	-	29	1	26	2
...COELASTRACEAE								
....COELASTRUM	--	-	--	-	--	-	--	-
...MICRACTINIACEAE								
....GOLENKINIA	--	-	--	-	86	3	--	-
....MICRACTINIUM	--	-	--	-	260	9	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	*	0	110	3	240	8	39	2
....CHODATELLA	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	130	4	--	-
....KIRCHNERIELLA	--	-	--	-	72	2	--	-
...OOCYSTIS	--	-	--	-	160	5	--	-
....SELENASTRUM	--	-	--	-	--	-	39	2
....WESTELLA	--	-	--	-	--	-	--	-
...SCENEDESMACEAE								
....SCENEDESMUS	29	1	--	-	57	2	160	9
....TETRASTRUM	--	-	--	-	110	4	--	-
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	--	-	28	1	--	-	--	-
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCACEAE					29	1	--	-
....CYCLOTELLA	100	3	28	1	29	1	470#	28
....MELOSIRA	--	-	--	-	230	8	560#	33
....THALASSIOSIRA	43	1	--	-	--	-	--	-
...PENNALES								
....ACHNANTHACEAE								
....RHOICOSPHEA	--	-	*	0	--	-	--	-
...CYMBELLACEAE								
....AMPHORA	--	-	--	-	*	0	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	39	2
....SYNEDRA	--	-	--	-	--	-	13	1
...GOMPHONEMACEAE								
....GOMPHONEMA	--	-	--	-	--	-	--	-
...NAVICULACEAE								
....NAVICULA	86	2	--	-	*	0	160	9
...NITZSCHACEAE								
....NITZSCHIA	190	5	28	1	170	6	140	9
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
....CRYPTOMONADACEAE								
....CRYPTOMONAS	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
....AGMENELLUM	890#	26	--	-	--	-	--	-
....ANACYSTIS	290	8	180	5	29	1	39	2
...HORMOGONALES								
....OSCILLATORIACEAE								
....LYNGBYA	--	-	210	5	--	-	--	-
....OSCILLATORIA	1500#	44	3200#	84	1300#	44	--	-
...PHORMIDIUM	260	7	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	29	1	*	0	--	-	--	-
...TRACHELOMONAS	*	0	--	-	--	-	--	-

See footnotes at end of table.

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUN 30,80 1120	JUL 24,80 1130	AUG 19,80 1100	SEP 15,80 1000				
TOTAL CELLS/ML	4300	17000	26000	23000				
DIVERSITY: DIVISION	1.4	1.0	1.3	0.8				
..CLASS	1.4	1.0	1.3	0.8				
..ORDER	1.4	1.2	1.8	0.9				
...FAMILY	1.7	1.6	2.3	2.2				
....GENUS	1.8	2.0	2.9	2.4				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
...CHARACIACEAE								
...SCHROEDERIA	140	3	--	--	--	--	--	--
...COELASTRACEAE								
...COELASTRUM	--	--	2200	13	2400	9	3600#	15
...MICRACTINIACEAE								
...GOLENKINIA	--	--	--	--	--	--	--	--
...MICRACTINIUM	100	2	1200	7	300	1	--	--
...OOCYSTACEAE								
...ANKISTRODESMUS	--	--	--	--	--	--	--	--
...CHODATELLA	--	--	100	1	--	--	6000#	26
...DICTYOSPHAERIUM	--	--	--	--	--	--	--	--
...KIRCHNERIELLA	--	--	--	--	--	--	--	--
...OOCYSTIS	1400#	31	--	--	--	--	--	--
...SELENASTRUM	--	--	100	1	--	--	--	--
...WESTELLA	--	--	--	--	--	--	900	4
...SCENEDESMACEAE								
...SCENEDESMUS	--	--	400	2	4100#	16	8200#	35
...TETRASTRUM	--	--	--	--	--	--	--	--
...VOLVOCALES								
...CHLAMYDOMONADACEAE								
...CHLAMYDOMONAS	--	--	300	2	--	--	--	--
CHRYSTOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
...COSCINODISCACEAE	--	--	--	--	--	--	--	--
...CYCLOTELLA	26	1	9900#	59	4000#	15	*	0
...MELOSIRA	2200#	52	2000	12	8000#	30	1900	8
...THALASSIOSIRA	--	--	--	--	--	--	--	--
...PENNALES								
...ACHNANTHACEAE								
...RHOICOSPHENIA	--	--	--	--	--	--	--	--
...CYMBELLACEAE								
...AMPHORA	--	--	--	--	--	--	--	--
...FRAGILARIACEAE								
...FRAGILARIA	*	0	--	--	2500	10	--	--
...SYNEDRA	--	--	--	--	*	0	--	--
...GOMPHONEMACEAE								
...GOMPHONEMA	*	0	--	--	--	--	--	--
...NAVICULACEAE								
...NAVICULA	--	--	--	--	220	1	340	1
...NITZSCHACEAE								
...NITZSCHIA	*	0	100	1	1000	4	2100	9
CRYPTOPHYTA (CRYPTOMONADS)								
..CRYPTOPHYCEAE								
...CRYPTOMONADALES								
...CRYPTOMONADACEAE								
...CRYPTOMONAS	--	--	100	1	--	--	--	--
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
...CHROOCOCCACEAE								
...AGMENELLUM	--	--	--	--	--	--	--	--
...ANACYSTIS	400	9	300	2	--	--	--	--
...HORMOGONALES								
...OSCILLATORIACEAE								
...LYNGBYA	--	--	--	--	2500	9	--	--
...OSCILLATORIA	--	--	--	--	1200	5	--	--
...PHORMIDIUM	--	--	--	--	--	--	--	--
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
...EUGLENACEAE								
...EUGLENA	*	0	100	1	--	--	*	0
...TRACHELOMONAS	--	--	--	--	--	--	--	--

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1140	1110	1130	1140	1120	1130	905	893	901	930	900	919
2	1120	1100	1110	1130	1110	1120	954	904	928	931	911	919
3	1200	1110	1140	1140	1110	1120	962	948	957	932	896	911
4	1190	1140	1160	1130	1090	1110	969	955	962	952	880	902
5	1190	1140	1160	1120	1100	1110	980	960	970	899	843	866
6	1160	1090	1140	1140	1110	1120	972	944	961	871	817	843
7	1100	1080	1090	1130	1100	1110	963	935	952	842	778	818
8	1100	1080	1090	1100	1060	1080	955	911	936	1020	803	858
9	1080	1080	1080	1090	1070	1080	930	904	919	1030	733	872
10	1130	1080	1090	1130	1070	1100	932	906	923	736	564	617
11	1090	1030	1070	1120	1100	1110	947	917	935	690	540	615
12	1040	1010	1030	1100	1070	1090	953	927	941	535	469	495
13	1130	1050	1080	1080	1060	1070	954	918	938	503	473	487
14	1100	1080	1090	1220	1080	1160	942	914	930	558	508	531
15	1080	1030	1050	1220	1200	1210	941	911	928	725	563	647
16	1040	1020	1030	1220	1200	1210	937	899	920	602	540	563
17	1040	1020	1030	1210	1190	1200	924	896	910	573	537	553
18	1030	1010	1020	1210	1100	1160	938	900	919	688	574	646
19	1020	988	1010	1200	1170	1180	957	919	937	712	618	664
20	1150	990	1050	1190	1160	1180	954	922	943	631	567	594
21	---	---	---	1200	1170	1180	961	865	926	672	558	606
22	---	---	---	1200	1180	1190	981	933	952	755	673	722
23	---	---	---	1190	1160	1170	964	924	948	756	622	706
24	1060	971	1010	1200	1160	1170	1200	941	1100	782	656	717
25	1050	941	984	1170	1130	1150	1180	1080	1130	794	700	762
26	1050	942	988	1150	1110	1130	1140	913	1090	784	714	755
27	1110	992	1010	1100	950	1000	914	878	897	806	738	780
28	1130	1070	1100	949	917	932	907	891	899	915	809	836
29	1120	1090	1110	927	891	911	924	900	915	1050	439	592
30	1140	1090	1120	910	884	902	934	896	919	439	413	427
31	1160	1120	1140	---	---	---	933	901	920	417	387	400
MONTH	1200	941	1080	1220	884	1110	1200	865	949	1050	387	698

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	403	393	399	422	412	417	727	699	709	911	825	884
2	416	402	408	431	421	426	735	711	718	880	700	844
3	428	412	420	441	427	434	746	732	738	781	651	725
4	452	432	441	427	419	425	748	734	740	680	596	646
5	477	445	457	424	412	418	739	727	734	887	617	694
6	581	487	521	410	396	404	739	725	732	811	627	678
7	678	572	613	392	380	386	734	718	727	750	644	710
8	832	594	643	393	383	387	734	718	726	755	645	707
9	857	713	780	389	367	380	741	729	733	682	620	648
10	935	813	890	376	366	372	759	733	743	649	599	631
11	968	892	927	366	356	362	758	736	745	648	592	610
12	973	855	904	364	354	359	785	739	756	635	597	619
13	902	702	805	367	353	357	819	761	780	895	595	711
14	730	514	601	367	353	358	868	782	814	906	804	864
15	521	441	479	365	349	359	788	758	777	879	777	823
16	520	470	494	370	356	362	777	753	766	896	774	835
17	481	369	427	386	358	371	771	743	759	835	747	798
18	391	351	374	1200	382	829	856	750	792	816	738	781
19	398	346	369	1240	1180	1200	892	858	874	811	727	778
20	389	347	361	1260	1070	1180	935	895	915	829	749	792
21	363	345	353	1230	1040	1140	972	936	953	854	780	809
22	384	360	375	1240	686	898	970	938	952	899	803	850
23	408	376	390	736	702	723	981	953	970	1020	870	924
24	410	374	391	1080	661	746	1020	985	1000	984	876	921
25	389	339	362	1120	689	965	1020	906	991	974	912	939
26	367	345	356	783	759	774	884	818	841	976	936	962
27	383	355	369	780	768	775	815	795	803	948	920	933
28	400	372	385	796	716	772	823	775	799	932	898	919
29	410	394	401	764	648	693	854	802	833	932	874	903
30	---	---	---	698	670	681	887	821	865	910	870	892
31	---	---	---	717	677	697	---	---	---	906	870	886
MONTH	973	339	507	1260	349	602	1020	699	810	1020	592	797

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	898	844	864	924	898	913	1010	977	990	1090	1080	1090
2	926	864	894	926	904	915	1020	993	1010	1070	1060	1070
3	927	891	904	913	893	904	1030	1010	1010	1060	1050	1060
4	902	864	883	907	881	897	1050	1020	1030	1190	1040	1100
5	874	826	854	911	895	904	1080	1040	1060	1290	1190	1240
6	889	807	857	915	893	904	1080	1060	1070	1310	1270	1290
7	896	846	881	916	896	906	1090	1070	1080	1330	1300	1320
8	901	835	881	914	890	904	1100	1080	1090	1360	1300	1340
9	903	835	871	926	898	907	1130	1100	1110	1320	1260	1290
10	870	830	848	920	902	909	1170	1110	1140	1280	1240	1270
11	865	799	835	935	905	918	1200	1160	1180	1260	1230	1250
12	846	816	830	941	927	933	1230	1170	1200	1230	1200	1220
13	867	813	839	937	921	930	1270	1190	1220	1250	1190	1220
14	897	845	874	943	923	933	1290	1200	1240	1220	1170	1210
15	924	896	908	942	930	937	1290	1230	1260	1190	1130	1150
16	931	877	914	954	936	944	1360	1300	1320	1160	1120	1140
17	916	866	900	954	934	943	1340	1110	1170	1140	1120	1130
18	907	869	897	958	926	939	1390	1290	1340	1150	1120	1130
19	913	883	901	943	927	933	1360	1310	1330	1140	1120	1130
20	946	892	918	959	927	937	1310	1270	1290	1130	1100	1120
21	931	909	921	961	925	935	1300	1260	1280	1110	1080	1100
22	956	906	928	947	929	940	1270	1220	1230	1080	1050	1070
23	939	915	930	950	926	939	1220	1190	1200	1180	1070	1110
24	935	907	925	944	930	938	1200	1180	1190	1200	1150	1170
25	928	898	917	945	925	934	1180	1170	1170	1210	1140	1170
26	923	899	915	951	929	935	1170	1140	1160	1220	1160	1200
27	942	902	923	948	934	941	1160	1130	1150	1190	1150	1180
28	944	894	923	956	936	946	1160	1140	1150	1260	1200	1230
29	927	899	916	975	947	961	1150	1130	1140	1200	1100	1170
30	930	892	920	984	958	973	1140	1120	1130	1180	1130	1150
31	---	---	---	988	972	979	1120	1100	1110	---	---	---
MONTH	956	799	892	988	881	930	1390	977	1160	1360	1040	1180
YEAR	1390	339	892									

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.5	16.5	19.5	18.0	13.0	15.5	---	---	---	14.5	10.5	12.5
2	24.0	17.0	20.5	18.5	13.5	16.0	---	---	---	14.0	10.0	12.5
3	23.0	18.0	22.5	17.0	12.5	15.0	---	---	---	13.5	8.5	11.0
4	24.0	18.5	21.5	18.0	15.0	16.5	15.0	10.0	13.5	13.0	8.0	10.5
5	23.5	18.0	21.0	18.5	12.5	15.5	15.0	11.5	13.5	13.0	8.0	10.5
6	23.5	17.0	20.0	18.0	13.0	15.5	16.0	12.0	14.0	13.5	10.0	12.0
7	23.0	18.0	20.0	16.0	14.0	15.0	15.0	11.0	13.0	13.0	11.0	12.0
8	22.5	18.0	20.0	17.0	14.0	15.0	14.5	10.5	12.5	15.5	12.5	14.0
9	23.0	18.0	20.0	17.0	14.0	15.5	14.0	10.0	12.5	14.5	13.5	13.5
10	22.5	17.0	19.5	17.5	14.0	15.5	13.5	10.0	12.0	13.5	13.5	13.5
11	22.0	17.0	19.5	17.0	13.5	15.0	14.5	11.5	13.0	14.0	13.5	13.5
12	21.5	16.0	18.5	17.0	12.5	14.5	11.5	8.0	10.0	14.0	13.5	14.0
13	20.0	16.5	18.5	17.5	11.5	14.0	12.0	7.0	9.5	14.0	14.0	14.0
14	22.0	18.5	20.0	17.5	11.5	14.0	12.5	7.5	10.0	14.5	14.0	14.0
15	22.0	17.5	19.5	17.0	11.0	14.0	12.0	7.0	9.5	15.0	14.5	15.0
16	21.5	17.0	19.0	16.5	11.5	14.0	10.5	7.5	8.5	15.0	15.0	15.0
17	19.5	17.0	18.5	16.5	12.5	14.5	---	---	---	15.0	15.0	15.0
18	19.5	17.5	18.5	16.5	13.5	15.0	13.0	8.5	11.5	15.0	15.0	15.0
19	20.5	18.0	19.0	15.0	11.0	13.0	13.0	8.5	11.0	15.0	14.0	14.5
20	20.0	17.5	19.0	13.5	9.0	11.0	13.0	9.0	11.0	14.0	13.0	13.5
21	22.5	16.5	18.5	13.0	7.5	10.5	13.5	12.5	13.0	13.0	12.0	12.5
22	21.0	14.5	17.0	13.5	7.5	10.5	13.0	10.5	12.0	12.5	12.0	12.0
23	16.5	15.0	16.0	14.5	9.5	12.0	12.0	7.5	10.0	13.0	12.0	12.5
24	16.5	16.5	16.5	15.0	10.0	12.5	13.0	8.5	11.0	12.5	12.0	12.5
25	16.5	16.5	16.5	15.5	11.0	13.0	15.0	12.5	13.5	12.5	12.0	12.5
26	16.5	16.5	16.5	15.0	12.5	14.0	15.0	11.5	13.0	12.5	12.0	12.5
27	17.5	16.5	17.0	15.5	13.0	14.5	12.5	8.5	10.5	12.5	12.5	12.5
28	17.5	17.0	17.0	14.5	12.5	13.5	12.0	7.5	10.0	13.0	12.5	12.5
29	17.0	16.5	16.5	14.0	11.5	13.0	13.0	9.5	11.5	13.5	13.0	13.0
30	16.5	14.5	15.5	13.0	10.0	11.5	12.5	8.5	11.0	13.0	13.0	13.0
31	17.0	13.0	15.0	---	---	---	14.0	10.0	12.0	13.0	13.0	13.0
MONTH	24.0	13.0	18.5	18.5	7.5	14.0	16.0	7.0	11.5	15.5	8.0	13.0

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	13.0	13.0	14.5	14.0	14.0	16.0	15.5	16.0	19.0	17.0	18.0
2	13.5	13.0	13.0	15.0	14.5	14.5	16.5	16.0	16.0	21.5	15.5	18.0
3	13.5	13.0	13.5	15.0	14.5	14.5	16.5	---	---	17.5	17.5	17.5
4	14.0	13.5	13.5	15.0	14.5	14.5	16.5	16.5	16.5	18.0	17.5	17.5
5	14.0	13.5	14.0	15.0	14.5	15.0	16.5	16.5	16.5	21.5	17.5	18.5
6	14.0	13.5	13.5	15.0	14.5	15.0	17.0	16.5	16.5	21.5	18.0	18.5
7	14.5	13.5	14.0	15.0	14.5	14.5	17.0	16.5	17.0	19.0	18.0	18.5
8	14.5	14.0	14.5	15.5	14.5	15.0	17.5	17.0	17.0	19.5	18.5	19.0
9	14.5	14.0	14.0	15.5	14.5	15.0	17.5	17.0	17.5	19.5	19.0	19.0
10	14.5	14.0	14.0	15.0	14.5	14.5	18.0	17.5	18.0	19.5	19.0	19.5
11	14.0	13.5	14.0	14.5	14.0	14.5	19.0	18.0	18.5	19.0	19.0	19.0
12	14.0	13.5	13.5	15.0	14.5	14.5	19.0	18.5	18.5	19.0	18.0	18.5
13	13.5	13.0	13.0	15.0	14.5	15.0	19.0	17.5	18.5	18.0	17.0	17.5
14	13.0	13.0	13.0	15.5	15.0	15.0	18.5	16.0	18.0	17.5	17.0	17.0
15	13.0	12.5	12.5	15.5	15.0	15.0	18.5	18.5	18.5	17.0	17.0	17.0
16	13.0	12.5	13.0	16.0	15.5	15.5	19.0	18.5	19.0	17.5	17.0	17.0
17	13.0	13.0	13.0	16.5	14.5	15.5	20.0	19.0	19.5	17.5	17.0	17.0
18	13.5	13.0	13.5	17.0	14.0	15.0	20.5	19.5	20.0	18.0	17.0	17.5
19	13.5	13.5	13.5	19.0	14.0	16.0	20.0	19.5	19.5	18.0	17.5	17.5
20	14.5	13.5	14.0	19.5	14.0	16.0	20.0	19.5	19.5	18.5	17.5	18.0
21	14.5	14.0	14.0	17.5	14.0	15.5	20.0	19.5	19.5	18.5	18.0	18.0
22	14.5	14.0	14.0	18.0	13.5	15.5	20.0	19.5	19.5	19.0	18.5	18.5
23	14.5	14.0	14.0	15.5	15.0	15.5	19.5	18.5	19.0	19.0	18.5	19.0
24	14.0	14.0	14.0	18.5	15.0	16.0	18.5	17.5	18.0	15.0	12.5	13.5
25	14.0	13.5	14.0	18.0	15.0	15.5	17.5	17.0	17.5	15.0	13.5	14.0
26	14.0	13.0	13.5	15.5	15.0	15.0	17.0	16.5	17.0	15.0	14.0	14.5
27	14.0	13.0	14.0	16.0	15.0	15.5	17.5	16.5	17.0	14.0	13.5	14.0
28	14.5	13.5	14.0	16.0	15.5	15.5	18.0	16.5	17.5	14.0	13.0	13.5
29	14.0	13.5	14.0	16.0	15.5	15.5	20.5	16.5	18.0	14.0	12.5	13.0
30	---	---	---	16.0	15.5	15.5	18.0	17.0	17.5	13.0	12.5	13.0
31	---	---	---	16.0	15.5	16.0	---	---	---	13.0	12.5	12.5
MONTH	14.5	12.5	13.5	19.5	13.5	15.0	20.5	15.5	18.0	21.5	12.5	17.0
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.0	11.5	12.0	23.0	22.5	22.5	25.5	24.5	25.0	24.5	19.5	21.5
2	18.5	12.0	18.0	23.0	22.5	22.5	25.5	25.0	25.0	25.0	19.5	22.0
3	18.0	17.5	18.0	23.0	22.5	23.0	25.5	25.0	25.0	25.0	19.0	21.5
4	18.0	17.5	18.0	23.5	23.0	23.0	25.5	25.0	25.0	25.0	---	---
5	18.0	17.5	18.0	23.5	23.0	23.5	25.5	24.5	25.0	25.5	19.0	22.0
6	18.5	17.5	18.0	23.5	23.0	23.5	25.5	24.5	25.0	25.5	19.5	22.0
7	18.5	18.0	18.0	24.0	23.5	23.5	25.0	24.5	24.5	22.5	19.5	20.5
8	19.0	18.0	18.5	24.0	23.5	23.5	25.0	24.5	24.5	24.0	18.5	20.5
9	19.0	18.5	18.5	24.0	23.5	23.5	25.0	24.0	24.5	24.0	17.5	20.5
10	19.0	18.5	18.5	24.0	23.5	23.5	25.0	24.5	24.5	24.5	19.0	21.0
11	19.0	18.5	19.0	24.0	23.5	23.5	25.0	24.5	24.5	24.5	18.5	21.0
12	19.5	19.0	19.0	24.0	23.0	23.5	25.5	24.5	25.0	24.5	19.0	21.5
13	19.5	19.0	19.5	24.0	23.0	23.5	25.5	24.5	25.0	23.5	19.5	21.0
14	20.0	19.0	19.5	24.0	23.0	23.5	24.5	24.0	24.5	24.0	19.0	21.0
15	20.0	19.5	20.0	23.5	23.0	23.5	24.5	24.0	24.0	20.5	17.5	18.5
16	20.0	19.5	20.0	23.5	23.0	23.5	24.0	23.5	23.5	25.0	18.0	21.5
17	20.5	20.0	20.0	23.5	23.0	23.0	24.0	22.5	23.5	27.0	20.0	23.0
18	20.5	20.0	20.5	23.5	23.0	23.0	25.0	21.0	22.5	26.0	19.5	22.5
19	21.5	20.0	20.5	23.5	23.0	23.0	25.0	19.5	21.5	25.0	19.0	21.5
20	21.0	20.5	20.5	23.5	23.0	23.0	26.0	18.5	21.5	24.0	18.0	20.5
21	21.5	20.5	21.0	23.5	23.0	23.0	25.5	19.0	22.0	24.5	19.0	21.5
22	21.5	21.0	21.0	23.5	23.0	23.0	25.0	21.0	22.5	24.0	18.0	20.5
23	21.5	21.0	21.5	23.5	23.0	23.0	25.5	20.5	23.0	24.0	17.5	20.5
24	22.0	21.5	21.5	23.5	23.0	23.0	25.5	20.0	22.5	24.5	17.5	20.5
25	22.0	21.5	21.5	23.5	23.0	23.5	26.5	20.0	23.0	24.5	17.5	20.5
26	22.0	21.5	22.0	24.0	23.5	23.5	27.0	20.0	23.0	24.5	18.0	21.0
27	22.5	22.0	22.0	24.0	23.5	23.5	26.5	19.5	22.5	24.5	18.0	21.0
28	22.5	22.0	22.0	24.5	23.5	24.0	26.0	19.0	22.0	24.0	17.0	20.5
29	22.5	22.0	22.5	24.5	24.0	24.0	26.0	19.0	22.0	25.0	17.0	21.0
30	22.5	22.5	22.5	25.0	24.0	24.5	25.0	18.0	21.5	26.0	18.0	21.5
31	---	---	---	25.0	24.5	24.5	25.5	18.5	21.5	---	---	---
MONTH	22.5	11.5	19.5	25.0	22.5	23.5	27.0	18.0	23.5	27.0	17.0	21.0
YEAR	27.0	7.0	17.5									

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	75	260	53	122	68	22	203	170	93
2	84	260	59	114	65	20	209	163	92
3	81	260	57	113	63	19	212	159	91
4	79	265	57	111	61	18	212	153	88
5	79	270	58	109	58	17	205	150	83
6	78	280	59	113	59	18	208	148	83
7	80	280	60	113	60	18	209	143	81
8	85	290	67	129	60	21	207	141	79
9	86	298	69	124	61	20	207	140	78
10	89	305	73	118	62	20	215	139	81
11	91	303	74	115	63	20	220	138	82
12	90	300	73	114	66	20	209	137	77
13	80	300	65	115	72	22	199	134	72
14	79	299	64	115	80	25	198	132	71
15	81	297	65	114	85	26	207	131	73
16	89	295	71	111	88	26	211	130	74
17	93	288	72	107	90	26	212	129	74
18	92	280	70	118	91	29	214	130	75
19	95	272	70	115	93	29	220	127	75
20	40	48	5.2	111	94	28	218	125	74
21	8.7	45	1.1	106	95	27	244	179	122
22	8.7	44	1.0	109	97	29	243	140	92
23	154	175	87	113	97	30	218	127	75
24	197	250	133	112	98	30	148	98	39
25	192	170	88	114	100	31	130	82	29
26	187	130	66	122	153	56	127	141	49
27	182	107	53	198	200	107	213	122	70
28	177	91	43	213	190	109	213	110	63
29	170	82	38	206	182	101	214	98	57
30	161	76	33	211	175	100	210	92	52
31	148	72	29	---	---	---	208	88	49
TOTAL	3231.4	---	1813.3	3805	---	1064	6363	---	2293
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	211	86	49	2020	245	1340	3080	52	432
2	208	83	47	1990	203	1090	5450	43	633
3	201	81	44	1960	180	953	5150	38	528
4	200	80	43	2050	142	786	4620	33	412
5	209	78	44	1710	122	563	5130	29	402
6	214	77	44	462	110	137	5120	26	359
7	234	76	48	247	82	55	5190	24	336
8	241	120	78	241	49	32	5160	21	293
9	158	205	84	242	46	30	5040	19	259
10	123	200	66	240	45	29	3690	17	169
11	410	340	403	238	42	27	3060	15	124
12	613	270	447	236	40	25	3020	14	114
13	604	250	408	308	100	83	3040	12	98
14	606	210	344	1200	155	459	3050	11	91
15	620	195	326	2010	193	1060	3000	10	81
16	624	180	303	2250	227	1380	2940	9	71
17	617	160	267	2870	853	6190	1720	70	325
18	526	145	206	4520	360	4390	17	122	5.6
19	465	120	151	5590	340	5130	17	68	3.1
20	464	102	128	5720	280	4320	17	43	2.0
21	319	80	69	6220	250	4200	17	33	1.5
22	221	60	36	6140	240	3980	260	26	18
23	220	41	24	6440	190	3300	1620	21	92
24	219	37	22	6370	140	2410	460	17	21
25	264	36	26	4920	108	1430	290	16	13
26	296	35	28	1940	83	435	890	10	24
27	296	34	27	4720	72	918	1450	7	27
28	245	34	22	3530	65	620	1720	6	28
29	1250	374	1850	1370	58	215	1710	5	23
30	2010	345	1870	---	---	---	1680	5	23
31	1900	300	1540	---	---	---	1640	5	22
TOTAL	14788	---	9044	77754	---	45587	79248	---	5030.2

SANTA ANA RIVER BASIN

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	1630	4	18	452	8	9.8	404	10	11
2	1610	3	13	399	11	12	414	10	11
3	1630	4	18	1350	9	33	415	10	11
4	1660	4	18	1340	8	29	419	10	11
5	1680	4	18	625	6	10	425	10	11
6	1670	4	18	603	6	9.8	389	9	9.5
7	1650	4	18	665	6	11	363	9	8.8
8	1640	4	18	902	8	19	369	9	9.0
9	1620	4	17	1570	12	51	412	9	10
10	1610	6	26	1750	15	71	440	10	12
11	1580	14	60	1700	13	60	442	10	12
12	1560	13	55	1670	12	54	440	10	12
13	1150	11	34	679	10	18	413	9	10
14	1160	10	31	232	9	5.6	372	8	8.0
15	1710	10	46	294	8	6.4	363	8	7.8
16	1690	9	41	340	7	6.4	372	8	8.0
17	1680	9	41	346	6	5.6	375	8	8.1
18	1070	8	23	356	6	5.8	365	8	7.9
19	308	17	14	366	6	5.9	328	7	6.2
20	312	17	14	373	5	5.0	363	7	6.9
21	315	17	14	384	5	5.2	363	7	6.9
22	316	17	15	391	5	5.3	366	7	6.9
23	309	17	14	362	5	4.9	378	7	7.1
24	308	17	14	315	6	5.1	422	7	8.0
25	459	11	14	312	7	5.9	438	8	9.5
26	765	10	21	315	8	6.8	442	8	9.5
27	765	9	19	312	9	7.6	420	8	9.1
28	556	8	12	312	9	7.6	393	7	7.4
29	307	8	6.6	365	9	8.9	393	7	7.4
30	304	8	6.6	401	10	11	392	6	6.4
31	---	---	---	403	10	11	---	---	---
TOTAL	33024	---	677.2	19884	---	507.6	11890	---	269.4
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	412	6	6.7	332	38	34	89	410	99
2	427	6	6.9	327	38	34	89	400	96
3	437	6	7.1	322	38	33	89	395	95
4	446	6	7.2	306	39	32	83	390	87
5	447	6	7.2	295	39	31	81	388	85
6	452	7	8.5	287	40	31	80	382	83
7	440	7	8.3	282	42	32	86	380	88
8	430	8	9.3	277	43	32	90	375	91
9	430	10	12	271	45	33	92	370	92
10	428	15	17	264	49	35	97	370	97
11	372	17	17	273	50	37	96	368	95
12	327	18	16	273	60	44	95	363	93
13	320	19	16	286	80	62	98	361	96
14	317	21	18	286	100	77	96	359	93
15	314	22	19	272	125	92	101	350	95
16	314	23	19	244	160	105	98	350	93
17	316	30	26	217	230	135	95	350	90
18	312	39	33	177	370	177	93	350	88
19	311	38	32	110	640	190	86	350	81
20	311	37	31	103	590	164	86	349	81
21	312	37	31	72	540	105	91	347	85
22	317	37	32	89	520	125	95	342	88
23	353	37	35	110	500	148	98	340	90
24	359	36	35	97	480	126	100	338	91
25	356	35	34	96	470	122	99	336	90
26	355	35	34	98	450	119	95	335	86
27	354	36	34	91	445	109	98	338	89
28	349	36	34	88	437	104	97	340	89
29	344	37	34	86	430	100	100	345	93
30	340	37	34	85	422	97	98	345	91
31	336	38	34	89	415	100	---	---	---
TOTAL	11338	---	688.2	6205	---	2665	2791	---	2710
YEAR	270321.4		72348.9						

11074000 SANTA ANA RIVER BELOW PRADO DAM, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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	
OCT									
03...	1245	20.5	82	258	57	48	62	75	
10...	1040	18.0	96	328	85	--	--	--	
NOV									
06...	1215	14.0	118	58	18	--	--	--	
DEC									
18...	1000	8.5	216	132	77	--	--	--	
JAN									
02...	1600	14.0	201	83	45	--	--	--	
16...	1040	--	623	180	303	--	--	--	
23...	1400	12.5	221	42	25	--	--	--	
FEB									
04...	1230	--	1690	3	14	--	--	--	
05...	1440	13.5	1640	126	558	--	--	--	
08...	1330	14.5	243	49	32	--	--	--	
18...	0815	13.0	4270	437	5040	77	86	86	
20...	1315	14.0	5740	366	5670	46	51	52	
20...	1500	13.5	5670	223	3410	--	--	--	
22...	0930	14.0	7040	187	3550	78	87	89	
22...	1430	14.0	1940	316	1660	--	--	--	
MAR									
18...	1145	16.0	84	124	28	--	--	--	
25...	1215	16.5	85	15	3.4	--	--	--	
25...	1230	16.5	85	15	3.4	--	--	--	
APR									
29...	1330	20.5	14	8	.30	--	--	--	
MAY									
23...	1300	19.5	394	5	5.3	--	--	--	
JUN									
30...	1120	--	462	24	30	--	--	--	
JUL									
24...	1130	24.0	360	40	39	--	--	--	
28...	1010	24.0	350	34	32	--	--	--	
AUG									
01...	1410	25.0	330	42	37	--	--	--	
19...	1100	20.0	105	805	228	60	76	87	
SEP									
15...	1000	21.5	140	359	136	--	--	--	
		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	SED. SUSP. FALL DIAM. % FINER THAN 2.00 MM
OCT									
03...	88	97	100	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
NOV									
06...	--	--	82	--	--	--	--	--	--
DEC									
18...	--	--	95	--	--	--	--	--	--
JAN									
02...	--	--	94	--	--	--	--	--	--
16...	--	--	95	98	100	--	--	--	--
23...	--	--	89	90	92	96	100	--	--
FEB									
04...	--	--	100	--	--	--	--	--	--
05...	--	--	96	98	99	100	--	--	--
08...	--	--	99	--	--	--	--	--	--
18...	88	91	94	98	100	--	--	--	--
20...	54	56	59	64	69	77	89	100	--
20...	--	--	--	--	--	--	--	--	--
22...	90	93	96	99	100	--	--	--	--
22...	--	--	81	--	--	--	--	--	--
MAR									
18...	--	--	61	--	--	--	--	--	--
25...	--	--	92	--	--	--	--	--	--
25...	--	--	88	--	--	--	--	--	--
APR									
29...	--	--	82	--	--	--	--	--	--
MAY									
23...	--	--	94	--	--	--	--	--	--
JUN									
30...	--	--	--	--	--	--	--	--	--
JUL									
24...	--	--	84	--	--	--	--	--	--
28...	--	--	89	--	--	--	--	--	--
AUG									
01...	--	--	90	--	--	--	--	--	--
19...	96	99	100	--	--	--	--	--	--
SEP									
15...	--	--	95	--	--	--	--	--	--

SANTA ANA RIVER BASIN

11075600 SANTA ANA RIVER AT IMPERIAL HIGHWAY, NEAR ANAHEIM, CA

LOCATION.--Lat 33°51'23", long 117°47'23", in Canon De Santa Ana, Orange County, Hydrologic Unit 18070203, on right bank 500 ft (150 m) upstream from State Highway 91, and 0.4 mi (0.6 km) south of Orangethorpe Avenue, and 9 mi (14 km) east of Anaheim, and 9.8 mi (15.8 km) downstream from Prado Dam.

DRAINAGE AREA.--1,544 mi² (3,999 km²), excludes 768 mi² (1,989 km²) above Lake Elsinore.

PERIOD OF RECORD.--October 1973 to current year.

AGE.--Water-stage recorder. Altitude of gage is 282 ft (86.0 m), from topographic map. Prior to June 4, 1975, at datum 3.00 ft (0.914 m) higher due to channel degradation.

REMARKS.--Records poor. Natural flow affected by ground-water withdrawals, diversions, importation from Metropolitan Water District and California Aqueduct, municipal use, return flow from irrigation, Prado flood-control reservoir, capacity, 201,200 acre-ft (248 hm³) since 1940. See schematic diagram of Santa Ana River Basin.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency and reviewed by the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s (300 m³/s) Feb. 19, 1980, gage height, 4.80 ft (1.463 m), maximum gage height, 5.22 ft (1.591 m) Dec. 4, 1974, datum then in use; minimum daily discharge, 10 ft³/s (0.28 m³/s) Sept. 20, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,600 ft³/s (300 m³/s) Feb. 19, gage height, 4.80 ft (1.463 m); minimum daily, 11 ft³/s (0.31 m³/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	114	193	185	1960	2970	1700	312	361	350	315	88
2	91	109	195	185	2130	5400	1650	154	350	416	315	88
3	89	109	198	175	1910	4800	1650	897	340	438	450	85
4	86	107	195	173	1910	4600	1700	999	340	445	367	80
5	87	104	195	180	1800	5000	1700	481	330	544	394	80
6	86	123	200	188	574	5100	1700	423	340	520	341	82
7	86	125	200	198	345	5210	1650	451	300	427	315	86
8	89	133	200	223	279	5230	1650	651	300	372	328	88
9	90	136	200	245	252	5520	1600	1120	300	484	292	92
10	92	130	203	167	241	3760	1600	1330	280	438	315	94
11	93	124	203	357	238	3100	1600	1310	240	361	341	94
12	93	122	188	450	227	3000	1520	1290	320	394	408	94
13	86	149	180	485	444	3100	1310	751	350	383	289	96
14	85	170	173	485	1010	3000	895	270	320	310	250	96
15	87	173	175	414	1840	3000	1490	280	320	310	263	98
16	92	165	178	460	3810	2650	1520	310	340	250	276	96
17	92	150	173	470	3940	2170	1550	290	438	250	242	89
18	92	175	170	505	5640	240	1230	270	350	290	210	86
19	94	170	178	390	7310	158	484	290	310	300	110	86
20	47	158	185	374	6300	128	405	350	372	310	100	88
21	12	150	203	291	6100	120	350	330	280	280	85	90
22	11	155	225	216	6340	157	340	383	220	383	78	94
23	145	148	175	215	6620	982	280	361	350	416	100	100
24	177	168	165	208	4090	605	230	250	416	300	89	98
25	172	158	144	224	4400	278	290	270	383	310	88	94
26	170	158	132	248	3390	777	445	310	394	383	91	94
27	167	183	197	245	3510	1420	438	310	445	300	88	96
28	163	188	210	461	3660	1640	293	270	340	315	86	98
29	158	190	195	1200	3180	1910	228	330	445	328	84	98
30	152	195	140	1830	---	1800	229	361	394	302	86	100
31	107	---	171	1820	---	1750	---	330	---	263	88	---
TOTAL	3174	4439	5739	13267	83450	79575	31727	15734	10268	11172	6884	2748
MEAN	102	148	185	428	2878	2567	1058	508	342	360	222	91.6
MAX	177	195	225	1830	7310	5520	1700	1330	445	544	450	100
MIN	11	104	132	167	227	120	228	154	220	250	78	80
C-FT	6300	8800	11380	26320	165500	157800	62930	31210	20370	22160	13650	5450
AL YR 1979	TOTAL	74720	MEAN 205	MAX 660	MIN 11	AC-FT 148200						
TR YR 1980	TOTAL	268177	MEAN 733	MAX 7310	MIN 11	AC-FT 531900						

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 1807020, on diversion channel, 100 ft (30 m) downstream from diversion point, 0.1 mi (0.2 km) south of La Palma Avenue, 0.6 mi (1.0 km) west of Imperial Highway, and 7.8 mi (12.6 km) east of Anaheim.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1974 to current year. Records prior to Sept. 30, 1976, in files of Laguna Niguel Subdistrict.

GAGE.--Water-stage recorder and Parshall flume control. Altitude of gage is 262 ft (80 m), from topographic map.

REMARKS.--Records fair. Water is diverted from Santa Ana River at diversion point 100 ft (30 m) upstream, for recharging to spreading basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 431 ft³/s (12.2 m³/s) Jan. 14, 1978; no flow for some periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 367 ft³/s (10.4 m³/s) July 6; no flow Oct. 1 to Dec. 20, Sept. 4-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	143	80	73	53	142	288	326	271	.32
2			0	141	95	37	53	73	288	348	269	.16
3			0	136	96	70	105	216	285	352	268	.12
4			0	136	94	72	137	200	283	358	258	.10
5			0	141	84	60	141	101	285	360	250	0
6			0	145	14	92	125	99	264	367	245	0
7			0	152	131	113	99	98	229	356	241	0
8			0	152	230	125	99	116	231	334	239	0
9			0	120	224	110	95	140	255	333	231	0
10			0	79	220	115	129	125	291	331	227	0
11			0	284	225	126	126	137	295	299	224	0
12			0	339	219	177	128	136	299	256	226	0
13			0	338	184	183	105	85	289	253	228	0
14			0	343	144	166	83	159	243	254	237	0
15			0	344	171	206	131	270	246	254	229	0
16			0	334	88	201	126	311	250	254	210	0
17			0	327	27	176	124	309	260	256	211	0
18			0	311	17	140	83	290	261	256	198	0
19			0	282	9.7	181	.16	297	247	255	127	0
20			0	270	27	156	.16	309	286	257	99	0
21			70	219	24	137	.13	311	284	257	60	0
22			142	179	24	133	110	306	281	261	34	0
23			136	172	13	176	246	287	292	281	35	0
24			115	170	12	78	238	239	326	283	51	0
25			92	179	20	42	196	235	347	284	50	0
26			90	217	28	105	212	235	350	285	48	0
27			136	190	62	137	129	232	343	286	30	0
28			147	190	48	115	87	230	313	288	15	0
29			146	68	41	116	68	251	313	283	5.7	0
30			143	55	---	108	99	289	314	281	3.1	0
31		---	141	38	---	80	---	287	---	276	.75	---
TOTAL	0	0	1358	6194	2651.7	3806	3327.45	6515	8538	9124	4820.55	.70
MEAN	0	0	43.8	200	91.4	123	111	210	285	294	156	.023
MAX	0	0	147	344	230	206	246	311	350	367	271	.32
MIN	0	0	0	38	9.7	37	.13	73	229	253	.75	0
AC-FT	0	0	2690	12290	5260	7550	6600	12920	16940	18100	9560	1.4
CAL YR 1979	TOTAL	40681.63	MEAN	111	MAX	361	MIN	0	AC-FT	80690		
WTR YR 1980	TOTAL	46335.40	MEAN	127	MAX	367	MIN	0	AC-FT	91910		

SANTA ANA RIVER BASIN

11075620 SANTA ANA RIVER SPREADING DIVERSION BELOW IMPERIAL HIGHWAY, NEAR ANAHEIM, CA--Continued

WATER-QUALITY RECORDS

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

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 periods of no flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,640 micromhos Sept. 21, 1978; minimum recorded, 143 micromhos Mar. 10, 1980.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,520 micromhos Apr. 25; minimum recorded, 143 micromhos Mar. 10.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1							---	---	---	---	---	---
2							---	---	---	942	916	930
3							---	---	---	951	921	936
4							---	---	---	973	921	939
5							---	---	---	948	922	933
6							---	---	---	943	919	931
7							---	---	---	931	849	911
8							---	---	---	940	788	890
9							---	---	---	997	425	726
10							---	---	---	837	295	521
11							---	---	---	838	266	573
12							---	---	---	709	519	565
13							---	---	---	523	461	509
14							---	---	---	574	518	548
15							---	---	---	781	561	660
16							---	---	---	773	587	636
17							---	---	---	586	552	575
18							---	---	---	699	559	635
19							---	---	---	722	668	693
20							---	---	---	668	606	639
21							432	468	590	763	611	661
22							758	416	551	836	742	788
23							730	474	591	844	712	796
24							650	406	530	899	753	813
25							---	---	---	914	842	882
26							---	---	---	960	800	865
27							---	---	---	983	799	869
28							---	---	---	958	364	662
29							---	---	---	628	214	369
30							---	---	---	325	203	269
31							---	---	---	324	300	311
MONTH							---	---	---	997	203	701

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	316	288	301	---	---	---	762	732	753	1190	618	924
2	---	---	290	---	---	---	781	721	757	1490	914	1080
3	---	---	---	---	---	---	770	762	765	1040	895	936
4	---	---	---	449	363	398	833	763	799	885	749	835
5	463	249	330	414	324	383	828	618	767	981	509	782
6	257	243	246	417	223	341	821	777	797	937	443	619
7	883	253	545	364	318	340	828	772	801	849	345	535
8	901	741	808	341	335	338	843	777	808	836	338	525
9	925	783	861	386	348	370	870	800	836	802	676	729
10	999	891	936	395	143	290	903	827	855	738	630	699
11	1040	893	981	152	148	150	890	822	859	706	300	520
12	1060	904	970	161	153	156	909	819	860	308	286	296
13	1060	324	753	190	170	185	1050	854	892	293	277	284
14	722	418	567	197	193	194	1320	857	1050	1020	277	688
15	616	384	520	206	200	203	886	834	861	1020	927	979
16	520	370	472	445	205	234	911	839	857	989	919	954
17	---	---	---	242	216	229	904	834	859	1010	891	932
18	---	---	---	409	215	271	1040	831	889	940	818	877
19	---	---	---	462	314	386	1060	1040	1050	894	814	860
20	---	---	---	589	461	552	1090	1050	1080	874	810	844
21	---	---	---	634	596	609	1090	1030	1060	866	810	834
22	---	---	---	1390	639	704	1260	1070	1150	876	818	852
23	---	---	---	1110	752	898	1330	1280	1320	1030	847	930
24	---	---	---	1230	755	942	1450	1380	1420	1040	935	966
25	---	---	---	1310	838	1050	1520	1200	1420	1020	965	982
26	---	---	---	991	887	945	1390	1160	1270	1020	989	1000
27	---	---	---	994	818	913	1220	790	862	1020	961	986
28	---	---	---	891	721	829	881	843	854	974	940	959
29	---	---	---	869	755	814	987	917	934	990	898	936
30	---	---	---	840	786	816	1330	1000	1130	914	870	896
31	---	---	---	833	755	799	---	---	---	906	876	891
MONTH	---	---	---	1390	143	512	1520	618	954	1490	277	811
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	892	844	866	966	930	946	1020	1010	1020	570	478	527
2	915	847	879	931	857	905	1040	1000	1020	508	454	489
3	1000	855	891	934	892	912	1040	1010	1030	506	356	450
4	935	807	857	906	864	891	1060	1030	1040	410	346	382
5	868	792	817	917	875	899	1080	1050	1070	---	---	---
6	838	746	803	915	899	907	1090	1060	1080	---	---	---
7	863	823	846	922	894	914	1080	1060	1070	---	---	---
8	869	817	851	922	902	914	1090	1070	1080	---	---	---
9	872	800	840	919	897	911	1080	1060	1070	---	---	---
10	906	784	803	938	900	913	1130	1060	1080	---	---	---
11	817	773	794	976	924	949	1140	1090	1110	---	---	---
12	810	760	788	985	969	977	1160	1100	1130	---	---	---
13	822	788	805	987	961	975	1190	1110	1140	---	---	---
14	873	809	846	998	968	983	1210	1140	1170	---	---	---
15	907	855	886	1000	976	991	1230	1160	1190	---	---	---
16	918	884	904	1010	993	999	1260	1180	1220	---	---	---
17	920	874	893	1010	978	995	1300	1210	1270	---	---	---
18	901	867	888	1010	982	992	1360	1280	1330	---	---	---
19	964	872	904	1000	963	982	1370	976	1260	---	---	---
20	936	898	916	1030	985	1000	968	782	821	---	---	---
21	957	903	927	1040	1000	1020	848	768	816	---	---	---
22	959	933	944	1050	983	1010	798	734	773	---	---	---
23	974	916	941	1040	995	1010	808	710	758	---	---	---
24	950	916	935	1040	1020	1030	740	730	737	---	---	---
25	947	917	931	1040	1010	1020	744	734	740	---	---	---
26	944	924	932	1040	1010	1020	748	740	745	---	---	---
27	960	928	943	1030	1000	1020	748	728	736	---	---	---
28	979	935	955	1020	1000	1010	726	698	710	---	---	---
29	959	927	944	1020	998	1000	720	702	709	---	---	---
30	962	934	946	1030	1000	1020	744	714	729	---	---	---
31	---	---	---	1040	1010	1020	764	562	671	---	---	---
MONTH	1000	746	883	1050	857	972	1370	562	978	---	---	---
YEAR	1520	143	810									

SANTA ANA RIVER BASIN

11075720 CARBON CREEK BELOW CARBON CANYON DAM, CA

LOCATION.--Lat 33°54'40", long 117°50'29", in SW¼NE¼ sec.17, T.3 S., R.9 W., Orange County, Hydrologic Unit 18070106, on right wall of outlet channel 250 ft (76 m) downstream from toe of Carbon Canyon Dam, and 2.4 mi (3.9 km) northwest of Yorba Linda.

DRAINAGE AREA.--19.5 mi² (50.5 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 396.29 ft (120.789 m) Corps of Engineers datum. Prior to Dec. 3, 1971, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair. Flow regulated by Carbon Canyon flood-control reservoir, capacity, 6,610 acre-ft (8.15 hm³). No diversion above station. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--19 years, 1.09 ft³/s (0.031 m³/s), 790 acre-ft/yr (974,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 446 ft³/s (12.6 m³/s) Feb. 25, 1969, gage height, 4.64 ft (1.414 m), present datum, from rating curve extended above 110 ft³/s (3.12 m³/s) on basis of computation of flow in concrete-lined channel at gage heights 6.18 ft (1.884 m) and 4.12 ft (1.256 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 407 ft³/s (11.5 m³/s) Feb. 17, gage height, 4.44 ft (1.353 m), from rating curve extended as explained above; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.63	14	8.2	4.8	1.8	.63	.25	
2				0	.25	43	7.8	4.5	2.1	.63	.16	
3				0	.17	171	6.9	4.1	2.0	.48	.23	
4				0	.17	36	6.9	4.5	1.7	.48	.27	
5				0	.11	30	6.4	4.5	1.5	.48	.26	
6				0	.11	94	6.4	4.5	1.4	.48	.36	
7				0	.02	28	6.4	3.8	1.4	.36	.36	
8				0	0	25	6.0	3.8	1.2	.48	.28	
9				.20	0	19	6.0	3.8	1.3	.48	.25	
10				0	0	23	6.0	5.2	1.3	.36	.25	
11				7.3	0	24	6.0	4.2	1.3	.48	.21	
12				.15	0	20	5.6	3.7	1.2	.48	.14	
13				.10	31	17	5.6	3.8	1.3	.48	.11	
14				.10	156	16	5.6	3.7	1.2	.48	.15	
15				.10	149	16	5.6	3.8	1.1	.48	.17	
16				4.0	74	16	5.6	3.6	1.0	.48	.17	
17				.13	273	15	5.6	4.6	.89	.36	.17	
18				.19	305	14	5.2	4.4	1.2	.25	.25	
19				.04	118	12	5.2	4.0	.96	.25	.32	
20				.04	89	11	5.2	3.1	.98	.25	.35	
21				.02	29	11	4.8	3.5	.96	.48	.47	
22				.02	20	9.9	4.8	2.9	.88	.36	.61	
23				.02	19	9.4	4.8	2.8	.79	.48	.50	
24				.02	18	8.8	4.8	2.3	.80	.36	.40	
25				.02	17	8.8	4.8	2.0	1.0	.48	.31	
26				.02	16	10	4.8	2.0	1.1	.48	.25	
27				0	16	10	4.8	1.6	.48	.36	.20	
28				15	14	9.6	4.8	1.7	.48	.36	.14	
29				187	14	8.6	4.8	1.8	.36	.48	.06	
30				7.8	---	8.3	4.8	1.8	.48	.25	0	
31		---		2.3	---	8.3	---	1.8	---	.25	0	---
TOTAL	0	0	0	224.57	1359.46	746.7	170.2	106.6	34.16	13.19	7.65	0
MEAN	0	0	0	7.24	46.9	24.1	5.67	3.44	1.14	.43	.25	0
MAX	0	0	0	187	305	171	8.2	5.2	2.1	.63	.61	0
MIN	0	0	0	0	0	8.3	4.8	1.6	.36	.25	0	0
AC-FT	0	0	0	445	2700	1480	338	211	68	26	15	0
CAL YR 1979	TOTAL	584.83	MEAN 1.60	MAX 80	MIN 0	AC-FT 1160						
WTR YR 1980	TOTAL	2662.53	MEAN 7.27	MAX 305	MIN 0	AC-FT 5280						

11075755 SANTA ANA RIVER AT BALL ROAD, AT ANAHEIM, CA

LOCATION.--Lat 33°49'00", long 117°52'17", in SE¼SW¼SE¼ sec.24, T.4 S., R.10 W., Orange County, Hydrologic Unit 18070203, 350 ft (110 m) south of Ball Road, 0.6 mi (1.0 km) west of Batavia Street, 1.0 mi (1.6 km) east of State College Boulevard in Anaheim, and 16 mi (26 km) downstream from Prado Dam.

DRAINAGE AREA.--1,587 mi² (4,110 km²), excludes 768 mi² (1,989 km²) above Lake Elsinore.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder with concrete cut-off wall. Altitude of gage is 170 ft (51.8 m), from topographic map.

REMARKS.--Records fair. River flow is regulated by Prado Dam, infiltration ponds and diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,070 ft³/s (314 m³/s) Feb. 16, 1980, gage height, 5.08 ft (1.548 m); maximum gage height, 5.40 ft (1.646 m) Jan. 6, 1979, due to infiltration dikes in channel; no flow for many months each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,070 ft³/s (314 m³/s) Feb. 16, gage height, 5.08 ft (1.548 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	2110	1810	1590	67	13	30	25	
2				0	2200	5860	1570	208	10	30	18	
3				0	2250	5500	1440	1090	10	30	13	
4				0	2200	4960	1410	1250	11	37	17	
5				0	2110	5110	1570	615	11	46	15	
6				0	763	4960	1750	480	17	55	12	
7				0	108	4220	1750	492	10	58	12	
8				0	66	3660	1520	714	9.3	62	12	
9				235	30	4590	1350	1370	9.3	55	13	
10				0	33	4850	1330	1900	9.3	46	13	
11				196	37	2350	1460	1970	9.3	49	12	
12				46	40	2680	1370	1800	9.3	40	11	
13				58	1040	3110	1370	965	12	35	10	
14				121	2490	3160	641	115	11	33	10	
15				174	2800	3000	1480	.50	11	26	10	
16				288	4620	3020	1640	.50	12	26	8.6	
17				314	3970	2290	1730	1.5	13	21	8.6	
18				314	6100	58	1480	.58	13	20	7.2	
19				288	5310	14	150	.88	13	15	5.4	
20				288	4860	0	114	.67	13	14	4.5	
21				264	6450	0	108	.67	13	15	4.5	
22				91	5550	0	91	17	13	15	4.5	
23				37	5540	564	55	13	13	20	4.5	
24				3.8	5860	651	33	15	13	28	4.5	
25				0	4460	149	38	20	18	28	3.7	
26				0	4020	454	392	26	21	30	1.6	
27				0	3160	947	436	17	33	33	.36	
28				735	3180	1500	378	13	40	27	.22	
29				1920	2190	1590	112	15	37	28	.08	
30				2150	---	1610	53	15	35	26	.01	
31		---		1950	---	1550	---	15	---	23	0	---
TOTAL	0	0	0	9472.8	83547	74217	28411	13207.30	462.5	1011	261.27	0
MEAN	0	0	0	306	2881	2394	947	426	15.4	32.6	8.43	0
MAX	0	0	0	2150	6450	5860	1750	1970	40	62	25	0
MIN	0	0	0	0	30	0	33	.50	9.3	14	0	0
AC-FT	0	0	0	18790	165700	147200	56350	26200	917	2010	518	0
CAL YR 1979	TOTAL	12075.49	MEAN	33.1	MAX	1440	MIN	0	AC-FT	23950		
WTR YR 1980	TOTAL	210589.87	MEAN	575	MAX	6450	MIN	0	AC-FT	417700		

SANTA ANA RIVER BASIN

11075755 SANTA ANA RIVER AT BALL ROAD, AT ANAHEIM, CA

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to September 1980 (discontinued).

WATER TEMPERATURES: Water years 1977 to September 1980 (discontinued).

SEDIMENT RECORDS: Water years 1977 to September 1980 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1976 to September 1979.

SEDIMENT RECORDS: October 1976 to September 1979.

REMARKS.--Daily sediment discharge values estimated using sediment samples and composite sediment-transport relations.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 28,000 mg/L Feb. 10, 1978; minimum daily mean, no flow on many days.

SEDIMENT DISCHARGE: Maximum daily, 229,000 tons (208,000 metric tons) Feb. 10, 1978; minimum daily, 0 tons on many days.

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1979	0.0	0.0	0	0
NOVEMBER ...	0.0	0.0	0	0
DECEMBER ...	0.0	0.0	0	0
JANUARY 1980	9472.80	97500	23100	121000
FEBRUARY ...	83547.00	1240000	611000	1850000
MARCH	74217.00	869000	486000	1360000
APRIL	28411.00	31100	69900	101000
MAY	13207.30	7300	30600	37900
JUNE	462.50	41.70	20	62
JULY	1011.00	93.6	49	143
AUGUST	261.27	9.13	12	21
SEPTEMBER ..	0.0	0.0	0	0
TOTAL	210589.87	2245044.43	1220681	3460126

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
JAN								
14...	1400	--	114	538	166	52	65	72
15...	1245	--	183	610	301	--	--	--
17...	1330	--	314	483	409	--	--	--
17...	1525	--	264	478	341	--	--	--
18...	1345	16.5	314	451	382	--	--	--
29...	1145	14.0	1370	7050	26100	--	--	--
29...	1425	--	1250	2950	9960	--	--	--
29...	1700	--	1140	4510	13900	--	--	--
30...	0945	--	2180	5770	34000	--	25	28
31...	1315	--	2130	2200	12700	--	--	--
FEB								
05...	1700	14.5	2130	1180	6790	--	--	--
07...	1045	15.0	62	158	26	--	--	--
14...	1045	--	1540	5760	24000	--	--	--
14...	1645	13.5	1480	2920	11700	--	--	--
16...	1430	14.0	4770	5860	75500	--	29	32
19...	1330	--	6750	6320	115000	--	30	34
19...	1430	--	6890	6000	112000	--	--	--
20...	1400	--	4370	4460	52600	--	--	--
22...	1300	--	6530	3980	70200	--	--	--
26...	1230	--	6030	2480	40400	--	--	--
28...	1400	14.5	567	1350	2070	--	--	--
MAR								
01...	1030	14.5	1660	3600	16100	--	--	--
03...	1800	14.5	5340	7010	101000	--	--	--
05...	1345	--	5190	4900	68700	--	--	--
APR								
04...	0945	--	1250	400	1350	--	--	--
MAY								
02...	1230	22.5	.06	18	.00	--	--	--
JUN								
02...	1235	19.0	10	31	.84	--	--	--
JUL								
28...	1020	26.0	35	19	1.8	--	--	--

11075755 SANTA ANA RIVER AT BALL ROAD, AT ANAHEIM, CA

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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
JAN								
14...	79	83	85	90	96	98	100	--
15...	--	--	76	--	--	--	--	--
17...	--	--	80	--	--	--	--	--
17...	--	--	81	--	--	--	--	--
18...	--	--	72	--	--	--	--	--
29...	--	--	60	--	--	--	--	--
29...	--	--	86	--	--	--	--	--
29...	--	--	91	--	--	--	--	--
30...	33	39	46	54	65	81	94	97
31...	--	--	56	--	--	--	--	--
FEB								
05...	--	--	44	--	--	--	--	--
07...	--	--	80	--	--	--	--	--
14...	--	--	84	--	--	--	--	--
14...	--	--	81	--	--	--	--	--
16...	42	53	71	71	91	99	100	--
19...	45	57	71	82	93	99	100	--
19...	--	--	54	--	--	--	--	--
20...	--	--	64	--	--	--	--	--
22...	--	--	42	--	--	--	--	--
26...	--	--	74	--	--	--	--	--
28...	--	--	31	--	--	--	--	--
MAR								
01...	--	--	16	--	--	--	--	--
03...	--	--	40	--	--	--	--	--
05...	--	--	33	--	--	--	--	--
APR								
04...	--	--	20	--	--	--	--	--
MAY								
02...	--	--	81	--	--	--	--	--
JUN								
02...	--	--	46	--	--	--	--	--
JUL								
28...	--	--	37	--	--	--	--	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM
SEP											
24...	1245	4	.00	1	8	36	73	91	97	99	100

SANTA ANA RIVER BASIN

11075800 SANTIAGO CREEK AT MODJESKA, CA

LOCATION.--Lat 33°42'32", long 117°38'05", in SE&SE&NW¼ sec.29, T.5 S., R.7 W., Orange County, Hydrologic Unit 18070203, on right bank at Santiago Canyon road bridge, 0.3 mi (0.5 km) west of Modjeska, and 0.4 mi (0.6 km) downstream from Harding Creek.

DRAINAGE AREA.--12.5 mi² (32.4 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 1,254.35 ft (382.326 m) National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1969, at datum 4.42 ft (1.347 m) 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.--19 years, 8.57 ft³/s (0.243 m³/s), 6,210 acre-ft/yr (7.66 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft³/s (185 m³/s) Feb. 25, 1969, gage height, 10.50 ft (3.200 m), present datum, from rating curve extended above 840 ft³/s (23.8 m³/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 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 600 ft³/s (17.0 m³/s) on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 29	0400	755 21.4	*9.15 2.789	Mar. 2	2300	179 5.07	4.23 1.289
Feb. 18	0300	*1,810 51.3	9.03 2.752	Mar. 6	1100	303 8.58	4.73 1.442

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) Oct. 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.72	.64	.68	48	67	32	6.2	4.6	2.5	.72	.51
2	.11	.68	.64	.68	32	89	29	5.8	4.6	2.4	.70	.50
3	.10	.64	.64	.68	27	137	7.1	5.3	4.7	2.3	.69	.50
4	.09	.60	.64	.68	23	126	6.4	5.3	4.7	2.2	.68	.49
5	.09	.60	.64	.68	21	130	5.6	5.3	4.7	2.1	.67	.48
6	.08	.60	.64	.68	19	231	6.0	5.3	4.7	2.0	.66	.48
7	.08	.68	.64	.68	17	189	6.0	5.1	4.8	1.9	.65	.48
8	.08	.98	.64	.82	16	154	6.0	5.5	4.7	1.8	.64	.47
9	.07	.87	.64	7.3	15	130	6.0	6.2	4.7	1.7	.63	.47
10	.07	.82	.64	6.6	14	115	6.0	12	4.7	1.6	.62	.45
11	.07	.82	.64	37	14	95	7.1	11	4.7	1.6	.61	.45
12	.06	.72	.64	23	15	81	7.8	8.8	4.6	1.5	.61	.45
13	.06	.68	.64	18	38	72	7.5	7.8	4.6	1.5	.60	.47
14	.06	.68	.64	19	108	66	8.0	7.3	4.5	1.4	.60	.47
15	.06	.68	.64	18	511	61	7.5	6.9	4.4	1.4	.59	.47
16	.05	.68	.64	15	607	56	7.3	6.2	4.3	1.3	.59	.47
17	.05	.68	.60	12	573	52	7.5	6.0	4.1	1.2	.58	.47
18	.06	.68	.60	11	1320	47	7.5	5.7	3.9	1.2	.58	.47
19	.06	.68	.60	9.4	721	58	6.4	5.5	3.8	1.1	.57	.45
20	2.1	.64	.60	8.5	590	53	6.0	5.3	3.6	1.1	.57	.45
21	1.1	.64	.64	7.5	530	49	7.1	5.2	3.4	1.0	.57	.45
22	.64	.64	.68	6.9	344	45	7.5	5.1	3.3	1.0	.56	.45
23	.73	.64	.68	6.2	226	42	8.0	5.0	3.2	.97	.55	.43
24	.64	.64	.68	5.8	169	39	7.5	4.9	3.1	.93	.54	.43
25	.64	.64	.68	5.3	140	37	7.8	4.8	3.0	.90	.54	.41
26	.60	.64	.68	4.9	124	63	7.3	4.8	2.9	.87	.53	.41
27	.56	.64	.68	4.4	102	54	6.9	4.7	2.8	.83	.53	.40
28	.56	.64	.68	20	86	48	6.4	4.7	2.7	.80	.52	.40
29	.60	.64	.68	494	78	43	7.1	4.7	2.6	.78	.52	.40
30	1.2	.64	.68	129	---	39	6.6	4.7	2.5	.76	.52	.38
31	.77	---	.68	62	---	35	---	4.7	---	.74	.51	---
TOTAL	11.57	20.53	20.08	936.38	6528	2503	254.9	185.8	118.9	43.38	18.45	13.61
MEAN	.37	.68	.65	30.2	225	80.7	8.50	5.99	3.96	1.40	.60	.45
MAX	2.1	.98	.68	494	1320	231	32	12	4.8	2.5	.72	.51
MIN	.05	.60	.60	.68	14	35	5.6	4.7	2.5	.74	.51	.38
AC-FT	23	41	40	1860	12950	4960	506	369	236	86	37	27

CAL YR 1979	TOTAL	3332.62	MEAN	9.13	MAX	232	MIN	0	AC-FT	6610
WTR YR 1980	TOTAL	10654.60	MEAN	29.1	MAX	1320	MIN	.05	AC-FT	21130

11077500 SANTIAGO CREEK AT SANTA ANA, CA

LOCATION.--Lat 33°46'13", long 117°53'01", in NW¼SW¼NW¼ sec.1, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on left bank 127 ft (39 m) upstream from Bristol Street bridge at Santa Ana, and 1,700 ft (520 m) upstream from mouth at Santa Ana River.

DRAINAGE AREA.--98.6 mi² (255.4 km²).

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 (32.004 m) Orange County Environmental Management Agency datum. Prior to Sept. 8, 1969, at site 0.1 mi (0.2 km) upstream at different datum, Sept. 9, 1969 to July 21, 1976, at site 127 ft (39 m) downstream at datum 2.66 ft (0.811 m) lower.

REMARKS.--Records good. Flow regulated by Santiago Reservoir, capacity, 25,000 acre-ft (30.8 hm³), since January 1963 by Villa Park flood-control reservoir, capacity, 15,500 acre-ft (19.1 hm³), 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.--52 years, 5.30 ft³/s (0.150 m³/s), 3,840 acre-ft/yr (4.73 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,600 ft³/s (187 m³/s) Feb. 25, 1969, gage height, 9.10 ft (2.774 m), site and datum then in use; maximum gage height, 9.85 ft (3.002 m) Jan. 16, 1952, site and datum then in use; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,560 ft³/s (44.2 m³/s) Feb. 16, gage height, 5.82 ft (1.774 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	0	0			0	0		
2	0	0	0	0	0	105			0	0		
3	0	0	0	0	0	7.2			0	0		
4	0	0	0	0	0	0			0	.12		
5	0	0	0	0	0	24			0	0		
6	0	0	0	0	0	20			0	0		
7	0	1.9	0	0	0	0			0	0		
8	0	.01	0	.26	0	0			0	0		
9	0	0	0	96	0	0			0	0		
10	0	0	0	3.4	0	0			0	0		
11	0	0	0	164	0	0			0	0		
12	0	0	0	8.2	0	0			0	0		
13	0	0	0	0	187	.13			.29	0		
14	0	0	0	0	106	0			0	0		
15	0	0	0	0	7.5	0			0	0		
16	0	0	0	0	298	0			0	0		
17	0	.05	0	0	171	0			0	0		
18	0	0	0	0	180	0			0	0		
19	0	0	0	0	8.7	0			0	0		
20	4.3	0	0	0	32	0			0	0		
21	0	0	0	0	323	.15			0	0		
22	0	0	0	0	732	1.1			0	0		
23	0	0	0	0	218	.13			0	0		
24	0	0	.01	0	784	0			0	0		
25	0	0	0	0	183	10			0	0		
26	0	0	0	0	86	15			0	0		
27	0	0	0	0	2.6	1.4			0	0		
28	0	0	0	275	.07	.16			0	0		
29	0	0	0	50	0	.26			0	0		
30	0	0	0	2.6	---	.02			0	0		
31	0	---	0	.56	---	0	---		---	0		---
TOTAL	4.3	1.96	.01	600.02	3318.87	184.55	0	0	.29	.12	0	0
MEAN	.14	.065	.0003	19.4	114	5.95	0	0	.010	.004	0	0
MAX	4.3	1.9	.01	275	784	105	0	0	.29	.12	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	8.5	3.9	.02	1190	6580	366	0	0	.6	.2	0	0
CAL YR 1979 TOTAL	635.15			MEAN 1.74	MAX 163	MIN 0	AC-FT 1260					
WTR YR 1980 TOTAL	4110.12			MEAN 11.2	MAX 784	MIN 0	AC-FT 8150					

SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA

LOCATION.--Lat 33°44'56", long 117°54'30", in NW¼SW¼SE¼ sec.10, T.5 S., R.10 W., Orange County, Hydrologic Unit 18070203, on right bank 50 ft (15 m) downstream from Fifth Street Bridge in Santa Ana and 1.8 mi (2.9 km) downstream from Santiago Creek. Prior to Nov. 29, 1979, at site 50 ft (15 m) upstream.

DRAINAGE AREA.--1,700 mi² (4,403 km²), excludes 768 mi² (1,989 km²) 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 46.20 ft (14.082 m) 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 (137 m) 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 (8.230 m) higher. Oct. 2, 1961, to Nov. 28, 1979, at same site at datum 25.00 ft (7.620 m) higher. Nov. 29, 1979, to Apr. 20, 1980, at same site at datum 20.00 ft (6.096 m) higher.

REMARKS.--Records poor. 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 (248 hm³), three small flood-control reservoirs, combined capacity, 31,900 acre-ft (39.3 hm³), Big Bear Lake (station 11049000), and Santiago Reservoir, capacity, 25,000 acre-ft (30.8 hm³). Discharge up to 100 ft³/s (2.83 m³/s) can be diverted from Carbon Creek to Coyote Creek 1.5 mi (2.4 km) upstream from mouth of Carbon Creek. See schematic diagram of Santa Ana River basin.

AVERAGE DISCHARGE.--17 years (water years 1924-40), 23.4 ft³/s (0.663 m³/s), 16,940 acre-ft/yr (20.9 hm³/yr); 40 years (unadjusted for storage since 1940) 47.5 ft³/s (1.345 m³/s) 34,400 acre-ft/yr (42.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,300 ft³/s (1,310 m³/s) Mar. 3, 1938, gage height, 10.20 ft (3.109 m), 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, 17,800 ft³/s (504 m³/s) Feb. 18, gage height, 9.10 ft (2.774 m); maximum gage height, 9.62 ft (2.932 m) Feb. 16; no flow many days during the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0		0	2640	1800	1500	65	0	31	6.2	.25
2	0	0		0	2700	5600	1450	109	0	32	6.9	.25
3	0	0		0	2770	5100	1400	363	0	30	1.3	.25
4	0	0		0	2610	4800	1400	494	0	36	.29	.25
5	0	0		0	2620	5100	1600	321	0	41	.46	.21
6	0	0		0	837	4400	1700	220	0	55	.21	.16
7	0	.97		0	178	3600	1500	231	0	56	.07	.13
8	0	0		12	100	3000	1400	309	0	58	.86	.05
9	0	0		910	42	4600	1400	511	0	51	.21	0
10	0	0		44	38	3300	1500	739	0	46	.10	0
11	0	0		1630	40	2300	1400	726	0	42	1.4	0
12	0	0		110	48	2500	1350	733	0	36	.34	0
13	0	0		55	1500	3000	1300	498	0	28	.29	0
14	0	0		148	3240	3100	640	94	0	22	.34	0
15	0	0		202	2180	2900	1500	10	0	19	.25	0
16	0	0		328	4010	2700	1600	5.2	0	17	.16	0
17	0	0		360	4460	2600	1700	3.0	0	10	.59	0
18	0	0		374	7180	30	1400	1.9	0	2.7	.34	0
19	0	0		286	5500	5.0	50	.80	0	3.1	.52	0
20	4.2	0		259	4700	4.0	45	.30	0	.05	.40	0
21	2.0	0		234	5800	3.8	40	.20	0	0	.21	0
22	1.0	0		111	5600	40	37	.15	0	0	.59	0
23	.50	0		49	5500	580	14	.11	0	0	.66	.40
24	0	0		12	5800	600	15	.09	0	3.9	.34	.10
25	0	0		5.2	5200	150	170	.05	0	13	.29	0
26	0	0		4.2	4550	400	180	0	0	17	.40	0
27	0	0		4.0	3100	900	170	0	26	17	.34	0
28	0	0		1100	1100	1500	150	0	35	16	.29	0
29	0	0		3370	3370	1600	23	0	35	7.6	.34	0
30	0	0		2730	---	1700	30	0	33	9.0	.29	0
31	0	---		2150	---	1500	---	0	---	9.5	.34	---
TOTAL	7.70	.97	0	14487.4	87413	69412.8	26664	5434.80	129	708.85	25.32	2.05
MEAN	.25	.032	0	467	3014	2239	889	175	4.30	22.9	.82	.068
MAX	4.2	.97	0	3370	7180	5600	1700	739	35	58	6.9	.40
MIN	0	0	0	0	38	3.8	14	0	0	0	.07	0
AC-FT	15	1.9	0	28740	173400	137700	52890	10780	256	1410	50	4.1
CAL YR 1979	TOTAL	12825.94	MEAN	35.1	MAX	1400	MIN	0	AC-FT	25440		
WTR YR 1980	TOTAL	204285.89	MEAN	558	MAX	7180	MIN	0	AC-FT	405200		

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 current year.

SEDIMENT RECORDS: October 1967 to September 1971, October 1972 to current year.

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 (2,420,000 metric tons) Feb. 25, 1969; minimum daily, 0 tons on many days each year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 9,870 mg/L Feb. 18; minimum daily mean, no flow for many days.

SEDIMENT DISCHARGE: Maximum daily, 212,000 tons (192,000 metric tons) Feb. 18; minimum daily, 0 tons on many days.

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	0	0	0			
2	0	0	0	0	0	0			
3	0	0	0	0	0	0			
4	0	0	0	0	0	0			
5	0	0	0	0	0	0			
6	0	0	0	0	0	0			
7	0	0	0	.97	4	.14			
8	0	0	0	0	0	0			
9	0	0	0	0	0	0			
10	0	0	0	0	0	0			
11	0	0	0	0	0	0			
12	0	0	0	0	0	0			
13	0	0	0	0	0	0			
14	0	0	0	0	0	0			
15	0	0	0	0	0	0			
16	0	0	0	0	0	0			
17	0	0	0	0	0	0			
18	0	0	0	0	0	0			
19	0	0	0	0	0	0			
20	4.2	16	.37	0	0	0			
21	2.0	10	.05	0	0	0			
22	1.0	6	.02	0	0	0			
23	.50	5	0	0	0	0			
24	0	0	0	0	0	0			
25	0	0	0	0	0	0			
26	0	0	0	0	0	0			
27	0	0	0	0	0	0			
28	0	0	0	0	0	0			
29	0	0	0	0	0	0			
30	0	0	0	0	0	0			
31	0	0	0	---	---	---			
TOTAL	7.70	---	.44	.97	---	.14	0	0	0

SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

WATER-QUALITY RECORDS

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

JANUARY				FEBRUARY				MARCH	
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)
1	0	0	0	2640	1800	12800	1800	780	51000
2	0	0	0	2700	1950	14200	5600	8300	180000
3	0	0	0	2770	1870	14000	5100	5200	71600
4	0	0	0	2610	1720	12100	4800	4700	60900
5	0	0	0	2620	804	5900	5100	5800	165000
6	0	0	0	837	342	859	4400	4100	48700
7	0	0	0	178	140	67	3600	2450	23800
8	12	60	3.2	100	92	25	3000	2050	16600
9	910	3410	16700	42	46	5.2	4600	2800	146000
10	44	595	142	38	38	3.9	3300	1400	12500
11	1630	3990	42300	40	41	4.4	2300	820	5090
12	110	302	212	48	410	53	2500	1370	74000
13	55	120	18	1500	2350	30300	3000	1350	10900
14	148	130	52	3240	7460	105000	3100	1320	11000
15	202	145	79	2180	3070	19400	2900	1310	10300
16	328	195	173	4010	4400	89300	2700	1020	7440
17	360	220	214	4460	4800	68100	2600	780	5480
18	374	235	237	7180	9870	212000	30	121	9.8
19	286	205	158	5500	7900	117000	5.0	20	.27
20	259	190	133	4700	6800	86300	4.0	15	.16
21	234	175	111	5800	9000	165000	3.8	13	.13
22	111	94	28	5600	8010	121000	40	23	2.5
23	49	51	6.7	5500	7000	104000	580	580	3050
24	12	41	1.3	5800	7300	160000	600	424	687
25	5.2	34	.48	5200	4600	64600	150	54	22
26	4.2	30	.34	4550	3000	36900	400	120	130
27	4.0	28	.30	3100	1900	15900	900	280	6200
28	1100	3760	29800	1100	1200	3560	1500	310	15200
29	3370	7020	78900	3370	1050	9550	1600	330	1430
30	2730	3100	22900	---	---	---	1700	345	1580
31	2150	1400	8130	---	---	---	1500	340	1380
TOTAL 14487.40		---	200299.3	87413	---	1467928	69412.8	---	930001.9
APRIL				MAY				JUNE	
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)
1	1500	345	1400	65	118	61	0	0	0
2	1450	340	1330	109	183	180	0	0	0
3	1400	338	1280	363	331	416	0	0	0
4	1400	350	1320	494	370	494	0	0	0
5	1600	390	2650	321	170	176	0	0	0
6	1700	410	2900	220	204	198	0	0	0
7	1500	395	1600	231	216	227	0	0	0
8	1400	360	1360	309	346	396	0	0	0
9	1400	330	1250	511	542	837	0	0	0
10	1500	350	2500	739	690	1380	0	0	0
11	1400	325	1230	726	529	1050	0	0	0
12	1350	290	1060	733	620	1240	0	0	0
13	1300	265	930	498	383	565	0	0	0
14	640	74	128	94	135	44	0	0	0
15	1500	310	2520	10	45	1.2	0	0	0
16	1600	305	2680	5.2	16	.22	0	0	0
17	1700	300	2800	3.0	16	.13	0	0	0
18	1400	240	907	1.9	15	.08	0	0	0
19	50	35	4.7	.80	15	.03	0	0	0
20	45	30	3.6	.30	11	0	0	0	0
21	40	27	2.9	.20	10	0	0	0	0
22	37	24	2.4	.15	8	0	0	0	0
23	14	10	.38	.11	7	0	0	0	0
24	15	20	.81	.09	5	0	0	0	0
25	170	125	153	.05	3	0	0	0	0
26	180	130	168	0	0	0	0	0	0
27	170	121	130	0	0	0	26	90	7.2
28	150	108	44	0	0	0	35	56	5.3
29	23	19	1.2	0	0	0	35	55	5.2
30	30	88	7.1	0	0	0	33	52	4.6
31	---	---	---	0	0	0	---	---	---
TOTAL 26664		---	30363.09	5434.80	---	7265.66	129.00	---	22430

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	31	50	4.2	6.2	14	.23	.25	13	0	
2	32	48	4.1	6.9	16	.30	.25	13	0	
3	30	47	3.8	1.3	14	.05	.25	13	0	
4	36	64	6.2	.29	11	0	.25	13	0	
5	41	85	9.4	.46	10	.01	.21	12	0	
6	55	105	16	.21	11	0	.16	12	0	
7	56	137	21	.07	11	0	.13	12	0	
8	58	131	21	.86	12	.03	.05	12	0	
9	51	102	14	.21	13	0	0	0	0	
10	46	72	8.9	.10	12	0	0	0	0	
11	42	53	6.0	1.4	16	.06	0	0	0	
12	36	39	3.8	.34	15	.01	0	0	0	
13	28	28	2.1	.29	14	.01	0	0	0	
14	22	21	1.2	.34	13	.01	0	0	0	
15	19	16	.82	.25	13	0	0	0	0	
16	17	11	.50	.16	15	0	0	0	0	
17	10	7	.19	.59	14	.02	0	0	0	
18	2.7	3	.02	.34	14	.01	0	0	0	
19	3.1	5	.04	.52	14	.02	0	0	0	
20	.05	0	0	.40	14	.02	0	0	0	
21	0	0	0	.21	15	0	0	0	0	
22	0	0	0	.59	16	.03	0	0	0	
23	0	0	0	.66	15	.03	.40	15	.01	
24	3.9	34	.70	.34	15	.01	.10	12	0	
25	13	36	1.3	.29	15	.01	0	0	0	
26	17	34	1.6	.40	14	.02	0	0	0	
27	17	31	1.4	.34	14	.01	0	0	0	
28	16	25	1.1	.29	14	.01	0	0	0	
29	7.6	20	.41	.34	14	.01	0	0	0	
30	9.0	18	.44	.29	14	.01	0	0	0	
31	9.5	20	.51	.34	14	.01	---	---	---	
TOTAL	708.85	---	130.73	25.32	---	.93	2.05	---	.01	
YEAR 204285.9			2636012							

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1979	7.70	0.44	0	0
NOVEMBER ...	0.97	0.14	0	0
DECEMBER ...	0.0	0.0	0	0
JANUARY 1980	14487.40	200299.32	26000	226000
FEBRUARY ...	87413.00	1467927.50	266000	1730000
MARCH	69412.80	930001.86	184000	1110000
APRIL	26664.00	30363.09	40600	71000
MAY	5434.80	7265.66	4270	11500
JUNE	129.00	22.30	5	27
JULY	708.85	130.73	33	164
AUGUST	25.32	0.93	1	2
SEPTEMBER ..	2.05	0.01	0	0
TOTAL	204285.89	2636011.98	520909	3148693

SANTA ANA RIVER BASIN

11078000 SANTA ANA RIVER AT SANTA ANA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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
JAN								
09...	1030	--	130	118	41	--	--	--
10...	1030	--	27	171	12	--	--	--
11...	1600	--	532	470	675	--	--	--
14...	1230	--	117	264	83	81	96	98
15...	1400	--	198	301	161	--	--	--
16...	1445	--	340	196	180	--	--	--
17...	1145	--	360	264	257	--	--	--
17...	1415	--	360	249	242	--	--	--
22...	1550	--	96	113	29	--	--	--
30...	1140	--	2370	3110	19900	--	53	60
31...	1100	--	2290	1410	8720	--	--	--
FEB								
13...	1500	--	3480	2790	26200	--	21	26
14...	1315	--	1050	4290	12200	--	53	69
17...	1250	15.0	955	3970	10200	--	--	--
17...	1500	--	3200	4420	38200	--	--	--
17...	1525	--	3200	3700	32000	--	--	--
18...	1215	14.0	6200	10000	167000	--	--	--
19...	1500	--	5200	7300	102000	--	--	--
20...	1430	14.5	5000	7640	103000	--	16	17
22...	1400	--	5500	7970	118000	--	--	--
25...	1345	--	5200	4940	69400	--	--	--
MAR								
18...	1350	--	20	121	6.5	--	--	--
APR								
30...	1340	15.0	40	106	11	--	--	--
JUN								
30...	1325	26.0	33	44	3.9	--	--	--
JUL								
28...	1120	26.0	18	28	1.4	--	--	--
SEP								
24...	1345	26.0	.40	12	.01	--	--	--

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
JAN								
09...	--	--	98	--	--	--	--	--
10...	--	--	99	--	--	--	--	--
11...	--	--	96	--	--	--	--	--
14...	99	99	99	100	--	--	--	--
15...	--	--	75	--	--	--	--	--
16...	--	--	96	--	--	--	--	--
17...	--	--	95	--	--	--	--	--
17...	--	--	98	--	--	--	--	--
22...	--	--	95	--	--	--	--	--
30...	71	79	83	84	88	96	100	--
31...	--	--	81	--	--	--	--	--
FEB								
13...	36	47	65	77	86	95	100	--
14...	87	93	96	97	98	100	--	--
17...	--	--	68	--	--	--	--	--
17...	--	--	66	--	--	--	--	--
17...	--	--	77	--	--	--	--	--
18...	--	--	75	--	--	--	--	--
19...	--	--	69	--	--	--	--	--
20...	24	36	51	72	85	90	99	100
22...	--	--	59	--	--	--	--	--
25...	--	--	49	--	--	--	--	--
MAR								
18...	--	--	84	--	--	--	--	--
APR								
30...	--	--	76	--	--	--	--	--
JUN								
30...	--	--	58	--	--	--	--	--
JUL								
28...	--	--	14	--	--	--	--	--
SEP								
24...	--	--	100	--	--	--	--	--

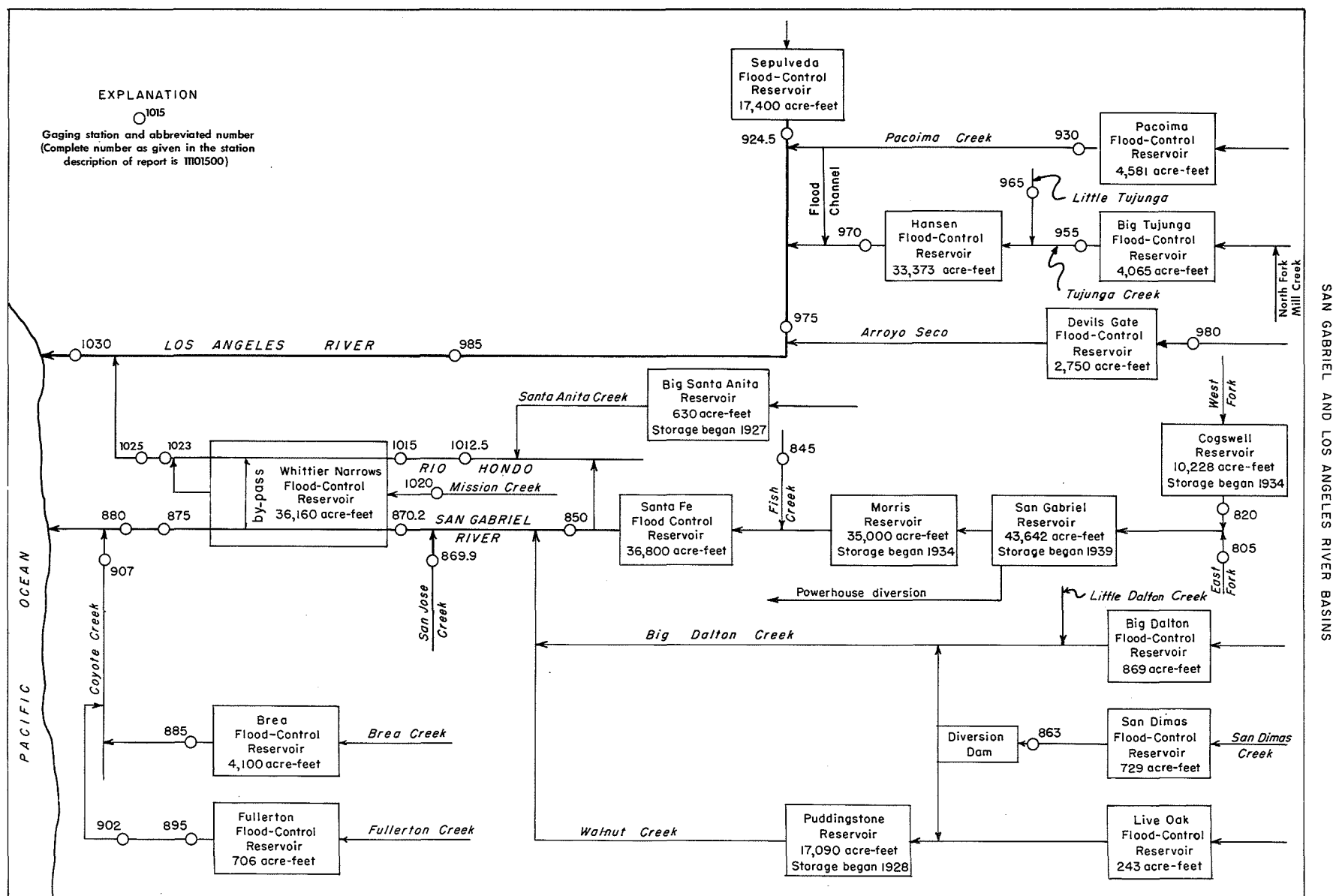


Figure 5.--Schematic diagram showing diversions and storage in San Gabriel and Los Angeles River basins.

SAN GABRIEL RIVER BASIN

11082800 SAN GABRIEL RIVER AT AZUSA POWERHOUSE, AT AZUSA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°09'18", long 117°54'26', in NE¼SE¼ sec.22, T.1 N., R.10 W., Los Angeles County, Hydrologic Unit 18070106, at tailrace of Azusa Powerhouse, and 1.0 mi (1.6 km) north of Azusa.

PERIOD OF RECORD.--Water years 1908 to 1909, 1967 to current year.

CHEMICAL ANALYSES: Water years 1908 to 1909, 1967 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources; records of discharge were furnished by Los Angeles County Flood Control District.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 19...	1400	65	350	8.0	19.0	2	9.5	170	51	11
NOV 26...	1650	65	380	8.2	10.0	4	11.1	190	54	13
DEC 17...	1725	46	380	8.3	9.0	2	11.2	190	55	13
JAN 25...	1530	68	320	8.2	10.5	10	10.8	160	46	10
MAY 15...	1720	--	250	8.4	13.5	20	10.1	130	40	8.0
19...	0925	--	--	--	16.5	--	--	--	--	--
JUN 20...	1520	--	270	8.7	22.0	0	8.8	150	41	11
JUL 21...	1625	--	260	8.1	26.0	0	8.0	140	39	11

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
OCT 19...	12	13	.4	4.0	170	23	3.0	.3	230	.16
NOV 26...	11	11	.3	4.0	190	25	4.0	.4	201	.18
DEC 17...	12	12	.4	4.0	190	28	3.0	.3	227	.16
JAN 25...	10	12	.3	3.0	150	24	3.0	.3	185	.65
MAY 15...	8.0	11	.3	3.0	--	16	2.0	.3	20	.54
19...	--	--	--	--	--	--	--	--	--	--
JUN 20...	8.0	10	.3	3.0	--	18	3.0	.3	210	.36
JUL 21...	10	13	.4	4.0	--	21	.3	.4	177	.29

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 19...	1400	--	100	--	--	--	--	--	--
NOV 26...	1650	--	100	--	--	--	--	--	--
DEC 17...	1725	--	100	--	--	--	--	--	--
JAN 25...	1530	--	100	--	--	--	--	--	--
MAY 15...	1720	--	0	--	--	--	--	--	--
19...	0925	0	--	140	0	0	0	.0	0
JUN 20...	1520	--	0	--	--	--	--	--	--
JUL 21...	1625	--	0	--	--	--	--	--	--

11085000 SAN GABRIEL RIVER BELOW SANTA FE DAM, NEAR BALDWIN PARK, CA

LOCATION.--Lat 34°06'44", long 117°58'07", in SE¼NE¼SW¼ 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 (150 m) downstream from axis of dam, and 1.7 mi (2.7 km) north of Baldwin Park.

DRAINAGE AREA.--236 mi² (611 km²).

PERIOD OF RECORD.--October 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft (121.920 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. Flow regulated by Cogswell and San Gabriel flood-control reservoirs, combined capacity, 53,870 acre-ft (66.4 hm³), Morris Reservoir, capacity, 35,000 acre-ft (43.2 hm³), and Santa Fe flood-control reservoir, capacity, 32,640 acre-ft (40.2 hm³). Diversions above station for irrigation, power development, and ground-water replenishment. At times water diverted from side of stilling basin to headwaters of Rio Hondo; 70,500 acre-ft (86.9 hm³) 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 ft³/s (875 m³/s) Jan. 26, 1969, gage height, 22.20 ft (6.767 m); no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,500 ft³/s (524 m³/s) Feb. 17, gage height, 19.51 ft (5.947 m); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	48	0	34	356	5.4			
2				0	46	54	108	353	4.4			
3				0	44	919	111	347	1.3			
4				0	42	2340	122	343	0			
5				0	40	2250	237	335	0			
6				0	37	2270	232	192	.12			
7				0	32	2260	228	33	0			
8				0	18	2220	223	160	0			
9				0	1.2	1680	219	217	0			
10				0	0	1080	216	233	0			
11				0	0	599	242	246	8.0			
12				0	0	210	237	252	0			
13				0	0	102	235	182	0			
14				0	19	177	232	36	0			
15				0	151	184	233	28	0			
16				7.4	1130	188	240	152	0			
17				31	10100	191	251	232	0			
18				25	8600	129	251	249	0			
19				10	8920	89	261	261	0			
20				2.1	8240	87	291	264	0			
21				.30	6110	86	277	260	0			
22				.07	5590	84	272	212	0			
23				0	3950	82	313	162	0			
24				0	4400	79	321	161	0			
25				0	2280	78	321	157	0			
26				0	1830	27	322	155	0			
27				0	3350	.02	322	151	0			
28				0	82	.33	344	122	0			
29				26	66	.58	354	47	0			
30				49	---	.73	358	7.4	0			
31		---		51	---	2.6	---	6.3	---			---
TOTAL	0	0	0	201.87	65126.2	17469.26	7407	5911.7	19.22	0	0	0
MEAN	0	0	0	6.51	2246	564	247	191	.64	0	0	0
MAX	0	0	0	51	10100	2340	358	356	8.0	0	0	0
MIN	0	0	0	0	0	0	34	6.3	0	0	0	0
AC-FT	0	0	0	400	129200	34650	14690	11730	38	0	0	0
CAL YR 1979	TOTAL	16124.05	MEAN	44.2	MAX	282	MIN	0	AC-FT	31980		
WTR YR 1980	TOTAL	96135.25	MEAN	263	MAX	10100	MIN	0	AC-FT	190700		

SAN GABRIEL RIVER BASIN

11087020 SAN GABRIEL RIVER ABOVE WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°02'00", long 118°02'14", in La Puente Grant, Los Angeles County, Hydrologic Unit 18070106, on downstream side of bridge near center on Peck Road, 0.8 mi (1.3 km) downstream from San Jose flood channel, 1.2 mi (1.9 km) upstream from axis of Whittier Narrows Dam, and 1.8 mi (2.9 km) south of El Monte.

DRAINAGE AREA.--353 mi² (914 km²).

PERIOD OF RECORD.--October 1955 to September 1957, October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 220 ft (67 m), from topographic map.

REMARKS.--Records fair. Flow regulated by San Gabriel, Cogswell, and Santa Fe flood-control reservoirs, combined capacity, 90,670 acre-ft (112 hm³), several small flood-control reservoirs, combined capacity, 19,100 acre-ft (23.6 hm³), and Morris Reservoir, capacity, 35,000 acre-ft (43.2 hm³). 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 (24.0 km) upstream from gage, at Metropolitan Water District aqueduct crossing on San Dimas Creek for ground-water replenishment. 70,500 acre-ft (86.9 hm³) were diverted by Los Angeles County Flood Control District from San Gabriel River below Santa Fe Dam to Rio Hondo during current year. 20,400 acre-ft (25.2 hm³) were released from Puddingstone Reservoir during current year. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records of diversion to Rio Hondo and from Puddingstone Reservoir were furnished by Los Angeles County Flood Control District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 46,600 ft³/s (1,320 m³/s) Jan. 25, 1969, gage height, 10.90 ft (3.322 m); no flow for part of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43,800 ft³/s (1,240 m³/s) Feb. 17, gage height, 10.7 ft (3.26 m) from high-water mark; minimum daily, 7.7 ft³/s (0.22 m³/s) Nov. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	197	9.8	98	134	134	150	64	81	30	20	26	22
2	197	9.8	98	134	129	200	72	60	29	20	22	22
3	197	9.8	98	129	129	1500	85	64	28	25	26	22
4	197	12	98	134	124	3900	64	60	27	25	26	18
5	190	7.7	85	134	115	3700	76	50	26	25	31	72
6	197	7.7	85	134	85	3800	106	38	25	22	31	98
7	197	38	90	172	76	4350	124	38	25	29	31	68
8	197	36	85	50	57	4300	94	38	25	22	31	68
9	190	29	85	1690	50	3870	68	44	25	25	26	68
10	190	94	85	406	47	2790	64	204	25	25	25	68
11	190	94	85	1430	50	1330	57	129	22	25	25	98
12	190	98	81	220	50	694	57	119	20	20	22	106
13	190	98	81	359	2380	252	53	98	20	20	20	106
14	190	98	85	212	4000	348	50	41	22	22	25	115
15	197	98	85	41	7000	394	50	47	22	20	25	129
16	197	98	81	26	11000	394	50	50	22	18	26	134
17	190	106	81	68	17000	348	50	53	20	18	29	139
18	190	102	81	279	14000	694	50	94	20	18	26	144
19	197	98	81	22	15000	160	50	106	18	22	22	102
20	829	94	81	15	13000	144	50	110	20	22	25	41
21	22	94	139	12	10100	139	50	115	20	25	20	41
22	14	94	90	11	9300	134	90	102	20	20	25	60
23	11	98	85	15	6600	129	68	44	20	18	20	98
24	11	98	155	15	7300	129	68	41	20	18	20	110
25	11	98	64	11	3800	307	60	40	18	17	18	134
26	11	98	47	9.8	3000	244	57	38	18	20	15	94
27	12	98	129	9.8	5600	64	53	37	18	20	20	98
28	12	98	129	3550	160	64	110	35	18	22	18	106
29	9.8	98	129	4540	130	64	81	34	20	26	22	119
30	9.8	98	134	288	---	68	102	32	20	25	22	160
31	11	---	134	160	---	64	---	31	---	29	20	---
TOTAL	4643.6	2209.8	2964	14410.6	130416	34724	2073	2073	663	683	740	2660
MEAN	150	73.7	95.6	465	4497	1120	69.1	66.9	22.1	22.0	23.9	88.7
MAX	829	106	155	4540	17000	4350	124	204	30	29	31	160
MIN	9.8	7.7	47	9.8	47	64	50	31	18	17	15	18
AC-FT	9210	4380	5880	28580	258700	68880	4110	4110	1320	1350	1470	5280
CAL YR 1979 TOTAL	52243.8			MEAN 143	MAX 3680	MIN 4.6	AC-FT 103600					
WTR YR 1980 TOTAL	198260.0			MEAN 542	MAX 17000	MIN 7.7	AC-FT 393200					

11088500 BREA CREEK BELOW BREA DAM, NEAR FULLERTON, CA

LOCATION.--Lat 33°53'16", long 117°55'32", in NE¼NE¼NE¼ sec.28, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank 0.2 mi (0.3 km) downstream from Brea Dam, and 1 mi (2 km) north of Fullerton.

DRAINAGE AREA.--21.6 mi² (55.9 km²).

PERIOD OF RECORD.--January 1942 to current year.

GAGE.--Water-stage recorder. Datum of gage is 196.67 ft (59.945 m) National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Dec. 4, 1964, at datum 1.03 ft (0.314 m) higher.

REMARKS.--Records poor. No gage-height record Oct. 25 to Mar. 5 and Mar. 26 to Sept. 30. Flow regulated by Brea flood-control reservoir, capacity, 4,100 acre-ft (506 hm³). No diversion above station. Since August 1966 low flow mostly the result of irrigation wastewater from golf course 0.8 mi (1.3 km) upstream. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--38 years, 2.41 ft³/s (0.068 m³/s), 1,750 acre-ft/yr (2.16 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s (33.7 m³/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, 1,700 ft³/s (48.1 m³/s) Feb. 18, from release records of Brea Dam as furnished by Corps of Engineers; minimum daily, 0.35 ft³/s (0.010 m³/s) Oct. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	1.2	.70	1.4	8.0	18	8.6	3.5	2.2	1.6	2.8	2.0
2	.53	1.2	.70	1.3	6.6	16	8.0	3.4	2.2	1.6	2.8	2.0
3	.53	1.1	.70	1.2	5.6	310	7.4	3.4	2.2	1.6	2.7	2.0
4	.53	1.0	.70	1.2	4.8	100	7.0	3.3	2.1	1.6	2.6	2.0
5	.76	1.0	.70	1.1	4.3	160	6.6	3.2	2.1	1.6	2.5	2.0
6	.42	1.0	.70	1.1	3.6	12	6.2	3.1	2.1	1.6	2.4	2.0
7	.58	1.0	.62	1.1	4.2	14	6.0	3.0	2.1	1.6	2.4	2.0
8	.40	1.9	.67	1.2	4.2	17	5.7	3.0	2.1	1.6	2.3	1.9
9	.37	1.0	.67	180	3.4	16	5.4	2.9	2.1	1.6	2.3	1.9
10	.35	.90	.72	52	3.0	17	5.2	6.0	2.0	1.6	2.2	1.9
11	.35	.80	.72	150	11	13	5.1	3.0	2.0	1.6	2.1	1.9
12	.44	.70	.76	48	320	15	4.9	3.0	2.0	1.6	2.1	1.9
13	2.6	.60	.76	31	420	15	4.7	2.9	2.0	1.6	2.1	1.8
14	5.0	.60	.81	14	500	16	4.6	2.9	2.0	1.6	2.1	1.8
15	2.6	.60	.81	4.6	330	16	4.5	2.8	2.0	1.6	2.1	1.8
16	1.8	.60	.85	3.0	460	17	4.4	2.7	2.0	1.6	2.1	1.7
17	2.9	.70	.90	2.5	440	17	4.3	2.7	1.9	1.7	2.1	1.7
18	2.9	.70	.90	2.3	1700	16	4.3	2.6	1.9	1.8	2.1	1.6
19	13	.70	1.0	2.2	200	18	4.2	2.6	1.8	2.0	2.1	1.6
20	73	.70	1.0	2.1	36	18	4.2	2.6	1.8	2.1	2.1	1.6
21	8.7	.70	1.1	2.0	67	18	4.1	2.5	1.8	2.2	2.0	1.5
22	2.6	.70	1.1	1.8	47	18	4.1	2.5	1.8	2.3	2.0	1.5
23	1.0	.70	.89	1.7	43	18	6.4	2.4	1.7	2.4	2.0	1.4
24	1.0	.80	1.0	1.6	33	19	4.9	2.4	1.7	2.5	2.0	1.4
25	1.3	.80	1.0	1.5	33	33	4.5	2.4	1.7	2.6	2.0	1.4
26	1.4	.80	1.1	1.4	32	18	4.2	2.3	1.7	2.7	2.0	1.3
27	1.4	.80	1.4	3.0	27	16	4.0	2.3	1.7	2.8	2.0	1.3
28	1.4	.80	1.5	30	25	13	5.0	2.3	1.6	2.8	2.0	1.3
29	1.4	.80	1.4	600	22	12	4.2	2.3	1.6	2.9	2.0	1.2
30	1.2	.70	1.7	14	---	11	3.7	2.3	1.6	2.9	2.0	1.2
31	1.2	---	1.6	11	---	9.6	---	2.2	---	2.8	2.0	---
TOTAL	132.51	25.60	29.18	1169.3	4793.7	1026.6	156.4	88.5	57.5	62.1	68.0	50.6
MEAN	4.27	.85	.94	37.7	165	33.1	5.21	2.85	1.92	2.00	2.19	1.69
MAX	73	1.9	1.7	600	1700	310	8.6	6.0	2.2	2.9	2.8	2.0
MIN	.35	.60	.62	1.1	3.0	9.6	3.7	2.2	1.6	1.6	2.0	1.2
AC-FT	263	51	58	2320	9510	2040	310	176	114	123	135	100
CAL YR 1979 TOTAL	3283.78			MEAN 9.00	MAX 551	MIN .17	AC-FT 6510					
WTR YR 1980 TOTAL	7659.99			MEAN 20.9	MAX 1700	MIN .35	AC-FT 15190					

SAN GABRIEL RIVER BASIN

11089500 FULLERTON CREEK BELOW FULLERTON DAM, NEAR BREA, CA

LOCATION.--Lat 33°53'45", long 117°53'07", in NE¼NW¼SW¼ 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 (2.6 km) southeast of Brea.

DRAINAGE AREA.--4.94 mi² (12.79 km²).

PERIOD OF RECORD.--October 1941 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 250 ft (76 m), 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 (0.914 m) higher.

REMARKS.--Records good. Flow regulated by Fullerton flood-control reservoir, capacity, 706 acre-ft (870,000 m³). Small tributary formerly entering below station diverted into reservoir since December 1954. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--13 years (water years 1942-54), 0.19 ft³/s (0.005 m³/s), 135 acre-ft/yr (166,000 m³/yr); 26 years (water years 1955-80), 0.93 ft³/s (0.026 m³/s), 674 acre-ft/yr (831,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 313 ft³/s (8.86 m³/s) Jan. 25, 1969, gage height, 7.32 ft (2.231 m), present datum; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 299 ft³/s (8.47 m³/s) Feb. 18, gage height, 7.69 ft (2.344 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) July 26, Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.23	.19	.25	.77	.31	.31	.31	.25	.31	.89	.07
2	.31	.22	.19	.25	1.0	.59	.31	.25	.31	.38	.89	.07
3	.31	.21	.19	.19	.56	.77	.31	.25	.25	.25	.66	.10
4	.31	.20	.19	.25	.47	1.5	.31	.25	.19	.19	.47	.19
5	.31	.19	.19	.25	.56	11	.31	.25	.25	.25	.89	.31
6	.31	.18	.25	.25	.47	40	.31	.25	.38	.25	1.0	.25
7	.31	.18	.25	1.5	.38	2.1	.31	.38	.31	.25	.77	.25
8	.31	.14	.25	1.2	.25	.56	.31	.38	.25	.25	.38	.25
9	.31	.14	.25	.72	.25	.56	.38	.38	.31	.25	.38	.38
10	.31	.10	.31	2.3	.19	7.2	.47	2.3	.31	.31	.38	.38
11	.31	.04	.31	.65	.25	.66	.38	.25	.38	.25	.25	.47
12	.25	.04	.31	9.7	.25	.38	.31	.19	.38	.25	.25	.47
13	.25	4.0	.31	6.3	.60	.38	.31	.19	.38	.19	.25	.38
14	.25	.31	.25	7.6	138	.38	.31	.19	.38	.31	.47	.25
15	.25	.25	.31	1.7	72	.38	.31	.25	.25	.31	.25	.31
16	.31	.31	.25	.56	110	.31	.31	.25	.25	.25	.25	.31
17	.31	.31	.25	.38	107	.31	.31	.19	.25	.31	.31	.25
18	.31	.25	.25	11	154	.31	.38	.19	.38	.31	.38	.25
19	.31	.25	.25	.38	14	.31	.56	.25	.56	.31	.38	.31
20	.14	.25	.25	.25	42	.31	.47	.25	.38	.31	.38	.31
21	.07	.19	1.9	.25	20	.47	.47	.47	.38	.56	.47	.25
22	.07	.25	.31	.25	1.0	.89	2.1	.25	.25	1.0	.31	.25
23	21	.31	.31	.25	.66	.66	2.6	.25	.25	.66	.07	.31
24	.31	.38	4.7	.25	.47	.56	.47	.25	.31	.38	.10	.25
25	.25	.38	.89	.31	.47	5.5	.31	.19	.31	.47	.47	.77
26	.25	.38	.31	.31	.38	8.1	.31	.19	.47	.01	.38	.66
27	.25	.31	.25	.25	.38	.38	.31	.25	.38	.56	.89	.04
28	.25	.19	.19	.77	.38	.31	2.1	.25	.31	.31	.25	.01
29	.25	.19	.25	142	.31	.31	.47	.31	.25	.56	.07	.01
30	.25	.19	.25	2.8	---	.31	.38	.25	.25	.89	.07	.01
31	.24	---	.19	1.3	---	.31	---	.25	---	.77	.07	---
TOTAL	28.98	10.57	14.55	406.28	726.45	220.76	16.50	10.11	9.56	11.66	13.03	8.12
MEAN	.93	.35	.47	13.1	25.1	7.12	.55	.33	.32	.38	.42	.27
MAX	21	4.0	4.7	142	154	77	2.6	2.3	.56	1.0	1.0	.77
MIN	.07	.04	.19	.19	.19	.31	.31	.19	.19	.01	.07	.01
AC-FT	57	21	29	806	1440	438	33	20	19	23	26	16
CAL YR 1979	TOTAL	889.66	MEAN	2.44	MAX	206	MIN	.01	AC-FT	1760		
WTR YR 1980	TOTAL	1476.57	MEAN	4.03	MAX	154	MIN	.01	AC-FT	2930		

11090200 FULLERTON CREEK AT RICHMAN AVENUE, AT FULLERTON, CA

LOCATION.--Lat 33°51'45", long 117°55'55", in NW¼SW¼SE¼ sec.33, T.3 S., R.10 W., Orange County, Hydrologic Unit 18070106, on right bank 125 ft (38 m) east of Richman Avenue, at Fullerton.

DRAINAGE AREA.--12.1 mi² (31.3 km²).

PERIOD OF RECORD.--October 1959 to September 1977, October 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 126.4 ft (38.53 m) National Geodetic Vertical Datum of 1929 (levels by Orange County Environmental Management Agency).

REMARKS.--Flow regulated by Fullerton flood-control reservoir, capacity, 706 acre-ft (870,000 m³). No diversion above station. See schematic diagram of San Gabriel and Los Angeles River basins.

COOPERATION.--Records were furnished by Orange County Environmental Management Agency and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--20 years, 2.86 ft³/s (0.081 m³/s), 2,070 acre-ft/yr (2.55 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft³/s (58.1 m³/s) Jan. 28, 1980, gage height, 6.70 ft (2.042 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,050 ft³/s (58.1 m³/s) Jan. 28, gage height, 6.70 ft (2.042 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 12, Sept. 29, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.30	.60	1.1	1.1	1.7	.80	1.0	.70	1.1	1.8	.50
2	.70	.30	.60	1.0	1.1	160	.80	1.0	.80	1.4	1.8	.60
3	.70	.70	.60	.80	1.0	197	.80	1.0	.80	1.5	1.5	.70
4	.60	.50	.60	1.1	.80	3.8	.70	1.0	.60	1.3	1.1	.80
5	.50	.50	.50	1.0	.80	24	.60	1.0	.70	1.1	1.5	1.3
6	.50	.50	.60	.70	.70	89	.70	1.1	1.0	1.0	2.3	1.1
7	.60	6.3	.80	7.2	.70	2.3	.70	1.1	1.0	1.4	2.6	1.3
8	.60	4.2	.80	8.8	1.1	1.3	.80	.80	1.0	1.5	2.1	1.0
9	.70	.30	.80	220	1.1	.80	1.3	.80	1.0	1.4	2.1	1.1
10	.70	.30	1.1	13	1.4	18	1.1	7.7	1.0	1.3	2.0	1.5
11	.60	.50	1.0	183	1.7	1.8	1.1	.70	1.0	1.3	2.0	1.7
12	.40	.20	.60	61	1.8	1.1	1.0	.80	.80	1.0	1.8	1.7
13	.50	4.6	1.0	16	246	.80	1.1	.60	.80	.80	1.8	1.1
14	.40	1.0	.80	14	351	1.0	1.0	.60	.80	1.4	1.5	.80
15	.60	.60	1.0	2.6	183	1.0	1.3	.70	.70	1.1	2.0	.70
16	.70	.60	.80	1.4	463	.80	1.0	.80	.80	.80	1.8	.70
17	.60	.60	1.0	1.4	263	1.0	1.0	.70	.80	1.1	1.1	.80
18	.60	.50	1.0	13	351	1.4	.80	.60	1.0	1.0	1.4	1.0
19	4.2	.50	.60	1.1	26	1.0	1.1	.70	1.7	.80	2.9	.80
20	38	.50	.60	.80	110	1.0	1.1	1.1	1.7	.70	1.1	1.7
21	.50	.30	6.5	.70	46	1.8	1.4	1.4	1.7	1.1	2.1	.80
22	.30	.50	1.3	.60	1.7	2.0	6.2	.80	1.1	1.5	2.0	.80
23	17	.70	.60	.50	1.0	1.0	5.2	1.3	.80	1.0	2.3	1.1
24	4.2	.80	2.3	.60	.70	1.0	1.4	.80	.80	1.0	.40	1.0
25	.60	1.1	4.0	1.0	.60	14	1.0	.60	1.4	.80	1.1	1.4
26	.50	1.3	.70	1.1	.80	28	1.1	.60	1.7	.50	1.5	3.8
27	.60	.80	.50	.80	.50	1.3	1.0	.70	1.7	.30	.60	.50
28	.60	.60	.50	383	.50	1.1	6.5	1.0	1.7	1.4	1.5	.20
29	.60	.50	.80	330	.50	1.0	1.7	1.0	1.1	.80	.50	.30
30	.60	.60	1.1	6.2	---	1.0	.80	.80	1.1	1.8	.50	.20
31	.60	---	1.1	4.5	---	1.0	---	.70	---	2.0	.50	---
TOTAL	78.90	30.70	34.80	1278.00	2058.60	562.00	45.10	33.50	31.80	35.20	49.20	31.00
MEAN	2.55	1.02	1.12	41.2	71.0	18.1	1.50	1.08	1.06	1.14	1.59	1.03
MAX	38	6.3	6.5	383	463	197	6.5	7.7	1.7	2.0	2.9	3.8
MIN	.30	.20	.50	.50	.50	.80	.60	.60	.60	.30	.40	.20
AC-FT	156	61	69	2530	4080	1110	89	66	63	70	98	61
CAL YR 1979 TOTAL	2755.90			MEAN 7.55	MAX 648	MIN .10	AC-FT 5470					
WTR YR 1980 TOTAL	4268.80			MEAN 11.7	MAX 463	MIN .20	AC-FT 8470					

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 of Hansen Dam, 0.1 mi (0.2 km) upstream from Glen Oaks Boulevard, and 3 mi (5 km) southeast of San Fernando.

DRAINAGE AREA.--153 mi² (396 km²).

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 (287.524 m) Corps of Engineers datum. See WSP 1735 for history of changes prior to Oct. 1, 1953.

REMARKS.--Records good above 5.0 ft³/s (0.14 m³/s) and poor below. Flow regulated since July 1931 by Big Tujunga flood-control reservoir, capacity, 4,240 acre-ft (5.23 hm³) and since September 1940 by Hansen flood-control reservoir, capacity, 29,700 acre-ft (36.6 hm³). Several small diversions for domestic use and irrigation. Water reported herein is that which passed Hansen Dam. Los Angeles County Flood Control District diverts 0.3 mi (0.5 km) upstream from gage to spreading grounds. 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, 12,000 ft³/s (340 m³/s) Feb. 10, 1978, gage height, 7.63 ft (2.326 m), from rating curve extended above 5,000 ft³/s (142 m³/s) on basis of gate openings at dam; no flow for all or parts of most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 54,000 ft³/s (1,530 m³/s), estimated, Mar. 2, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,020 ft³/s (142 m³/s) Feb. 17, gage height, 4.75 ft (1.448 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Aug. 19, Sept. 10, 13, 14, 16 and 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	7.8	2.9	3.9	111	643	32	1.1	4.0	4.0	1.1	.50
2	16	8.6	2.3	3.9	22	760	51	2.9	2.9	4.0	1.1	1.1
3	17	8.6	1.9	3.9	28	782	11	1.9	2.9	4.0	1.9	1.1
4	15	8.5	1.9	3.9	31	917	26	1.9	2.9	4.0	1.1	1.1
5	15	6.9	1.9	3.9	38	994	.98	1.9	4.0	4.0	1.9	1.1
6	15	6.9	1.9	4.0	38	1150	.85	1.8	4.0	4.0	1.9	1.1
7	17	6.9	1.9	4.0	38	943	1.1	1.8	4.0	4.0	1.9	.50
8	17	6.9	1.9	4.5	38	733	1.9	6.1	4.0	4.0	1.1	.50
9	15	6.9	1.9	5.3	34	692	1.1	1.1	4.0	4.0	1.9	.50
10	15	6.6	1.9	5.3	31	805	1.1	1.1	4.0	4.0	1.9	.14
11	15	5.3	1.9	297	28	741	.50	1.1	4.0	4.0	1.1	.50
12	15	5.3	1.9	91	22	679	.50	1.1	4.0	4.0	1.1	.50
13	14	5.3	1.9	53	250	337	.50	1.1	4.0	4.0	1.1	.14
14	12	5.3	1.9	114	702	116	.50	1.9	4.0	4.0	1.1	.14
15	12	5.3	1.9	76	1230	130	.50	1.9	4.0	4.0	1.1	.50
16	15	4.5	1.9	102	1290	172	1.1	2.9	4.0	4.0	.50	.14
17	15	4.0	1.9	81	3680	173	1.1	2.9	4.0	4.0	.50	.14
18	15	4.0	1.9	45	2780	338	1.1	2.9	2.9	4.0	.50	.50
19	13	4.0	1.9	41	3490	244	1.1	2.9	2.9	4.0	.14	1.9
20	14	3.6	1.9	41	2800	108	.50	2.9	4.0	4.0	.50	2.9
21	13	1.9	1.9	45	2270	146	1.1	2.9	2.9	4.0	.50	2.9
22	12	1.9	1.9	41	2010	135	.50	2.9	4.0	4.0	.50	1.9
23	12	1.9	5.5	41	1250	160	12	4.0	4.0	4.0	.50	1.9
24	13	1.9	4.5	38	1040	162	4.0	4.0	4.0	2.9	.50	1.9
25	12	1.9	4.3	38	910	173	1.1	4.0	4.0	1.9	1.1	1.9
26	12	1.9	4.1	34	812	149	1.1	5.3	4.0	1.9	1.1	2.3
27	12	2.4	4.1	34	729	104	1.1	4.0	4.0	.50	.50	2.3
28	11	2.9	4.1	34	686	100	31	4.0	4.0	.50	.50	2.4
29	10	2.9	4.0	168	660	69	1.1	5.3	4.0	.50	.50	3.7
30	8.6	2.9	4.0	562	---	58	1.1	4.0	4.0	1.1	1.1	3.3
31	8.6	---	4.0	362	---	53	---	4.0	---	1.1	1.1	---
TOTAL	423.2	143.7	81.8	2380.6	27048	12766	188.53	87.6	113.4	102.40	31.34	39.50
MEAN	13.7	4.79	2.64	76.8	933	412	6.28	2.83	3.78	3.30	1.01	1.32
MAX	17	8.6	5.5	562	3680	1150	51	6.1	4.0	4.0	1.9	3.7
MIN	8.6	1.9	1.9	3.9	22	53	.50	1.1	2.9	.50	.14	.14
AC-FT	839	285	162	4720	53650	25320	374	174	225	203	62	78
a	839	285	162	4840	53790	32300	9460	6020	3730	2210	1870	1670

CAL YR 1979 TOTAL 8106.78 MEAN 22.2 MAX 597 MIN 0 AC-FT 16080 AC-FT a 140610
WTR YR 1980 TOTAL 43406.07 MEAN 119 MAX 3680 MIN .14 AC-FT 86100 AC-FT a 117176

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 NW¼NW¼NE¼ sec.31, T.2 N., R.12 W., Los Angeles County, Hydrologic Unit 18070105, on right bank, 0.7 mi (1.1 km) east of Angeles Crest Highway, 1.5 mi (2.4 km) upstream from Millard Canyon, and 5.5 mi (8.8 km) northwest of Pasadena.

DRAINAGE AREA.--16.0 mi² (41.4 km²).

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 (426.074 m) 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 (1.219 m) lower.

REMARKS.--Records fair. Minor regulation by debris dam 1.5 mi (2.4 km) upstream. Temporary diversion above station by City of Pasadena. See schematic diagram of San Gabriel and Los Angeles River basins.

AVERAGE DISCHARGE.--66 years (water years 1914-15, 1917-80), 9.86 ft³/s (0.279 m³/s), 7,140 acre-ft/yr (8.80 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,620 ft³/s (244 m³/s) Mar. 2, 1938, gage height, 9.42 ft (2.871 m), 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 ft³/s (5.66 m³/s) and maximum (*) from rating curve extended above 1,200 ft³/s (34.0 m³/s) on basis of slope-area measurements at gage heights 9.42 ft (2.871 m) and 7.86 ft (2.396 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 9	2315	262 7.42	2.97 0.905	Feb. 19	1015	1,900 53.8	5.12 1.561
Jan. 29	0300	1,560 44.2	4.81 1.466	Mar. 2	2245	356 10.1	3.19 0.972
Feb. 16	1815	*3,080 87.2	6.06 1.847	Mar. 6	1000	304 8.61	3.07 0.936

Minimum daily discharge, 0.39 ft³/s (0.011 m³/s) Dec. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
: MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.5	.82	4.2	25	56	28	20	12	5.9	3.4	2.9
2	1.6	1.5	.67	3.0	20	93	19	19	12	6.3	3.5	2.9
3	1.5	1.6	.69	3.1	17	196	27	17	11	6.2	3.7	2.8
4	1.5	1.6	.59	3.0	14	142	26	17	11	5.9	3.8	2.5
5	1.4	1.7	.39	3.0	12	162	26	16	11	5.3	3.9	2.5
6	1.3	1.7	.40	2.7	11	200	26	16	10	5.0	3.7	2.5
7	1.2	1.9	.41	3.0	9.3	165	24	16	10	4.8	3.6	2.7
8	1.4	2.7	.82	3.2	8.0	142	23	17	9.7	4.7	3.5	3.1
9	1.4	2.2	1.8	58	7.3	127	23	17	9.5	4.7	3.3	3.0
10	1.4	2.0	2.0	42	7.0	119	23	21	9.4	4.5	3.1	2.9
11	1.4	2.0	2.0	59	6.9	119	22	19	9.4	4.4	3.0	2.7
12	1.5	2.0	1.9	23	6.9	98	21	17	9.0	4.3	3.0	2.7
13	1.5	1.9	2.0	18	35	92	21	16	8.7	4.3	3.0	2.9
14	1.6	1.9	2.0	58	166	83	20	16	8.7	4.3	3.1	3.1
15	1.7	1.8	2.0	31	402	78	20	16	8.5	4.2	3.2	3.0
16	1.8	1.8	2.1	16	756	71	20	15	8.4	4.1	3.3	2.7
17	1.9	2.0	2.2	13	321	66	20	14	7.8	4.0	3.3	2.6
18	1.8	2.2	2.3	15	252	78	20	14	7.8	4.1	3.3	2.6
19	2.1	2.1	2.3	10	840	69	20	13	7.6	4.3	3.5	2.7
20	15	2.1	2.3	8.6	716	59	20	13	7.3	4.0	3.4	2.9
21	5.0	2.1	2.6	7.4	553	54	22	14	7.1	3.8	3.2	2.7
22	3.0	2.1	2.7	6.6	374	48	26	14	7.0	3.6	3.1	3.0
23	2.5	2.2	2.5	5.9	277	43	24	14	7.2	3.6	3.1	2.8
24	2.3	2.2	2.6	5.5	193	40	22	13	7.1	3.8	3.0	2.4
25	2.2	2.2	3.6	5.1	127	41	21	12	6.9	3.8	3.0	2.3
26	2.2	2.4	3.1	5.0	96	41	20	12	6.7	3.7	2.9	2.3
27	2.2	2.5	2.9	4.7	84	36	20	12	6.2	3.7	2.7	2.2
28	2.1	2.4	2.7	27	72	33	23	12	6.2	3.5	2.7	2.3
29	1.3	2.3	2.6	420	63	31	21	12	6.2	3.4	2.6	2.3
30	1.3	1.7	2.6	46	---	30	20	12	5.8	3.3	2.4	2.3
31	1.4	---	2.9	37	---	28	---	12	---	3.4	2.6	---
TOTAL	70.2	60.3	60.49	947.0	5471.4	2640	676	468	255.2	134.9	98.9	80.3
MEAN	2.26	2.01	1.95	30.5	189	85.2	22.5	15.1	8.51	4.35	3.19	2.68
MAX	15	2.7	3.6	420	840	200	28	21	12	6.3	3.9	3.1
MIN	1.2	1.5	.39	2.7	6.9	28	20	12	5.8	3.3	2.4	2.2
AC-FT	139	120	120	1880	10850	5240	1340	928	506	268	196	159
CAL YR 1979	TOTAL	2989.28	MEAN	8.19	MAX	119	MIN	.38	AC-FT	5930		
WTR YR 1980	TOTAL	10962.69	MEAN	30.0	MAX	840	MIN	.39	AC-FT	21740		

LOS ANGELES RIVER BASIN

11101250 RIO HONDO ABOVE WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°03'32", long 118°04'13", in Potrero Grande Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank 0.3 mi (0.5 km) downstream from Garvey Avenue, 0.4 mi (0.6 km) downstream from Rubio Wash, and 2.2 mi (3.5 km) west of El Monte.

DRAINAGE AREA.--91.2 mi² (236.2 km²).

PERIOD OF RECORD.--February 1956 to current year.

GAGE.--Water-stage recorder. Datum of gage is 217.8 ft (66.39 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Big Santa Anita, Sawpit, and Eaton flood-control reservoirs, combined capacity, 1,700 acre-ft (2.10 hm³) and Sierra Madre, Las Flores, and Rubio debris basins. Many diversions above station for domestic use and irrigation. 34,730 acre-ft (42.8 hm³) were diverted by Los Angeles County Flood Control District 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.--24 years, 38.5 ft³/s (1.090 m³/s), 27,890 acre-ft/yr (34.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,200 ft³/s (515 m³/s) Feb. 16, 1980, gage height, 7.35 ft (2.240 m); no flow in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft³/s (85.0 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 9	1005	6,860 194	4.54 1.384	Feb. 16	1750	*18,200 515	7.35 2.240
Jan. 29	0015	11,300 320	5.64 1.719				

Minimum daily discharge, 0.45 ft³/s (0.013 m³/s) Dec. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	1.7	102	.96	124	350	88	88	130	43	2.7	3.6
2	2.3	2.3	80	.96	62	959	118	92	130	37	2.5	3.6
3	1.6	.96	62	1.9	51	1010	124	84	130	27	1.9	3.6
4	1.1	1.6	48	.84	37	172	66	80	97	22	3.1	3.6
5	.96	1.3	33	.72	48	486	31	80	76	15	5.3	3.4
6	.84	.96	23	.72	130	660	24	76	72	10	6.1	3.6
7	.96	14	16	13	88	288	24	28	59	7.4	6.6	3.6
8	.96	46	9.7	5.1	56	324	13	62	51	6.1	5.8	3.4
9	.84	118	7.1	597	41	180	15	80	48	5.1	4.8	3.6
10	.84	136	4.8	265	28	157	18	124	48	4.3	4.3	3.6
11	.96	143	1.9	324	22	118	19	92	46	3.8	4.1	3.4
12	.96	150	.96	88	16	37	27	84	41	2.9	4.3	3.4
13	.96	157	1.3	136	683	27	41	80	43	1.7	4.3	3.4
14	1.7	164	1.3	51	1350	59	53	80	43	1.9	4.3	3.1
15	1.1	164	.84	16	2970	92	56	84	43	2.3	4.5	4.1
16	.96	172	.96	23	5420	92	56	84	41	2.3	4.5	4.8
17	.96	172	1.1	62	2400	80	56	84	41	2.3	4.5	4.3
18	1.3	164	.84	31	2250	214	53	88	41	2.1	4.3	4.3
19	10	136	.96	3.1	2660	197	51	88	43	1.4	4.5	4.1
20	254	164	1.3	2.1	1450	188	41	88	53	1.3	4.8	3.8
21	4.3	164	18	3.4	1390	188	27	92	62	1.6	4.5	3.8
22	2.5	164	1.1	5.6	705	180	39	88	69	2.1	4.3	3.8
23	2.1	164	.53	11	421	172	46	88	69	2.5	4.3	3.6
24	.72	164	84	6.8	406	164	48	84	69	2.3	4.3	3.6
25	1.1	164	23	18	324	180	51	80	69	2.3	4.3	3.6
26	2.1	157	1.1	39	197	312	51	80	66	1.9	4.1	3.1
27	1.1	150	.96	9.7	188	69	51	80	62	1.7	4.1	3.1
28	.84	143	.53	855	164	124	66	88	56	1.7	4.1	3.1
29	1.4	143	.45	1130	150	124	97	92	48	2.1	4.1	2.9
30	1.7	118	.62	124	---	88	92	118	43	2.5	3.8	2.9
31	1.7	---	.72	124	---	88	---	124	---	2.7	3.8	---
TOTAL	305.36	3439.82	528.07	3948.90	23831	7379	1542	2660	1889	222.3	132.9	107.8
MEAN	9.85	115	17.0	127	822	238	51.4	85.8	63.0	7.17	4.29	3.59
MAX	254	172	102	1130	5420	1010	124	124	130	43	6.6	4.8
MIN	.72	.96	.45	.72	16	27	13	28	41	1.3	1.9	2.9
AC-FT	606	6820	1050	7830	47270	14640	3060	5280	3750	441	264	214
CAL YR 1979 TOTAL	18472.56		MEAN 50.6		MAX 1200	MIN .45	AC-FT 36640					
WTR YR 1980 TOTAL	45986.15		MEAN 126		MAX 5420	MIN .45	AC-FT 91210					

11102300 RIO HONDO BELOW WHITTIER NARROWS DAM, CA

LOCATION.--Lat 34°01'00", long 118°05'15", in Paso de Bartolo Grant, Los Angeles County, Hydrologic Unit 18070105, on right levee 0.2 mi (0.3 km) upstream from Beverly Boulevard, 0.4 mi (0.6 km) downstream from axis of Whittier Narrows Dam, and 1.0 mi (1.6 km) northeast of Montebello.

DRAINAGE AREA.--124 mi² (321 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 175 ft (53 m), from topographic map.

REMARKS.--Records fair above 100 ft³/s (2.83 m³/s) and poor below. Flow regulated by Whittier Narrows flood-control reservoir, capacity, 36,160 acre-ft (44.6 hm³). There are several small flood-control reservoirs, combined capacities, 1,700 acre-ft (2.10 hm³) and several small debris basins above Whittier Narrows Dam. Many diversions for domestic use and irrigation. At times flow is diverted from San Gabriel River to Rio Hondo from sites below Santa Fe Dam and above Whittier Narrows Dam. See schematic diagram of San Gabriel and Los Angeles River basins.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,800 ft³/s (1,100 m³/s) Jan. 25, 1969, gage height, 13.82 ft (4.212 m), from rating curve extended above 15,000 ft³/s (425 m³/s) on basis of gate openings at dam at gage heights 12.32 ft (3.755 m) and 13.82 ft (4.212 m); no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,700 ft³/s (671 m³/s) Feb. 14, gage height, 10.50 ft (3.200 m); no flow July 10-27, Aug. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	3.7	108	84	190	655	223	160	108	65	.81	3.7
2	58	2.9	63	88	215	3360	292	67	90	62	.75	5.1
3	80	3.7	67	90	64	2890	302	128	73	53	.49	6.4
4	110	3.7	85	103	65	1070	152	135	63	45	.16	6.3
5	143	3.7	70	119	69	1350	104	154	54	40	.03	39
6	195	3.7	76	125	160	1740	96	160	74	40	0	104
7	228	61	244	161	128	396	64	67	90	45	0	79
8	218	136	260	64	103	367	67	287	80	18	.17	79
9	209	211	233	2040	89	249	79	272	110	2.0	.35	84
10	165	227	208	668	69	214	69	395	165	0	.37	91
11	142	241	198	1890	57	69	70	228	170	0	.39	116
12	141	261	187	294	56	49	91	272	180	0	.41	135
13	141	283	196	276	1680	77	108	302	265	0	.61	141
14	135	297	195	297	5620	74	117	73	240	0	3.1	140
15	135	292	190	275	8140	115	121	67	240	0	5.9	139
16	135	273	186	229	10500	132	121	40	180	0	7.2	140
17	135	295	159	204	9120	127	115	11	150	0	5.1	146
18	139	327	149	235	10000	516	121	14	150	0	5.0	175
19	172	290	106	230	9180	254	151	45	150	0	.99	177
20	390	310	122	86	5430	228	158	56	150	0	.93	30
21	14	327	189	70	4380	245	153	108	150	0	.92	2.5
22	3.0	344	150	60	4060	256	357	128	150	0	.88	2.2
23	2.8	351	102	65	5700	293	246	67	255	0	1.3	.75
24	2.5	351	222	67	6140	274	235	40	240	0	1.7	.77
25	2.1	351	42	81	4180	482	242	31	240	0	1.8	46
26	2.1	346	9.5	126	2530	575	257	35	95	0	3.9	86
27	2.1	323	64	80	4630	143	257	5.0	50	0	11	78
28	2.0	239	73	2730	960	193	332	8.0	50	.07	36	75
29	1.5	203	79	5470	366	193	174	14	50	.24	48	80
30	1.5	149	79	172	---	181	210	108	50	.32	4.9	133
31	2.7	---	82	207	---	195	---	135	---	.40	3.7	---
TOTAL	3188.3	6509.4	4193.5	16686	93881	16962	5084	3612.0	4112	371.03	146.86	2340.72
MEAN	103	217	135	538	3237	547	169	117	137	12.0	4.74	78.0
MAX	390	351	260	5470	10500	3360	357	395	265	65	48	177
MIN	1.5	2.9	9.5	60	56	49	64	5.0	50	0	0	.75
AC-FT	6320	12910	8320	33100	186200	33640	10080	7160	8160	736	291	4640
CAL YR 1979	TOTAL	62173.56	MEAN 170	MAX 5400	MIN 0	AC-FT 123300						
WTR YR 1980	TOTAL	157086.81	MEAN 429	MAX 10500	MIN 0	AC-FT 311600						

LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA
(National stream-quality accounting network station)

LOCATION.--Lat 33°49'02", long 118°12'20", in Los Cerritos Grant, Los Angeles County, Hydrologic Unit 18070105, on right bank 5,000 ft (1,524 m) upstream from Willow Street, 3.4 mi (5.5 km) north of Long Beach, and 3.7 mi (6.0 km) upstream from mouth.

DRAINAGE AREA.--827 mi² (2,140 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is 11.91 ft (3.630 m) 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 (60.9 hm³), 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 prior to 1980 water year were furnished by Los Angeles County Flood Control District.

AVERAGE DISCHARGE.--50 years (water years 1930-79), 185 ft³/s (5.239 m³/s), 134,030 acre-ft/yr (165 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 102,000 ft³/s (2,890 m³/s) Jan. 25, 1969, gage height, 16.00 ft (4.877 m); no flow at times in 1929-30, 1934.

NOTE.--Record for current year not available from cooperator at time of publication.

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued
(Formerly published as Los Angeles River at Willow Street Bridge, at Long Beach)

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 to current year.

SPECIFIC CONDUCTANCE: Water years 1974 to current year.

WATER TEMPERATURES: Water years 1974 to current year.

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1973 to September 1975, July 1980 to September 1980.

WATER TEMPERATURES: October 1973 to September 1975, January 1980 to September 1980.

INSTRUMENTATION.--Specific-conductance recorder October 1973 to September 1975, and since July 1980.

Temperature recorder October 1973 to September 1975, and since January 1980.

REMARKS.--Missing specific-conductance and temperature data due to recorder malfunction.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,010 micromhos June 30, 1975; minimum recorded, 117 micromhos

Mar. 6, 1975, minimum observed, 91 micromhos May 8, 1977.

WATER TEMPERATURES: Maximum recorded, 34.5°C Aug. 7, 1975; minimum recorded, 2.0°C Jan. 31, 1975.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,330 micromhos July 25; minimum recorded, 1,000 micromhos Sept. 30, 31.

WATER TEMPERATURES: Maximum recorded, 33.0°C July 24; minimum recorded, 7.0°C Jan. 19-21.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOC- CI, KF ASAR (COLS. PER AS CAC03)	HARD- NESS (MG/L AS CAC03)
OCT 29...	0800	54	975	8.0	12.0	4.5	10.9	5900	10000	300
NOV 27...	0730	48	1100	8.3	12.5	1.8	13.0	--	--	330
DEC 20...	0830	44	1150	8.3	9.0	3.3	20.0	K30	570	320
JAN 17...	1000	350	710	7.6	15.5	33	10.3	2500	12000	220
FEB 28...	1200	1200	650	7.3	17.5	260	10.0	--	3300	250
MAR 31...	1200	324	1140	9.0	23.5	23	7.0	--	40	450
APR 30...	1245	93	1080	--	18.5	13	13.1	210	770	390
MAY 20...	1230	69	1100	7.8	20.0	4.2	13.4	150	240	300
JUN 23...	1315	44	1100	8.6	27.0	3.4	9.9	--	60	370
JUL 22...	1400	64	1000	7.9	31.5	14	20.0	30	150	330
AUG 18...	1130	47	1100	7.8	23.0	19	10.0	140	105	330
SEP 19...	1100	60	1100	7.8	19.5	10	11.8	K16	K20	320
DATE		HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT- Y (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 29...	140	76	26	96	40	2.4	9.0	160	--	
NOV 27...	160	83	29	110	41	2.6	9.9	170	220	
DEC 20...	140	80	29	110	53	2.7	9.3	180	220	
JAN 17...	100	60	18	53	33	1.5	6.6	120	150	
FEB 28...	95	69	20	39	25	1.1	4.6	160	140	
MAR 31...	270	110	43	77	27	1.6	5.9	180	320	
APR 30...	210	100	34	88	32	1.9	7.1	180	270	
MAY 20...	140	73	29	94	40	2.4	6.7	160	220	
JUN 23...	180	87	38	100	36	2.3	7.6	190	250	
JUL 22...	170	82	31	110	41	2.6	8.5	160	240	
AUG 18...	140	77	33	120	43	2.9	8.9	--	240	
SEP 19...	150	76	31	110	42	2.7	7.8	170	210	

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

LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, 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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
OCT 29...	210	.6	6.2	689	652	4.9	5.0	.73	.87
NOV 27...	110	.5	14	719	706	6.3	6.2	.52	.53
DEC 20...	120	.6	15	752	716	6.8	5.4	.25	.12
JAN 17...	47	.4	17	467	438	3.0	3.0	.52	.52
FEB 28...	30	.4	25	435	436	2.6	2.7	.60	.35
MAR 31...	76	.5	22	842	780	3.9	4.0	.11	.06
APR 30...	86	.7	24	781	740	5.2	5.0	.89	.92
MAY 20...	94	.5	19	743	654	5.0	4.9	.18	--
JUN 23...	120	.6	24	795	749	1.6	1.6	.27	.02
JUL 22...	110	.6	22	759	713	3.2	2.8	--	.02
AUG 18...	120	.6	25	739	758	4.5	4.4	--	--
SEP 19...	120	.8	25	736	701	4.6	4.0	.07	.06

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+NH4 + ORG. SUSP. 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)
OCT 29...	1.4	1.4	2.1	--	2.3	7.0	7.3	1.6	1.6
NOV 27...	7.1	.87	7.6	6.2	1.4	14	7.6	3.7	3.2
DEC 20...	2.3	1.1	2.5	1.3	1.2	9.3	6.6	3.5	3.4
JAN 17...	3.0	1.9	3.5	1.1	2.4	6.5	5.4	1.3	.50
FEB 28...	2.4	.85	3.0	1.8	1.2	5.6	3.9	1.3	.20
MAR 31...	1.3	1.0	1.4	.30	1.1	5.3	5.1	.42	.33
APR 30...	1.2	1.1	2.1	.10	2.0	7.3	7.0	1.0	.85
MAY 20...	1.0	--	1.2	.50	.70	6.2	5.6	1.7	1.7
JUN 23...	1.8	1.6	2.1	.50	1.6	3.7	3.2	.74	.77
JUL 22...	--	1.2	3.1	1.9	1.2	6.3	4.0	1.6	.78
AUG 18...	--	--	1.9	.50	1.4	6.4	5.8	2.0	1.8
SEP 19...	2.2	1.6	2.3	.60	1.7	6.9	5.7	2.8	2.4

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
OCT 29...	0800	7	1	6	300	300	7	6	5	<1	10
DEC 20...	0830	--	--	--	--	--	--	--	--	--	--
JAN 17...	1000	6	2	4	200	100	70	5	2	3	30
MAR 31...	1200	--	--	--	--	--	--	--	--	--	--
APR 30...	1245	5	1	4	100	20	80	5	1	4	10
JUN 23...	1315	--	--	--	--	--	--	--	--	--	--
JUL 22...	1400	4	0	4	100	40	60	4	2	2	10
SEP 19...	1100	--	--	--	--	--	--	--	--	--	--

DATE	CHRO- MIUM, SUS- PENDE RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDE RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDE RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 29...	2	8	--	0	<3	15	9	6	690	650	40
DEC 20...	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	20	10	8	5	<3	49	45	4	11000	11000	50
MAR 31...	--	--	--	--	--	--	--	--	--	--	--
APR 30...	10	0	--	--	<3	26	10	16	2000	2000	20
JUN 23...	--	--	--	--	--	--	--	--	--	--	--
JUL 22...	0	10	2	--	<3	44	31	13	1300	1300	50
SEP 19...	--	--	--	--	--	--	--	--	--	--	--

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV. (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, SUS- PENDE RECOV- ERABLE (UG/L AS NI)
OCT 29...	15	15	0	70	60	8	1.3	.0	1.3	34	9
DEC 20...	--	--	--	--	--	--	--	--	--	--	--
JAN 17...	180	180	2	340	310	30	--	.0	1.4	38	22
MAR 31...	--	--	--	--	--	--	--	--	--	--	--
APR 30...	25	24	1	110	60	50	.1	.1	.0	53	8
JUN 23...	--	--	--	--	--	--	--	--	--	--	--
JUL 22...	26	22	4	100	--	<1	1.2	1.2	.0	47	25
SEP 19...	--	--	--	--	--	--	--	--	--	--	--

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

LOS ANGELES RIVER BASIN

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 29...	25	2	0	2	0	0	0	40	30	10
DEC 20...	--	--	--	--	1	--	--	--	--	--
JAN 17...	16	2	0	2	0	0	0	180	150	30
MAR 31...	--	--	--	--	0	--	--	--	--	--
APR 30...	45	4	0	4	0	0	0	70	60	10
JUN 23...	--	--	--	--	0	--	--	--	--	--
JUL 22...	22	2	0	2	1	1	0	70	60	10
SEP 19...	--	--	--	--	1	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE (MG/L AS C)
OCT 29...	0800	--	12	.1
NOV 27...	0730	14	--	--
DEC 20...	0830	18	--	--
JAN 17...	1000	--	20	2.3
FEB 28...	1200	21	--	--
MAR 31...	1200	11	--	--
APR 30...	1245	--	12	.4
MAY 20...	1230	13	--	--
JUN 23...	1315	17	--	--
JUL 22...	1400	16	--	--
AUG 18...	1130	23	--	--
SEP 19...	1100	12	--	--

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	NOV 27,79 0730	MAR 31,80 1200	MAY 20,80 1230	JUN 23,80 1315				
TOTAL CELLS/ML	19000	31000	16000	22000				
DIVERSITY: DIVISION	1.0	0.1	0.6	1.4				
..CLASS	1.0	0.1	0.6	1.4				
..ORDER	1.6	0.1	1.0	1.9				
...FAMILY	2.1	1.3	1.0	2.6				
....GENUS	2.1	1.3	1.0	2.8				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)								
..CHLOROPHYCEAE								
...CHLOROCOCCALES								
....HYDRODICTYACEAE							1900	9
....PEDIASTRUM	--	-	--	-	--	-	--	-
...OOCYSTACEAE								
....ANKISTRODESMUS	--	-	--	-	140	1	--	-
....CHLORELLA	4500#	23	--	-	--	-	--	-
....CHODATELLA	--	-	--	-	--	-	--	-
....KIRCHNERIELLA	--	-	570	2	--	-	--	-
...OOCYSTIS	--	-	--	-	--	-	1500	7
....SELENASTRUM	--	-	--	-	--	-	*	0
...SCENEDESMACEAE								
....ACTINASTRUM	--	-	--	-	--	-	690	3
....SCENEDESMUS	--	-	--	-	--	-	7000#	32
..VOLVOCALES								
...CHLAMYDOMONADACEAE								
....CHLAMYDOMONAS	5700#	29	--	-	680	4	600	3
CHRYSOPHYTA								
..BACILLARIOPHYCEAE								
...CENTRALES								
....COSCINODISCAEAE								
....CYCLOTELLA	210	1	--	-	1200	7	3300#	15
...PENNALES								
....ACHNANTHACEAE								
....ACHNANTHES	3600#	18	--	-	14000#	83	--	-
...CYMBELLACEAE								
....CYMBELLA	--	-	--	-	--	-	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-
...FRAGILARIACEAE								
....FRAGILARIA	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	*	0
...GOMPHONEMATAEAE								
....GOMPHONEMA	310	2	570	2	--	-	--	-
...NAVICULACEAE								
....NAVICULA	--	-	11000#	36	--	-	170	1
...NITZSCHIAEAE								
....NITZSCHIA	5100#	26	18000#	59	--	-	770	4
...SURIRELLACEAE								
....SURIRELLA	--	-	290	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)								
..CYANOPHYCEAE								
...CHROOCOCCALES								
....CHROOCOCCACEAE								
....AGMENELLUM	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	690	3
...HORMOGONALES								
...NOSTOCACEAE								
....ANABAENOPSIS	--	-	--	-	--	-	--	-
....APHANIZOMENON	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE								
....LYNGBYA	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	4800#	22
....PHORMIDIUM	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)								
..EUGLENOPHYCEAE								
...EUGLENALES								
....EUGLENACEAE								
....EUGLENA	--	-	--	-	810	5	--	-
PYRRHOPHYTA (FIRE ALGAE)								
..DINOPHYCEAE								
...PERIDINIALES								
....GLENODINIACEAE								
....GLENODINIUM	--	-	--	-	--	-	--	-

See footnotes at end of table.

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 22,80 1400	AUG 18,80 1130	SEP 19,80 1100
TOTAL CELLS/ML	36000	130000	22000
DIVERSITY: DIVISION	1.2	0.6	0.6
..CLASS	1.2	0.6	0.6
..ORDER	1.5	0.7	0.8
..FAMILY	2.1	0.9	1.4
....GENUS	2.3	1.2	1.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
..CHLOROCOCCALES						
...HYDRODICTYACEAE						
....PEDIASTRUM	6800#	19	--	-	2500	11
...OOCYSTACEAE						
....ANKISTRODESMUS	240	1	--	-	160	1
...CHLORELLA	--	-	--	-	--	-
...CHODATELLA	* 0		* 0		--	-
...KIRCHNERIELLA	--	-	--	-	--	-
...OOCYSTIS	--	-	--	-	--	-
...SELENASTRUM	--	-	--	-	--	-
...SCENEDESMACEAE						
....ACTINASTRUM	--	-	--	-	--	-
...SCENEDESMUS	13000#	36	14000	11	17000#	77
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	570	2	* 0		250	1
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINODISCACEAE						
...CYCLOTELLA	1100	3	* 0		250	1
...PENNIALES						
...ACHNANTHACEAE	--	-	--	-	--	-
...ACHNANTHES	--	-	--	-	--	-
...CYMBELLACEAE	--	-	* 0		--	-
...CYMBELLA	--	-	--	-	* 0	
...EPITHEMIA	--	-	--	-	--	-
...FRAGILARIACEAE						
...FRAGILARIA	* 0		--	-	--	-
...SYNEDRA	--	-	--	-	--	-
...GOMPHONEMACEAE						
...GOMPHONEMA	--	-	* 0		* 0	
...NAVICULACEAE						
...NAVICULA	240	1	* 0		330	1
...NITZSCHACEAE						
...NITZSCHIA	650	2	810	1	250	1
...SURIRELLACEAE						
...SURIRELLA	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
...CHROOCOCCACEAE						
....AGMENELLUM	650	2	--	-	--	-
...ANACYSTIS	* 0		* 0		410	2
...HORMOGONALES						
...NOSTOCACEAE						
....ANABAENOPSIS	--	-	2200	2	--	-
...APHANIZOMENON	--	-	1300	1	--	-
...OSCILLATORIA						
....LYNGBYA	1500	4	100000#	78	--	-
...OSCILLATORIA	11000#	30	8700	7	--	-
...PHORMIDIUM	--	-	--	-	490	2
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	* 0		330	1
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	* 0		--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

OCTOBER			NOVEMBER			DECEMBER			JANUARY			
DAY	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										17.0	14.0	15.5
18										17.5	10.0	14.0
19										18.0	7.0	11.5
20										19.0	7.0	11.5
21										18.5	7.0	12.0
22										20.0	8.0	13.0
23										19.5	8.0	12.5
24										9.5	8.0	9.0
25										---	---	---
26										---	---	---
27										---	---	---
28										---	---	---
29										---	---	---
30										---	---	---
31										---	---	---
MONTH										---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1				---	---	---	32.0	23.0	27.5	29.0	21.0	24.0
2				---	---	---	---	---	---	28.0	20.5	23.5
3				---	---	---	---	---	---	30.0	20.0	24.0
4				---	---	---	---	---	---	30.0	19.0	24.0
5				---	---	---	---	---	---	30.0	19.5	24.5
6				---	---	---	---	---	---	30.0	20.0	24.5
7				---	---	---	---	---	---	26.5	19.5	22.5
8				---	---	---	---	---	---	25.0	19.0	21.5
9				---	---	---	---	---	---	25.5	18.5	21.5
10				---	---	---	---	---	---	26.5	19.5	23.0
11				---	---	---	---	---	---	27.5	20.5	23.5
12				---	---	---	---	---	---	27.0	20.0	23.0
13				---	---	---	---	---	---	24.5	20.5	22.0
14				---	---	---	---	---	---	26.0	18.5	22.0
15				---	---	---	---	---	---	25.5	19.0	21.5
16				---	---	---	---	---	---	26.0	18.5	22.5
17				---	---	---	---	---	---	29.0	20.0	24.0
18				---	---	---	27.0	23.5	25.0	29.5	20.5	24.5
19				---	---	---	28.0	20.0	23.5	26.0	19.5	22.5
20				---	---	---	29.5	19.0	24.0	26.0	19.5	22.0
21				---	---	---	30.0	20.0	24.5	27.5	20.0	23.0
22				32.0	23.0	28.0	28.5	20.5	24.0	25.5	18.5	21.5
23				32.5	20.5	26.0	30.5	21.0	25.0	26.5	19.0	22.0
24				33.0	21.0	26.5	30.0	20.5	24.5	27.5	19.0	23.0
25				32.0	21.5	26.5	30.5	20.5	25.0	27.0	18.5	22.5
26				32.0	21.5	26.5	30.5	20.5	25.0	26.0	19.0	22.0
27				32.0	21.0	26.0	30.5	21.0	25.0	27.0	18.5	22.0
28				32.5	21.5	26.5	30.5	20.5	25.0	26.0	17.5	22.0
29				32.5	22.0	27.0	30.5	20.0	24.5	27.5	18.5	23.0
30				32.5	23.5	27.5	30.5	19.0	25.0	29.5	20.0	24.0
31				32.0	23.0	27.0	29.5	20.0	24.0	---	---	---
MONTH				---	---	---	---	---	---	30.0	17.5	23.0
YEAR	33.0	7.0	22.5									

11103000 LOS ANGELES RIVER AT LONG BEACH, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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 .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT 29...	1000	16.0	54	35	5.1	--	--
NOV 27...	1030	17.5	48	29	3.8	--	--
DEC 20...	0830	9.0	44	272	32	--	--
JAN 17...	1100	15.0	350	262	248	--	--
FEB 28...	1330	17.5	1200	1370	4440	29	39
APR 30...	1245	18.5	93	254	64	--	--
MAY 20...	1215	20.0	69	55	10	--	--
JUN 23...	1245	27.0	44	59	7.0	--	--
JUL 22...	1400	31.5	64	55	9.5	--	--
AUG 18...	1130	23.0	47	22	2.8	--	--

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
OCT 29...	--	--	47	--	--	--
NOV 27...	--	--	52	--	--	--
DEC 20...	--	--	90	--	--	--
JAN 17...	--	--	94	--	--	--
FEB 28...	60	80	95	100	--	--
APR 30...	--	--	47	--	--	--
MAY 20...	--	--	9	--	--	--
JUN 23...	--	--	42	--	--	--
JUL 22...	--	--	71	80	91	100
AUG 18...	--	--	70	--	--	--

CALLEGUAS CREEK BASIN

11105850 ARROYO SIMI NEAR SIMI, CA

LOCATION (REVISED).--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 bridge on Madera Avenue, 30 ft (9 m) upstream from steel-lipped concrete stabilizer, 0.5 mi (0.8 km) upstream from Brea Canyon, and 1.1 mi (1.8 km) northwest of Simi.

DRAINAGE AREA.--70.6 mi² (182.9 km²), revised.

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 (213.073 m) 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 (0.466 m) higher and Nov. 16, 1976, to Oct. 29, 1979, at site 0.6 mi (1.0 km) 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.--12 years (water years 1969-80) 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,310 ft³/s (264 m³/s) Feb. 16, 1980, gage height, 8.80 ft (2.682 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft ³ /s)	Discharge (m ³ /s)	Gage height (ft)	Gage height (m)
Nov. 8	0030	646	18.3	3.87	1.180	Feb. 16	1645	*9,310	264	8.80	2.682
Jan. 9	1045	996	28.2	4.34	1.323	Feb. 19	0830	1,260	35.7	4.17	1.271
Jan. 29	0100	1,620	45.9	5.05	1.539	Mar. 6	0900	512	14.5	3.26	0.994

Minimum daily discharge, 0.70 ft³/s (0.020 m³/s) Jan. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.6	1.3	1.5	6.8	12	3.3	5.0	2.0	2.5	4.9	3.9
2	1.5	1.6	1.5	1.3	5.2	147	3.3	2.6	1.8	4.2	5.6	3.9
3	1.5	2.0	1.5	1.3	3.9	139	3.3	2.6	1.8	4.2	5.6	3.5
4	1.5	2.0	1.6	1.6	3.0	30	3.3	2.4	1.6	3.5	4.2	3.3
5	1.3	1.8	1.6	2.2	2.0	125	3.3	2.4	2.8	1.6	3.9	3.3
6	1.5	1.6	1.6	2.2	1.3	168	3.3	2.2	2.2	2.2	3.9	3.0
7	1.8	8.6	1.6	2.7	1.2	57	3.3	2.2	2.0	3.3	3.9	3.0
8	1.8	63	1.8	2.2	1.5	31	3.3	2.0	2.0	3.0	3.5	3.0
9	1.8	1.3	1.8	187	2.0	18	3.5	2.0	2.0	3.3	3.5	3.0
10	1.5	1.6	2.2	18	1.3	14	3.5	4.0	2.0	3.3	3.5	3.0
11	1.5	1.5	2.0	132	1.3	12	3.3	1.8	2.2	3.3	3.5	3.3
12	1.5	1.5	1.8	28	1.3	10	3.3	1.3	2.2	3.5	3.0	3.5
13	1.8	1.3	1.8	29	132	9.8	3.3	1.3	2.0	3.5	3.3	3.3
14	2.0	1.3	1.6	46	94	7.7	8.0	1.90	1.8	3.9	3.3	2.2
15	2.0	1.3	1.8	3.0	282	6.4	4.0	1.5	1.8	3.5	3.3	1.5
16	1.8	1.3	2.2	3.7	1670	5.6	2.7	1.5	1.8	3.5	3.0	2.5
17	1.8	1.5	1.8	3.8	522	6.0	2.7	1.5	1.8	3.3	3.5	2.5
18	2.0	1.5	1.8	3.4	703	37	2.7	1.6	2.0	3.0	3.0	2.5
19	2.8	1.5	1.8	1.6	450	6.8	2.7	1.3	2.2	2.7	3.0	2.5
20	22	1.3	2.0	2.0	368	6.0	2.7	1.3	2.5	2.7	2.7	2.5
21	2.5	1.3	2.5	1.2	177	6.0	2.7	1.6	1.8	3.3	2.7	3.0
22	2.0	1.3	2.2	1.2	69	6.0	6.4	4.2	1.8	3.9	3.0	2.7
23	1.5	1.3	2.2	1.90	37	5.6	2.7	1.5	2.5	3.9	3.0	2.5
24	1.5	1.3	38	1.70	24	5.2	2.7	1.6	2.0	3.9	3.0	2.5
25	1.8	1.3	19	1.2	20	19	2.7	1.6	2.0	3.9	3.0	2.5
26	1.3	1.3	1.8	1.3	17	10	2.7	1.8	2.0	3.9	3.3	2.5
27	1.5	1.3	1.6	1.8	15	3.3	2.7	1.6	2.0	4.2	3.5	2.5
28	2.2	1.3	1.5	102	13	3.5	6.5	1.6	2.0	4.2	3.5	2.5
29	1.8	1.3	1.3	225	12	3.3	3.0	1.8	2.0	4.2	3.5	2.5
30	1.3	1.3	2.2	10	---	3.3	2.7	1.8	1.8	4.5	3.9	2.5
31	1.5	---	1.6	8.2	---	3.3	---	2.0	---	4.5	3.9	---
TOTAL	73.8	112.1	109.0	826.00	4635.8	916.8	103.6	62.50	60.4	108.4	110.4	84.9
MEAN	2.38	3.74	3.52	26.6	160	29.6	3.45	2.02	2.01	3.50	3.56	2.83
MAX	22	63	38	225	1670	168	8.0	5.0	2.8	4.5	5.6	3.9
MIN	1.3	1.3	1.3	1.70	1.2	3.3	2.7	1.90	1.6	1.6	2.7	1.5
AC-FT	146	222	216	1640	9200	1820	205	124	120	215	219	168
CAL YR 1979	TOTAL	4190.50	MEAN	11.5	MAX	627	MIN	.50	AC-FT	8310		
WTR YR 1980	TOTAL	7203.70	MEAN	19.7	MAX	1670	MIN	.70	AC-FT	14290		

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 (4.2 km) upstream from U.S. Highway 101, and 4.4 mi (7.1 km) northeast of Camarillo.

DRAINAGE AREA.--64.2 mi² (166.3 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 180 ft (55 m), from topographic map. Mar. 4, 1978 to Oct. 25, 1978, at same site at datum 10.00 ft (3.048 m) lower.

REMARKS.--No regulation or diversion above station. Indefinite stage-discharge relation Nov. 9 to Dec. 12.

COOPERATION.--Records were furnished by Ventura County Flood Control District and reviewed by the Geological Survey.

AVERAGE DISCHARGE.--8 years, 26.5 ft³/s (0.750 m³/s), 19,200 acre-ft/yr (23.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,800 ft³/s (334 m³/s) Feb. 16, 1980, gage height, 21.67 ft (6.605 m) from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of slope-conveyance study of maximum flow; minimum daily, 0.13 ft³/s (0.004 m³/s) May 31, 1973.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft³/s (34.0 m³/s) and maximum (*) from rating curve extended or explained above.

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 8	0100	2,920 82.7	14.42 4.395	Feb. 16	1700	*11,800 334	21.67 6.605
Jan. 9	1115	2,030 57.5	15.09 4.599	Feb. 17	2400	4,230 120	16.95 5.166
Jan. 11	0630	1,600 45.3	14.67 4.471	Feb. 19	0900	1,380 39.1	14.25 4.343
Jan. 29	0130	4,560 129	17.20 5.243	Feb. 20	1900	1,320 37.4	14.30 4.359
Feb. 15	0500	7,190 204	18.90 5.761	Mar. 3	0130	1,410 39.9	14.40 4.389

Minimum daily discharge, 6.7 ft³/s (0.19 m³/s) Jan. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	14	16	8.5	24	58	33	25	21	19	18	17
2	18	15	16	8.1	24	312	32	25	21	19	18	17
3	16	15	16	7.7	23	319	32	22	22	19	18	16
4	16	15	16	7.4	22	85	32	23	22	19	18	17
5	16	15	16	7.0	22	164	32	24	21	18	18	17
6	15	14	16	6.7	21	217	32	24	19	19	17	18
7	16	53	16	7.7	20	103	32	25	19	18	17	17
8	15	198	16	8.1	20	84	27	24	20	18	16	18
9	15	16	16	279	20	73	23	24	21	17	15	19
10	15	16	16	46	20	70	31	29	21	18	14	18
11	14	16	16	398	20	67	29	24	21	19	15	10
12	15	16	16	64	20	64	26	24	19	18	16	11
13	15	16	15	44	134	61	29	23	19	19	17	16
14	15	16	16	54	173	58	26	23	19	19	17	17
15	15	16	16	35	1180	55	26	24	19	19	17	17
16	14	16	17	30	3060	52	26	23	19	19	18	17
17	14	16	16	27	1510	48	29	22	19	18	17	16
18	14	16	16	24	1030	44	29	22	19	18	16	16
19	16	16	16	22	619	41	28	23	19	17	18	16
20	39	16	17	19	559	39	28	22	19	17	18	17
21	16	16	17	18	210	39	27	22	19	18	17	17
22	14	16	15	17	100	39	36	23	19	18	17	17
23	15	16	15	16	90	38	27	23	19	18	16	17
24	16	16	140	16	82	37	26	22	19	18	17	17
25	16	16	60	16	76	69	26	22	20	18	18	17
26	16	16	15	16	70	57	25	22	20	17	17	16
27	16	16	9.3	16	66	39	26	23	19	18	17	16
28	15	16	9.3	190	62	36	36	22	19	17	17	16
29	14	16	9.3	704	60	36	29	21	18	18	17	17
30	14	16	8.9	38	---	35	26	22	18	18	17	16
31	14	---	8.9	28	---	35	---	22	---	17	16	---
TOTAL	497	691	628.7	2178.2	9337	2474	866	719	589	562	524	493
MEAN	16.0	23.0	20.3	70.3	322	79.8	28.9	23.2	19.6	18.1	16.9	16.4
MAX	39	198	140	704	3060	319	36	29	22	19	18	19
MIN	14	14	8.9	6.7	20	35	23	21	18	17	14	10
AC-FT	986	1370	1250	4320	18520	4910	1720	1430	1170	1110	1040	978
CAL YR 1979 TOTAL	13418.7			MEAN 36.8	MAX 1480	MIN 8.9	AC-FT 26620					
WTR YR 1980 TOTAL	19558.9			MEAN 53.4	MAX 3060	MIN 6.7	AC-FT 38800					

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 (1.6 km) northeast of Camarillo State Hospital, and 1.4 mi (2.3 km) downstream from Conejo Creek.

DRAINAGE AREA.--248 mi² (642 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 58.42 ft (17.806 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--Records good. No regulation above station. Pumping for irrigation in valley 1.0 mi (1.6 km) 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.--12 years, 37.0 ft³/s (1.05 m³/s), 26,810 acre-ft/yr (33.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,300 ft³/s (716 m³/s) Feb. 16, 1980, gage height, 10.54 ft (3.213 m), from rating curve extended above 4,600 ft³/s (130 m³/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 ft³/s (31.2 m³/s), and maximum (*) from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 8	0245	2,120 60.0	3.31 1.009	Feb. 16	1845	*25,300 716	10.54 3.213
Jan. 11	0715	3,900 110	4.08 1.244	Feb. 19	1015	6,450 183	5.01 1.527
Jan. 29	0330	11,900 337	6.77 2.063	Mar. 3	0215	4,400 125	4.28 1.305
Feb. 14	0800	1,390 39.4	2.91 0.887	Mar. 6	1245	1,320 37.4	2.86 0.872

Minimum daily discharge, 12 ft³/s (0.34 m³/s) Sept. 13, 20, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	40	15	24	22	72	53	38	33	16	22	24
2	18	24	15	24	20	564	51	38	30	20	21	22
3	13	28	16	24	20	807	40	30	33	26	20	28
4	15	35	18	22	20	78	48	30	42	28	19	26
5	16	30	18	20	20	260	38	40	26	20	18	24
6	13	20	18	20	20	371	35	30	26	20	17	24
7	15	101	20	24	16	76	35	35	22	24	16	26
8	20	497	18	30	16	76	24	28	18	22	16	28
9	20	26	18	510	18	69	35	28	20	18	20	30
10	16	16	20	74	20	69	40	33	24	18	20	26
11	22	18	22	975	20	76	35	28	26	20	22	26
12	15	20	22	101	18	72	48	26	26	20	24	16
13	24	20	18	36	143	40	42	30	20	24	20	12
14	22	18	18	115	347	38	45	28	24	22	22	22
15	26	16	18	38	1420	38	38	26	33	22	20	22
16	26	16	18	24	5690	38	40	28	22	20	18	22
17	22	16	20	20	3130	48	53	30	20	20	20	16
18	24	16	16	24	2440	33	38	33	20	18	16	16
19	22	20	22	20	1940	79	28	33	20	20	22	13
20	76	22	26	20	1630	62	35	35	28	20	22	12
21	45	20	26	30	508	79	40	33	28	22	22	13
22	42	22	18	22	151	48	48	38	20	20	22	16
23	38	24	20	20	106	66	38	35	16	22	20	16
24	16	18	90	20	83	42	30	38	16	26	24	18
25	16	20	152	26	79	69	38	45	16	22	22	16
26	22	24	22	30	76	113	45	45	16	22	22	16
27	22	24	20	33	69	59	45	40	15	22	26	12
28	22	22	20	69	86	76	45	38	15	26	28	15
29	26	16	20	2400	79	69	45	33	16	25	22	15
30	22	16	20	61	---	62	38	30	16	24	24	15
31	22	---	20	28	---	56	---	40	---	23	26	---
TOTAL	738	1205	804	4884	18207	3705	1213	1042	687	672	653	587
MEAN	23.8	40.2	25.9	158	628	120	40.4	33.6	22.9	21.1	21.1	19.6
MAX	76	497	152	2400	5690	807	53	45	42	28	28	30
MIN	13	16	15	20	16	33	24	26	15	16	16	12
AC-FT	1460	2390	1590	9690	36110	7350	2410	2070	1360	1330	1300	1160
CAL YR 1979	TOTAL	20438	MEAN	56.0	MAX	2200	MIN	12	AC-FT	40540		
WTR YR 1980	TOTAL	34397	MEAN	94.0	MAX	5690	MIN	12	AC-FT	68230		

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 (0.3 km) south of Highway 126, 0.8 mi (1.3 km) west of Los Angeles-Ventura County line, and 6.4 mi (10.3 km) west of intersection of Highway 126 and Interstate 5.

DRAINAGE AREA.--625 mi² (1,620 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 794.93 ft (242.295 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Indefinite stage-discharge relation Jan. 29 to July 1. 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 (399 hm³). Imported water from California Water Project stored and released at Castaic Dam.

AVERAGE DISCHARGE.--28 years, 45.1 ft³/s (1,277 m³/s), 32,670 acre-ft/yr (40.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,800 ft³/s (1,950 m³/s) Jan. 25, 1969, gage height, 19.01 ft (5.794 m), from rating curve extended above 9,200 ft³/s (261 m³/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 ft³/s (21.2 m³/s) and maximum (*) from slope-area measurement of maximum flow:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1100	1,030 29.2	4.81 1.466	Feb. 16	1300	*13,900 394	6.50 1.981
Jan. 29	0100	4,030 114	6.15 1.875	Feb. 19	Unknown	Unknown	Unknown
				Mar. 6	Unknown	Unknown	Unknown

Minimum daily discharge, 15 ft³/s (0.42 m³/s) for several days in July and August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	18	20	41	100	160	215	107	72	59	15	24
2	18	19	20	41	85	450	195	105	71	46	15	26
3	18	19	19	42	74	620	193	100	71	18	16	26
4	19	20	20	41	68	430	191	73	70	18	17	25
5	20	20	19	40	128	550	184	62	70	19	18	26
6	19	19	20	40	200	840	183	60	70	18	16	27
7	18	20	20	39	264	620	182	58	69	18	15	29
8	18	30	20	38	295	460	181	55	69	17	15	30
9	18	25	20	165	126	360	169	53	68	18	15	29
10	19	24	19	51	51	300	154	51	68	17	15	29
11	19	25	18	259	50	260	153	49	68	17	16	32
12	18	25	18	82	49	230	152	48	67	17	17	33
13	20	25	18	56	49	210	151	46	67	19	17	32
14	19	26	18	146	200	190	150	45	66	20	19	31
15	19	24	16	97	480	170	149	43	66	19	18	30
16	19	26	18	37	5000	160	148	42	66	18	18	29
17	18	26	19	33	2500	150	134	40	66	19	19	27
18	17	24	18	32	1200	140	112	39	65	19	20	28
19	18	24	18	33	3000	133	112	54	65	19	20	29
20	21	24	18	35	2500	130	111	70	65	17	19	28
21	18	24	19	36	2100	126	111	69	65	16	18	28
22	19	24	20	58	1140	260	110	68	65	16	20	28
23	19	23	21	132	650	256	110	67	64	16	18	26
24	19	24	26	162	450	252	110	66	64	16	19	26
25	20	23	37	192	350	249	109	65	64	16	20	26
26	20	21	33	199	270	246	109	64	64	16	20	26
27	20	21	35	204	225	243	109	63	64	15	20	26
28	20	20	37	290	190	240	108	62	63	16	21	27
29	19	20	40	1190	170	237	108	61	63	15	21	30
30	19	20	39	308	---	234	108	64	63	16	20	28
31	18	---	40	130	---	232	---	63	---	16	23	---
TOTAL	585	683	723	4249	21964	9138	4311	1912	1998	606	560	841
MEAN	18.9	22.8	23.3	137	757	295	144	61.7	66.6	19.5	18.1	28.0
MAX	21	30	40	1190	5000	840	215	107	72	59	23	33
MIN	17	18	16	32	49	126	108	39	63	15	15	24
AC-FT	1160	1350	1430	8430	43570	18130	8550	3790	3960	1200	1110	1670
CAL YR 1979 TOTAL	29037			MEAN 79.6	MAX 1710	MIN 12	AC-FT 57590					
WTR YR 1980 TOTAL	47570			MEAN 130	MAX 5000	MIN 15	AC-FT 94360					

SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to current year.

CHEMICAL ANALYSIS: Water years 1969, 1972 to current year.

BIOLOGICAL DATA: Water years 1979 to current year.

WATER TEMPERATURES: Water years 1969 to September 1978 (observed), February 1980 to September 1980.

SEDIMENT RECORDS: Water years 1969 to September 1978, October 1978 to current year (periodic record only).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1969 to current year.

pH: June to September 1969.

CHLORIDE: June to September 1969.

WATER TEMPERATURES: February 1980 to September 1980.

SEDIMENT RECORDS: October 1968 to September 1978.

INSTRUMENTATION.--Water-quality monitor from June to September 1969. Specific-conductance recorder since June 1969. Temperature recorder since February 1980.

REMARKS.--The letter "A" following a date indicates chemical-quality data furnished by California Department of Water Resources. Missing specific-conductance and temperature data due to probe or recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 3,600 micromhos Mar. 31, 1971; minimum recorded, 160 micromhos

Mar. 17, 1979.

SEDIMENT CONCENTRATIONS: 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 (2,990,000 metric tons), estimated, Feb. 25, 1969; minimum daily, 0.03 tons (0.03 metric tons) Sept. 9, 1976.

WATER TEMPERATURES: Maximum recorded, 32.0°C Aug. 9; minimum recorded, 6.0°C Feb. 10.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,800 micromhos Dec. 24; minimum recorded, 340 micromhos Feb. 14.

WATER TEMPERATURES: Maximum recorded, 32.0°C Aug. 9; minimum recorded, 6.0°C Feb. 10.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
02...	1000	19	1520	8.2	17.0	--	1.3	8.8	155	141
NOV										
20...	1000	24	1580	8.4	9.5	--	5.4	9.8	34	69
30... A	1540	19	1420	8.2	16.0	2	--	9.2	--	--
JAN										
16...	0930	35	1650	8.3	14.5	--	35	8.5	640	108
30... A	1535	E130	1570	8.4	18.0	55	--	8.6	--	--
MAR										
19...	1030	134	1220	8.5	14.0	--	260	9.7	980	135
APR										
18... A	1515	E112	1070	8.3	26.0	50	--	7.5	--	--
30...	1050	108	1200	8.4	15.5	--	290	9.1	480	378
MAY										
22... A	1240	E68	--	--	18.5	--	--	--	--	--
30...	1100	64	1290	8.4	19.5	--	23	8.4	98	52
JUL										
02...	1100	60	1060	8.2	20.5	--	14	9.0	155	210
17... A	1155	19	1410	8.4	28.0	6	--	7.6	--	--
29...	1100	15	1600	8.3	23.5	--	13	8.1	168	82
SEP										
18...	1030	27	1510	8.3	19.0	--	5.3	8.8	108	90
30...	1030	28	1480	8.2	17.0	--	.70	9.1	200	340

E Estimated

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)
OCT										
02...	550	260	140	48	140	35	2.6	6.9	290	450
NOV										
20...	600	310	150	54	140	33	2.5	6.7	290	440
30...A	560	--	--	--	--	--	--	--	--	430
JAN										
16...	640	350	160	59	160	35	2.7	7.2	290	520
30...A	640	--	--	--	--	--	--	--	--	530
MAR										
19...	410	170	100	39	99	34	2.1	5.0	240	300
APR										
18...A	420	--	--	--	--	--	--	--	--	290
30...	440	210	110	39	100	33	2.1	5.3	230	330
MAY										
22...A	--	--	--	--	--	--	--	--	--	--
30...	450	220	110	42	120	36	2.5	5.6	230	340
JUL										
02...	400	180	99	37	100	35	2.2	5.7	220	290
17...A	610	--	--	--	--	--	--	--	--	430
29...	560	280	140	50	150	37	2.8	6.9	280	480
SEP										
18...	520	230	130	48	140	37	2.7	6.1	290	400
30...	490	200	120	47	140	38	2.7	7.0	290	400

DATE	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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT										
02...	88	.7	21	1140	1080	2.3	2.3	.05	.06	.59
NOV										
20...	94	.6	23	1160	1100	3.0	3.1	--	.09	--
30...A	93	--	--	1130	--	--	--	--	--	--
JAN										
16...	100	.6	21	1260	1210	2.8	2.8	.12	.11	1.1
30...A	110	--	--	1310	--	--	--	--	--	--
MAR										
19...	51	.5	21	797	774	3.2	3.2	.40	.32	1.1
APR										
18...A	70	--	--	868	--	--	--	--	--	--
30...	71	.6	19	871	828	3.4	3.3	--	.07	--
MAY										
22...A	--	--	--	--	--	--	--	--	--	--
30...	76	.6	19	966	867	3.4	3.4	.08	.00	--
JUL										
02...	65	.7	17	746	757	2.3	2.3	.02	.01	1.9
17...A	92	--	--	1170	--	--	--	--	--	--
29...	100	.7	22	1200	1130	--	3.7	.37	.03	.73
SEP										
18...	92	.7	23	1240	1030	--	4.2	.00	.01	1.0
30...	87	1.2	23	1070	1020	3.9	3.8	.00	.00	.92

SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED TOTAL (MG/L AS N)	NITRO- GEN, DIS- SOLVED TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED TOTAL (MG/L AS P)
OCT 02...	.47	.64	.11	.53	2.9	2.8	1.5	1.2
NOV 20...	1.0	--	--	1.1	--	4.2	.99	.90
30...A	--	--	--	--	--	--	--	--
JAN 16...	.87	1.2	.22	.98	4.0	3.8	.89	.70
30...A	--	--	--	--	--	--	--	--
MAR 19...	.78	1.5	.40	1.1	4.7	4.3	1.9	.38
APR 18...A	--	--	--	--	--	--	--	--
30...	.57	--	--	.64	--	3.9	1.1	.36
MAY 22...A	--	--	--	--	--	--	--	--
30...	.74	--	--	.74	--	4.1	.67	.56
JUL 02...	1.1	1.9	.80	1.1	4.2	3.4	.31	.12
17...A	--	--	--	--	--	--	--	--
29...	.74	1.1	.33	.77	--	4.5	.82	.64
SEP 18...	.99	1.0	.00	1.0	--	5.2	1.6	1.4
30...	.83	.92	.09	.83	4.8	4.6	1.3	1.2

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC SUS- PENDE TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, SUS- PENDE RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM SUS- PENDE RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CB)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
NOV 20...	1000	1	0	1	300	200	70	0	0	2	0
JAN 16...	0930	--	--	--	--	--	--	--	--	--	--
MAR 19...	1030	4	2	2	500	400	90	1	0	<1	40
APR 30...	1050	6	4	2	600	500	80	1	--	<1	30
MAY 22...A	1240	--	--	0	--	--	--	--	--	40	--
JUL 02...	1100	--	--	--	--	--	--	--	--	--	--
29...	1100	2	0	3	100	10	90	1	0	2	20
SEP 30...	1030	--	--	--	--	--	--	--	--	--	--

DATE	CHRO- MIUM, SUS- PENDE RECOV. (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, SUS- PENDE RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, SUS- PENDE RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, SUS- PENDE RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 20...	0	0	0	0	<3	0	0	1	430	420	10
JAN 16...	--	--	--	--	--	--	--	--	--	--	--
MAR 19...	40	0	13	10	<3	31	28	3	30000	30000	<10
APR 30...	30	0	17	--	<3	34	31	3	39000	39000	30
MAY 22...A	--	--	--	--	--	--	--	0	--	--	0
JUL 02...	--	--	--	--	--	--	--	--	--	--	--
29...	20	0	0	--	<3	12	8	4	2100	2100	30
SEP 30...	--	--	--	--	--	--	--	--	--	--	--

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

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, SUS- PENDE RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, SUS- PENDE RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY SUS- PENDE RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, SUS- PENDE RECOV- ERABLE (UG/L AS NI)
NOV 20...	5	2	3	60	10	50	.2	.1	.1	3	3
JAN 16...	--	--	--	--	--	--	--	--	--	--	--
MAR 19...	13	13	0	610	590	20	.5	.4	.1	22	22
APR 30...	26	26	0	710	680	30	.3	.3	.0	32	32
MAY 22... A	--	--	0	--	--	--	.0	--	--	--	--
JUL 02...	--	--	--	--	--	--	.1	--	--	--	--
JUL 29...	10	3	7	50	40	7	.1	.0	.1	--	--
SEP 30...	--	--	--	--	--	--	--	--	--	--	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, SUS- PENDE TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, SUS- PENDE RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, SUS- PENDE RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 20...	0	0	0	2	1	1	0	20	0	20
JAN 16...	--	--	--	--	0	--	--	--	--	--
MAR 19...	0	2	1	1	1	1	0	110	110	5
APR 30...	0	2	0	2	0	0	0	150	140	8
MAY 22... A	--	--	--	--	--	--	--	--	--	0
JUL 02...	--	--	--	--	0	--	--	--	--	--
JUL 29...	4	3	0	3	0	0	0	50	30	20
SEP 30...	--	--	--	--	1	--	--	--	--	--

DATE	TIME	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE (MG/L AS C)
OCT 02...	1000	3.2	--	--
NOV 20...	1000	--	14	--
JAN 16...	0930	6.4	--	--
MAR 19...	1030	--	3.9	4.4
APR 30...	1050	--	5.1	8.2
MAY 30...	1100	12	--	--
JUL 02...	1100	3.6	--	--
JUL 29...	1100	--	4.4	.7
SEP 18...	1030	12	--	--
SEP 30...	1030	3.7	--	--

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

PHYTOPLANKTON

DATE TIME	JUL 2,80 1100	JUL 29,80 1100	SEP 18,80 1030
TOTAL CELLS/ML	310	3700	1800
DIVERSITY: DIVISION	1.2	1.4	1.6
..CLASS	1.2	1.4	1.6
..ORDER	1.7	1.7	1.7
...FAMILY	2.2	2.5	2.3
....GENUS	2.3	2.5	2.7

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
....HYDRODICTYACEAE						
.....PEDIASTRUM	--	-	730#	20	--	-
....OOCYSTACEAE						
.....ANKISTRODESMUS	--	-	--	-	130	7
....OOCYSTIS	13	4	--	-	--	-
.....TREUBARIA	13	4	--	-	--	-
...SCENEDESMACEAE						
....SCENEDESMUS	77#	25	1400#	37	77	4
..VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	26	8	43	1	--	-
CHRYSOPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
....COSCINODISCACEAE						
.....COSCINODISCUS	--	-	--	-	13	1
....CYCLOTELLA	13	4	--	-	13	1
..PENNALES						
...FRAGILARIACEAE						
....SYNEDRA	13	4	--	-	--	-
...GOMPHONEMACEAE						
....GOMPHONEMA	--	-	--	-	13	1
...NAVICULACEAE						
....NAVICULA	--	-	110	3	13	1
...NITZSCHIACEAE						
....NITZSCHIA	140#	46	520	14	77	4
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
....CHROOCOCCACEAE						
.....AGMENELLUM	--	-	430	12	--	-
....ANACYSTIS	--	-	43	1	--	-
...HORMOGONALES						
....NOSTOCACEAE						
.....ANABAENA	--	-	130	3	270#	15
...OSCILLATORIACEAE						
....OSCILLATORIA	--	-	340	9	510#	29
....PHORMIDIUM	--	-	--	-	210	12
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
....EUGLENACEAE						
.....EUGLENA	--	-	--	-	460#	26
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...PERIDINIALES						
....GLENODINIACEAE						
.....GLENODINIUM	13	4	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR 1979 TO SEPTEMBER 1980

PERIPHYTON

DATE	TIME	BIOMASS CHLORO- PHYLL RATIO PERI- PHYTON (UNITS) (70950)	CHLOR-A PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70957)	CHLOR-B PERI- PHYTON CHROMO- GRAPHIC FLUOROM (MG/M2) (70958)	PERI- PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M (00573)	PERI- PHYTON BIOMASS ASH WEIGHT G/SQ M (00572)	LENGTH OF EXPOSURE (DAYS)
NOV 20...	1000	1385	.361	.034	1.22	.720	49
JUL 29...	1100	89.9	35.6	4.05	23.7	20.5	27

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1550	1520	1530	1580	1540	1560	1670	1560	1600	1570	1520	1550
2	1570	1500	1540	1580	1540	1560	1620	1540	1580	1570	1520	1550
3	1550	1520	1540	1590	1540	1560	1640	1540	1570	1570	1530	1550
4	1540	1510	1530	1560	1500	1550	1630	1530	1580	1570	1500	1540
5	1540	1460	1510	1580	1540	1550	1660	1560	1590	1570	1520	1540
6	1520	1500	1510	1570	1540	1560	1640	1540	1590	1570	1520	1550
7	1520	1500	1510	1580	1400	1550	1650	1520	1580	1570	1500	1540
8	1510	1480	1500	---	---	---	1620	1520	1570	1560	1500	1530
9	1520	1430	1490	1590	1550	1570	1650	1500	1570	2350	750	1400
10	1530	1440	1500	1580	1530	1550	1640	1520	1580	1720	1460	1570
11	1540	1460	1510	1570	1500	1550	---	---	---	1920	600	1310
12	1590	1470	1520	1560	1520	1540	---	---	---	2010	1220	1590
13	1530	1490	1500	1550	1500	1520	---	---	---	1940	1560	1710
14	1520	1500	1510	1530	1480	1510	---	---	---	2020	795	1490
15	1530	1450	1500	1530	1500	1510	---	---	---	1640	1080	1550
16	1550	1210	1360	1530	1480	1510	---	---	---	1730	1620	1670
17	1550	1440	1510	1540	1500	1510	---	---	---	1730	1680	1700
18	1560	1500	1530	1550	1510	1530	---	---	---	1730	1680	1700
19	1560	1500	1540	1580	1540	1560	---	---	---	1720	1640	1680
20	1550	1380	1510	1590	1540	1560	---	---	---	1700	1620	1660
21	1570	1470	1540	1590	1540	1560	---	---	---	1700	1630	1660
22	1570	1480	1530	1580	1530	1560	---	---	---	1690	1030	1400
23	1570	1500	1540	1580	1520	1550	1660	1500	1550	1030	985	1000
24	1580	1520	1540	1560	1520	1540	2800	1480	1690	1020	990	1000
25	1570	1500	1540	1560	1520	1540	1770	1540	1590	1020	990	998
26	1580	1500	1540	1570	1520	1540	1600	1530	1570	995	960	982
27	1570	1520	1540	1590	1540	1560	1590	1520	1550	990	970	981
28	1570	1500	1540	1620	1560	1580	1580	1520	1550	1220	860	998
29	1580	1520	1550	1650	1510	1590	1580	1540	1550	---	---	---
30	1580	1540	1560	1640	1560	1590	1580	1540	1550	---	---	---
31	1570	1530	1550	---	---	---	1580	1520	1550	---	---	---
MONTH	1590	1210	1520	1650	1400	1550	---	---	---	2350	600	1440

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---									
2	1680	1630	1660									
3	1690	1620	1660									
4	1670	1620	1640									
5	1640	1010	1250									
6	1020	910	978									
7	940	880	903									
8	930	720	847									
9	1250	830	1030									
10	1200	800	992									
11	1210	820	970									
12	1200	880	1040									
13	1390	420	884									
14	650	340	511									
15	1160	450	698									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1110	1060	1080						
2	---	---	---	1220	1090	1130						
3	---	---	---	1390	1250	1330						
4	---	---	---	---	---	---						
5	---	---	---	1480	1360	1410						
6	---	---	---	1490	1380	1430						
7	---	---	---	---	---	---						
8	---	---	---	---	---	---						
9	---	---	---	---	---	---						
10	1170	856	1130	---	---	---						
11	---	---	---	---	---	---						
12	---	---	---	---	---	---						
13	---	---	---	---	---	---						
14	1170	870	1080	---	---	---						
15	1200	1100	1150	---	---	---						
16	1150	1080	1120	---	---	---						
17	1150	1090	1110	---	---	---						
18	1130	1080	1100	---	---	---						
19	1130	1080	1100	---	---	---						
20	1120	1090	1110	---	---	---						
21	1100	1070	1090	---	---	---						
22	1090	1060	1080	---	---	---						
23	1090	1050	1070	---	---	---						
24	1110	1070	1080	---	---	---						
25	1120	1080	1100	---	---	---						
26	1150	1090	1120	---	---	---						
27	---	---	---	---	---	---						
28	---	---	---	---	---	---						
29	---	---	---	---	---	---						
30	1110	978	1060	---	---	---						
31	---	---	---	---	---	---						
MONTH	---	---	---	---	---	---						
YEAR	2800	340	1420									

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---									
2	21.0	10.0	14.5									
3	20.5	10.0	14.0									
4	21.0	10.5	14.5									
5	19.0	11.5	14.5									
6	18.0	9.0	13.0									
7	15.0	8.5	11.0									
8	16.0	9.0	11.5									
9	18.5	7.0	10.0									
10	19.5	6.0	11.5									
11	18.5	6.5	11.5									
12	18.0	7.5	11.0									
13	11.5	8.5	10.0									
14	12.5	8.5	10.5									
15	16.0	11.0	13.0									
16	13.0	11.5	12.5									
17	16.0	11.0	13.0									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	26.0	18.0	21.5	31.0	16.5	22.0	26.5	13.5	19.0
2	---	---	---	28.5	19.0	22.5	28.0	16.0	21.5	26.0	15.5	19.5
3	---	---	---	30.5	17.0	23.0	27.5	17.0	21.0	27.0	15.5	20.0
4	---	---	---	30.5	16.5	22.5	27.5	16.0	20.5	26.5	13.0	19.0
5	---	---	---	30.5	16.0	22.5	28.0	16.0	20.0	27.0	14.5	19.5
6	---	---	---	30.0	15.5	22.0	27.0	14.0	19.5	26.5	14.5	19.5
7	---	---	---	29.5	15.0	21.0	29.5	13.0	20.0	23.0	15.0	18.0
8	---	---	---	29.0	14.0	20.5	30.0	13.5	20.5	25.5	14.5	18.5
9	---	---	---	29.0	13.5	20.0	32.0	14.5	22.0	24.5	13.5	18.0
10	28.0	14.0	20.5	29.0	13.0	20.0	31.0	14.0	22.0	25.5	15.5	19.0
11	28.5	14.5	20.5	29.5	15.0	21.0	30.5	15.0	22.0	26.0	15.0	19.5
12	28.5	13.5	20.0	27.5	15.0	20.5	31.0	15.5	22.0	26.0	15.0	19.5
13	27.5	13.5	20.0	28.5	14.0	20.0	27.0	15.5	20.0	23.0	17.0	18.5
14	28.0	13.5	20.5	29.0	14.0	20.5	23.5	16.0	19.0	25.5	16.0	19.5
15	30.5	14.0	21.0	29.0	13.5	20.5	24.0	15.0	18.5	25.0	13.5	

SANTA CLARA RIVER BASIN

11108500 SANTA CLARA RIVER AT LOS ANGELES-VENTURA COUNTY LINE, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE, WATER (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
02...	1000	19	17.0	7	56
NOV					
20...	1000	24	9.5	14	70
30... A	1540	19	16.0	--	--
JAN					
16...	0930	35	14.5	182	64
30... A	1535	E130	18.0	--	--
MAR					
19...	1030	134	14.0	1780	50
APR					
18... A	1515	E112	26.0	--	--
30...	1050	108	15.5	1370	82
MAY					
22... A	1240	E68	18.5	--	--
30...	1100	64	19.5	222	35
JUL					
02...	1100	60	20.5	--	--
17... A	1155	19	28.0	--	--
29...	1100	15	23.5	71	79
SEP					
18...	1030	27	19.0	25	48
30...	1030	28	17.0	52	36

E Estimated

LOCATION.--Lat 34°43'57", long 119°02'14", in SE₄SW₄SE₄ sec.31, T.8 N., R.20 W., Ventura County, Hydrologic Unit 18070102, on right bank 2.1 mi (3.4 km) southeast of Stauffer, and 3.8 mi (6.1 km) upstream from Piru Creek.

AVERAGE DISCHARGE.--9 years, 7.17 ft³/s (0.203 m³/s), 5,190 acre-ft/yr (6.40 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,490 ft³/s (70.5 m³/s) Feb. 16, 1980, gage height, 5.45 ft (1.661 m), from rating curve extended above 17 ft³/s (0.48 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 7.32 ft (2.231 m) Mar. 4, 1978; minimum daily, 0.90 ft³/s (0.025 m³/s) Aug. 5, 9-16, Aug. 19 to Oct. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Feb. 16	1800	*2,490	70.5	5.45	1.661	July 27	1700	180	5.10	3.11	0.948
Feb. 19	0700	720	20.4	3.92	1.195						

Minimum daily discharge, 3.8 ft³/s (0.11 m³/s) Sept. 8, 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	5.6	5.4	5.4	6.5	9.9	10	9.9	8.3	5.2	4.6	4.4
2	4.4	5.6	5.4	5.3	5.9	21	10	9.9	8.0	5.2	4.6	4.6
3	4.4	5.6	5.4	5.2	5.2	25	9.9	9.9	8.0	5.2	4.5	4.6
4	4.4	5.6	5.4	5.2	5.2	14	9.9	9.9	7.7	5.1	4.5	4.6
5	4.4	5.4	5.2	5.2	5.2	22	10	9.5	7.7	4.9	4.5	4.6
6	4.6	5.6	5.2	5.2	5.0	31	10	9.5	7.4	4.8	4.4	4.4
7	4.4	5.9	5.2	5.2	5.0	31	9.5	9.9	7.4	5.0	4.4	4.2
8	4.6	5.9	5.2	5.4	5.0	25	9.5	9.9	7.2	5.1	4.4	3.8
9	4.6	5.6	5.4	7.0	5.0	22	11	9.9	7.2	5.2	4.4	3.9
10	4.6	5.4	5.6	6.7	5.2	21	11	10	6.9	5.1	4.3	3.9
11	4.6	5.4	5.6	6.7	6.0	20	10	9.9	6.9	4.9	4.3	4.0
12	4.6	5.6	5.8	14	8.6	18	10	9.9	6.9	4.8	4.3	3.9
13	4.8	5.6	5.8	8.6	10	17	11	9.9	6.9	4.7	4.3	3.9
14	4.8	5.9	6.2	19	29	16	10	9.9	6.9	4.7	4.3	4.0
15	4.9	5.9	6.8	13	49	16	10	9.5	6.9	4.7	4.2	4.0
16	5.0	5.9	7.5	10	561	15	10	9.5	6.6	4.9	4.2	4.1
17	5.1	5.6	6.0	9.2	300	15	11	9.5	6.4	4.8	4.2	3.9
18	5.2	5.6	5.1	8.6	190	14	11	9.2	6.1	5.1	4.2	3.8
19	5.2	5.9	15	8.0	250	14	12	9.2	5.9	4.7	4.1	3.8
20	5.4	6.7	9.2	7.7	130	14	11	9.2	5.9	4.4	4.1	3.8
21	5.4	7.6	7.0	7.4	65	13	11	9.2	5.9	4.3	4.1	4.0
22	5.4	7.0	6.3	7.1	40	13	11	9.2	5.7	4.4	4.1	4.0
23	5.4	6.5	6.2	6.9	29	13	11	9.2	5.5	4.3	4.1	4.1
24	5.4	6.2	15	6.8	23	13	10	9.2	5.7	4.5	4.0	4.1
25	5.6	5.7	11	6.6	18	13	9.9	9.2	5.6	4.8	4.0	4.0
26	5.6	5.4	8.4	6.7	16	12	9.5	8.9	5.8	4.7	4.0	4.1
27	5.6	5.4	7.1	8.4	14	12	8.9	8.9	5.8	13	4.1	4.0
28	5.6	5.4	6.4	16	12	11	9.5	8.6	5.7	7.0	4.2	4.0
29	5.6	5.4	6.0	11	11	11	9.9	8.6	5.5	5.2	4.2	4.0
30	5.6	5.4	5.8	8.2	---	10	9.9	8.6	5.0	4.9	4.1	3.9
31	5.6	---	5.5	7.3	---	9.9	---	8.6	---	4.7	4.4	---
TOTAL	155.4	174.3	211.1	253.0	1814.8	511.8	307.4	292.2	197.4	160.3	132.1	122.4
MEAN	5.01	5.81	6.81	8.16	62.6	16.5	10.2	9.43	6.58	5.17	4.26	4.08
MAX	5.6	7.6	15	19	561	31	12	10	8.3	13	4.6	4.6
MIN	4.4	5.4	5.1	5.2	5.0	9.9	8.9	8.6	5.0	4.3	4.0	3.8
AC-FT	308	346	419	502	3600	1020	610	580	392	318	262	243
CAL YR 1979	TOTAL	4247.8	MEAN 11.6	MAX 81	MIN 4.0	AC-FT 8430						
WTR YR 1980	TOTAL	4332.2	MEAN 11.8	MAX 561	MIN 3.8	AC-FT 8590						

SANTA CLARA RIVER BASIN

11109550 PIRU CREEK ABOVE FRENCHMANS FLAT, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°37'43", long 118°44'42", in NW¼SW¼NW¼ sec. 12, T.6 N., R.18 W., Los Angeles County, on right bank of concrete-lined channel beside old Highway 99, 1 mi (2 km) north of Frenchmans Flat, and 12.5 mi (20.1 km) north of Castaic.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1972 to September 1980 (discontinued).

INSTRUMENTATION.--Specific-conductance recorder since March 1972.

REMARKS.--Conductance recorder is located 700 ft (210 m) downstream from gaging station operated by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,540 micromhos Dec. 29, 1973; minimum recorded, 338 micromhos Nov. 30, 1972, Feb. 13, 1976.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 832 micromhos Jan. 11; minimum recorded, 466 micromhos Feb. 23.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	642	626	638	678	658	668	652	632	645	650	638	643
2	646	598	639	684	658	671	642	620	633	648	632	644
3	640	630	636	682	662	673	640	624	631	636	628	632
4	642	632	638	682	662	675	642	616	631	630	616	624
5	644	628	639	688	668	679	642	628	635	630	618	624
6	644	634	640	682	666	677	654	628	641	624	612	620
7	642	634	639	720	666	681	652	630	644	620	610	616
8	644	638	640	696	666	688	650	628	640	620	602	613
9	648	638	645	704	680	691	648	632	639	718	534	646
10	644	628	641	702	678	689	646	626	637	714	632	693
11	668	634	655	682	666	673	652	630	637	832	578	692
12	672	664	668	678	660	668	642	626	634	578	552	559
13	672	664	669	680	660	669	640	612	627	554	542	548
14	670	658	667	678	660	669	626	610	619	560	546	553
15	672	662	667	678	662	669	626	614	618	564	550	556
16	672	660	665	672	652	663	624	598	613	558	504	552
17	700	668	683	670	654	665	620	598	612	558	502	550
18	686	664	674	676	660	667	622	598	613	558	502	542
19	680	664	668	680	666	672	620	610	617	550	498	538
20	676	662	668	670	658	664	622	602	615	550	500	539
21	682	666	674	664	648	657	618	600	610	558	508	547
22	672	660	666	664	642	652	620	600	611	556	546	553
23	668	662	664	658	638	651	624	602	615	558	534	550
24	668	656	664	664	650	657	622	568	607	552	520	547
25	668	656	663	666	646	655	698	584	675	554	510	547
26	664	660	663	660	646	652	702	678	692	554	530	550
27	674	660	666	660	648	652	688	668	678	554	510	546
28	680	662	668	662	644	653	674	652	667	560	500	536
29	678	666	671	658	640	651	676	656	662	542	526	616
30	674	660	667	656	642	652	670	644	656	606	516	571
31	670	658	666	---	---	---	652	624	645	546	510	545
MONTH	700	598	658	720	638	667	702	568	635	832	498	584

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	546	510	543	552	530	548	592	548	572	570	546	560
2	544	512	541	562	528	549	600	548	578	576	534	562
3	546	512	539	562	524	554	612	550	583	576	540	561
4	542	502	537	552	518	545	600	556	582	574	554	562
5	540	496	537	554	536	548	600	554	581	574	554	561
6	540	496	536	554	486	537	596	566	585	574	554	561
7	540	496	527	554	488	538	598	558	581	574	542	560
8	550	490	534	552	518	544	590	560	574	572	536	559
9	546	510	538	546	520	541	574	554	564	562	546	557
10	546	514	537	546	526	543	574	560	565	566	548	559
11	540	506	530	546	500	542	570	552	561	572	534	558
12	540	510	530	554	518	543	570	550	561	574	546	561
13	556	498	529	552	528	548	570	540	560	---	---	---
14	600	514	575	552	520	545	568	552	560	---	---	---
15	---	---	---	552	528	548	568	552	559	---	---	---
16	---	---	---	626	510	545	570	542	560	---	---	---
17	530	510	514	566	518	551	570	528	559	---	---	---
18	528	482	518	562	538	557	570	532	559	---	---	---
19	536	514	526	588	550	571	572	544	560	---	---	---
20	532	498	520	652	552	582	572	554	561	---	---	---
21	530	490	522	584	548	573	560	546	558	---	---	---
22	530	476	520	582	544	572	562	524	557	---	---	---
23	532	466	520	584	542	573	560	546	557	---	---	---
24	558	506	542	578	536	569	570	538	558	---	---	---
25	566	526	552	576	548	566	572	542	558	---	---	---
26	564	520	556	578	544	568	572	556	561	---	---	---
27	558	526	551	588	552	569	568	538	559	---	---	---
28	556	532	551	580	534	568	570	540	558	---	---	---
29	556	532	549	588	544	569	574	524	561	---	---	---
30	---	---	---	600	556	573	564	554	559	---	---	---
31	---	---	---	590	548	569	---	---	---	---	---	---
MONTH	600	466	536	652	486	556	612	524	565	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	558	540	551	614	564	595			
2	---	---	---	578	546	558	614	568	594			
3	---	---	---	596	564	578	---	---	---			
4	---	---	---	588	562	574	---	---	---			
5	---	---	---	584	562	573	---	---	---			
6	---	---	---	584	558	574	---	---	---			
7	---	---	---	586	560	574	---	---	---			
8	---	---	---	590	564	578	---	---	---			
9	---	---	---	592	560	576	---	---	---			
10	630	574	595	588	558	574	---	---	---			
11	642	606	625	586	556	573	---	---	---			
12	644	610	629	588	562	575	---	---	---			
13	642	550	594	606	552	577	---	---	---			
14	558	542	551	592	546	572	---	---	---			
15	558	536	548	594	546	574	---	---	---			
16	556	536	547	596	542	573	---	---	---			
17	560	540	550	592	544	572	---	---	---			
18	558	536	550	600	546	575	---	---	---			
19	560	536	550	598	550	576	---	---	---			
20	560	536	550	590	550	573	---	---	---			
21	560	536	549	596	550	573	---	---	---			
22	560	536	549	588	554	574	---	---	---			
23	562	540	552	592	554	574	538	500	519			
24	562	542	553	590	552	574	540	496	520			
25	566	540	553	592	550	572	542	498	523			
26	562	538	552	588	544	571	542	502	522			
27	562	534	550	588	542	567	556	484	519			
28	562	538	550	582	544	565	530	480	512			
29	558	538	548	588	550	571	522	482	500			
30	562	544	553	604	568	583	514	478	493			
31	---	---	---	616	570	595	---	---	---			
MONTH	---	---	---	616	540	573	---	---	---			
YEAR	832	466	591									

SANTA CLARA RIVER BASIN

11109600 PIRU CREEK ABOVE LAKE PIRU, CA

LOCATION.--Lat 34°31'23", long 118°45'22", in SW¼NE¼NW¼ sec.15, T.5 N., R.18 W., Ventura County, Hydrologic Unit 18070102, on left bank near Blue Point, 1.3 mi (2.1 km) downstream from Agua Blanca Creek, 4.3 mi (6.9 km) upstream from Santa Felicia Dam, and 8.0 mi (12.9 km) northeast of Piru.

DRAINAGE AREA.--372 mi² (963 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,058.55 ft (322.646 m) National Geodetic Vertical Datum of 1929 (levels by U.S. Forest Service). Prior to Dec. 15, 1972, at site 0.3 mi (0.5 km) upstream at different datum.

REMARKS.--Records fair. Flow regulated beginning December 1971 by Pyramid Dam, capacity, 173,500 acre-ft (214 hm³) 15 mi (24 km) upstream. Imported water from the California Water Project stored and released from Pyramid Dam.

AVERAGE DISCHARGE.--16 years (water years 1956-71), 55.1 ft³/s (1.560 m³/s), 39,920 acre-ft/yr (49.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft³/s (884 m³/s) Feb. 25, 1969, gage height, 18.6 ft (5.67 m), site and datum then in use, from floodmark, from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of slope-area measurement at gage height 12.2 ft (3.72 m) and inflow-outflow records for Lake Piru; no flow in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 35,000 ft³/s (991 m³/s), is the greatest since that date.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,900 ft³/s (195 m³/s) Feb. 16, gage height, 7.92 ft (2.414 m); minimum daily, 10 ft³/s (0.28 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	12	14	188	295	107	83	76	83	19	16
2	11	11	12	12	175	545	106	81	76	80	19	16
3	10	11	12	14	193	486	104	78	76	42	19	16
4	11	11	12	15	197	401	102	77	76	37	19	16
5	11	11	12	13	197	519	100	76	76	35	19	16
6	11	11	12	13	193	1010	99	76	76	35	19	16
7	11	12	12	14	188	1250	97	76	58	35	18	16
8	11	15	12	15	146	810	95	76	56	35	17	16
9	11	14	12	208	79	730	94	76	56	34	17	16
10	11	13	12	68	79	700	92	78	51	34	16	16
11	11	12	12	298	79	678	92	83	42	34	16	16
12	11	12	12	154	89	567	90	78	42	34	16	16
13	11	12	12	114	136	370	89	77	48	34	16	16
14	11	12	12	143	281	357	87	78	87	34	16	17
15	11	12	12	151	592	344	86	78	87	34	17	17
16	11	12	12	155	2850	335	84	78	89	33	17	29
17	11	12	12	155	2600	274	84	78	90	33	18	31
18	11	12	12	163	2380	202	83	78	90	32	18	31
19	11	12	12	171	2000	180	81	78	90	32	18	31
20	11	12	13	171	1750	143	80	78	90	32	18	22
21	11	12	13	156	1550	136	80	78	90	31	18	19
22	11	12	13	98	1370	134	83	78	90	31	17	19
23	11	12	13	95	980	132	84	78	90	31	17	18
24	11	12	20	92	640	128	83	78	90	31	17	18
25	11	12	52	98	460	128	81	77	90	31	16	18
26	11	12	22	92	400	128	80	76	90	31	16	18
27	11	12	18	95	350	122	80	74	88	31	16	18
28	11	12	15	99	324	118	81	76	84	31	16	18
29	11	12	13	388	315	115	86	74	83	31	16	17
30	11	12	14	134	---	111	83	74	83	31	16	16
31	11	---	16	207	---	109	---	76	---	31	16	---
TOTAL	340	360	450	3615	20781	11557	2673	2400	2310	1183	533	565
MEAN	11.0	12.0	14.5	117	717	373	89.1	77.4	77.0	36.2	17.2	18.8
MAX	11	15	52	388	2850	1250	107	83	90	83	19	31
MIN	10	11	12	12	79	109	80	74	42	31	16	16
AC-FT	674	714	893	7170	41220	22920	5300	4760	4580	2230	1060	1120
CAL YR 1979	TOTAL	34923	MEAN	95.7	MAX	1480	MIN	10	AC-FT	69270		
WTR YR 1980	TOTAL	46707	MEAN	128	MAX	2850	MIN	10	AC-FT	92640		

11109600 PIRU CREEK ABOVE LAKE PIRU, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1971 to September 1980 (discontinued).

INSTRUMENTATION.--Specific-conductance recorder since March 1971.

REMARKS.--Periods of missing specific-conductance data due to recorder malfunction, vandalism, and flood damage.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,980 micromhos June 3, 1973; minimum recorded, 292 micromhos Feb. 9, 1978.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	904	880	895	---	---	---
2	---	---	---	---	---	---	900	878	892	---	---	---
3	---	---	---	---	---	---	896	874	889	---	---	---
4	---	---	---	---	---	---	898	874	889	---	---	---
5	---	---	---	---	---	---	900	878	890	---	---	---
6	---	---	---	---	---	---	900	874	889	---	---	---
7	---	---	---	---	---	---	898	874	889	---	---	---
8	---	---	---	---	---	---	896	876	889	---	---	---
9	---	---	---	---	---	---	896	874	888	886	466	669
10	---	---	---	---	---	---	894	874	887	902	704	822
11	---	---	---	---	---	---	894	878	887	966	452	676
12	834	790	816	---	---	---	896	880	891	980	680	753
13	832	788	814	---	---	---	896	878	890	700	662	683
14	828	790	814	---	---	---	894	868	881	698	624	670
15	832	788	814	---	---	---	884	864	876	664	630	657
16	834	798	820	---	---	---	878	860	872	658	634	648
17	840	800	824	892	870	883	874	856	868	648	626	639
18	842	798	826	898	874	889	872	856	867	648	624	634
19	838	814	828	902	882	894	870	854	865	638	614	628
20	840	828	808	902	882	896	868	854	863	630	564	619
21	---	---	---	904	884	898	864	844	858	678	592	631
22	---	---	---	904	884	897	866	854	862	688	678	683
23	---	---	---	900	882	895	866	854	862	684	674	681
24	---	---	---	900	878	892	864	802	854	682	668	678
25	---	---	---	898	872	889	916	856	896	678	672	675
26	---	---	---	896	876	889	922	912	918	---	---	---
27	---	---	---	898	878	891	---	---	---	---	---	---
28	---	---	---	900	880	893	---	---	---	---	---	---
29	---	---	---	902	884	896	---	---	---	---	---	---
30	---	---	---	904	882	895	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	922	802	881	---	---	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

[illegible]

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 (305 m) upstream from left end of dam, 0.5 mi (0.8 km) downstream from Santa Felicia Canyon, 4.2 mi (6.8 km) northeast of Piru, and 20 mi (32 km) downstream from Pyramid Dam.

DRAINAGE AREA.--425 mi² (1,101 km²).

PERIOD OF RECORD.--May 1955 to current year.

GAGE.--Nonrecording gage. 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.

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 (321.56 m), 91,010 acre-ft (112 hm³). Flow regulated since December 1971 by Pyramid Dam 20 mi (32 km) upstream, capacity, 173,500 acre-ft (214 hm³). 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.

COOPERATION.--Elevations were furnished by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,400 acre-ft (135 hm³) Feb. 25, 1969, elevation, 1,061.45 ft (323.530); lake dry Oct. 25 to Nov. 20, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 92,230 acre-ft (114 hm³) Feb. 22, elevation, 1,056.00 ft (321.869 m); minimum observed, 49,960 acre-ft (61.6 hm³) several days in October, November, and December, elevation, 1,016.65 ft (309.875 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,023.40	56,440	--
Oct. 31.....	1,016.70	50,010	-6,430
Nov. 30.....	1,016.70	50,010	0
Dec. 31.....	1,017.15	50,430	+420
CAL YR 1979.....	--	--	-3,810
Jan. 31.....	1,024.25	57,280	+6,850
Feb. 29.....	1,055.40	91,500	+34,220
Mar. 31.....	1,053.95	89,740	-1,760
Apr. 30.....	1,053.65	89,380	-360
May 31.....	1,053.50	89,200	-180
June 30.....	1,053.90	89,680	+480
July 31.....	1,052.30	87,770	-1,910
Aug. 31.....	1,039.40	73,060	-14,710
Sept. 30.....	1,028.90	61,950	-11,110
WTR YR 1980.....	--	--	+5,510

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 (229 m) downstream from Santa Felicia Dam, 1 mi (2 km) upstream from Lime Canyon, 4 mi (6 km) northeast of Piru, and 20 mi (30 km) downstream from Pyramid Dam.

DRAINAGE AREA.--425 mi² (1,100 km²).

WATER-DISCHARGE RECORDS

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 (261.76 m) National Geodetic Vertical Datum of 1929 (levels by United Water Conservation District).

REMARKS.--Records excellent. 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 (214 hm³). Imported water from the California Water Project stored by Pyramid Dam. No diversion above station. Spill from Santa Felicia Dam bypasses gage. Corrected figures for combined flow of creek and spill for calendar year 1978, and water year 1979 are given herein.

COOPERATION.--Records of spill were furnished by United Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 544 ft³/s (15.4 m³/s) Aug. 18, 1958, gage height, 3.66 ft (1.116 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 422 ft³/s (12.0 m³/s) Feb. 19; minimum daily, no flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	298	9.9	10	2.9	3.7	.04	135	85	60	61	94	206
2	299	11	10	3.3	3.7	.15	144	86	59	61	141	231
3	298	11	10	4.8	3.7	.09	149	86	60	61	145	250
4	301	11	10	4.8	3.7	.19	152	86	60	61	162	250
5	301	10	10	4.8	3.2	.11	148	86	60	61	212	250
6	299	9.5	10	4.8	1.9	.06	132	86	60	61	268	250
7	298	9.5	10	5.9	.85	.01	153	86	60	60	297	250
8	298	9.3	10	7.2	.44	0	134	86	60	60	296	249
9	298	9.5	10	2.7	.44	0	115	86	60	60	294	247
10	298	9.5	10	0	.44	0	107	86	60	60	294	247
11	204	9.1	10	.07	.44	0	107	86	60	60	295	247
12	11	8.7	10	0	.48	0	107	86	60	60	295	246
13	11	8.7	10	0	.51	0	107	86	60	61	293	246
14	11	8.8	10	0	.52	0	107	84	60	61	295	245
15	11	9.6	10	0	.52	0	107	84	60	61	297	231
16	11	10	10	0	1.4	0	108	84	60	61	298	214
17	11	11	10	0	.77	0	107	84	61	61	299	206
18	18	11	10	0	150	0	107	84	61	61	299	181
19	22	11	10	1.5	422	0	108	83	60	61	302	171
20	22	11	10	3.5	347	0	108	83	60	61	301	171
21	22	11	10	3.5	.22	0	91	83	60	61	301	171
22	22	11	10	3.5	.15	274	85	83	61	60	302	171
23	22	11	10	3.5	.12	375	85	83	61	60	304	171
24	22	11	10	3.5	.09	280	70	83	61	60	303	171
25	22	10	10	3.5	.07	148	83	84	61	60	304	171
26	15	10	10	3.5	.07	143	83	83	61	60	305	171
27	8.2	10	10	3.5	.05	213	83	83	61	60	272	171
28	11	10	4.2	3.6	.05	213	83	83	61	60	213	171
29	11	10	0	3.8	.03	213	85	69	61	45	207	171
30	9.1	10	0	3.7	---	214	85	59	61	7.8	207	169
31	8.6	---	1.6	3.7	---	110	---	59	---	25	206	---
TOTAL	3492.9	303.1	275.8	85.57	946.56	2183.65	3275	2555	1810	1772.8	8101	6296
MEAN	113	10.1	8.90	2.76	32.6	70.4	109	82.4	60.3	57.2	261	210
MAX	301	11	10	7.2	422	375	153	86	61	61	305	250
MIN	8.2	8.7	0	0	.03	0	70	59	59	7.8	94	169
AC-FT	6930	601	547	170	1880	4330	6500	5070	3590	3520	16070	12490
a	12700	6420	3830	145	129	1840	14830	6880	5010	5440	15440	17520
b	6930	601	547	170	16520	28420	6500	5070	3590	3520	16070	12490
CAL YR 1979 TOTAL	26969.06			MEAN 73.9	MAX 306	MIN 0	AC-FT 53490	AC-FT a	75310			
WTR YR 1980 TOTAL	31097.38			MEAN 85.0	MAX 422	MIN 0	AC-FT 61680	AC-FT b	100430			

a WTR YR 1979 Combined discharge, in acre-feet, of Piru Creek below Santa Felicia Dam and spill from Santa Felicia Dam.

b WTR YR 1980 Combined discharge, in acre-feet, of Piru Creek below Santa Felicia Dam and spill from Santa Felicia Dam.

CAL YR 1978 (combined flow) 121,060 AC-FT

WTR YR 1979 (combined flow) 90,180 AC-FT

11109800 PIRU CREEK BELOW SANTA FELICIA DAM, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: February 1974 to September 1980 (discontinued).

INSTRUMENTATION.--Specific-conductance recorder since February 1974.

REMARKS.--Periods of missing specific-conductance record due to periods of no flow and recorder malfunction.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,590 micromhos Mar. 1, 1980; minimum recorded, 220 micromhos Feb. 16, 1980.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,590 micromhos Mar. 1; minimum recorded, 220 micromhos Feb. 16.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1590	1350	1460	866	842	856	808	790	799
2	---	---	---	1480	812	1220	866	850	858	802	784	793
3	---	---	---	1220	848	1020	866	854	859	798	780	790
4	---	---	---	1320	926	1140	866	852	858	794	766	787
5	---	---	---	1140	840	941	866	854	859	794	776	785
6	---	---	---	1290	914	1110	866	854	860	790	774	782
7	---	---	---	---	---	---	868	852	861	784	772	779
8	890	812	856	---	---	---	870	850	862	782	772	777
9	894	814	864	---	---	---	868	850	862	778	768	774
10	902	802	863	---	---	---	868	848	860	780	762	772
11	886	802	856	---	---	---	862	852	859	776	762	769
12	874	806	851	---	---	---	864	844	853	772	756	764
13	870	764	837	---	---	---	858	838	849	770	754	762
14	848	718	807	---	---	---	852	836	846	---	---	---
15	856	744	818	---	---	---	854	830	842	---	---	---
16	856	220	624	---	---	---	846	828	838	---	---	---
17	896	614	806	---	---	---	844	822	836	---	---	---
18	828	644	765	---	---	---	844	826	836	---	---	---
19	794	746	772	---	---	---	844	810	832	---	---	---
20	848	718	768	---	---	---	838	824	830	---	---	---
21	1030	738	884	---	---	---	834	824	829	---	---	---
22	1320	1030	1160	1230	---	---	830	820	826	---	---	---
23	1430	1240	1330	858	818	845	832	816	825	---	---	---
24	1470	1290	1390	858	836	847	898	798	829	---	---	---
25	1470	1310	1410	1080	844	894	820	804	814	---	---	---
26	1490	1300	1420	1090	842	926	818	804	811	---	---	---
27	1550	1310	1440	858	830	850	816	802	808	---	---	---
28	1550	1350	1460	862	850	856	812	796	806	---	---	---
29	1570	1320	1480	864	840	853	810	794	803	---	---	---
30	---	---	---	866	848	856	806	796	801	---	---	---
31	---	---	---	1140	844	922	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	898	794	839	---	---	---

11110500 HOPPER CREEK NEAR PIRU, CA

LOCATION.--Lat 34°24'03", long 118°49'32", in NE¼NE¼SW¼ 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 (2 km) upstream from mouth, and 2.1 mi (3.4 km) southwest of Piru.

DRAINAGE AREA.--23.6 mi² (61.1 km²).

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 (180 m), from topographic map.

REMARKS.--Records good. 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.--48 years (water years 1931-32, 1934-36, 1938-80) 5.99 ft³/s (0.170 m³/s), 4,340 acre-ft/yr (5.35 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,400 ft³/s (238 m³/s) Jan. 25, 1969, gage height, 12.72 ft (3.877 m), from floodmarks, from rating curve extended above 850 ft³/s (24.1 m³/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 ft³/s (7.08 m³/s) revised, and maximum (*) from rating curve extended above 3,300 ft³/s (93.5 m³/s);

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0600	618 17.5	5.89 1.795	Feb. 18	0130	1,040 29.5	6.73 2.051
Jan. 29	0215	1,020 28.9	6.36 1.939	Feb. 19	1830	1,200 34.0	6.94 2.115
Feb. 15	2145	325 9.20	5.47 1.667	Mar. 2	2100	333 9.43	5.98 1.823
Feb. 16	1715	*8,120 230	11.60 3.536	Mar. 5	1630	290 8.21	5.89 1.795

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	.03	0	3.9	14	14	7.6	4.9	1.9	.71	.71
2	0	0	.04	0	3.0	109	14	7.6	4.6	1.9	.71	.71
3	0	0	.03	0	2.5	128	13	7.6	4.2	1.9	.83	.71
4	0	0	.02	0	2.2	56	12	7.6	3.8	1.7	.83	.60
5	0	0	.01	.01	1.8	117	10	7.6	3.5	1.7	.83	.60
6	0	0	.02	0	1.6	148	10	7.1	3.5	1.7	.83	.51
7	0	.12	.01	.02	1.6	101	9.5	7.1	3.2	1.5	.71	.60
8	0	1.7	.02	.02	1.5	78	9.5	7.1	3.2	1.5	.71	.71
9	0	.36	.04	60	1.5	59	9.5	6.5	3.0	1.5	.71	.71
10	0	.10	.07	26	1.5	48	9.5	6.5	3.0	1.5	.60	.83
11	0	.04	.10	122	1.5	41	8.8	6.5	3.0	1.5	.60	.83
12	0	.03	.13	18	1.4	35	8.8	6.1	3.0	1.5	.60	.83
13	0	.01	.13	4.8	11	33	8.8	6.1	2.7	1.3	.71	.83
14	0	.02	.10	44	80	33	8.8	6.1	2.7	1.3	.71	.83
15	0	.02	.10	11	131	30	8.8	6.1	2.7	1.3	.71	.83
16	0	.02	.10	.82	2000	30	8.2	6.1	2.4	1.3	.83	.83
17	0	.11	.07	.19	545	28	8.2	5.7	2.4	1.3	.83	.83
18	0	.07	.07	.07	286	26	8.2	5.7	2.4	1.3	.83	.71
19	0	.05	.07	.05	341	24	8.2	5.3	2.4	1.1	.98	.71
20	.57	.07	.10	.05	255	22	7.6	5.3	2.4	1.1	.83	.71
21	.10	.10	.13	.05	181	21	7.6	5.3	2.1	1.1	.83	.71
22	0	.13	.13	.02	92	21	7.6	5.3	2.1	1.1	.71	.71
23	0	.13	.18	.01	72	19	7.6	4.9	2.1	1.1	.71	.71
24	0	.10	4.0	.01	59	19	7.6	4.9	2.1	1.1	.71	.60
25	0	.07	36	.01	49	17	7.6	4.9	2.1	.98	.71	.51
26	0	.05	1.9	0	40	17	7.6	4.9	2.1	.98	.71	.51
27	0	.05	.79	0	32	17	7.6	4.6	1.9	.98	.71	.51
28	0	.02	.45	7.4	27	17	7.6	4.6	1.9	.83	.71	.51
29	0	.02	.29	205	19	16	7.6	4.9	1.9	.83	.60	.51
30	0	.02	.10	13	---	16	7.6	4.9	1.9	.83	.60	.51
31	0	---	0	5.5	---	14	---	4.9	---	.83	.60	---
TOTAL	.67	3.41	45.23	518.03	4244.0	1354	271.4	185.4	83.2	40.46	22.70	20.42
MEAN	.022	.11	1.46	16.7	146	43.7	9.05	5.98	2.77	1.31	.73	.68
MAX	.57	1.7	36	205	2000	148	14	7.6	4.9	1.9	.98	.83
MIN	0	0	0	0	1.4	14	7.6	4.6	1.9	.83	.60	.51
AC-FT	1.3	6.8	90	1030	8420	2690	538	368	165	80	45	41
CAL YR 1979	TOTAL	2017.76	MEAN	5.53	MAX	220	MIN	0	AC-FT	4000		
WTR YR 1980	TOTAL	6788.92	MEAN	18.5	MAX	2000	MIN	0	AC-FT	13470		

SANTA CLARA RIVER BASIN

11111500 SESPE CREEK NEAR WHEELER SPRINGS, CA

LOCATION.--Lat 34°34'40", long 119°15'25", in SE¼NW¼SW¼ sec.30, T.6 N., R.22 W., Ventura County, Hydrologic Unit 18070102, on right bank at Sespe Gorge, 1.6 mi (2.6 km) upstream from Tule Creek, and 5 mi (8 km) northeast of Wheeler Springs.

DRAINAGE AREA.--49.5 mi² (128.2 km²).

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 (1,066.998 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District).

REMARKS.--Records good except those for periods of no gage-height record, July 1 to Sept. 16, which are fair.

AVERAGE DISCHARGE.--33 years, 13.0 ft³/s (0.368 m³/s), 9,420 acre-ft/yr (11.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft³/s (303 m³/s) Feb. 10, 1978, gage height, 14.18 ft (4.322 m), from rating curve extended above 640 ft³/s (18.1 m³/s) on basis of slope-area measurement at gage height 13.60 ft (4.145 m); no flow many days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) revised, and maximum (*), from rating curve extended above 500 ft³/s (14.2 m³/s) on basis of slope-area measurement of peak flow:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0645	179 5.07	3.85 1.173	Mar. 2	1830	481 13.6	3.97 1.210
Feb. 16	1545	*6,780 192	10.82 3.298	Mar. 6	1615	431 12.2	3.84 1.170
Feb. 19	0845	2,590 73.3	7.22 2.201				

Minimum daily discharge, 0.73 ft³/s (0.021 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.8	2.0	2.3	8.1	56	30	15	9.0	4.2	2.5	1.6
2	1.6	1.9	2.0	2.3	7.6	135	29	14	8.3	4.6	2.5	1.6
3	1.5	1.9	2.0	2.3	7.0	239	27	14	8.0	4.3	2.5	1.5
4	1.4	2.0	1.9	2.3	6.6	140	27	16	7.6	4.0	2.4	1.5
5	1.4	1.9	1.9	2.3	6.2	201	26	14	7.6	3.7	2.4	1.5
6	1.4	1.9	2.0	2.3	5.7	306	25	13	7.6	3.6	2.4	1.4
7	1.4	3.2	2.0	2.3	5.9	198	24	13	7.1	3.5	2.4	1.4
8	1.4	4.4	2.0	2.3	5.8	154	23	12	6.6	3.4	2.4	1.4
9	1.5	2.2	2.0	2.4	5.6	131	23	12	6.2	3.3	2.3	1.4
10	1.5	2.0	2.0	11	5.4	118	22	13	5.9	3.2	2.3	1.4
11	1.5	1.9	1.9	68	5.4	100	21	13	5.7	3.0	2.3	1.3
12	1.5	2.0	1.9	22	5.4	90	21	12	5.8	2.9	2.3	1.3
13	1.6	1.9	1.9	17	27	80	20	12	5.8	3.0	2.3	1.3
14	1.6	2.1	2.1	47	123	75	20	12	5.6	3.0	2.2	1.3
15	1.6	2.1	2.0	26	187	70	19	12	5.4	2.9	2.2	1.2
16	1.6	2.0	1.9	14	2000	64	18	12	5.2	2.9	2.2	1.2
17	1.6	2.7	1.9	11	751	61	18	12	5.1	2.8	2.2	1.2
18	1.6	2.4	1.9	9.3	714	61	18	11	5.1	2.8	2.2	1.1
19	1.6	2.2	1.9	8.0	1600	59	17	11	4.9	2.8	2.1	1.1
20	1.9	2.1	1.9	7.0	717	55	17	9.9	4.8	2.8	2.1	1.1
21	1.8	2.0	2.0	6.6	467	53	17	10	4.6	2.8	2.0	1.0
22	1.7	2.0	2.0	6.3	272	50	18	11	4.5	2.7	2.0	1.0
23	1.7	2.0	2.0	6.0	205	47	17	11	4.4	2.7	1.9	.97
24	1.7	2.0	12	5.9	152	44	16	11	4.5	2.7	1.9	.87
25	1.7	2.0	13	5.6	107	40	16	11	4.5	2.7	1.8	.84
26	1.7	2.0	7.0	5.3	85	37	15	11	4.2	2.6	1.8	.82
27	1.7	2.0	3.5	5.1	72	35	14	11	4.1	2.6	1.8	.78
28	1.6	2.0	2.6	8.7	60	33	17	10	4.1	2.6	1.7	.81
29	1.7	2.0	2.4	35	58	31	20	9.7	4.2	2.6	1.7	.79
30	1.8	2.0	2.3	12	---	31	16	9.3	4.0	2.5	1.6	.73
31	1.8	---	2.3	9.4	---	30	---	9.4	---	2.5	1.6	---
TOTAL	49.7	64.6	90.2	388.6	7671.7	2824	611	367.3	170.4	95.7	66.0	35.41
MEAN	1.60	2.15	2.91	12.5	265	91.1	20.4	11.8	5.68	3.09	2.13	1.18
MAX	1.9	4.4	13	68	2000	306	30	16	9.0	4.6	2.5	1.6
MIN	1.4	1.8	1.9	2.3	5.4	30	14	9.3	4.0	2.5	1.6	.73
AC-FT	99	128	179	771	15220	5600	1210	729	338	190	131	70
CAL YR 1979 TOTAL	6041.90			MEAN 16.6	MAX 586	MIN 1.1	AC-FT 11980					
WTR YR 1980 TOTAL	12434.61			MEAN 34.0	MAX 2000	MIN .73	AC-FT 24660					

11113000 SESPE CREEK NEAR FILLMORE, CA

LOCATION.--Lat 34°27'03", long 118°55'30", in NE¼NW¼NE¼ sec.12, T.4 N., R.20 W., Ventura County, Hydrologic Unit 18070102, on right bank 0.1 mi (0.2 km) downstream from Little Sespe Creek, and 3.5 mi (5.6 km) north of Fillmore.

DRAINAGE AREA.--251 mi² (650 km²).

WATER-DISCHARGE RECORDS

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 (177 m), from topographic map. Canal gage is at different datum. See WSP 1315-B for history of changes prior to Jan. 17, 1946.

REMARKS.--Records good. No regulation above station. Fillmore Irrigation Co. has diverted water 1 mi (2 km) 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: 55 years, 113 ft³/s (3.200 m³/s), 81,870 acre-ft/yr (101 hm³/yr).

Combined creek and canal: 53 years, 119 ft³/s (3.370 m³/s) 86,220 acre-ft/yr (106 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Creek only: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Feb. 10, 1978, gage height, 22.40 ft (6.828 m), from rating curve extended above 17,000 ft³/s (481 m³/s) on basis of slope-area measurement at gage height 22.40 ft (6.828 m); maximum gage height, 24.95 ft (7.605 m) Feb. 25, 1969, from debris wave; no flow at times in some years.

Combined creek and canal: Maximum discharge, 73,000 ft³/s (2,070 m³/s) Feb. 10, 1978; minimum daily, 1.1 ft³/s (0.031 m³/s) July 31, Aug. 2, 1951.

EXTREMES FOR CURRENT YEAR.--Creek only: Peak discharges above base of 1,300 ft³/s (36.8 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0630	2,770 78.4	11.50 3.505	Feb. 19	1045	16,400 464	16.99 5.179
Jan. 29	0230	5,720 162	13.01 3.965	Mar. 2	1815	3,330 94.3	13.11 3.996
Feb. 16	1715	*40,700 1,150	19.53 5.953	Mar. 6	1000	2,690 76.2	12.84 3.914

Minimum daily discharge, 4.4 ft³/s (0.12 m³/s) Sept. 30.

Combined creek and canal: Maximum discharge, 40,700 ft³/s (1,150 m³/s) Feb. 16; minimum daily, 11 ft³/s (0.31 m³/s) Oct. 6-13, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	6.2	9.1	24	129	367	210	103	59	27	10	6.5
2	5.9	5.9	8.5	24	112	1040	98	98	57	27	9.9	6.8
3	5.9	6.2	8.6	23	100	1510	198	91	56	28	9.7	6.7
4	5.5	6.8	8.7	23	94	883	191	83	55	27	9.5	6.1
5	5.4	6.6	9.3	23	89	1370	186	78	54	25	10	5.6
6	6.5	7.2	8.7	23	83	2040	180	74	51	23	9.1	5.4
7	7.2	9.7	8.2	23	77	1500	170	72	50	21	8.7	5.5
8	5.2	15	8.4	24	74	1110	164	72	49	25	8.7	5.7
9	4.9	11	8.6	413	72	874	158	71	47	22	8.2	5.8
10	5.3	11	8.1	245	69	731	151	73	46	19	8.0	6.1
11	5.4	10	8.2	1020 <	68	630	144	74	45	19	7.7	6.4
12	5.3	10	7.7	328	66	554	139	71	43	18	7.4	6.4
13	5.4	10	7.3	189	101	493	135	68	43	18	7.1	6.6
14	5.4	9.4	7.4	448	593	448	132	68	42	18	7.3	6.5
15	5.5	7.8	7.3	353	1660	415	128	68	41	17	7.3	6.3
16	6.7	7.7	7.2	174	9320 <	385	123	66	40	15	7.7	6.4
17	7.1	9.4	7.7	123	3470	366	120	62	39	15	8.2	6.6
18	5.8	10	7.5	102	2460	342	115	61	38	14	8.7	6.7
19	6.0	9.1	8.9	88	7170	321	112	59	37	13	9.0	6.7
20	9.5	8.9	9.0	77	5910	299	109	59	35	13	9.7	7.1
21	8.2	9.2	9.4	71	4910	289	113	60	34	13	14	6.6
22	8.2	9.2	9.1	66	2400	278	116	63	34	13	11	7.0
23	7.8	9.6	9.0	62	1400	262	116	63	33	13	9.5	6.6
24	6.7	9.4	59	58	1000	255	112	63	32	13	8.2	7.2
25	7.9	9.4	104	56	790	253	106	62	30	13	7.8	5.8
26	7.1	9.5	49	54	640	265	103	60	29	12	7.3	5.8
27	6.4	9.3	33	52	548	240	100	60	28	12	7.3	5.5
28	6.0	9.2	29	77	469	228	106	62	28	12	7.0	5.3
29	7.4	9.1	27	1720	407	220	114	62	29	11	6.7	5.2
30	6.1	9.4	26	259	---	215	109	60	27	11	6.4	4.4
31	5.7	---	25	163	---	211	---	59	---	11	6.4	---
TOTAL	197.4	271.2	543.9	6385	44281	18394	4167	2145	1231	538	263.5	185.3
MEAN	6.37	9.04	17.5	206	1527	593	139	69.2	41.0	17.4	8.50	6.18
MAX	9.5	15	104	1720	9320	2040	210	103	59	28	14	7.2
MIN	4.9	5.9	7.2	23	66	211	100	59	27	11	6.4	4.4
AC-FT	392	538	1080	12660	87830	36480	8270	4250	2440	1070	523	368
CAL YR 1979 TOTAL	49718.1			MEAN 136	MAX 3650	MIN 4.9	AC-FT 98620					
WTR YR 1980 TOTAL	78602.3			MEAN 215	MAX 9320	MIN 4.4	AC-FT 155900					

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 1979 TO SEPTEMBER 1980

MEAN VALUES

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	16	24	129	367	210	104	66	35	18	14
2	12	13	16	24	112	1040	207	99	64	36	18	14
3	12	13	16	23	100	1510	198	93	63	37	18	14
4	12	14	16	23	94	883	191	88	62	36	17	13
5	12	14	16	23	89	1370	186	85	61	34	17	13
6	11	14	16	23	83	2040	180	83	58	31	17	12
7	11	15	16	23	77	1500	170	81	57	29	16	13
8	11	20	16	24	74	1110	164	81	56	28	16	13
9	11	18	16	413	72	874	158	79	53	28	16	13
10	11	18	16	245	69	731	151	81	52	27	15	14
11	11	17	16	1020	68	630	144	82	51	27	15	14
12	11	16	16	328	66	554	139	79	50	26	15	14
13	11	16	16	189	101	493	135	75	48	26	14	14
14	12	16	16	448	593	448	132	75	49	26	14	14
15	12	15	16	353	1660	415	128	75	48	25	15	14
16	13	15	16	174	9320	385	123	73	47	24	15	14
17	13	16	16	123	3470	366	120	69	46	24	16	14
18	13	16	16	102	2460	342	115	66	45	23	17	14
19	13	16	16	88	7170	321	112	65	45	21	17	14
20	15	16	16	77	5910	299	109	65	43	21	17	14
21	15	16	17	71	4910	289	114	65	42	21	17	14
22	14	16	16	66	2400	278	117	68	42	21	17	14
23	14	16	16	62	1400	262	117	68	41	21	16	14
24	13	16	62	58	1000	255	113	68	41	21	16	14
25	13	16	105	56	790	253	106	68	39	21	15	13
26	14	16	49	54	640	265	103	67	38	19	15	13
27	13	16	33	52	548	240	100	67	37	19	15	12
28	13	16	29	77	469	228	107	68	36	19	15	12
29	13	16	27	1720	407	220	115	68	36	18	14	12
30	13	16	26	259	---	215	110	66	35	18	14	11
31	13	---	25	163	---	211	---	65	---	18	14	---
TOTAL	387	471	725	6385	44281	18394	4174	2336	1451	780	491	402
MEAN	12.5	15.7	23.4	206	1527	593	139	75.4	48.4	25.2	15.8	13.4
MAX	15	20	105	1720	9320	2040	210	104	66	37	18	14
MIN	11	13	16	23	66	211	100	65	35	18	14	11
AC-FT	768	934	1440	12660	87830	36480	8280	4630	2880	1550	974	797
CAL YR 1979	TOTAL	51354	MEAN 141	MAX 3650	MIN 11	AC-FT 101900						
WTR YR 1980	TOTAL	80277	MEAN 219	MAX 9320	MIN 11	AC-FT 159200						

11113000 SESPE CREEK NEAR FILLMORE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956-62, 1967 to current year.

CHEMICAL ANALYSES: Water years 1967 to current year.

WATER TEMPERATURES: Water years 1967 to September 1978.

SEDIMENT RECORDS: Water years 1956-62, 1967 to September 1978.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1969 to September 1970.

SPECIFIC CONDUCTANCE: October 1969 to September 1980 (discontinued).

SEDIMENT RECORDS: October 1966 to September 1978.

INSTRUMENTATION.--Specific-conductance recorder since October 1969.

REMARKS.--Periods of missing specific-conductance data due to probe not in contact with water or flood damage.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,590 micromhos Dec. 17, 1977; minimum recorded, 112 micromhos Feb. 9, 1978.

WATER TEMPERATURES: Mximum, 29.5°C, July 4, 18, 20, 1970; minimum, 4.5°C Jan. 4, 1970.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 33,800 mg/L Mar. 4, 1978; minimum daily, 1 mg/L on many days in 1966-69 and 1976-77.

SEDIMENT DISCHARGE: Maximum daily, 3,280,000 tons (2,976,000 metric tons) Feb. 9, 1978; minimum daily, 0 tons on many days in most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,150 micromhos Dec. 22, 23; minimum recorded, 300 micromhos Jan. 9.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
NOV 30...	1820	9.4	940	8.6	13.0	0	10.0	400	320	53	723
JAN 30...	1210	247	590	8.5	11.5	40	10.8	330	240	14	604
APR 22...	1735	117	790	8.7	14.5	2	10.2	390	280	16	642
MAY 22...	1555	63	--	--	16.0	--	--	--	--	--	--
JUL 17...	1500	14	780	8.4	25.5	1	7.4	340	290	34	688

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY 22...	1555	0	0	0	0	0	.0	0

SANTA CLARA RIVER BASIN

11113300 SANTA CLARA RIVER NEAR SANTA PAULA, CA

WATER-QUALITY RECORDS

LOCATION.--Lat 34°21'14", long 119°01'38", in SW¼NE¼SE¼ sec.12, T.3 N., R.21 W., Ventura County, Hydrologic Unit 18070102, 1.5 mi (2.4 km) upstream from Riverside Road bridge, and 1.8 mi (2.9 km) east of Santa Paula.

PERIOD OF RECORD.--Water years 1967 to current year.

CHEMICAL ANALYSES: Water years 1967 to current year.

COOPERATION.--Records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC 04...	1550	E80	1700	8.2	18.0	1	9.8	800	200	76
JAN 30...	0910	E450	970	8.1	14.0	100	9.6	470	120	40
APR 22...	1615	E450	1380	8.4	18.0	30	9.4	620	150	58
MAY 22...	1725	E95	--	--	16.0	--	--	--	--	--
JUL 18...	0950	E65	1410	8.2	26.0	3	7.9	620	160	57

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC 04...	150	28	2.3	6.0	270	730	59	.9	1520	4.3
JAN 30...	66	23	1.3	4.0	180	380	31	.9	832	1.9
APR 22...	98	26	1.7	4.0	220	520	42	.9	1120	2.8
MAY 22...	--	--	--	--	--	--	--	--	--	--
JUL 18...	110	27	1.9	6.0	210	560	45	.8	1140	3.4

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 04...	1550	--	800	--	--	--	--	--	--
JAN 30...	0910	--	600	--	--	--	--	--	--
APR 22...	1615	--	600	--	--	--	--	--	--
MAY 22...	1725	0	--	0	10	0	0	.0	10
JUL 18...	0950	--	700	--	--	--	--	--	--

E Estimated

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA

LOCATION.-- Lat 34°23'44", long 119°04'32", in NW¼SW¼SW¼ sec.27, T.4 N., R.21 W., Ventura County, Hydrologic Unit 18070102, on right bank upstream from Santa Paula Water Works diversion dam, 200 ft (60 m) upstream from Mud Creek, and 3 mi (5 km) north of Santa Paula.

DRAINAGE AREA.-- 40.0 mi² (103.6 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- October 1927 to current year. March 1912 to September 1913, at site 2.5 mi (4.0 km) upstream; records not equivalent.

GAGE.--Water-stage recorder and concrete diversion dam control. Datum of gage is 619.43 ft (188.802 m) Corps of Engineers datum. Oct. 1, 1927, to Feb. 19, 1931, at site 500 ft (150 m) downstream at different datum. Feb. 20, 1931, to Dec. 5, 1963, and July 30, 1965, to March 7, 1973 at site 50 ft (15 m) downstream. Feb. 20, 1931 to May 5, 1969 at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records fair. No stage-discharge relation April 12 to May 13. No regulation above station. Diversion above station for irrigation of 60 acres (243,000 m²) by Santa Paula Water Works began prior to October 1927. During current year 207 acre-ft (255,000 m³) were diverted.

COOPERATION.--Records of diversion were furnished by Santa Paula Water Works.

AVERAGE DISCHARGE.--53 years, 23.4 ft³/s (0.663 m³/s), 16,950 acre-ft/yr (20.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft³/s (595 m³/s) Feb. 25, 1969, gage height, 18.18 ft (5.541 m), from floodmark, present datum, from rating curve extended above 2,300 ft³/s (65.1 m³/s) on basis of critical-depth measurement at gage height 15.2 ft (4.63 m); no flow at times in 1949, 1951-52, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), from rating curve extended above 4,000 ft³/s (113 m³/s) on basis of high-water compilation curve:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0545	368 10.4	7.37 2.246	Feb. 19	1130	2,000 56.6	9.11 2.777
Jan. 29	0200	419 11.9	7.32 2.231	Mar. 2	2030	470 13.3	7.44 2.268
Feb. 16	1715	*11,800 334	12.59 3.837	Mar. 6	0900	667 18.9	7.73 2.356

Minimum daily discharge, 2.9 ft³/s (0.082 m³/s) Jan. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	4.3	4.2	4.4	29	138	48	29	15	11	8.2	7.5
2	4.1	4.3	4.5	4.2	25	233	46	29	16	11	8.1	7.8
3	4.6	4.6	4.6	4.0	22	277	45	28	16	11	8.5	7.7
4	5.1	4.8	4.6	3.6	20	214	45	28	15	11	8.5	7.2
5	4.3	4.8	4.6	3.5	18	337	43	28	15	11	8.2	7.2
6	4.1	4.6	4.6	3.2	18	404	42	27	16	13	7.9	7.1
7	4.1	5.2	4.6	2.9	17	262	40	27	15	12	7.6	7.2
8	4.1	6.0	4.6	2.9	16	194	38	27	14	12	7.3	7.3
9	3.9	5.3	4.6	2.0	15	179	39	27	14	12	7.1	7.4
10	3.5	5.3	4.8	2.6	14	154	38	26	15	11	7.2	7.5
11	3.7	5.3	4.9	120	14	121	37	26	15	11	7.2	7.5
12	3.7	5.0	4.4	40	13	125	37	26	15	12	7.0	7.4
13	4.1	4.8	4.1	35	18	115	36	26	15	11	7.3	7.6
14	4.3	4.8	4.5	109	54	100	36	25	14	11	7.3	7.5
15	4.3	4.8	4.7	60	134	93	35	23	13	11	7.3	7.2
16	4.3	4.8	4.9	27	1460	90	35	23	13	12	7.0	7.4
17	4.3	5.0	5.0	19	1130	89	34	22	13	11	7.1	7.0
18	4.6	5.0	5.0	14	774	92	34	24	13	12	7.1	6.9
19	4.6	4.5	5.0	11	1110	82	34	23	13	12	7.4	7.1
20	5.6	4.3	5.0	9.6	1020	75	33	23	12	11	7.2	7.1
21	5.3	4.8	5.0	8.6	727	72	33	23	12	11	7.4	7.2
22	5.1	5.0	5.1	8.1	582	69	32	20	12	11	7.5	7.0
23	4.8	4.8	5.5	7.6	463	65	32	20	12	10	7.6	7.0
24	5.1	4.7	12	7.1	325	62	31	21	12	10	7.6	6.7
25	5.1	4.4	12	6.8	240	62	31	20	12	9.9	7.4	6.7
26	4.6	4.2	7.0	6.6	180	61	31	16	12	9.7	7.6	6.8
27	4.6	4.1	6.2	6.4	163	57	30	16	11	9.3	7.4	6.8
28	4.3	4.1	5.5	23	152	53	30	17	11	8.9	7.3	6.9
29	4.3	4.3	5.1	157	146	51	29	16	11	8.6	7.2	6.9
30	4.3	4.3	4.7	54	---	50	29	16	11	8.5	7.1	6.9
31	4.1	---	4.7	38	---	49	---	17	---	8.3	7.2	---
TOTAL	137.7	142.2	166.0	842.5	8899	4025	1083	719	403	334.2	231.8	215.5
MEAN	4.44	4.74	5.35	27.2	307	130	36.1	23.2	13.4	10.8	7.48	7.18
MAX	5.6	6.0	12	157	1460	404	48	29	16	13	8.5	7.8
MIN	3.5	4.1	4.1	2.9	13	49	29	16	11	8.3	7.0	6.7
AC-FT	273	282	329	1670	17650	7980	2150	1430	799	663	460	427

CAL YR 1979 TOTAL 9939.5 MEAN 27.2 MAX 546 MIN 3.5 AC-FT 19710
WTR YR 1980 TOTAL 17198.9 MEAN 47.0 MAX 1460 MIN 2.9 AC-FT 34110

SANTA CLARA RIVER BASIN

11113500 SANTA PAULA CREEK NEAR SANTA PAULA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

CHEMICAL ANALYSES: Water years 1967 to September 1979.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1969 to September 1980 (discontinued).

WATER TEMPERATURES: April 1969 to September 1970.

INSTRUMENTATION.--Specific-conductance recorder since April 1969. Water-temperature recorder April 1969 to September 1970.

REMARKS.--Missing specific-conductance data due to equipment malfunction or flood damage.

COOPERATION.--Chemical-quality data furnished by California Department of Water Resources not published this year due to lack of data.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,570 micromhos July 17, 1980; minimum recorded, 191 micromhos Mar. 8, 1975.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,570 micromhos July 17; minimum recorded, 286 micromhos Dec. 24.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	916	892	904	904	868	889	852	720	803	1020	920	976
2	918	884	899	904	866	889	836	708	790	1020	908	978
3	906	870	886	906	870	891	854	698	798	1010	898	963
4	898	874	884	916	884	902	864	690	789	994	888	950
5	894	870	882	918	878	899	880	670	765	978	866	930
6	892	864	880	900	860	874	906	700	795	930	862	902
7	894	872	883	904	864	882	854	656	770	---	---	---
8	890	870	880	930	874	905	888	640	771	---	---	---
9	904	872	885	920	876	901	858	632	754	---	---	---
10	892	858	867	914	864	892	852	618	732	---	---	---
11	872	844	860	904	852	880	912	704	808	---	---	---
12	878	850	867	898	844	872	902	616	729	---	---	---
13	882	854	870	892	836	864	838	584	709	---	---	---
14	892	872	883	886	832	860	884	666	803	---	---	---
15	894	868	883	878	828	854	886	596	800	---	---	---
16	890	862	878	868	826	850	894	804	854	---	---	---
17	886	854	872	866	828	848	856	808	833	---	---	---
18	874	852	864	862	820	844	858	812	835	---	---	---
19	894	860	873	880	828	852	840	800	823	---	---	---
20	940	894	918	884	850	868	852	796	821	---	---	---
21	936	890	917	886	852	868	844	802	819	---	---	---
22	934	888	911	872	842	857	858	804	832	---	---	---
23	918	872	896	860	822	841	848	796	821	---	---	---
24	908	860	887	840	802	822	892	286	773	---	---	---
25	906	856	879	832	796	818	1060	476	929	---	---	---
26	900	854	875	834	796	819	1080	974	1040	---	---	---
27	910	870	895	836	808	820	1110	1000	1060	---	---	---
28	920	878	901	880	762	818	1120	1010	1060	---	---	---
29	920	884	903	930	742	848	1080	974	1030	---	---	---
30	916	874	896	898	736	826	1060	950	1010	606	526	569
31	904	868	889	---	---	---	1030	938	985	656	606	632
MONTH	940	844	886	930	736	862	1120	286	844	---	---	---

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	686	656	672	580	540	562	505	495	500	590	590	584
2	702	686	693	660	505	561	505	495	499	625	590	602
3	720	700	708	610	550	574	505	495	500	630	600	613
4	732	718	724	580	565	574	505	495	502	635	610	625
5	744	732	736	630	415	536	515	505	507	630	615	625
6	798	742	749	580	470	512	515	505	513	635	625	625
7	770	754	761	590	545	559	520	510	514	630	620	624
8	774	760	768	600	415	585	535	515	520	635	630	627
9	778	766	773	625	575	613	535	520	525	640	635	634
10	782	770	778	645	515	626	540	520	527	645	640	638
11	790	770	780	660	530	644	530	520	524	650	645	644
12	786	768	780	665	530	645	550	520	531	650	645	647
13	868	708	776	695	550	651	550	530	538	---	---	---
14	758	426	600	695	435	643	545	530	535	---	---	---
15	452	358	384	665	510	651	545	530	533	---	---	---
16	---	---	---	655	485	641	560	525	541	---	---	---
17	---	---	---	685	535	623	560	535	545	---	---	---
18	---	---	---	645	480	618	560	535	546	---	---	---
19	---	---	---	630	545	616	560	540	547	---	---	---
20	---	---	---	615	575	601	555	540	547	---	---	---
21	---	---	---	600	575	587	555	545	548	---	---	---
22	---	---	---	585	550	570	550	540	547	---	---	---
23	---	---	---	560	535	549	555	550	551	---	---	---
24	---	---	---	545	525	533	560	550	557	---	---	---
25	---	---	---	530	515	523	570	560	562	---	---	---
26	---	---	---	520	505	515	570	560	565	---	---	---
27	---	---	---	515	500	510	570	560	567	---	---	---
28	---	---	---	510	495	503	590	570	573	---	---	---
29	---	---	---	510	495	500	580	575	577	---	---	---
30	---	---	---	505	495	499	585	580	579	---	---	---
31	---	---	---	505	495	499	---	---	---	---	---	---
MONTH	---	---	---	695	415	575	590	495	537	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	772	736	757	806	764	791
2	---	---	---	---	---	---	780	740	765	812	760	791
3	---	---	---	---	---	---	784	742	770	804	688	766
4	---	---	---	---	---	---	784	744	771	796	716	768
5	---	---	---	---	---	---	782	740	768	794	728	771
6	---	---	---	---	---	---	784	736	768	802	740	777
7	784	702	748	---	---	---	782	732	761	802	772	789
8	770	682	729	---	---	---	---	---	---	800	760	787
9	726	638	685	---	---	---	---	---	---	802	756	789
10	672	610	642	---	---	---	---	---	---	802	764	790
11	638	584	612	---	---	---	---	---	---	---	---	---
12	606	568	590	---	---	---	---	---	---	788	748	774
13	588	546	568	---	---	---	---	---	---	782	772	776
14	560	540	550	---	---	---	778	754	770	796	748	773
15	---	---	---	---	---	---	782	746	767	804	756	785
16	---	---	---	1520	734	1110	780	738	767	806	778	795
17	---	---	---	1570	1460	1520	782	738	767	802	764	789
18	---	---	---	1450	1060	1230	784	738	772	808	768	791
19	---	---	---	1060	886	938	794	754	777	812	774	799
20	---	---	---	894	780	840	806	746	782	818	782	805
21	---	---	---	866	778	833	814	754	791	822	786	811
22	---	---	---	862	796	833	820	766	799	826	790	813
23	---	---	---	858	796	832	822	770	802	826	790	813
24	---	---	---	880	800	844	822	764	804	828	790	813
25	---	---	---	884	810	856	820	760	799	824	786	809
26	---	---	---	882	766	828	810	758	792	816	776	799
27	---	---	---	828	734	783	806	752	787	808	772	798
28	---	---	---	796	728	765	800	752	783	810	772	796
29	---	---	---	784	738	761	800	750	783	804	770	786
30	---	---	---	770	744	760	800	752	783	788	746	763
31	---	---	---	772	728	753	798	750	780	---	---	---
MONTH	---	---	---	---	---	---	822	732	779	828	688	790
YEAR	1570	286	754									

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 (3.1 km) 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 (49 m), 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 ft³/s (12.4 m³/s) Dec. 10, 1978; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	70	60	100	102	0	216	126	100	107	71	245
2	230	70	59	97	283	0	243	125	100	107	112	248
3	223	67	65	96	258	0	291	118	154	106	139	267
4	218	78	63	90	240	0	297	147	149	104	148	266
5	219	75	64	89	224	0	301	194	159	106	182	260
6	224	68	60	92	222	0	313	164	166	111	248	264
7	223	81	56	94	225	0	312	178	167	112	277	271
8	231	96	55	93	221	0	343	190	164	98	281	274
9	221	81	60	136	198	0	349	198	164	91	282	274
10	208	65	65	0	190	0	293	193	159	89	289	267
11	212	86	65	0	187	0	293	104	155	99	288	264
12	150	79	78	0	184	0	316	183	153	97	281	269
13	91	67	86	0	240	0	319	203	152	90	283	267
14	77	71	54	0	49	0	283	218	155	87	291	270
15	71	67	56	0	0	0	298	210	156	78	285	267
16	77	66	57	0	0	0	307	180	127	77	296	250
17	59	73	56	0	0	0	314	177	114	73	303	237
18	65	85	52	0	0	0	313	189	115	72	306	215
19	65	80	50	0	0	0	306	173	110	72	298	197
20	92	75	51	111	0	0	293	191	104	77	294	207
21	82	75	60	221	0	0	284	174	103	43	295	217
22	72	75	59	207	0	0	245	164	110	0	300	216
23	70	78	59	205	0	0	282	160	116	0	298	214
24	67	79	101	201	0	0	261	179	107	0	306	217
25	69	78	0	199	0	0	254	87	115	0	312	211
26	74	80	48	192	0	42	261	80	122	0	300	206
27	80	74	126	190	0	157	197	96	113	0	300	207
28	90	72	114	220	0	178	133	123	114	0	250	205
29	86	62	105	0	0	228	135	99	115	0	233	205
30	78	59	100	0	---	260	154	89	118	38	239	194
31	73	---	98	0	---	240	---	102	---	67	240	---
TOTAL	4029	2232	2082	2633	2823	1105	8206	4814	3956	2001	8027	7171
MEAN	130	74.4	67.2	84.9	97.3	35.6	274	155	132	64.5	259	239
MAX	232	96	126	221	283	260	349	218	167	112	312	274
MIN	59	59	0	0	0	0	133	80	100	0	71	194
AC-FT	7990	4430	4130	5220	5600	2190	16280	9550	7850	3970	15920	14220
CAL YR 1979	TOTAL	52270.00	MEAN	143	MAX	379	MIN	0	AC-FT	103700		
WTR YR 1980	TOTAL	49079.00	MEAN	134	MAX	349	MIN	0	AC-FT	97350		

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1969 to 1980 (discontinued).

SPECIFIC CONDUCTANCE: Water years 1969 to 1980 (discontinued).

WATER TEMPERATURES: Water years 1969 to 1970.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1969 to September 1980 (discontinued).

WATER TEMPERATURES: April 1969 to September 1970.

INSTRUMENTATION.--Specific-conductance recorder since April 1969.

REMARKS.--Interruptions in record were due to malfunctions of the instrument and periods of no flow.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,320 micromhos Oct. 21, 1972; minimum recorded, 517 micromhos Jan. 11, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,960 micromhos Dec. 10; minimum recorded, 1,060 micromhos Feb. 9.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1530	1450	1490	1530	1500	1510	1650	1610	1630			
2	1490	1460	1470	1530	1500	1510	1630	1560	1600			
3	1480	1420	1460	1530	1480	1500	1630	1580	1590			
4	1450	1300	1410	1560	1500	1520	1630	1580	1610			
5	1330	1220	1250	1630	1500	1550	1590	1500	1540			
6	1250	1220	1240	1620	1570	1600	1560	1500	1530			
7	1240	1210	1230	1630	1480	1590	1560	1510	1530			
8	1270	1240	1250	1660	1310	1510	1550	1500	1520			
9	1290	1280	1270	1650	1540	1590	1680	1470	1540			
10	1340	1290	1300	1590	1400	1540	1960	1430	1610			
11	1350	1280	1320	1580	1500	1530	---	---	---			
12	1360	1320	1330	1680	1490	1550	---	---	---			
13	1420	1320	1380	1600	1500	1530	---	---	---			
14	1490	1430	1460	1620	1570	1600	1710	1650	1680			
15	1480	1460	1470	1620	1580	1610	1710	1660	1690			
16	1480	1460	1470	1630	1550	1620	---	---	---			
17	1480	1460	1470	---	---	---	---	---	---			
18	1480	1470	1470	---	---	---	---	---	---			
19	1540	1480	1500	---	---	---	---	---	---			
20	1550	1300	1440	1670	1600	1630	---	---	---			
21	1560	1500	1530	1670	1620	1640	---	---	---			
22	1530	1360	1450	1640	1600	1610	---	---	---			
23	1550	1500	1520	1620	1590	1600	---	---	---			
24	1540	1500	1520	1610	1580	1590	---	---	---			
25	1550	1510	1530	1620	1580	1600	---	---	---			
26	1530	1480	1500	1610	1580	1600	1490	1290	1420			
27	1520	1490	1500	1630	1600	1610	1620	1320	1470			
28	1520	1490	1510	1670	1610	1640	---	---	---			
29	1520	1490	1500	1670	1630	1650	---	---	---			
30	1520	1500	1510	1670	1630	1650	---	---	---			
31	1550	1500	1510	---	---	---	---	---	---			
MONTH	1560	1210	1430	1680	1310	1580	---	---	---			

11113900 SATICOY DIVERSION NEAR SATICOY, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---									
2	---	---	---									
3	---	---	---									
4	---	---	---									
5	---	---	---									
6	1300	1200	1250									
7	1240	1160	1180									
8	1190	1070	1130									
9	1470	1060	1250									
10	1470	1350	1420									
11	1470	1340	1410									
12	1470	1350	1410									
13	1820	1180	1380									
14	1400	1100	1190									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1470	1420	1440	1480	1440	1460	1280	1260	1260
2	---	---	---	1490	1420	1450	1480	1420	1440	1270	1240	1250
3	---	---	---	1480	1410	1440	1450	1380	1400	1250	1210	1230
4	---	---	---	1490	1400	1440	1390	1360	1380	1230	1200	1220
5	---	---	---	1450	1400	1430	1400	1360	1380	1220	1180	1210
6	1400	1360	1370	1460	1400	1430	1400	1350	1370	1230	1200	1210
7	1390	1350	1370	1460	1420	1430	1370	1250	1310	1230	1200	1210
8	1400	1350	1370	1480	1420	1450	1270	1180	1220	1230	1200	1220
9	1410	1360	1370	1490	1420	1450	1210	1170	1190	1240	1210	1230
10	1440	1370	1390	1490	1430	1460	1210	1160	1180	1240	1210	1230
11	1410	1360	1380	1510	1440	1470	1190	1150	1170	1240	1220	1230
12	1430	1380	1400	1500	1440	1460	1190	1160	1180	1240	1210	1230
13	1440	1400	1410	1490	1430	1460	1220	1170	1180	1250	1220	1240
14	1440	1390	1410	1490	1440	1460	1300	1220	1260	1260	1240	1250
15	1440	1390	1410	1560	1420	1490	1320	1290	1310	1260	1220	1250
16	1430	1380	1410	1590	1520	1560	1330	1260	1310	1270	1240	1250
17	1440	1400	1410	1600	1540	1570	1320	1270	1290	1280	1250	1270
18	1440	1400	1420	1630	1560	1590	1310	1240	1260	1290	1270	1280
19	1440	1410	1420	1640	1580	1610	1360	1280	1300	1320	1290	1300
20	1460	1410	1430	1630	1480	1540	1430	1340	1380	1320	1300	1310
21	1460	1400	1430	1490	1460	1480	1420	1320	1370	1330	1310	1320
22	1450	1400	1430	---	---	---	1330	1280	1300	1340	1320	1330
23	1450	1400	1430	---	---	---	1290	1250	1280	1370	1340	1350
24	1460	1410	1430	---	---	---	1300	1240	1260	1390	1310	1360
25	1480	1400	1430	---	---	---	1250	1220	1240	---	---	---
26	1470	1400	1440	---	---	---	1250	1210	1230	---	---	---
27	1460	1420	1440	---	---	---	1230	1200	1220	---	---	---
28	1460	1420	1440	---	---	---	1280	1210	1240	---	---	---
29	1460	1410	1430	---	---	---	1290	1240	1260	---	---	---
30	1460	1420	1440	1470	1400	1450	1290	1240	1260	---	---	---
31	---	---	---	1480	1430	1450	1270	1240	1260	---	---	---
MONTH	1480	1350	1410	---	---	---	1480	1150	1290	1390	1180	1260
YEAR	1960	1060	1410									

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 (1.4 km) southeast of Montalvo, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--1,612 mi² (4,175 km²).

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 (15.813 m) 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 (6.3 km) upstream at different datum.

REMARKS.--Records fair except those for periods of no gage-height record, Feb. 25 to June 12 and July 31 to Sept. 25, which are poor. Flow partly regulated by Lake Piru (station 11109500) 33 mi (53 km) upstream since May 1955; by Pyramid Lake, capacity, 173,500 acre-ft (214 hm³) 42 mi (68 km) upstream since December 1971; and by Castaic Reservoir, capacity, 324,000 acre-ft (399 hm³) 43 mi (69 km) 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 (9.7 km) upstream (station 11113900). AVERAGE DISCHARGE represents flow to the ocean regardless of upstream development.

COOPERATION.--Two discharge measurements were furnished by Ventura County Flood Control District.

AVERAGE DISCHARGE.--36 years, 148 ft³/s (4.191 m³/s), 107,200 acre-ft/yr (132 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165,000 ft³/s (4,670 m³/s) Jan. 25, 1969, gage height, 17.41 ft (5.307 m), present datum; no flow for long periods in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 120,000 ft³/s (3,400 m³/s), estimated by Ventura County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 81,400 ft³/s (2,310 m³/s) Feb. 16, gage height, 10.38 ft (3.164 m); minimum daily, no flow Dec. 30 to Jan. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.18	.37	.23	0	430	1200	360	171	110	1.9	4.5	.75
2	.18	.37	.09	0	7.6	2200	340	168	109	2.4	1.8	.84
3	.18	.37	.09	0	3.8	3100	330	165	60	2.4	1.3	.94
4	.18	.37	.09	0	2.9	1900	320	162	48	2.6	1.1	1.1
5	.18	.37	.09	0	2.4	3000	310	160	40	2.1	.92	1.2
6	.18	.37	.09	0	2.4	5770	300	158	33	2.4	.83	1.3
7	.23	2.2	.14	0	2.4	3700	290	155	27	2.6	.75	1.5
8	.23	.48	.18	.02	2.4	3000	282	152	24	2.4	.70	1.7
9	.23	6.3	.09	886	2.1	2500	274	150	19	2.9	.66	1.9
10	.23	20	.09	797	2.1	2200	270	148	16	2.9	.62	2.1
11	.23	4.5	.09	2700	2.4	1950	260	145	13	3.5	.58	2.3
12	.28	.51	.05	1260	2.1	1750	254	143	11	3.5	.55	2.6
13	.32	.18	.05	893	2.4	1600	248	141	5.7	2.6	.52	2.9
14	.37	.18	.14	962	1320	1450	242	139	3.8	2.6	.50	3.3
15	.55	.14	.23	869	3010	1350	236	137	2.9	2.9	.50	3.7
16	.60	.14	.09	440	26000	1250	230	135	2.9	3.5	.50	4.1
17	.81	.23	.09	274	17100	1180	225	133	2.9	3.5	.50	4.6
18	.93	.14	.09	171	12400	1120	221	131	2.9	3.8	.50	5.2
19	.93	.05	.09	116	16600	1050	217	130	2.9	3.2	.50	5.8
20	1.7	.05	.14	77	12000	980	211	129	2.9	2.6	.50	6.5
21	.93	.09	.18	52	8680	940	208	127	3.2	3.9	.50	7.3
22	.70	.10	.18	48	8860	890	203	125	2.9	47	.50	8.2
23	.42	.09	.09	47	5160	850	199	124	2.6	55	.50	9.1
24	.37	.05	.79	47	4960	820	195	122	2.6	65	.50	10
25	.37	.05	588	47	4100	800	191	120	2.4	65	.50	11
26	.37	.09	149	45	3000	770	187	119	2.4	63	.51	13
27	.37	.09	.80	43	2200	640	183	117	2.6	70	.52	10
28	.37	.09	.01	57	1700	510	180	115	2.6	74	.53	8.1
29	.37	.09	.01	4190	1300	460	177	113	2.6	72	.56	7.1
30	.37	.23	0	1010	---	410	174	112	2.1	56	.60	7.1
31	.37	---	0	649	---	380	---	111	---	14	.67	---
TOTAL	13.73	85.89	819.51	15680.02	126855.0	49720	7317	4257	562.9	641.2	24.22	145.23
MEAN	.44	2.86	26.4	506	4374	1604	244	137	18.8	20.7	.78	4.84
MAX	1.7	.48	588	4190	26000	5770	360	171	110	74	4.5	13
MIN	.18	.05	0	0	2.1	380	174	111	2.1	1.9	.50	.75
AC-FT	27	170	1630	31100	251600	98620	14510	8440	1120	1270	48	288
CAL YR 1979	TOTAL	88548.96	MEAN	243	MAX	8430	MIN	0	AC-FT	175600		
WTR YR 1980	TOTAL	206121.70	MEAN	563	MAX	26000	MIN	0	AC-FT	408800		

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	.18	20	.01	.37	101	.10	.23	48	.03
2	.18	41	.02	.37	122	.12	.09	73	.02
3	.18	62	.03	.37	143	.14	.09	98	.02
4	.18	82	.04	.37	165	.16	.09	82	.02
5	.18	103	.05	.37	186	.19	.09	65	.02
6	.18	105	.05	.37	186	.19	.09	48	.01
7	.23	107	.07	2.2	295	6.2	.14	32	.01
8	.23	109	.07	48	1290	249	.18	26	.01
9	.23	87	.05	6.3	212	4.1	.09	22	.01
10	.23	65	.04	20	481	35	.09	15	0
11	.23	45	.03	4.5	124	2.4	.09	16	0
12	.28	22	.02	.51	12	.02	.05	17	0
13	.32	68	.06	.18	16	.01	.05	18	0
14	.37	114	.11	.18	20	.01	.14	19	.01
15	.55	160	.24	.14	25	.01	.23	27	.02
16	.60	166	.27	.14	29	.01	.09	35	.01
17	.81	173	.38	.23	28	.02	.09	43	.01
18	.93	180	.45	.14	27	.01	.09	40	.01
19	.93	186	.47	.05	26	0	.09	38	.01
20	1.7	161	.74	.05	25	0	.14	36	.01
21	.93	136	.34	.09	24	.01	.18	33	.02
22	.70	111	.21	.18	22	.01	.18	28	.01
23	.42	86	.10	.09	21	.01	.09	23	.01
24	.37	61	.06	.05	32	0	.79	324	596
25	.37	36	.04	.05	42	.01	588	2200	4360
26	.37	11	.01	.09	53	.01	149	335	149
27	.37	20	.02	.09	58	.01	.80	23	.15
28	.37	28	.03	.09	62	.02	.01	20	0
29	.37	37	.04	.09	42	.01	.01	20	0
30	.37	58	.06	.23	23	.01	0	0	0
31	.37	80	.08	---	---	---	0	0	0
TOTAL	13.73	---	4.19	85.89	---	297.79	819.51	---	5105.42
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	0	0	0	430	196	246	1200	1000	3240
2	0	0	0	7.6	90	1.8	2200	8000	47500
3	0	0	0	3.8	50	.51	3100	14000	117000
4	0	0	0	2.9	26	.20	1900	8300	42600
5	0	0	0	2.4	30	.19	3000	20000	162000
6	0	0	0	2.4	35	.23	5770	28000	343000
7	0	0	0	2.4	40	.26	3700	5750	57400
8	.02	20	0	2.4	44	.29	3000	5700	46200
9	886	3660	17700	2.1	42	.24	2500	5700	38500
10	797	3130	12600	2.1	40	.23	2200	6000	35600
11	2700	10400	92000	2.4	38	.25	1950	5580	29400
12	1260	1440	5100	2.1	38	.22	1750	5170	24400
13	893	1330	3550	2.4	3620	23	1600	4760	20600
14	962	2410	6500	1320	9460	37500	1450	4340	17000
15	869	2240	5880	3010	9940	84400	1350	3510	12800
16	440	550	653	26000	22400	3200000	1250	2670	9010
17	274	500	370	17100	26500	1330000	1180	1840	5860
18	171	550	254	12400	22900	871000	1120	1900	5750
19	116	280	88	16600	21800	1100000	1050	2000	5670
20	77	110	23	12000	18700	640000	980	2100	5560
21	52	40	5.6	8680	18300	433000	940	2500	6350
22	48	10	1.3	6860	17600	331000	890	2200	5290
23	47	18	2.3	5160	10100	142000	850	2000	4590
24	47	26	3.3	4960	8240	111000	820	1780	3940
25	47	34	4.3	4100	2080	23000	800	1190	2570
26	45	40	4.9	3000	1700	13800	770	8500	5200
27	43	40	4.6	2200	1400	8320	640	8300	3970
28	57	4940	1050	1700	1200	5510	510	2210	3040
29	4190	16000	232000	1300	1100	3860	460	8500	3110
30	1010	1110	3300	---	---	---	410	2500	2770
31	649	380	666	---	---	---	380	8500	2570
TOTAL	15680.02	---	381760.3	126855.0	---	8334663	49720	---	1072490

SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	360	1000	972	171	651	301	110	350	104
2	340	600	551	168	661	300	109	300	88
3	330	600	535	165	572	255	60	300	49
4	320	600	510	162	483	211	48	300	39
5	310	600	502	160	393	170	40	300	32
6	300	600	486	158	375	160	33	290	26
7	290	600	470	155	358	150	27	290	21
8	282	600	457	152	340	140	24	290	19
9	274	650	481	150	322	130	19	280	14
10	270	700	510	148	340	136	16	280	12
11	260	800	562	145	357	140	13	278	9.8
12	254	794	545	143	375	145	11	277	8.2
13	248	788	528	141	336	128	5.7	266	4.1
14	242	782	511	139	296	111	3.8	255	2.6
15	236	642	409	137	256	95	2.9	244	1.9
16	230	501	311	135	217	79	2.9	233	1.8
17	225	360	219	133	222	80	2.9	222	1.7
18	221	220	131	131	226	80	2.9	211	1.7
19	217	238	139	130	230	81	2.9	200	1.6
20	211	256	146	129	219	76	2.9	189	1.5
21	208	275	154	127	208	71	3.2	170	1.5
22	203	333	183	125	197	66	2.9	150	1.2
23	199	391	210	124	186	62	2.6	100	.70
24	195	449	236	122	174	57	2.6	115	.81
25	191	507	261	120	163	53	2.4	130	.84
26	187	523	264	119	151	49	2.4	145	.94
27	183	538	266	117	200	63	2.6	154	1.1
28	180	554	269	115	250	78	2.6	158	1.1
29	177	800	382	113	300	92	2.6	162	1.1
30	174	640	301	112	400	121	2.1	166	.94
31	---	---	---	111	375	112	---	---	---
TOTAL	7317	---	11509	4257	---	3792	562.9	---	449.13
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	1.9	156	.80	4.5	19	.23	.75	114	.23
2	2.4	146	.95	1.8	22	.11	.84	100	.23
3	2.4	136	.88	1.3	26	.09	.94	114	.29
4	2.6	126	.88	1.1	29	.09	1.1	128	.38
5	2.1	150	.85	.92	26	.06	1.2	142	.46
6	2.4	200	1.3	.83	23	.05	1.3	141	.49
7	2.6	250	1.8	.75	20	.04	1.5	140	.57
8	2.4	200	1.3	.70	17	.03	1.7	139	.64
9	2.9	150	1.2	.66	17	.03	1.9	141	.72
10	2.9	120	.94	.62	16	.03	2.1	142	.81
11	3.5	120	1.1	.58	16	.03	2.3	144	.89
12	3.5	120	1.1	.55	16	.02	2.6	146	1.0
13	2.6	200	1.4	.52	16	.02	2.9	154	1.2
14	2.6	250	1.8	.50	16	.02	3.3	151	1.3
15	2.9	120	.94	.50	16	.02	3.7	169	1.7
16	3.5	119	1.1	.50	50	.07	4.1	156	1.7
17	3.5	118	1.1	.50	100	.14	4.6	142	1.8
18	3.8	117	1.2	.50	120	.16	5.2	128	1.8
19	3.2	117	1.0	.50	120	.16	5.8	115	1.8
20	2.6	117	.82	.50	120	.16	6.5	119	2.1
21	3.9	150	1.6	.50	120	.16	7.3	123	2.4
22	47	185	23	.50	120	.16	8.2	127	2.8
23	55	185	27	.50	120	.16	9.1	134	3.3
24	65	186	33	.50	120	.16	10	142	3.8
25	65	187	33	.50	120	.16	11	150	4.5
26	63	187	32	.51	120	.17	13	157	5.5
27	70	188	36	.52	120	.17	10	153	4.1
28	74	189	38	.53	120	.17	8.1	148	3.2
29	72	189	37	.56	155	.23	7.1	144	2.8
30	56	163	27	.60	141	.23	7.1	140	2.7
31	14	27	1.0	.67	128	.23	---	---	---
TOTAL	641.2	---	311.06	24.22	---	3.56	145.23	---	55.21
YEAR 206121.7			9810441						

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1979	13.73	4.19	0	4
NOVEMBER ...	85.89	297.79	133	431
DECEMBER ...	819.51	5105.42	4000	9110
JANUARY 1980	15680.02	381760.30	101000	483000
FEBRUARY ...	126855.00	8334663.42	1230000	9560000
MARCH	49720.00	1072490.00	340000	1410000
APRIL	7317.00	11509.00	33100	44600
MAY	4257.00	3792.00	17300	21100
JUNE	562.90	449.13	1370	1820
JULY	641.20	311.06	1780	2090
AUGUST	24.22	3.56	0	4
SEPTEMBER ..	145.23	55.21	11	66
TOTAL	206121.70	9810441.08	1728694	11532225

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	TEMPER- ATURE, WATER (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 19...	1000	18.0	.92	159	.39	--	--	--
DEC 26...	1100	14.0	163	373	164	38	42	55
JAN 10...	0940	13.5	454	1120	1370	--	--	--
11...	0900	13.5	3680	18500	184000	--	32	41
16...	1630	16.0	440	385	457	34	43	51
28...	1600	12.5	45	4820	586	--	43	56
FEB 16...	1400	14.5	29500	9360	746000	--	33	45
19...	1500	14.5	23300	17800	1120000	--	17	25
20...	1120	14.0	9390	12000	304000	--	--	--
29...	1245	14.0	1300	729	2560	--	--	--
MAR 25...	0910	12.0	800	1190	2570	13	16	20
MAY 29...	1035	15.0	113	740	226	17	21	27
JUN 12...	1135	26.5	11	277	8.2	--	--	--
JUL 15...	1330	24.0	2.7	120	.87	--	--	--
SEP 02...	1000	20.0	.84	100	.23	--	--	--

SANTA CLARA RIVER BASIN

11114000 SANTA CLARA RIVER AT MONTALVO, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SED. SUSP. FALL DIAM. % FINER THAN .015 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
OCT 19...	--	--	80	--	--	--	--
DEC 26...	65	69	72	78	90	100	--
JAN 10...	--	--	88	--	--	--	--
11...	53	64	71	78	92	99	100
16...	61	67	70	73	83	99	100
28...	71	82	90	94	98	100	--
FEB 16...	60	79	95	99	100	--	--
19...	34	50	67	82	94	100	--
20...	--	--	59	--	--	--	--
29...	--	--	88	--	--	--	--
MAR 25...	25	30	36	54	84	98	100
MAY 29...	34	40	45	54	79	97	100
JUN 12...	--	--	89	--	--	--	--
JUL 15...	--	--	75	--	--	--	--
SEP 02...	--	--	95	97	98	100	--

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
AUG 14...	0845	1	.50	10	21	48	77
14...	0850	1	.50	9	25	34	57
14...	0855	1	.50	10	15	23	43
14...	0900	1	.50	4	16	29	61
14...	0905	1	.50	2	8	16	41
14...	0910	1	.50	6	14	36	78
14...	0915	1	.50	5	12	38	87
14...	0920	1	.50	2	10	32	81
14...	0925	1	.50	4	9	18	44
14...	0930	1	.50	4	12	31	66
14...	0935	1	.50	2	5	20	51
14...	0940	1	.50	3	11	34	69
14...	0945	1	.50	3	8	33	73

DATE	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
AUG 14...	86	89	90	92	100	--
14...	76	90	97	99	100	--
14...	73	88	95	98	100	--
14...	85	93	96	98	99	100
14...	59	67	73	82	96	100
14...	94	98	100	--	--	--
14...	99	100	--	--	--	--
14...	96	99	100	--	--	--
14...	76	88	93	97	100	--
14...	91	98	99	100	--	--
14...	77	89	95	99	100	--
14...	91	98	99	100	--	--
14...	95	99	100	--	--	--

11115000 MATILIJA RESERVOIR AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'08", long 119°18'25", in NE&NW&SE¼ sec.29, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on left end of dam on Ventura River, 0.2 mi (0.3 km) east of Matilija Hot Springs, and 1.8 mi (2.9 km) southwest of Wheeler Springs.

DRAINAGE AREA.--54.4 mi² (140.9 km²).

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. Capacity table is dated June 1978 (furnished by Ventura County Flood Control District). Lowest sluice gate silted, elevation, 1,000 ft (304.8 m). Usable capacity, 1,475 acre-ft (1.82 hm³) between elevations 1,064 ft (324.3 m), lowest usable outlet and 1,095 ft (333.8 m), crest of spillway. Dead storage below lowest usable outlet, 218 acre-ft (269,000 m³). Capacity below spillway, 1,693 acre-ft (2.09 hm³). 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 (9.12 hm³) Apr. 3, 1958, elevation, 1,128.10 ft (343.845 m); 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 (3.86 hm³) Jan. 25, 1969, elevation, 1,103.6 ft (336.38 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,990 acre-ft (2.45 hm³) Feb. 16, elevation, 1,099.24 ft (335.048 m); minimum, reservoir dry several days due to construction.

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	1,054.73	16	--
Oct. 31.....	1,054.26*	11	-5
Nov. 30.....	1,052.27*	2*	-9
Dec. 31.....	1,056.77	47	+45
CAL YR 1979.....	--	--	-846
Jan. 31.....	1,066.29	284	+237
Feb. 29.....	1,095.35	1,720	+1,436
Mar. 31.....	1,084.95	1,080	-640
Apr. 30.....	1,080.64	855	-225
May 31.....	1,076.86	675	-180
June 30.....	1,073.14	519	-156
July 31.....	1,070.88	434	-85
Aug. 31.....	1,070.19	410	-24
Sept. 30.....	1,070.68	427	+17
WTR YR 1980.....	--	--	+411

* Estimated.

VENTURA RIVER BASIN

11115500 MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°28'58", long 119°18'03", in SW¼NW¼SW¼ sec.28, T.5 N., R.23 W., Ventura County, Hydrologic Unit 18070101, on right bank 0.2 mi (0.3 km) east of Matilija Hot Springs, 0.2 mi (0.3 km) upstream from North Fork, and 0.4 mi (0.6 km) downstream from Matilija Dam.

DRAINAGE AREA.--54.6 mi² (141.4 km²).

WATER-DISCHARGE RECORDS

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 (274 m), from topographic map. Prior to Feb. 11, 1939, at site 0.6 mi (1.0 km) upstream at different datum.

REMARKS.--Records good. Flow regulated by Matilija Reservoir March 1948 to March 1964, capacity, 7,020 acre-ft (8.66 hm³) and partly regulated since March 1964, capacity, 1,693 acre-ft (2.09 hm³). Water diverted at dam by Matilija conduit to Ventura River basin and Ojai Valley for irrigation from May 1951 to January 1969.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s (566 m³/s) Jan. 25, 1969, gage height, 16.5 ft (5.03 m), from rating curve extended above 4,200 ft³/s (119 m³/s) on basis of computation of maximum flow over dam; minimum daily, 0.10 ft³/s (0.003 m³/s) for several days in some years of regulated flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,600 ft³/s (300 m³/s) Feb. 16, gage height, 11.19 ft (3.411 m); minimum daily, 0.36 ft³/s (0.010 m³/s) Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	2.9	11	.47	30	180	155	45	25	16	8.8	6.3
2	3.9	3.0	11	.43	28	238	135	44	24	15	8.4	6.2
3	3.9	3.2	10	1.3	26	356	125	44	24	15	8.4	6.0
4	3.9	3.1	4.5	3.5	24	268	115	43	24	16	8.4	6.0
5	4.0	3.1	4.4	3.5	23	333	108	43	25	15	8.4	6.0
6	4.1	3.1	4.4	3.6	22	495	100	42	24	14	8.4	6.0
7	4.2	5.9	2.8	5.0	22	439	94	41	24	14	8.4	6.0
8	4.2	6.8	.66	6.7	21	365	90	40	24	14	8.4	6.0
9	4.2	4.4	.49	7.6	21	313	86	39	23	13	8.3	5.9
10	4.2	4.4	.48	7.6	20	276	82	38	23	14	8.1	5.7
11	4.1	4.3	.43	11	9.4	247	78	38	23	15	8.0	5.6
12	3.9	4.1	.40	8.4	.36	224	75	37	22	14	8.0	5.4
13	3.9	4.0	.43	8.2	.38	207	72	36	21	13	7.7	5.4
14	3.9	4.2	1.7	17	.49	192	70	36	21	12	7.7	5.4
15	3.9	4.2	5.2	22	99	179	67	35	20	12	7.7	5.4
16	3.9	4.2	5.2	22	2560	167	64	34	19	12	7.7	5.4
17	4.1	4.0	5.2	89	1350	158	62	33	19	12	7.5	5.4
18	3.9	4.1	5.0	134	1650	151	60	33	19	11	7.3	5.4
19	3.8	3.7	5.1	99	2450	145	58	32	19	11	7.3	5.4
20	3.9	3.3	4.9	55	1440	140	56	31	19	11	7.0	5.4
21	3.7	3.3	5.1	34	1070	139	55	30	19	11	6.9	5.2
22	6.7	3.3	5.2	29	707	138	53	29	18	11	6.6	5.3
23	9.5	3.3	5.2	25	514	138	52	28	18	10	6.6	5.2
24	9.5	3.3	15	22	404	137	51	26	18	10	6.6	5.2
25	9.5	3.7	26	21	332	137	50	26	18	10	6.6	5.1
26	7.2	5.1	25	20	279	134	49	26	17	9.9	6.6	5.2
27	4.0	6.0	4.9	19	242	131	48	25	17	9.7	6.6	5.1
28	3.3	6.0	.87	19	217	177	47	26	16	9.5	6.3	5.2
29	3.0	5.8	.73	31	196	210	47	25	16	9.3	6.3	4.9
30	2.9	8.0	.59	36	---	250	46	25	16	9.2	6.3	4.8
31	2.9	---	.50	33	---	195	---	25	---	8.8	6.3	---
TOTAL	142.2	127.8	172.38	794.30	13757.63	6859	2250	1055	615	377.4	231.6	165.5
MEAN	4.59	4.26	5.56	25.6	474	221	75.0	34.0	20.5	12.2	7.47	5.52
MAX	9.5	8.0	26	134	2560	495	155	45	25	16	8.8	6.3
MIN	2.9	2.9	.40	.43	.36	131	46	25	16	8.8	6.3	4.8
AC-FT	282	253	342	1580	27290	13600	4460	2090	1220	749	459	328

CAL YR 1979 TOTAL 10620.40 MEAN 29.1 MAX 653 MIN .34 AC-FT 21070
WTR YR 1980 TOTAL 26547.81 MEAN 72.5 MAX 2560 MIN .36 AC-FT 52660

11115500 MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year.

CHEMICAL ANALYSES: Water years 1972 to current year.

COOPERATION.--Chemical-quality records were furnished by California Department of Water Resources.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTY- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	TUR- BID- ITY (JTU)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
DEC 04...	0955	28	820	8.3	11.5	10	10.1	420	120	29
JAN 29...	1305	33	750	8.5	12.0	10	10.4	420	120	29
APR 22...	1310	--	740	8.4	17.0	2	9.6	390	110	29
MAY 23...	1120	28	--	--	19.5	--	--	--	--	--
JUL 18...	1240	--	750	8.2	26.0	--	8.1	160	97	27

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)
DEC 04...	52	21	1.1	3.0	260	220	43	.6	683	.02
JAN 29...	42	18	.9	3.0	190	270	22	.7	679	.10
APR 22...	32	15	.7	2.0	190	250	10	.7	608	.02
MAY 23...	--	--	--	--	--	--	--	--	--	--
JUL 18...	41	20	.9	3.0	160	250	18	.6	527	.10

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 04...	0955	--	800	--	--	--	--	--	--
JAN 29...	1305	--	700	--	--	--	--	--	--
APR 22...	1310	--	300	--	--	--	--	--	--
MAY 23...	1120	0	--	30	0	0	0	.0	0
JUL 18...	1240	--	500	--	--	--	--	--	--

VENTURA RIVER BASIN

11116000 NORTH FORK MATILIJA CREEK AT MATILIJA HOT SPRINGS, CA

LOCATION.--Lat 34°29'33", long 119°18'20", in NE¼NW¼NE¼ 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 (1.1 km) north of Matilija Hot Springs, and 0.8 mi (1.3 km) upstream from mouth.

DRAINAGE AREA.--15.6 mi² (40.4 km²).

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 (347.966 m) National Geodetic Vertical Datum of 1929 (levels by Ventura County Flood Control District). Prior to Nov. 12, 1948, at site 0.3 mi (0.5 km) downstream at different datum.

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

COOPERATION.--Records were furnished by Ventura County Flood Control District; one discharge measurement was made and records reviewed by the Geological Survey.

AVERAGE DISCHARGE.--51 years, 10.8 ft³/s (0.306 m³/s), 7,820 acre-ft/yr (9.64 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,440 ft³/s (267 m³/s) Feb. 24, 1969, gage height, 11.0 ft (3.35 m), from floodmark, from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of slope-area measurement at gage height 10.0 ft (3.05 m); minimum daily, 0.10 ft³/s (0.003 m³/s) for several days in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 16	1600	*3,720 105	7.51 2.289	Feb. 18	0045	1,100 31.2	5.05 1.539
				Feb. 19	0730	1,570 44.5	5.62 1.713

Minimum daily discharge, 1.6 ft³/s (0.045 m³/s) Oct. 11-19, Dec. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.0	1.8	2.5	7.2	62	24	13	9.1	6.0	2.7	2.5
2	1.8	2.0	1.6	2.2	6.4	82	23	13	8.6	5.6	2.7	2.5
3	1.8	2.0	1.6	2.2	6.0	94	22	12	8.2	6.0	2.7	2.7
4	1.8	2.0	1.6	2.2	6.0	67	21	12	8.6	5.2	3.0	2.5
5	1.8	2.2	1.8	2.2	5.6	98	20	11	8.2	4.8	2.7	2.2
6	1.8	2.2	1.8	2.0	4.8	157	20	11	8.2	4.8	2.5	2.2
7	1.8	3.2	1.8	2.0	4.4	119	19	11	8.2	4.4	2.2	2.2
8	1.8	3.5	1.8	2.2	4.4	95	18	11	7.7	4.1	2.0	2.5
9	1.8	3.0	2.0	19	4.4	82	18	12	7.7	4.4	1.8	2.5
10	1.8	2.7	2.0	11	4.4	75	17	12	7.7	4.1	1.8	2.5
11	1.6	2.7	2.2	45	4.1	66	16	12	7.7	4.1	2.0	2.5
12	1.6	2.7	2.2	28	3.8	59	15	11	7.2	4.1	2.0	2.5
13	1.6	2.7	2.2	14	5.1	54	15	12	7.2	4.1	2.0	2.5
14	1.6	2.7	2.2	22	14	53	14	11	7.2	4.1	2.2	2.7
15	1.6	2.7	2.2	18	73	48	14	11	6.8	3.8	2.2	2.7
16	1.6	2.5	2.2	11	1090	45	13	11	6.8	3.5	2.2	2.7
17	1.6	2.5	2.2	8.2	658	41	13	11	6.8	3.2	2.2	2.5
18	1.6	2.5	2.2	6.4	682	40	13	10	6.8	3.2	2.5	2.2
19	1.6	2.5	2.2	5.6	951	37	13	10	6.8	3.2	2.5	2.2
20	2.5	2.5	2.2	4.8	421	36	13	10	6.8	3.2	2.5	2.2
21	2.0	2.5	2.2	4.1	302	35	13	10	6.4	3.2	2.2	2.2
22	2.0	2.5	2.2	4.1	213	34	14	11	6.4	3.2	2.2	2.2
23	2.0	2.5	2.2	4.1	150	33	14	10	6.4	3.0	2.2	2.2
24	2.0	2.2	5.8	4.1	113	31	13	9.1	6.8	3.0	2.2	2.2
25	2.0	2.0	5.5	4.1	82	31	13	9.1	6.8	3.0	2.2	2.0
26	2.2	2.0	3.5	3.8	79	30	13	9.1	6.4	3.0	2.2	2.0
27	2.2	2.0	3.2	3.8	68	29	13	9.1	6.4	2.7	2.2	2.0
28	2.0	2.0	2.7	5.7	64	28	15	9.1	6.0	2.7	2.0	2.0
29	2.0	2.0	2.5	40	62	27	15	9.1	6.0	2.7	2.0	2.0
30	2.0	2.0	2.5	12	---	26	13	9.1	6.0	2.7	2.0	1.8
31	2.0	---	2.5	9.1	---	25	---	9.1	---	2.7	2.2	---
TOTAL	57.3	72.5	74.6	305.4	5088.6	1739	477	330.8	215.9	117.8	70.0	69.6
MEAN	1.85	2.42	2.41	9.85	175	56.1	15.9	10.7	7.20	3.80	2.26	2.32
MAX	2.5	3.5	5.8	45	1090	157	24	13	9.1	6.0	3.0	2.7
MIN	1.6	2.0	1.6	2.0	3.8	25	13	9.1	6.0	2.7	1.8	1.8
AC-FT	114	144	148	606	10090	3450	946	656	428	234	139	138
CAL YR 1979	TOTAL	3272.9	MEAN	8.97	MAX	230	MIN 1.6	AC-FT	6490			
WTR YR 1980	TOTAL	8618.5	MEAN	23.5	MAX	1090	MIN 1.6	AC-FT	17090			

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 (0.3 km) upstream from mouth, and 0.9 mi (1.4 km) north of Casitas Springs.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*), from rating curve extended above 1,600 ft³/s (45.3 m³/s) on basis of slope-area measurement of maximum flow:

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft ³ /s)	(m ³ /s)	(ft)	(m)			(ft ³ /s)	(m ³ /s)	(ft)	(m)
Jan. 11	0515	778	22.0	5.55	1.692	Feb. 19	1900	1,990	56.4	6.60	2.012
Jan. 29	0030	404	11.4	5.11	1.558	Feb. 20	1930	2,000	56.6	6.61	2.015
Feb. 16	1700	*7,380	209	10.65	3.246	Mar. 3	0815	422	12.0	5.09	1.551
Feb. 17	2400	2,540	71.9	7.01	2.137	Mar. 6	0900	1,130	32.0	5.89	1.795

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.6	3.0	3.6	7.8	44	48	29	18	14	5.7	5.3
2	3.3	3.3	3.0	3.6	7.8	104	44	28	18	12	5.7	5.0
3	2.6	3.6	3.0	3.0	7.8	140	42	27	17	11	5.7	4.6
4	2.8	3.9	3.6	3.0	7.8	52	42	26	17	10	5.7	4.2
5	3.6	4.2	3.6	3.0	7.3	151	42	25	17	10	5.7	3.9
6	3.3	4.6	3.6	2.8	6.9	364	40	26	18	10	5.7	4.2
7	3.3	7.7	3.9	3.0	6.9	213	40	26	18	9.8	5.7	4.2
8	3.9	11	3.9	3.0	6.9	150	39	26	18	9.8	5.3	4.6
9	4.2	7.8	3.9	33	6.9	128	37	26	19	9.8	5.0	4.6
10	4.2	7.3	3.9	23	6.9	112	37	26	20	9.8	5.0	5.0
11	4.2	6.5	3.9	152	6.5	102	34	23	19	9.8	4.6	5.0
12	4.2	6.5	3.9	47	6.5	96	33	23	18	9.8	4.6	5.0
13	4.6	5.7	3.9	34	8.5	88	33	23	18	9.8	5.0	5.7
14	5.7	5.7	3.9	46	8.1	77	32	23	17	10	6.1	5.7
15	6.9	5.3	3.9	23	27	74	32	22	14	9.8	6.1	5.0
16	5.3	5.0	3.9	14	1890	65	31	21	13	9.3	6.1	4.6
17	5.3	4.6	3.9	9.8	731	59	31	20	13	9.3	5.7	4.2
18	5.7	4.6	3.9	8.3	812	59	30	20	13	9.3	5.7	4.2
19	5.7	4.2	3.9	11	968	57	30	19	13	8.8	5.7	4.6
20	12	4.2	3.9	6.9	909	56	29	18	14	8.8	5.3	5.0
21	5.0	4.2	3.9	6.1	690	56	29	18	15	8.8	4.6	5.3
22	4.2	3.9	3.9	5.0	360	54	30	17	15	8.3	4.2	5.3
23	3.9	3.9	3.9	4.6	224	53	30	18	16	7.8	4.2	5.3
24	3.9	3.6	12	4.2	145	51	30	18	17	7.8	4.2	5.3
25	3.9	3.3	25	3.9	110	53	30	17	17	7.8	4.2	5.3
26	3.9	3.0	8.8	4.4	86	51	30	16	16	7.3	4.6	5.0
27	3.9	3.0	6.5	5.6	64	49	31	16	14	6.9	4.6	4.6
28	3.9	3.0	5.7	14	56	46	37	16	14	6.9	4.6	4.2
29	3.9	3.0	5.0	92	48	45	31	17	14	6.1	4.6	4.2
30	3.9	3.0	4.2	17	---	45	30	18	14	6.1	5.0	3.9
31	3.9	---	3.9	9.3	---	44	---	18	---	5.7	5.3	---
TOTAL	138.7	143.2	157.2	599.1	7222.6	2738	1034	666	484	280.4	160.2	143.0
MEAN	4.47	4.77	5.07	19.3	249	88.3	34.5	21.5	16.1	9.05	5.17	4.77
MAX	12	11	25	152	1890	364	48	29	20	14	6.1	5.7
MIN	2.6	3.0	3.0	2.8	6.5	44	29	16	13	5.7	4.2	3.9
AC-FT	275	284	312	1190	14330	5430	2050	1320	960	556	318	284
CAL YR 1979	TOTAL	5696.8		MEAN	15.6	MAX	620		AC-FT	11300		
WTR YR 1980	TOTAL	13766.4		MEAN	37.6	MAX	1890		AC-FT	27310		

VENTURA RIVER BASIN

11117600 COYOTE CREEK NEAR OAK VIEW, CA

LOCATION.--Lat 34°25'02", long 119°22'01", in Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 1,000 ft (305 m) downstream from Los Padres National Forest boundary, 0.6 mi (1.0 km) upstream from Poplin Creek, and 4.2 mi (6.8 km) northwest of Oak View.

DRAINAGE AREA.--13.2 mi² (34.2 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 560.47 ft (170.831 m) Water and Power Resources Service.

REMARKS.--Records good except those for Feb. 16 to May 24 when gage was in backwater, which are poor.
No regulation or diversion above station.

AVERAGE DISCHARGE.--22 years, 8.51 ft³/s (0.241 m³/s), 6,170 acre-ft/yr (7.61 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,000 ft³/s (227 m³/s) Jan. 25, 1969, gage height, 12.00 ft (3.658 m), from floodmarks, from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of slope-area measurements at gage heights 9.10 ft (2.774 m) and 12.00 ft (3.658 m); maximum gage height, 13.72 ft (4.182 m) 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 ft³/s (4.25 m³/s) and maximum (*), from rating curve extended above 9.0 ft³/s (0.25 m³/s) on basis of slope-area measurement at gage height 12.00 ft (3.658 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0615	796 22.5	6.25 1.905	Mar. 6	0845	Unknown	8.38†† 2.554
Feb. 16	1545	*5,100† 144	13.72†† 4.182				

† Estimated

†† Gage in backwater from Casitas Reservoir.

Minimum daily discharge, 0.44 ft³/s (0.012 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.58	.67	1.1	2.4	31	11	6.4	3.4	1.7	.80	.79
2	.45	.58	.68	1.0	2.1	50	11	6.3	3.3	1.7	.79	.79
3	.45	.61	.66	.97	2.0	190	11	6.2	3.4	2.0	.80	.73
4	.45	.62	.64	.96	1.9	110	10	6.1	3.1	1.8	.79	.72
5	.44	.59	.60	.96	1.8	160	9.9	6.0	2.9	1.6	.80	.64
6	.45	.58	.60	.96	1.7	240	9.7	5.9	2.8	1.5	.77	.64
7	.46	.72	.62	1.0	1.7	150	9.4	5.8	2.7	1.4	.76	.67
8	.47	.66	.63	1.0	1.7	75	9.2	5.8	2.5	1.4	.77	.68
9	.49	.60	.61	.22	1.8	53	9.0	5.7	2.4	1.3	.76	.68
10	.49	.61	.64	.17	1.7	44	8.8	5.6	2.3	1.3	.75	.70
11	.50	.61	.60	187	1.7	39	8.6	5.6	2.3	1.3	.73	.71
12	.51	.63	.60	35	1.7	33	8.4	5.5	2.3	1.2	.72	.71
13	.52	.63	.60	30	2.8	30	8.3	5.4	2.2	1.2	.73	.74
14	.52	.63	.60	79	4.9	27	8.2	5.3	2.2	1.1	.76	.71
15	.52	.63	.60	25	75	25	8.1	5.2	2.1	1.1	.77	.71
16	.55	.63	.62	8.0	1900	23	8.0	5.2	2.1	1.1	.76	.74
17	.56	.63	.63	4.7	700	22	7.9	5.0	2.2	1.0	.78	.71
18	.58	.64	.63	3.5	900	21	7.7	4.8	2.2	1.0	.80	.72
19	.60	.62	.66	2.6	950	20	7.6	4.7	2.3	1.0	.80	.72
20	.76	.66	.66	2.1	550	19	7.5	4.6	2.2	1.0	.81	.73
21	.58	.66	.66	1.8	280	18	7.4	4.5	2.2	.98	.80	.75
22	.54	.66	.66	1.6	170	17	7.3	4.2	2.1	.95	.84	.74
23	.55	.67	.66	1.4	100	16	7.2	4.1	2.1	.91	.86	.72
24	.57	.67	1.5	1.3	80	15	7.1	3.9	2.1	.90	.86	.72
25	.58	.66	1.6	1.2	60	15	7.0	3.8	2.0	.90	.85	.72
26	.59	.67	.97	1.2	45	14	6.9	3.6	2.0	.88	.84	.72
27	.58	.68	1.0	1.1	38	14	6.8	3.5	1.9	.85	.82	.70
28	.58	.68	1.1	2.1	34	13	6.7	3.6	1.8	.82	.80	.63
29	.60	.67	1.1	19	33	13	6.5	3.5	1.8	.81	.79	.60
30	.64	.67	1.1	3.9	---	12	6.4	3.4	1.8	.81	.78	.58
31	.63	---	1.1	2.8	---	12	---	3.5	---	.80	.79	---
TOTAL	16.66	19.15	24.00	461.25	5944.9	1521	248.6	152.7	70.7	36.31	24.48	21.12
MEAN	.54	.64	.77	14.9	205	49.1	8.29	4.93	2.36	1.17	.79	.70
MAX	.76	.72	1.6	187	1900	240	11	6.4	3.4	2.0	.86	.79
MIN	.44	.58	.60	.96	1.7	12	6.4	3.4	1.8	.80	.72	.58
AC-FT	33	38	48	915	11790	3020	493	303	140	72	49	42
CAL YR 1979	TOTAL	2294.58	MEAN	6.29	MAX	230	MIN	.40	AC-FT	4550		
WTR YR 1980	TOTAL	8540.87	MEAN	23.3	MAX	1900	MIN	.44	AC-FT	16940		

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 (120 m) upstream from unnamed tributary, and 3.0 mi (4.8 km) northwest of Oak View.

DRAINAGE AREA.--9.11 mi² (23.6 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 612.43 ft (186.669 m) Water and Power Resources Service datum. Prior to Aug. 17, 1970, on downstream end of right abutment at same datum.

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

AVERAGE DISCHARGE.--22 years, 6.17 ft³/s (0.175 m³/s), 4,470 acre-ft/yr (5.51 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,330 ft³/s (151 m³/s) Mar. 4, 1978, gage height, 10.01 ft (3.051 m), from rating curve extended above 1,000 ft³/s (28.3 m³/s) on basis of slope-area measurement at gage height 8.57 ft (2.612 m), maximum gage height, 10.70 ft (3.261 m) Jan. 25, 1969; no flow at times in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, reached a discharge of 3,780 ft³/s (107 m³/s), by slope-area measurement at site 2.0 mi (3.2 km) downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0600	267 7.56	5.78 1.762	Mar. 6	0930	216 6.12	5.37 1.637
Feb. 16	1545	*3,830 108	9.49 2.893				

Minimum daily discharge, no flow Oct. 1 to Dec. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.24	3.4	18	7.8	4.1	1.8	.77	.06	.07
2			0	.25	3.2	27	7.4	3.8	1.5	1.0	.06	.08
3			0	.23	2.9	81	7.1	3.2	1.2	1.1	.06	.08
4			0	.22	2.7	45	6.8	3.1	1.5	.84	.06	.08
5			0	.21	2.5	83	6.3	3.3	1.3	.37	.05	.06
6			0	.20	2.5	121	6.2	3.0	1.3	.60	.05	.06
7			0	.19	3.3	77	5.8	2.8	.98	.33	.05	.06
8			0	.18	3.3	55	5.6	2.7	1.0	.34	.05	.06
9			0	10	3.2	42	5.5	2.8	1.1	.29	.04	.06
10			0	7.8	3.1	36	5.2	3.2	1.0	.31	.04	.06
11			0	69	2.6	31	5.2	2.7	.92	.30	.04	.05
12			0	25	3.0	26	5.0	2.3	1.1	.28	.04	.06
13			0	21	4.0	23	4.8	2.2	.98	.25	.04	.06
14			0	33	5.7	21	4.9	2.2	.84	.21	.04	.06
15			0	18	4.1	19	4.7	2.1	.60	.19	.04	.05
16			0	9.8	10.0	18	4.6	2.1	.81	.20	.04	.05
17			0	7.6	34.6	16	4.4	2.2	.84	.18	.04	.05
18			0	6.0	45.0	15	4.3	2.7	.95	.17	.05	.04
19			0	4.6	46.2	14	4.1	2.6	.92	.16	.04	.05
20			0	3.7	27.4	14	3.9	2.7	.74	.15	.04	.05
21			0	3.5	19.6	13	4.0	2.9	.39	.15	.04	.06
22			0	3.4	10.3	12	4.6	2.9	.34	.15	.04	.06
23			0	3.1	6.8	11	4.6	2.7	.79	.13	.04	.05
24			.22	3.0	4.9	11	4.0	1.9	.97	.11	.04	.05
25			.77	2.8	3.8	11	4.2	2.4	.99	.11	.04	.05
26			.24	2.7	3.0	10	3.8	2.1	.90	.10	.05	.05
27			.24	2.6	2.5	9.6	4.1	1.9	.81	.10	.05	.05
28			.24	4.3	2.2	9.1	4.6	1.9	.81	.10	.05	.05
29			.24	1.9	2.0	8.6	4.8	1.9	.63	.10	.05	.05
30			.24	6.4	---	8.3	4.2	1.8	.37	.09	.05	.05
31		---	.24	4.2	---	8.0	---	1.8	.64	.09	.06	.04
TOTAL	0	0	2.43	272.22	3179.4	893.6	152.5	80.1	28.21	9.26	1.46	1.70
MEAN	0	0	.078	8.78	110	28.8	5.08	2.58	.94	.30	.047	.057
MAX	0	0	.77	69	1010	121	7.8	4.1	1.8	1.1	.07	.08
MIN	0	0	0	.18	2.5	8.0	3.8	1.8	.34	.09	.04	.04
AC-FT	0	0	4.8	540	6310	1770	302	159	56	18	2.9	3.4
CAL YR 1979	TOTAL	1470.98	MEAN	4.03	MAX	170	MIN	0	AC-FT	2920		
WTR YR 1980	TOTAL	4620.88	MEAN	12.6	MAX	1010	MIN	0	AC-FT	9170		

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 (2.4 km) west of Casitas Springs.

DRAINAGE AREA.--38.6 mi² (100.0 km²).

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 Water and Power Resources Service).

REMARKS.--Reservoir is formed by earthfill dam. Storage began January 1959. Capacity table is dated December 1958. Usable capacity, 250,835 acre-ft (309 hm³) between bottom of lowest outlet gate at elevation 350.00 ft (106.680 m) and crest of spillway at elevation 567.00 ft (172.822 m). Dead storage, 3,167 acre-ft (3.90 hm³) 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 (321 hm³) Feb. 21, 1980, elevation 569.24 ft (173.504 m); minimum, 237,200 acre-ft (292 hm³) Jan. 8, 1980, elevation 560.68 ft (170.895 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 260,100 acre-ft (321 hm³) Feb. 21, elevation 569.24 ft (173.504 m); minimum, 237,200 acre-ft (292 hm³) Jan. 8, elevation 560.68 ft (170.895 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	562.68	242,400	--
Oct. 31.....	561.91	240,400	-2,000
Nov. 30.....	561.26	238,700	-1,700
Dec. 31.....	560.76	237,400	-1,300
CAL YR 1979.....	--	--	-2,800
Jan. 31.....	562.42	241,800	+4,400
Feb. 29.....	567.98	256,700	+14,900
Mar. 31.....	567.29	254,800	-1,900
Apr. 30.....	566.80	253,500	-1,300
May 31.....	566.23	251,900	-1,600
June 30.....	565.22	249,200	-2,700
July 31.....	564.01	246,000	-3,200
Aug. 31.....	562.66	242,400	-3,600
Sept. 30.....	561.67	239,800	-2,600
WTR YR 1980.....	--	--	-2,600

11118000 COYOTE CREEK NEAR VENTURA, CA

LOCATION.--Lat 34°21'26", long 119°18'46", near southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 200 ft (60 m) downstream from bridge on Santa Ana Road, 0.3 mi (0.5 km) upstream from mouth, 1.6 mi (2.6 km) downstream from Casitas Reservoir, and 5.5 mi (8.8 km) northwest of Ventura.

DRAINAGE AREA.--41.2 mi² (106.7 km²).

PERIOD OF RECORD.--October 1927 to September 1932, October 1933 to September 1958, October 1969 to current year.

GAGE.--Water-stage recorder. Datum of gage is 224.95 ft (68.565 m) Ventura County Flood Control District datum. See WSP 1735 for history of changes prior to Oct. 1, 1969.

REMARKS.--Records good. Flow mostly regulated by Casitas Reservoir since October 1959, capacity, 267,000 acre-ft (329 hm³).

AVERAGE DISCHARGE.--30 years (water years 1928-32, 1934-58), 13.2 ft³/s (0.374 m³/s), 9,560 acre-ft/yr (11.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s (326 m³/s) Mar. 2, 1938, on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 643 ft³/s (18.2 m³/s) Feb. 21, gage height, 7.97 ft (2.429 m); maximum gage height, 9.69 ft (2.954 m) Feb. 16; minimum daily 0.03 ft³/s (0.001 m³/s) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.03	.03	.08	.54	165	22	.59	.46	.24	.12	.09
2	.04	.03	.03	.08	.48	150	19	.59	.45	.23	.11	.09
3	.04	.03	.03	.08	.45	185	16	.59	.44	.23	.11	.09
4	.04	.04	.04	.08	.42	220	15	.59	.44	.23	.11	.08
5	.04	.03	.04	.09	.41	270	13	.59	.42	.22	.11	.08
6	.04	.04	.04	.09	.37	315	13	.59	.42	.20	.11	.08
7	.04	.09	.04	.09	.36	285	12	.59	.42	.20	.11	.08
8	.04	.06	.04	.10	.35	255	10	.59	.42	.20	.11	.08
9	.04	.04	.04	1.6	.35	225	8.7	.59	.41	.19	.11	.07
10	.04	.04	.04	.63	.37	200	6.7	.59	.41	.19	.10	.07
11	.04	.04	.04	4.2	.37	180	5.6	.54	.41	.19	.10	.08
12	.04	.04	.04	2.0	.37	150	4.4	.54	.40	.19	.10	.08
13	.04	.04	.04	1.4	.63	145	4.0	.54	.37	.19	.10	.08
14	.04	.04	.04	1.3	.54	127	2.8	.54	.37	.18	.10	.07
15	.04	.04	.04	.66	2.4	115	1.8	.54	.35	.17	.10	.08
16	.04	.04	.04	.60	103	103	1.4	.50	.35	.17	.09	.08
17	.04	.04	.05	.56	56	93	1.3	.50	.36	.17	.09	.08
18	.04	.04	.05	.52	141	83	1.1	.50	.35	.16	.09	.08
19	.03	.04	.05	.47	266	77	1.0	.50	.34	.15	.10	.08
20	.05	.03	.05	.45	246	70	.96	.50	.32	.15	.09	.08
21	.03	.03	.05	.45	612	66	.90	.50	.32	.16	.09	.09
22	.03	.03	.05	.43	535	59	.84	.50	.32	.16	.10	.09
23	.03	.03	.05	.41	460	52	.79	.46	.30	.15	.10	.09
24	.03	.03	.41	.43	380	48	.76	.46	.28	.15	.10	.09
25	.03	.03	.19	.43	325	44	.73	.50	.27	.15	.09	.09
26	.03	.03	.10	.41	275	41	.69	.50	.26	.14	.09	.09
27	.03	.03	.09	.42	233	37	.67	.50	.25	.13	.09	.08
28	.03	.03	.08	1.2	195	34	.65	.46	.24	.13	.09	.08
29	.03	.03	.08	1.5	174	30	.63	.46	.24	.13	.09	.07
30	.03	.03	.08	.64	---	27	.63	.46	.24	.12	.09	.07
31	.03	---	.08	.57	---	25	---	.46	---	.14	.09	---
TOTAL	1.13	1.12	2.07	21.97	4009.41	3876	167.05	16.36	10.63	5.41	3.08	2.44
MEAN	.037	.037	.067	.71	138	125	5.57	.53	.35	.17	.099	.081
MAX	.05	.09	.41	4.2	612	315	22	.59	.46	.24	.12	.09
MIN	.03	.03	.03	.08	.35	25	.63	.46	.24	.12	.09	.07
AC-FT	2.2	2.2	4.1	44	7950	7690	331	32	21	11	6.1	4.8
CAL YR 1979 TOTAL	824.97			MEAN 2.26	MAX 81	MIN .02	AC-FT 1640					
WTR YR 1980 TOTAL	8116.67			MEAN 22.2	MAX 612	MIN .03	AC-FT 16100					

VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA

LOCATION.--Lat 34°21'08", long 119°18'27", in southeast corner of Santa Ana Grant, Ventura County, Hydrologic Unit 18070101, on right bank 50 ft (15 m) downstream from bridge on Casitas Pass Road at Foster Memorial Park, 0.2 mi (0.3 km) downstream from Coyote Creek, and 5 mi (8 km) north of Ventura.

DRAINAGE AREA.--188 mi² (487 km²).

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 (62.554 m) 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 (137 m) downstream at datum 4.00 ft (1.219 m) lower.

REMARKS.--Records good. Flow partly regulated since March 1948 by Matilija Reservoir, usable capacity, 1,475 acre-ft (1.82 hm³) and since October 1959 by Casitas Reservoir, capacity, 267,000 acre-ft (329 hm³). 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: 53 years (water years 1912-13, 1930-80), 60.2 ft³/s (1.705 m³/s), 43,610 acre-ft/yr (53.8 hm³/yr).
Combined river and diversion: 48 years, 69.9 ft³/s (1.980 m³/s), 50,640 acre-ft/yr (62.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--River only: Maximum discharge, 63,600 ft³/s (1,800 m³/s) Feb. 10, 1978, gage height, 19.14 ft (5.834 m), from rating curve extended above 34,000 ft³/s (963 m³/s); maximum gage height, 24.3 ft (7.41 m) Jan. 25, 1969, present datum, from floodmarks; no flow at times in many years.
Combined river and diversion: Maximum discharge, 63,600 ft³/s (1,800 m³/s) Feb. 10, 1978; no flow Nov. 28, 29, 1977.

EXTREMES FOR CURRENT YEAR.--River only: Maximum discharge, 37,900 ft³/s (1,070 m³/s) Feb. 16, gage height, 14.60 ft (4.450 m); minimum daily, 0.27 ft³/s (0.008 m³/s) Dec. 22, 23.
Combined river and diversion: Maximum discharge, 37,900 ft³/s (1,070 m³/s) Feb. 16; minimum daily, 7.9 ft³/s (0.22 m³/s) Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	2.2	.46	2.0	23	458	178	86	55	25	13	13
2	1.5	2.0	.53	3.4	17	656	163	79	54	26	17	9.7
3	1.3	2.2	.53	1.3	17	1040	146	79	56	27	19	9.3
4	1.0	3.1	.61	1.3	17	675	155	77	54	30	16	8.6
5	.92	4.0	.53	1.3	14	1070	158	73	50	27	12	8.9
6	1.0	1.3	.61	1.3	13	1630	146	70	52	25	13	9.3
7	4.6	2.9	.61	2.2	13	1180	144	69	56	21	13	11
8	2.2	3.1	.61	1.3	12	982	132	67	58	21	15	12
9	1.5	.92	.71	4.0	9.6	863	127	67	56	18	14	11
10	1.6	1.0	.61	2.4	15	762	123	73	54	17	16	8.6
11	2.4	2.4	.71	213	15	680	118	69	52	18	13	9.7
12	8.6	3.7	1.0	81	13	601	112	65	55	21	11	8.9
13	9.1	1.0	.92	47	25	538	109	66	54	21	10	9.7
14	8.2	.71	.92	86	26	491	109	65	52	18	11	12
15	7.7	.71	.81	30	109	452	105	66	51	17	12	9.7
16	6.8	.81	.71	19	8340	415	105	66	46	19	14	7.8
17	6.8	.92	.53	16	3670	363	100	69	42	19	12	7.5
18	6.0	1.8	.39	13	5080	363	98	70	42	21	12	7.8
19	2.4	1.5	.33	11	5990	340	96	69	45	23	12	8.6
20	2.6	.71	.33	12	4560	300	96	66	41	23	11	9.3
21	6.8	.61	.33	10	3610	309	91	63	41	19	10	9.7
22	2.9	.71	.27	6.0	2110	296	96	59	43	18	11	10
23	2.0	.71	.27	5.7	1520	292	96	58	40	19	14	7.8
24	2.0	.61	5.0	6.4	1180	289	88	59	36	20	13	9.3
25	2.2	.71	32	6.0	947	276	88	61	37	21	11	9.3
26	2.0	.61	9.0	9.6	785	274	89	61	40	22	11	8.6
27	2.2	.46	2.2	15	689	263	86	54	28	21	11	9.7
28	4.6	.46	1.8	23	588	285	100	51	30	18	11	11
29	4.0	.39	1.8	168	509	278	100	50	31	14	11	7.8
30	1.8	.53	3.1	41	---	231	86	48	29	16	11	6.5
31	2.0	---	3.4	28	---	191	---	52	---	16	13	---
TOTAL	111.62	42.78	71.63	924.8	39916.6	16843	3440	2027	1380	641	393	282.1
MEAN	3.60	1.43	2.31	29.8	1376	543	115	65.4	46.0	20.7	12.7	9.40
MAX	9.1	4.0	32	213	8340	1630	178	86	58	30	19	13
MIN	.92	.39	.27	1.3	9.6	191	86	48	28	14	10	6.5
AC-FT	221	85	142	1830	79170	33410	6820	4020	2740	1270	780	560
CAL YR 1979 TOTAL	14976.37			MEAN 41.0	MAX 1730	MIN .27	AC-FT 29710					
WTR YR 1980 TOTAL	66073.53			MEAN 181	MAX 8340	MIN .27	AC-FT 131100					

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 1979 TO SEPTEMBER 1980

MEAN VALUES												
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	11	10	11	30	468	189	97	63	41	26	21
2	13	13	9.1	14	27	664	173	91	65	38	25	21
3	12	10	13	14	25	1050	160	86	68	37	26	19
4	13	11	13	12	26	686	165	85	68	39	28	21
5	12	16	12	13	26	1080	163	86	63	35	25	18
6	11	13	12	10	25	1640	155	82	64	34	25	18
7	11	13	12	13	23	1190	154	81	65	37	23	17
8	14	15	10	12	25	991	142	80	66	34	24	21
9	15	12	9.9	47	24	871	139	77	67	35	25	21
10	14	9.6	11	32	24	771	132	81	73	30	22	20
11	11	9.4	12	223	25	691	127	77	65	34	22	19
12	9.3	11	12	89	25	612	120	76	65	29	24	20
13	9.8	15	12	56	37	549	119	78	65	28	22	18
14	12	15	12	97	36	502	120	78	62	31	24	19
15	12	13	12	41	120	461	117	77	60	30	22	22
16	13	12	7.9	29	8340	423	115	78	57	27	23	21
17	15	11	10	26	3670	373	111	82	53	29	21	20
18	16	8.8	11	24	5080	374	109	78	54	30	20	19
19	13	14	11	21	5990	350	106	81	53	30	23	20
20	11	14	11	22	4560	311	104	79	53	31	21	17
21	14	10	10	19	3620	320	102	75	51	32	21	18
22	14	10	10	19	2110	306	106	69	51	27	21	21
23	14	14	9.4	17	1520	301	105	71	51	28	20	17
24	13	9.1	12	17	1180	299	102	68	51	29	22	20
25	15	9.0	36	18	952	287	101	67	47	32	21	18
26	11	13	20	19	794	285	98	68	49	29	21	20
27	11	12	17	23	699	274	97	66	44	28	21	18
28	12	12	15	35	598	296	109	63	41	30	21	19
29	16	10	13	179	519	287	112	68	39	28	20	20
30	12	13	9.4	45	---	239	95	63	40	28	19	18
31	13	---	13	29	---	200	---	62	---	27	20	---
TOTAL	398.1	358.9	387.7	1226	40130	17151	3747	2370	1713	977	698	581
MEAN	12.8	12.0	12.5	39.5	1384	553	125	76.5	57.1	31.5	22.5	19.4
MAX	16	16	36	223	8340	1640	189	97	73	41	28	22
MIN	9.3	8.8	7.9	10	23	200	95	62	39	27	19	17
AC-FT	790	712	769	2430	79600	34020	7430	4700	3400	1940	1380	1150
CAL YR 1979 TOTAL	18424.4			MEAN 50.5	MAX 1740	MIN 7.9	AC-FT 36540					
WTR YR 1980 TOTAL	69737.7			MEAN 191	MAX 8340	MIN 7.9	AC-FT 138300					

VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1907 to December 1908, water years 1967 to current year.

CHEMICAL ANALYSES: December 1907 to December 1908, water years 1967-79.

WATER TEMPERATURES: Water years 1969, 1971-73, 1975 to current year.

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 current year.

SEDIMENT RECORDS: October 1968 to September 1973, October 1974 to current year.

REMARKS.--Surface-bed material particle sizes coarser than 16.0 mm were determined by particle count. Data is available in files of the Geological Survey.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 32,000 mg/L (estimated) Jan. 25, 1969; minimum daily mean, no flow for many days most years.

SEDIMENT DISCHARGE: Maximum daily, 2,220,000 tons (2,010,000 metric tons), estimated, Jan. 25, 1969; minimum daily, 0 tons on many days most years.

EXTREMES FOR CURRENT YEAR. --

SEDIMENT CONCENTRATIONS: Maximum daily mean, 23,200 mg/L Feb. 16; minimum daily mean, 1 mg/L for several days in May and June.

SEDIMENT DISCHARGE: Maximum daily, 1,500,000 tons (1,360,000 metric tons) Feb. 16; minimum daily, 0.01 tons Oct. 6, Dec. 18-24.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
ONCE-DAILY

[illegible]

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	2.9	7	.05	2.2	7	.04	.46	22	.03
2	1.5	7	.03	2.0	7	.04	.53	22	.03
3	1.3	7	.02	2.2	7	.04	.53	23	.03
4	1.0	7	.02	3.1	7	.06	.61	25	.04
5	.92	7	.02	4.0	7	.08	.53	27	.04
6	1.0	5	.01	1.3	7	.02	.61	29	.05
7	4.6	4	.05	2.9	7	.05	.61	30	.05
8	2.2	4	.02	3.1	7	.06	.61	28	.05
9	1.5	5	.02	.92	7	.02	.71	26	.05
10	1.6	5	.02	1.0	7	.02	.61	24	.04
11	2.4	6	.04	2.4	31	.20	.71	22	.04
12	8.6	6	.14	3.7	35	.35	1.0	21	.06
13	9.1	6	.15	1.0	20	.05	.92	19	.05
14	8.2	6	.13	.71	13	.02	.92	17	.04
15	7.7	6	.12	.71	13	.02	.81	15	.03
16	6.8	6	.11	.81	13	.03	.71	13	.02
17	6.8	6	.11	.92	13	.03	.53	12	.02
18	6.0	7	.11	1.8	14	.07	.39	11	.01
19	2.4	7	.05	1.5	14	.06	.33	12	.01
20	2.6	8	.06	.71	14	.03	.33	13	.01
21	6.8	8	.15	.61	14	.02	.33	14	.01
22	2.9	9	.07	.71	17	.03	.27	16	.01
23	2.0	9	.05	.71	20	.04	.27	17	.01
24	2.0	9	.05	.61	23	.04	5.0	20	.35
25	2.2	8	.05	.71	25	.05	32	23	2.8
26	2.0	8	.04	.61	28	.05	9.0	5	.12
27	2.2	8	.05	.46	27	.03	2.2	5	.03
28	4.6	8	.10	.46	26	.03	1.8	6	.03
29	4.0	8	.09	.39	25	.03	1.8	6	.03
30	1.8	7	.03	.53	24	.03	3.1	13	.11
31	2.0	7	.04	---	---	---	3.4	16	.15
TOTAL	111.62	---	2.00	42.78	---	1.64	71.63	---	4.35
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	2.0	15	.08	23	23	1.4	458	170	210
2	3.4	15	.14	17	19	.87	656	677	1660
3	1.3	14	.05	17	14	.64	1040	490	1660
4	1.3	13	.05	17	10	.46	675	200	364
5	1.3	13	.05	14	10	.38	1070	858	3300
6	1.3	13	.05	13	11	.39	1630	1130	6210
7	2.2	13	.08	13	12	.42	1180	250	796
8	1.3	13	.05	12	12	.39	982	170	451
9	40	66	11	9.6	10	.26	863	165	384
10	24	36	2.6	15	10	.41	762	162	333
11	213	886	1130	15	12	.49	680	160	294
12	81	200	74	13	11	.39	601	155	252
13	47	41	8.5	25	11	.74	538	137	199
14	86	85	23	26	11	.77	491	118	156
15	30	22	1.8	109	171	100	452	115	140
16	19	22	1.1	8340	23200	1500000	415	110	123
17	16	22	.95	3670	3350	70700	363	97	95
18	13	20	.70	5080	3300	65600	363	88	86
19	11	17	.50	5990	3110	57000	340	76	70
20	12	15	.49	4560	2210	29600	300	68	55
21	10	13	.35	3610	1460	15000	309	60	50
22	6.0	11	.18	2110	630	3590	296	50	40
23	5.7	9	.14	1520	275	1130	292	50	39
24	6.4	8	.14	1180	150	478	289	54	42
25	6.0	6	.10	947	160	409	276	58	43
26	9.6	9	.23	785	250	530	274	60	44
27	15	12	.49	689	220	409	263	35	25
28	23	27	4.0	588	240	381	285	32	25
29	168	312	256	509	190	261	278	31	23
30	41	30	3.3	---	---	---	231	30	19
31	28	27	2.0	---	---	---	191	30	15
TOTAL	924.8	---	1522.12	39916.6	---	1745196	16843	---	17203

VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

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	178	30	14	86	3	.70	55	3	.45
2	163	29	13	79	3	.64	54	3	.44
3	146	28	11	79	3	.64	56	2	.30
4	155	24	10	77	3	.62	54	2	.29
5	158	22	9.4	73	2	.39	50	2	.27
6	146	20	7.9	70	2	.38	52	2	.28
7	144	18	7.0	69	2	.37	56	1	.15
8	132	16	5.7	67	2	.36	58	1	.16
9	127	14	4.8	67	2	.36	56	1	.15
10	123	11	3.7	73	2	.39	54	1	.15
11	118	10	3.2	69	2	.37	52	1	.14
12	112	9	2.7	65	2	.35	55	1	.15
13	109	8	2.4	66	1	.18	54	1	.15
14	109	7	2.1	65	1	.18	52	1	.14
15	105	6	1.7	66	1	.18	51	1	.14
16	105	6	1.7	66	1	.18	46	1	.12
17	100	7	1.9	69	1	.19	42	2	.23
18	98	7	1.9	70	2	.38	42	2	.23
19	96	8	2.1	69	2	.37	45	2	.24
20	96	8	2.1	66	2	.36	41	3	.33
21	91	7	1.7	63	2	.34	41	4	.44
22	96	6	1.6	59	2	.32	43	5	.58
23	96	5	1.3	58	3	.47	40	6	.65
24	88	4	.95	59	3	.48	36	6	.58
25	88	3	.71	61	3	.49	37	6	.60
26	89	3	.72	61	3	.49	40	6	.65
27	86	3	.70	54	4	.58	28	6	.45
28	100	3	.81	51	4	.55	30	7	.57
29	100	3	.81	50	4	.54	31	7	.59
30	86	3	.70	48	4	.52	29	7	.55
31	---	---	---	52	4	.56	---	---	---
TOTAL	3440	---	118.30	2027	---	12.93	1380	---	10.17
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	25	8	.54	13	6	.21	13	14	.49
2	26	8	.56	17	6	.28	9.7	14	.37
3	27	8	.58	19	6	.31	9.3	14	.35
4	30	8	.65	16	6	.26	8.6	14	.33
5	27	8	.58	12	7	.23	8.9	14	.34
6	25	8	.54	13	8	.28	9.3	13	.33
7	21	7	.40	13	9	.32	11	13	.39
8	21	7	.40	15	9	.36	12	13	.42
9	18	7	.34	14	9	.34	11	13	.39
10	17	7	.32	16	9	.39	8.6	13	.30
11	18	7	.34	13	10	.35	9.7	13	.34
12	21	8	.45	11	10	.30	8.9	13	.31
13	21	8	.45	10	11	.30	9.7	13	.34
14	18	8	.39	11	11	.33	12	12	.39
15	17	8	.37	12	12	.39	9.7	11	.29
16	19	8	.41	14	12	.45	7.8	10	.21
17	19	8	.41	12	13	.42	7.5	9	.18
18	21	8	.45	12	13	.42	7.8	9	.19
19	23	8	.50	12	13	.42	8.6	9	.21
20	23	8	.50	11	13	.39	9.3	10	.25
21	19	8	.41	10	13	.35	9.7	10	.26
22	18	8	.39	11	13	.39	10	11	.30
23	19	8	.41	14	13	.49	7.8	11	.23
24	20	8	.43	13	13	.46	9.3	10	.25
25	21	7	.40	11	13	.39	9.3	9	.23
26	22	6	.36	11	12	.36	8.6	8	.19
27	21	5	.28	11	12	.36	9.7	7	.18
28	18	5	.24	11	12	.36	11	7	.21
29	14	5	.19	11	12	.36	7.8	7	.15
30	16	5	.22	11	13	.39	6.5	8	.14
31	16	5	.22	13	13	.46	---	---	---
TOTAL	641	---	12.73	393	---	11.12	282.1	---	8.56
YEAR	66073.53		1764103						

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1979	111.62	2.00	0	2
NOVEMBER ...	42.78	1.64	0	2
DECEMBER ...	71.63	4.35	0	4
JANUARY 1980	924.80	1522.12	6	1530
FEBRUARY ...	39916.60	1745196.01	24600	1770000
MARCH	16843.00	17203.00	2180	19400
APRIL	3440.00	118.30	17	135
MAY	2027.00	12.93	1	14
JUNE	1380.00	10.17	0	10
JULY	641.00	12.73	0	13
AUGUST	393.00	11.12	0	11
SEPTEMBER ..	282.10	8.56	0	9
TOTAL	66073.53	1764102.93	26804	1791130

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

			TEMPER- ATURE, WATER (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
DATE	TIME								
JAN									
11...	0700		12.0	802	3090	6690	--	51	65
11...	0925		13.0	391	1270	1340	--	63	76
11...	1515		16.0	91	347	85	76	89	92
FEB									
16...	1220		14.0	5150	16700	232000	--	32	39
17...	0735		13.0	2710	1980	14500	--	34	44
19...	1430		15.0	6220	3150	52900	--	24	33
22...	1650		15.0	1920	533	2760	21	27	34
MAR									
14...	1005		15.0	497	114	153	--	--	--
		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
DATE									
JAN									
11...	78		89	94	96	98	99	100	--
11...	86		93	97	98	99	100	--	--
11...	95		97	98	99	99	100	--	--
FEB									
16...	52		65	78	89	95	99	100	--
17...	55		66	76	84	94	99	100	--
19...	44		56	66	75	87	96	99	100
22...	41		47	52	57	66	80	94	96
MAR									
14...	--	--		66	75	87	98	100	--

VENTURA RIVER BASIN

11118500 VENTURA RIVER NEAR VENTURA, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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
AUG 08...	1015	9.3	1	3	8	11

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 128 MM
AUG 08...	13	13	14	14	19	33	49

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 (30 m) upstream of bridge on State Highway 192, 165 ft (50 m) downstream from Gobernador Creek, and 1.8 mi (2.9 km) northeast of Carpinteria.

DRAINAGE AREA.--13.1 mi² (33.9 km²).

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 (40 m), from topographic map. Prior to July 1, 1958, at site 100 ft (30 m) downstream, at datum 6.00 ft (1.829 m) higher. July 2, 1958, to Aug. 27, 1970, at site 65 ft (20 m) downstream at datum 4.00 ft (1.219 m) higher. Aug. 28, 1970, to Sept. 30, 1977, at site 100 ft (30 m) downstream at same datum.

REMARKS.--Records fair except those for Feb. 18 to Apr. 15, which are poor. No regulation above station. Gobernador Land and Water Co. diverts from Gobernador Creek 1.8 mi (2.9 km) above station. Small lake 0.8 mi (1.3 km) 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 (305 m) above station.

AVERAGE DISCHARGE.--38 years (water years 1941-77, 1979-80), 3.00 ft³/s (0.085 m³/s), 2,170 acre-ft/yr (2.68 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,880 ft³/s (251 m³/s) Dec. 27, 1971, gage height, 14.10 ft (4.298 m), from floodmark, from rating curve extended above 150 ft³/s (3.68 m³/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 ft³/s (3.54 m³/s) and maximum (*) from rating curve extended above 310 ft³/s (8.78 m³/s) on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 16	1545	*2,000 56.6	8.50 2.591	Mar. 6	Unknown	Unknown	Unknown
Feb. 19	Unknown	Unknown	Unknown				

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	.39	25	7.1	2.7	1.0	.08	0	0
2	0	0	0	0	.32	45	6.6	2.3	1.0	.16	0	.01
3	0	0	0	0	.26	55	6.0	2.0	1.0	.18	0	.03
4	0	0	0	0	.22	69	5.6	1.8	.89	.14	0	0
5	0	0	0	0	.19	82	5.2	1.8	.75	.09	0	0
6	0	0	0	0	.17	100	4.8	1.8	.75	.05	0	0
7	0	.03	0	0	.16	60	4.5	1.9	.75	.05	0	0
8	0	.05	0	0	.16	39	4.1	1.9	.63	.04	0	.02
9	0	0	0	7.3	.16	32	3.8	1.8	.52	.03	0	.02
10	0	0	0	2.8	.15	30	3.5	2.7	.42	.15	0	.04
11	0	0	0	19	.15	25	3.3	2.1	.42	.02	0	.03
12	0	0	0	6.5	.14	24	3.0	2.1	.34	.01	0	.01
13	0	0	0	5.5	.54	22	2.8	2.1	.27	.04	0	.02
14	0	0	0	15	.79	20	2.6	2.2	.27	.05	0	.04
15	0	0	0	6.3	9.3	19	2.5	2.3	.27	.03	0	.02
16	0	0	0	1.4	463	17	2.5	2.1	.27	0	.02	.02
17	0	0	.09	.86	272	16	2.1	2.0	.20	0	.01	0
18	0	0	0	.66	291	15	2.0	1.8	.49	.01	0	0
19	0	0	0	.52	330	14	1.8	1.8	.49	.03	.01	0
20	.01	0	0	.45	130	13	1.8	1.6	.31	.05	0	0
21	.04	0	0	.39	100	13	1.8	1.8	.26	.04	0	0
22	0	0	0	.33	86	12	3.2	1.6	.22	.01	0	.02
23	0	0	0	.30	70	11	4.0	1.6	.19	0	0	.01
24	0	0	.85	.26	58	10	2.8	1.4	.17	0	0	0
25	0	0	1.2	.23	46	10	2.4	1.4	.15	0	0	0
26	0	0	.02	.21	39	9.4	2.5	1.4	.14	0	0	0
27	0	0	0	.20	32	8.8	2.3	1.4	.13	0	0	0
28	0	0	0	1.2	29	8.4	3.2	1.4	.09	0	0	0
29	0	0	0	4.0	27	8.0	3.8	1.4	.13	0	0	0
30	0	0	0	1.0	---	7.6	2.5	1.1	.10	0	0	0
31	0	---	0	.60	---	7.2	---	1.0	---	0	0	---
TOTAL	.05	.08	2.16	75.01	1986.10	827.4	104.1	56.3	12.62	1.26	.04	.29
MEAN	.002	.003	.070	2.42	68.5	26.7	3.47	1.82	.42	.041	.001	.010
MAX	.04	.05	1.2	19	463	100	7.1	2.7	1.0	.18	.02	.04
MIN	0	0	0	0	.14	7.2	1.8	1.0	.09	0	0	0
AC-FT	.10	.2	4.3	149	3940	1640	206	112	25	2.5	.08	.6

CAL YR 1979	TOTAL	876.09	MEAN 2.40	MAX 120	MIN 0	AC-FT 1740
WTR YR 1980	TOTAL	3065.41	MEAN 8.38	MAX 463	MIN 0	AC-FT 6080

CARPINTERIA CREEK BASIN

11119500 CARPINTERIA CREEK NEAR CARPINTERIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

CHEMICAL ANALYSES: Water years 1979 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
FEB 06...	1415	.16	650	8.6	17.0	270	89	65	26	36	22
MAR 11...	0930	25	630	8.6	9.5	--	--	--	--	--	--
APR 01...	0940	7.1	675	8.6	9.0	--	--	--	--	--	--
MAY 01...	0950	2.5	756	8.5	11.0	--	--	--	--	--	--
30...	1050	1.2	660	8.5	16.0	--	--	--	--	--	--
JUN 30...	0900	.03	575	8.6	11.0	270	85	60	28	33	21

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
FEB 06...	1.0	1.4	180	150	21	.3	15	--	423	.08	.00
MAR 11...	--	--	--	--	--	--	--	412	--	--	--
APR 01...	--	--	--	--	--	--	--	437	--	--	--
MAY 01...	--	--	--	--	--	--	--	466	--	--	--
30...	--	--	--	--	--	--	--	425	--	--	--
JUN 30...	.9	1.7	180	130	18	.3	11	--	390	.03	.01

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
FEB 06...	1415	70	70
JUN 30...	0900	60	10

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 (46 m) downstream from debris basin, and 0.8 mi (1.3 km) north-northeast of intersection of San Ysidro and East Valley Roads, in Montecito.

DRAINAGE AREA.--3.07 mi² (7.95 km²).

PERIOD OF RECORD.--1969, 1972-79 (yearly maximum discharge only), October 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 570 ft (174 m), from topographic map.

REMARKS.--Records fair except those for the period Oct. 1 to Dec. 16, which are poor. Recorder installed Dec. 17. Debris basin may at times affect peak flows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,620 ft³/s (159 m³/s), Jan. 25, 1969, from slope-area measurement of maximum flow; minimum daily, 0.20 ft³/s (0.006 m³/s) Dec. 5-23, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 20 ft³/s (0.57 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 9	0845	25 0.71	1.18 0.360	Mar. 6	0745	50 1.42	1.57 0.479
Feb. 16	1530	*332 9.40	2.85 0.869				

Minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Dec. 5-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.25	.24	.35	.82	12	3.5	2.1	.94	.58	.36	.30
2	.28	.25	.23	.35	.74	11	3.4	1.7	.94	.58	.36	.30
3	.28	.25	.22	.35	.74	10	3.3	1.6	.94	.58	.36	.30
4	.28	.25	.21	.35	.70	8.5	3.2	1.5	.94	.58	.36	.30
5	.28	.25	.20	.35	.65	11	3.1	1.4	.94	.58	.36	.30
6	.28	.25	.20	.35	.65	29	3.0	1.4	.94	.57	.36	.30
7	.28	.25	.20	.35	.65	21	2.9	1.4	.92	.50	.36	.30
8	.28	.25	.20	.36	.65	16	2.8	1.4	.84	.50	.36	.30
9	.28	.25	.20	4.7	.65	14	2.7	1.4	.84	.50	.36	.34
10	.28	.25	.20	2.3	.64	13	2.5	1.6	.84	.50	.36	.36
11	.28	.25	.20	7.2	.57	11	2.5	1.4	.84	.50	.36	.36
12	.28	.25	.20	3.5	.57	10	2.4	1.3	.84	.50	.36	.36
13	.29	.25	.20	3.0	.70	9.2	2.3	1.3	.84	.50	.36	.36
14	.29	.25	.20	4.4	1.0	8.4	2.3	1.3	.83	.50	.36	.36
15	.30	.24	.20	3.1	3.1	7.6	2.2	1.3	.75	.50	.36	.36
16	.30	.24	.20	2.2	106	7.0	2.2	1.2	.75	.48	.36	.36
17	.30	.24	.20	1.8	82	6.5	2.1	1.2	.75	.43	.36	.36
18	.30	.24	.20	1.6	98	6.1	2.0	1.2	.75	.43	.36	.36
19	.29	.24	.20	1.3	90	5.9	1.9	1.1	.75	.43	.36	.36
20	.28	.24	.20	1.2	64	5.9	1.8	1.0	.75	.43	.36	.36
21	.28	.24	.20	1.1	58	5.8	1.8	1.0	.75	.43	.36	.36
22	.27	.24	.20	.99	37	5.5	1.8	1.0	.75	.43	.36	.36
23	.27	.24	.20	.94	25	5.3	1.8	1.0	.75	.43	.36	.36
24	.26	.24	.84	.85	19	5.2	1.8	1.0	.74	.43	.36	.36
25	.26	.24	.94	.85	16	5.0	1.8	1.0	.66	.43	.36	.36
26	.25	.24	.55	.85	15	4.5	1.8	.94	.64	.43	.30	.36
27	.25	.24	.42	.82	14	4.4	1.8	.94	.58	.43	.30	.36
28	.25	.24	.39	.96	13	4.1	2.0	.94	.58	.43	.30	.36
29	.25	.24	.35	1.3	12	3.9	1.9	.94	.58	.43	.30	.36
30	.25	.24	.35	1.0	---	3.7	1.8	.94	.58	.40	.30	.36
31	.25	---	.35	.90	---	3.5	---	.94	---	.36	.30	---
TOTAL	8.55	7.34	8.89	49.67	661.83	274.0	70.4	38.44	23.54	14.80	10.80	10.30
MEAN	.28	.24	.29	1.60	22.8	8.84	2.35	1.24	.78	.48	.35	.34
MAX	.30	.25	.94	7.2	106	29	3.5	2.1	.94	.58	.36	.36
MIN	.25	.24	.20	.35	.57	3.5	1.8	.94	.58	.36	.30	.30
AC-FT	17	15	18	99	1310	543	140	76	47	29	21	20
WTR YR 1980	TOTAL	1178.56	MEAN	3.22	MAX	106	MIN	.20	AC-FT	2340		

SYCAMORE CREEK BASIN

11119700 SYCAMORE CREEK AT SANTA BARBARA, CA

LOCATION.--Lat 34°25'45", long 119°40'35", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank on downstream side of bridge on Alameda Padre Serra in Santa Barbara.

DRAINAGE AREA.--3.41 mi² (8.83 km²).

PERIOD OF RECORD.--October 1970 to current year. Yearly peak discharge only for October 1972 to September 1979.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 55 ft (17 m), from topographic map.

REMARKS.--Records good. No regulation or diversion above station. Water may, at times, be wasted to channel from Sheffield Reservoir upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s (31.7 m³/s) Feb. 9, 1978, gage height, 4.65 ft (1.417 m), from rating furnished by Santa Barbara County Flood Control District; maximum gage height, 4.83 ft (1.472 m) Feb. 16, 1980; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*), from rating curve extended above 170 ft³/s (4.81 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 11	0415	66	1.87	2.10	0.640	Feb. 19	0830	100	2.83	2.37	0.722
Feb. 16	1515	*582	16.5	4.83	1.472	Mar. 6	0545	205	5.81	3.05	0.930

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.07	.12	.17	.38	1.3	.59	2.1	.20	.15	.08	.07
2	.09	.12	.09	.24	.28	4.1	.59	1.7	.20	.36	.08	.08
3	.08	.09	.07	.20	.25	6.4	.59	1.4	.20	.32	.08	.09
4	.07	.12	.05	.16	.20	8.0	.59	1.1	.20	.33	.08	.09
5	.11	.25	.05	.19	.20	15	.59	1.0	.20	.42	.08	.09
6	.09	.20	.05	.15	.20	43	.59	1.5	.20	.17	.08	.09
7	.09	.50	.07	.15	.21	7.5	.59	1.6	.20	.15	.08	.09
8	.09	.40	.07	.19	.25	4.3	.59	1.3	.20	.15	.08	.12
9	.10	.35	.05	8.6	.20	3.6	.49	.69	.20	.15	.08	.10
10	.09	.25	.07	2.3	.20	2.7	.49	.27	.20	.14	.08	.09
11	.10	.20	.08	13	.25	2.4	.48	.24	.20	.12	.08	.09
12	.09	.20	.09	3.6	.25	2.1	.48	.21	.20	.25	.08	.12
13	.09	.20	.09	4.4	.59	1.8	.48	.20	.20	.13	.08	.13
14	.09	.20	.08	5.8	.88	1.8	.48	.20	.20	.10	.08	.14
15	.10	.20	.09	4.0	5.1	1.7	.48	.20	.21	.09	.08	.10
16	.11	.20	.09	1.4	126	1.3	.48	.20	.25	.09	.08	.09
17	.11	.20	.09	.96	71	1.3	.48	.20	1.0	.11	.08	.09
18	.12	.20	.07	.87	57	1.3	.48	.20	.91	.12	.08	.09
19	.12	.34	.07	.48	38	1.2	.48	.20	.40	.12	.12	.09
20	.43	.35	.07	.39	40	2.2	.48	.20	.35	.12	.12	.09
21	.55	.25	.07	.32	22	1.2	.48	.23	.32	.09	.12	.09
22	.61	.20	.07	.30	8.1	1.0	.72	.43	.32	.21	.12	.13
23	.44	.20	.07	.32	4.9	.92	.57	.49	.32	.12	.12	.09
24	.25	.20	2.2	.52	3.5	.72	.48	.25	.32	.20	.09	.07
25	.14	.20	1.2	.28	2.7	.84	.94	.25	.27	.12	.07	.09
26	.12	.19	.36	.25	2.2	1.0	.59	.20	.16	.08	.07	.08
27	.10	.20	.49	.25	1.8	.90	.72	.20	.15	.07	.07	.09
28	.16	.21	.34	1.8	1.4	.84	1.1	.20	.15	.09	.07	.10
29	.09	.18	.20	1.7	1.3	.72	1.3	.20	.15	.08	.07	.07
30	.05	.13	.16	.50	---	.71	1.7	.20	.15	.08	.07	.05
31	.05	---	.15	.39	---	.59	---	.20	---	.08	.07	---
TOTAL	4.83	6.60	6.82	53.88	389.34	122.44	19.10	17.56	8.23	4.81	2.62	2.80
MEAN	.16	.22	.22	1.74	13.4	3.95	.64	.57	.27	.16	.085	.093
MAX	.61	.50	.22	13	126	43	1.7	2.1	1.0	.42	.12	.14
MIN	.05	.07	.05	.15	.20	.59	.48	.20	.15	.07	.07	.05
AC-FT	9.6	13	14	107	772	243	38	35	16	9.5	5.2	5.6
WTR YR 1980	TOTAL	639.03	MEAN	1.75	MAX	126	MIN	.05	AC-FT	1270		

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 mi² (21.70 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Concrete-lined channel. Altitude of gage is 105 ft (32 m), from topographic map.

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

AVERAGE DISCHARGE.--10 years, 3.60 ft³/s (0.102 m³/s), 2,610 acre-ft/yr (3.22 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,580 ft³/s (73.1 m³/s) Jan. 18, 1973, gage height, 4.97 ft (1.515 m), from rating curve extended above 41 ft³/s (1.16 m³/s) on basis of computation of flow in concrete-lined channel; maximum gage height, 5.45 ft (1.661 m) Feb. 16, 1980; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11.3 m³/s) and maximum (*), from rating curve extended above 440 ft³/s (12.5 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 16	1430	*1,300 36.8	5.45 1.661
Mar. 6	0500	405 11.5	3.47 1.058

Minimum daily discharge, no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6		0	0	0	1.5	1.9	2.6	1.9	0		
2	.50		0	0	0	16	1.2	1.5	1.9	.34		
3	0		0	0	0	22	1.2	.83	1.9	0		
4	0		0	0	0	7.5	1.5	.59	1.9	0		
5	0		0	0	0	32	1.6	1.2	1.5	0		
6	0		0	0	0	118	1.5	1.5	1.5	0		
7	0		0	0	0	37	1.5	1.5	1.5	0		
8	0		0	1.3	0	24	1.5	2.3	1.5	0		
9	0		0	28	0	17	1.5	3.2	1.5	0		
10	0		0	9.5	0	15	1.4	4.8	.82	0		
11	0		0	38	0	12	1.4	2.8	.17	0		
12	0		0	10	0	11	1.4	3.0	.17	0		
13	0		0	16	1.1	8.1	1.3	3.0	.17	0		
14	0		0	12	1.4	5.7	1.3	6.9	.10	0		
15	0		0	5.7	14	4.6	1.3	6.9	.10	0		
16	0		0	1.4	392	3.2	1.3	6.3	.02	0		
17	0		0	1.9	195	2.3	1.2	5.7	0	0		
18	0		0	.85	180	2.3	1.2	5.1	0	0		
19	0		0	0	105	2.3	1.2	4.6	0	0		
20	0		0	0	95	2.4	1.2	3.6	0	0		
21	0		0	0	61	1.9	11	6.0	0	0		
22	0		0	0	31	1.7	25	5.7	0	0		
23	0		0	0	21	1.4	14	3.8	0	0		
24	0		9.5	0	14	1.7	4.0	2.3	0	0		
25	0		2.4	0	9.3	5.5	2.0	2.3	0	0		
26	0		.15	0	6.9	2.5	1.5	2.3	0	0		
27	0		0	0	5.1	3.7	1.2	1.9	0	0		
28	0		0	8.0	3.6	7.7	2.4	1.9	0	0		
29	0		0	2.4	2.8	4.1	2.2	1.9	0	0		
30	0		0	.07	---	2.8	1.9	1.9	0	0		
31	0	---	0	0	---	2.3	---	1.9	---	0		---
TOTAL	2.10	0	12.05	135.12	1138.2	379.2	92.8	99.82	16.65	.34	0	0
MEAN	.068	0	.39	4.36	39.2	12.2	3.09	3.22	.56	.011	0	0
MAX	1.6	0	9.5	38	392	118	25	6.9	1.9	.34	0	0
MIN	0	0	0	0	0	1.4	1.2	.59	0	0	0	0
AC-FT	4.2	0	24	268	2260	752	184	198	33	.7	0	0
CAL YR 1979 TOTAL	572.80		MEAN 1.57	MAX 137	MIN 0	AC-FT 1140						
WTR YR 1980 TOTAL	1876.28		MEAN 5.13	MAX 392	MIN 0	AC-FT 3720						

11119750 MISSION CREEK NEAR MISSION STREET, AT SANTA BARBARA, CA

WATER-QUALITY RECORDS

CHEMICAL ANALYSIS: February 1980 to September 1980.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
FEB 26...	1305	6.7	800	8.6	16.5	400	220	100	36	45	20
MAR 14...	1120	5.1	1180	8.8	12.0	--	--	--	--	--	--
31...	1020	2.1	1128	8.8	14.5	--	--	--	--	--	--
APR 14...	0910	1.3	1420	8.4	14.0	--	--	--	--	--	--
30...	1020	2.2	1280	8.4	15.0	--	--	--	--	--	--
MAY 23...	1040	4.5	1290	8.5	12.0	--	--	--	--	--	--

[illegible]

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 (0.6 km) south of State Street on Hope Avenue in Santa Barbara.

DRAINAGE AREA.--6.65 mi² (17.22 km²).

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 (49 m), from topographic map.

REMARKS.--Records good except those below 1.0 ft³/s (0.028 m³/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.--10 years, 2.76 ft³/s (0.078 m³/s), 2,000 acre-ft/yr (2.47 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s (52.4 m³/s) Mar. 4, 1978, and Feb. 16, 1980, from rating curve extended above 50 ft³/s (1.42 m³/s) on basis of computation of flow in trapezoidal section; maximum gage height, 5.67 ft (1.728 m) Mar. 4, 1978; no flow many days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 9	0730	834	23.6	4.00	1.219	Feb. 16	1345	*1,850	52.4	5.66	1.725
Jan. 11	0315	522	14.8	3.37	1.027	Mar. 6	0530	906	25.7	4.12	1.256

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.01	.01	.03	2.2	.78	.54	0	.01	.01	0
2	.03	.02	0	0	.01	9.1	.70	.30	0	2.4	.01	0
3	.03	.65	.01	0	0	6.6	.69	.21	0	0	.01	0
4	0	0	.02	0	0	3.2	.66	.15	0	0	.02	.02
5	.02	0	.04	0	.01	14	.82	.09	.01	0	0	.05
6	.02	0	.09	.01	0	92	.62	.17	0	.01	0	0
7	.02	2.2	.09	0	0	14	.52	.17	.01	0	.01	0
8	.03	.01	.08	2.4	0	9.3	.49	.20	.02	.15	0	0
9	.03	0	.01	37	.01	7.2	.45	.21	.01	.23	0	0
10	.03	0	.05	6.7	.01	6.9	.50	.88	.01	0	.01	0
11	.03	0	.08	34	0	5.5	.38	.07	0	.31	.01	0
12	.02	0	.10	4.7	0	4.5	.36	.05	0	.03	.01	0
13	.04	0	.11	12	1.6	3.8	.37	.06	0	.01	0	0
14	.01	0	.02	7.4	1.4	3.4	.34	.07	.02	.01	0	0
15	.04	0	.02	.85	9.5	3.0	.38	.15	.01	.01	0	0
16	.03	0	.03	.78	496	2.6	.28	.07	.01	0	.01	0
17	.03	.04	.02	1.9	199	2.4	.30	.05	0	.01	.02	0
18	.03	0	.10	.66	139	2.2	.30	.03	0	.01	.12	0
19	.02	0	.31	.38	76	1.9	.36	.05	0	.01	.01	0
20	2.0	0	.13	.26	68	1.7	.28	.06	.01	0	0	0
21	0	0	.38	.23	37	1.6	.28	.46	.01	0	.01	0
22	0	0	.02	.16	18	1.4	1.5	.05	0	.02	.01	0
23	0	0	.02	.24	12	1.3	.42	.02	.01	.01	0	0
24	0	0	14	.08	8.4	1.2	.37	.02	.01	0	.01	0
25	.01	0	.26	.15	6.3	1.8	.26	.01	0	.01	.01	0
26	.03	0	.10	.05	4.8	1.2	.39	.01	.01	.01	.03	0
27	.04	0	.17	.02	3.9	1.1	.39	0	.01	0	.02	0
28	0	0	.01	9.0	3.2	.94	2.1	0	.01	.02	0	0
29	.01	0	0	1.2	2.6	.86	.52	0	0	.06	0	0
30	.01	0	.02	.37	---	.82	.36	0	.01	0	.01	0
31	0	---	.02	.08	---	.80	---	0	---	.01	.01	---
TOTAL	2.58	2.94	16.32	120.63	1086.77	208.52	16.17	4.15	.18	3.34	.36	.07
MEAN	.083	.098	.53	3.89	37.5	6.73	.54	.13	.006	.11	.012	.002
MAX	2.0	2.2	14	37	496	92	2.1	.88	.02	2.4	.12	.05
MIN	0	0	0	0	0	.80	.26	0	0	0	0	0
AC-FT	5.1	5.8	32	239	2160	414	32	8.2	.4	6.6	.7	.1
CAL YR 1979	TOTAL	465.33	MEAN	1.27	MAX	118	MIN	0	AC-FT	923		
WTR YR 1980	TOTAL	1462.03	MEAN	3.99	MAX	496	MIN	0	AC-FT	2900		

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 (0.3 km) east of Patterson Avenue, and 1.5 mi (2.4 km) northeast of Goleta.

DRAINAGE AREA.--6.35 mi² (16.4 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 60 ft (18 m), from topographic map.

REMARKS.--Records fair. No regulation. Some pumping for irrigation.

AVERAGE DISCHARGE.--10 years, 1.84 ft³/s (0.052 m³/s), 1,330 acre-ft/yr (1.64 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,650 ft³/s (46.7 m³/s) Jan. 16, 1978, gage height, 5.87 ft (1.789 m), from rating curve extended above 290 ft³/s (8.21 m³/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 ft³/s (2.12 m³/s) and maximum (*), from rating curve extended above 35 ft³/s (0.99 m³/s) on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 16	1115	*765	21.7	3.69	1.125	Mar. 6	0615	115	3.26	2.21	0.674
Feb. 20	1630	205	5.81	2.47	0.753						

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	0	.28	2.7	.93	.55	.03	0		
2	0	0	0	0	.25	14	.83	.47	.01	.35		
3	0	.01	0	0	.24	10	.92	.37	0	.01		
4	0	0	0	0	.21	4.9	.92	.29	0	0		
5	0	0	0	0	.20	21	.95	.38	0	0		
6	0	0	0	0	.18	36	.91	.45	0	0		
7	0	.62	0	0	.14	11	.80	.22	0	0		
8	0	0	0	.33	.16	6.9	.68	.19	0	0		
9	0	0	0	9.1	.16	5.2	.57	.08	0	0		
10	0	0	0	3.2	.17	4.5	.56	.23	0	0		
11	0	0	0	19	.19	3.8	.70	.24	0	0		
12	0	0	0	5.2	.17	3.1	.63	.19	0	0		
13	0	0	0	6.0	.61	2.9	.47	.18	0	0		
14	0	0	0	9.2	.73	2.4	.43	.16	0	0		
15	0	0	0	2.5	6.1	2.3	.39	.15	0	0		
16	0	0	0	1.0	214	2.1	.39	.14	0	0		
17	0	0	0	1.1	136	1.9	.38	.12	0	0		
18	0	0	0	.85	89	1.9	.30	.12	0	0		
19	0	0	0	.58	57	1.9	.41	.11	0	0		
20	.33	0	0	.49	75	1.5	.37	.11	0	0		
21	0	0	0	.43	57	1.5	.33	.10	0	0		
22	0	0	0	.40	17	1.4	.85	.10	0	0		
23	0	0	0	.33	9.4	1.3	.48	.06	0	0		
24	0	0	5.2	.30	6.5	1.4	.33	.01	0	0		
25	0	0	1.1	.30	5.1	1.5	.37	.05	0	0		
26	0	0	.20	.29	3.6	1.4	.50	.01	0	0		
27	0	0	0	.25	3.0	1.2	.37	0	0	0		
28	0	0	0	2.7	2.8	1.3	.78	.03	0	0		
29	0	0	0	1.2	2.8	1.1	.62	0	0	0		
30	0	0	0	.42	---	1.0	.29	0	0	0		
31	0	---	0	.33	---	.84	---	.01	---	0		---
TOTAL	.33	.63	6.50	65.50	687.99	153.94	17.46	5.12	.04	.36	0	0
MEAN	.011	.021	.21	2.11	23.7	4.97	.58	.17	.001	.012	0	0
MAX	.33	.62	5.2	19	214	36	.95	.55	.03	.35	0	0
MIN	0	0	0	0	.14	.84	.29	0	0	0	0	0
AC-FT	.7	1.2	13	130	1360	305	35	10	.08	.7	0	0
CAL YR 1979	TOTAL 313.56	MEAN .86	MAX 80	MIN 0	AC-FT 622							
WTR YR 1980	TOTAL 937.87	MEAN 2.56	MAX 214	MIN 0	AC-FT 1860							

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 (30 m) downstream from Maria Ygnacio Creek, 1.3 mi (2.1 km) upstream from mouth, and 1.3 mi (2.1 km) southeast of Goleta.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Datum of gage is 8.59 ft (2.618 m) Santa Barbara County benchmark. Prior to Dec. 14, 1967, at site 275 ft (84 m) downstream, datum 4.00 ft (1.219 m) higher. Dec. 14, 1967, to Sept. 30, 1976, at datum 4.00 ft (1.219 m) higher and Oct. 1, 1976, to Sept. 30, 1978, at datum 2.00 ft (0.610 m) higher, both at present site.

AVERAGE DISCHARGE.--39 years, 4.76 ft³/s (0.135 m³/s), 3,450 acre-ft/yr (4.25 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,380 ft³/s (152 m³/s) Jan. 18, 1973, gage height, 13.1 ft (3.99 m) datum then in use, from rating curve extended above 2,300 ft³/s (65.1 m³/s); maximum gage height, 13.3 ft (4.05 m), from floodmark, Dec. 3, 1974, datum then in use; no flow some days in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 225 ft³/s (6.37 m³/s) revised, and maximum (*), from rating curve extended above 900 ft³/s (25.5 m³/s) on basis of slope-area measurement at gage height 10.27 ft (3.130 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Jan. 11	0430	492	13.9	4.66	1.420	Feb. 20	1700	613	17.4	5.04	1.536
Feb. 16	1445	*4,600	130	10.27	3.130	Mar. 6	0545	893	25.3	5.63	1.716

Minimum daily discharge, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	.02	.10	.10	.30	8.4	1.7	.20	.01	.01		
2	.07	.02	.19	.08	.25	36	1.5	.16	.01		.03	0
3	.09	.23	.07	.07	.21	33				4.8	0	0
4	.16	.53	.04	.07	.15	14	1.5	.06	.02	.04	0	0
5	.10	.17	.11	.07	.14	53	1.6	.06	.05	0	0	0
6										0		.03
7	.29	.13	.11	.15	.14	158	1.6	.19	.01	0	0	.01
8	.17	5.1	.08	.11	.14	32	1.1	.19	.01	.09	0	.01
9	.07	1.1	.05	.50	.13	20	1.0	.16	0	0	0	0
10	.02	.25	.05	55	.39	16	.86	.17	.01	0	0	.01
	.02	.12	.05	17	.27	13	.74	1.2	.01	0	0	.02
11	.02	.07	.54	108	.25	12	.65	.05	.02	0	0	.03
12	.02	.05	.42	33	.38	8.3			.02	0	0	.03
13	.09	.04	.21	35	3.4	6.9	1.1	.01	.02	0	0	.03
14	.11	.06	.12	39	3.2	6.4	.55	.01	.01	0	0	.06
15	.07	.06	.09	8.1	35	5.8	.58	.02	.01	0	0	.05
								.02		0	0	.03
16	.12	.26	.09	2.8	955	5.2	.37	.01	0	0	0	.02
17	.14	.24	.10	2.9	381	5.3	.41	.02	.02	0	0	.04
18	.14	.12	.07	2.6	258	4.5	.30	.02	.04	0	0	.03
19	.13	.06	.12	.67	165	4.5	.23	.01	.02	0	0	.02
20	5.0	.04	.21	.59	209	3.9	.20	.06	.73	0	0	.01
21	.29	.04	.21	.52	115	4.1	.14	.45	.09	0	0	.02
22	.14	.04	.19	.48	42	4.1	3.0	.07	.02	0	0	.03
23	.22	.05	.14	.45	27	3.1	.56	.01	.01	0	0	.07
24	.16	.05	30	.39	20	3.4	.24	0	0	0	0	.08
25	.11	.03	4.8	.39	17	5.2	.08	0	0	0	0	.14
26	.11	.02	.34	.39	14	3.5	.15	0	0	0	0	.09
27	.11	.02	.23	.34	12	2.5	.19	0	.01	0	0	.05
28	.10	.11	.17	22	10	2.5	1.4	0	.01	0	0	.05
29	.06	.11	.15	11	9.3	2.3	1.4	0	0	.04	0	.04
30	.03	.07	.12	.74	---	2.2	.09	0	.01	.09	0	.02
31	.04	---	.11	.43	---	1.9	---	0	---	.63	0	---
TOTAL	6.32	9.21	39.28	342.94	2278.65	481.0	27.14	3.19	1.19	5.70	.03	.99
MEAN	.27	.31	1.27	11.1	78.6	15.5	.90	.10	.040	.18	.001	.033
MAX	5.0	5.1	30	108	955	158	3.0	1.2	.73	4.8	.03	.14
MIN	.02	.02	.04	.07	.13	1.9	.08	0	0	0	0	0
AC-FT	17	18	78	680	4520	954	54	6.3	2.4	11	.06	2.0
CAL YR 1979	TOTAL	1352.73	MEAN	3.71	MAX	259	MIN	0	AC-FT	2680		
WTR YR 1980	TOTAL	3197.64	MEAN	8.74	MAX	955	MIN	0	AC-FT	6340		

ATASCADERO CREEK BASIN

11120000 ATASCADERO CREEK NEAR GOLETA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT											
03...	0830	.05	1020	7.2	19.0	--	--	--	--	--	--
NOV											
07...	0905	.03	1300	8.2	13.5	--	--	--	--	--	--
DEC											
05...	1130	.12	1920	8.5	14.0	--	--	--	--	--	--
JAN											
02...	1520	.07	1140	8.1	19.5	440	220	110	41	96	32
FEB											
04...	1200	.14	2250	8.2	19.5	--	--	--	--	--	--
MAR											
03...	1500	36	595	8.3	18.0	--	--	--	--	--	--
28...	1310	2.8	900	6.7	24.0	--	--	--	--	--	--
MAY											
05...	1515	.06	1990	8.5	22.0	--	--	--	--	--	--
JUN											
02...	1345	.01	2585	8.4	24.0	--	--	--	--	--	--
JUL											
02...	1545	13	1120	7.6	24.5	340	210	77	35	110	41

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT											
03...	--	--	--	--	--	--	--	718	--	--	--
NOV											
07...	--	--	--	--	--	--	--	940	--	--	--
DEC											
05...	--	--	--	--	--	--	--	1380	--	--	--
JAN											
02...	2.0	4.9	220	250	110	.4	7.7	--	754	.28	.08
FEB											
04...	--	--	--	--	--	--	--	1710	--	--	--
MAR											
03...	--	--	--	--	--	--	--	406	--	--	--
28...	--	--	--	--	--	--	--	702	--	--	--
MAY											
05...	--	--	--	--	--	--	--	1420	--	--	--
JUN											
02...	--	--	--	--	--	--	--	1900	--	--	--
JUL											
02...	2.6	7.1	130	250	130	.3	7.8	--	701	1.1	.19

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN			
02...	1520	200	20
JUL			
02...	1545	270	90

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 (1.8 km) downstream from unnamed tributary, and 1.7 mi (2.7 km) northeast of Goleta.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder and concrete low-water control. Datum of gage is 95.61 ft (29.142 m) Santa Barbara County Road Department datum. Prior to Dec. 24, 1955, at datum 5.50 ft (1.676 m) higher. Dec. 24, 1955, to Jan. 10, 1960, at datum 1.5 ft (0.46 m) higher. Prior to Oct. 1, 1971, at site 75 ft (23 m) downstream at same datum.

AVERAGE DISCHARGE.--39 years, 2.01 ft³/s (0.057 m³/s), 1,460 acre-ft/yr (1.80 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft³/s (56.6 m³/s) Jan. 25, 1969, gage height, 10.10 ft (3.078 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurement at gage height 9.32 ft (2.841 m); maximum gage height, 12.74 ft (3.883 m), present datum, Jan. 21, 1943; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended as explained above 60 ft³/s (1.70 m³/s) on basis of slope-area measurement at gage height 8.05 ft (2.454 m).

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 16	1415	*1,370	38.8	7.39	2.252	Mar. 5	1300	124	3.51	4.10	1.250
Feb. 20	1800	153	4.33	4.26	1.298						

Minimum daily discharge, 0.05 ft³/s (0.001 m³/s) Oct. 3, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.16	.24	.64	1.1	2.7	1.2	.61	.60	.30	.20	.18
2	.07	.16	.15	.66	1.0	11	1.2	.73	.71	.68	.23	.15
3	.05	.16	.25	.67	.97	16	1.2	.71	.67	.48	.23	.15
4	.08	.17	.22	.57	.94	7.5	1.3	.71	.56	.38	.24	.16
5	.10	.18	.23	.61	.85	35	1.3	.71	.49	.31	.15	.13
6	.05	.29	.17	.56	.78	40	1.3	.71	.49	.38	.15	.12
7	.07	.27	.20	.59	.68	17	1.3	.71	.49	.41	.21	.17
8	.17	.31	.19	.84	.62	11	1.1	.71	.58	.30	.20	.12
9	.10	.32	.22	11	.74	8.5	.72	.71	.71	.26	.17	.11
10	.15	.26	.22	5.7	.77	6.7	.72	.88	.59	.20	.19	.14
11	.17	.26	.22	25	.77	6.0	.72	1.3	.37	.17	.18	.14
12	.16	.33	.15	9.2	.84	5.0	.64	1.0	.33	.18	.12	.12
13	.20	.23	.18	4.4	.90	4.2	.63	.71	.26	.15	.12	.12
14	.26	.32	.21	12	1.3	3.5	.63	.71	.26	.17	.18	.14
15	.21	.28	.21	3.6	15	2.8	.62	.71	.26	.17	.17	.14
16	.21	.24	.20	2.0	265	2.8	.66	.82	.26	.15	.15	.13
17	.21	.22	.17	1.6	143	2.6	.58	.84	.25	.15	.23	.18
18	.26	.27	.20	1.5	132	2.4	.64	.98	.24	.17	.22	.12
19	.25	.26	.20	1.8	73	2.2	.59	.75	.25	.16	.22	.13
20	.25	.25	.19	1.6	73	2.0	.59	.75	.28	.20	.19	.18
21	.25	.26	.19	1.4	59	2.0	.63	.69	.28	.38	.22	.12
22	.30	.29	.19	1.2	20	1.8	1.0	.69	.54	.24	.19	.13
23	.32	.26	.19	1.2	11	1.8	.88	.54	.51	.22	.21	.20
24	.30	.26	10	1.1	7.4	1.8	.49	.44	.49	.25	.18	.22
25	.32	.28	1.7	1.1	5.3	1.5	.50	.50	.48	.22	.25	.23
26	.29	.27	.52	1.1	3.9	1.7	.59	.59	.38	.25	.19	.14
27	.26	.29	.49	1.1	3.2	1.5	.78	.59	.55	.27	.19	.15
28	.26	.30	.54	1.6	2.8	1.4	.75	.59	.70	.22	.21	.13
29	.28	.26	.55	2.8	3.3	1.3	.77	.59	.54	.21	.26	.12
30	.23	.25	.58	1.9	---	1.3	.66	.59	.32	.22	.18	.10
31	.12	---	.63	1.6	---	1.3	---	.59	---	.20	.20	---
TOTAL	6.12	7.66	19.60	100.64	829.16	206.3	24.69	22.16	13.44	8.05	6.03	4.37
MEAN	.20	.26	.63	3.25	28.6	6.65	.82	.71	.45	.26	.19	.15
MAX	.32	.33	.10	.25	265	40	1.3	1.3	.71	.68	.26	.23
MIN	.05	.16	.15	.56	.62	1.3	.49	.44	.24	.15	.12	.10
AC=FT	12	15	39	200	1640	409	49	44	27	16	12	8.7
CAL YR 1979	TOTAL	503.45		MEAN 1.38	MAX 61	MIN .02	AC=FT	999				
WTR YR 1980	TOTAL	1248.22		MEAN 3.41	MAX 265	MIN .05	AC=FT	2480				

SAN JOSE CREEK BASIN

11120500 SAN JOSE CREEK NEAR GOLETA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT 03...	1150	.05	1630	7.5	17.0	--	--	--	--	--	--
NOV 07...	1020	.18	1470	7.8	12.0	--	--	--	--	--	--
DEC 05...	1030	.23	1260	8.3	11.5	--	--	--	--	--	--
JAN 03...	1000	.60	1080	8.2	11.0	490	220	130	40	75	33
FEB 05...	1300	.78	1020	8.1	16.5	--	--	--	--	--	--
MAR 21...	1420	2.0	950	8.4	17.0	--	--	--	--	--	--
APR 07...	1530	1.1	1090	8.3	20.0	--	--	--	--	--	--
MAY 06...	1200	.71	1200	8.3	--	--	--	--	--	--	--
JUN 02...	1100	.83	1180	8.2	16.0	--	--	--	--	--	--
JUL 02...	1425	.81	1180	8.0	21.5	510	240	130	45	78	25
AUG 04...	0915	.32	1320	7.9	--	--	--	--	--	--	--
28...	1420	.21	1150	8.1	22.0	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (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 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- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT 03...	--	--	--	--	--	--	--	1290	--	--	--
NOV 07...	--	--	--	--	--	--	--	1020	--	--	--
DEC 05...	--	--	--	--	--	--	--	922	--	--	--
JAN 03...	1.5	2.2	270	320	49	.4	21	--	802	.41	.02
FEB 05...	--	--	--	--	--	--	--	753	--	--	--
MAR 21...	--	--	--	--	--	--	--	699	--	--	--
APR 07...	--	--	--	--	--	--	--	801	--	--	--
MAY 06...	--	--	--	--	--	--	--	837	--	--	--
JUN 02...	--	--	--	--	--	--	--	826	--	--	--
JUL 02...	1.5	2.8	270	330	53	.5	19	--	824	.79	.01
AUG 04...	--	--	--	--	--	--	--	984	--	--	--
28...	--	--	--	--	--	--	--	880	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 03...	1000	100	30
JUL 02...	1425	140	30

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 (0.8 km) southeast of Goleta.

DRAINAGE AREA.--9.42 mi² (24.40 km²).

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 (3 m), from topographic map.

REMARKS.--Records fair. No regulation above station. Diversions for irrigation and domestic use above station.

AVERAGE DISCHARGE.--10 years, 3.11 ft³/s (0.088 m³/s), 2,250 acre-ft/yr (2.77 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,330 ft³/s (66.0 m³/s) Mar. 4, 1978, gage height, 5.65 ft (1.722 m), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-conveyance computation of flow in concrete channel at gage height 8.00 ft (2.438 m); no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,330 ft³/s (37.7 m³/s) Feb. 16 (1430 hrs), gage height, 4.44 ft (1.353 m), from rating curve extended as explained above, no other peak above base of 250 ft³/s (7.08 m³/s); minimum daily, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0	0	0	.25	.61	3.5	1.4	.58	.28	.03	0	
2	0	0	0	.23	.55	16	1.2	.64	.44	2.1	0	
3	0	.10	0	.23	.53	17	1.0	.58	.36	.38	0	
4	0	0	0	.24	.53	7.8	1.1	.49	.33	.28	0	
5	0	0	0	.25	.48	26	1.3	.61	.32	.12	.01	
6	0	0	.03	.27	.52	20	1.2	.68	.31	.14	0	
7	0	2.0	0	.36	.47	13	1.1	.66	.30	.19	0	
8	0	.14	.24	1.3	.38	8.6	1.2	.65	.26	.09	0	
9	0	.11	0	12	.36	6.2	1.2	.76	.49	.02	0	
10	0	.01	0	7.6	.48	5.4	.86	1.2	.40	.01	0	
11	0	0	0	27	.52	5.3	.87	.96	.11	.01	0	
12	0	.02	0	10	.53	5.3	.66	.88	.38	.01	0	
13	0	.02	0	7.8	1.5	5.1	.82	.61	.22	.01	0	
14	.02	0	0	16	1.6	4.9	.77	.83	.15	.14	0	
15	0	.01	0	3.4	18	3.7	.72	.68	.24	.07	0	
16	0	0	0	2.0	339	2.7	.71	.44	.04	.03	0	
17	0	.02	0	1.7	184	2.1	.67	.33	.02	.03	0	
18	0	0	0	1.1	139	4.2	.66	.41	.02	.02	0	
19	0	0	0	.88	35	3.9	.78	.33	.01	.05	0	
20	1.7	0	0	.75	90	2.3	.93	.46	.01	.02	0	
21	.03	0	.01	.66	45	3.3	1.3	.87	.01	.02	0	
22	.08	0	0	.61	26	2.0	1.8	.53	.01	.02	0	
23	0	0	0	.61	12	1.5	.79	.46	.32	0	0	
24	0	0	18	.58	10	1.2	.56	.32	.20	0	0	
25	.05	0	2.2	.57	8.2	2.5	.52	.30	.13	0	0	
26	.23	0	.53	.57	6.9	2.4	.67	.49	.10	.01	0	
27	0	0	.33	.59	5.4	1.7	.72	.40	.12	0	0	
28	0	0	.28	4.6	4.5	1.3	1.3	.26	.38	0	0	
29	0	0	.26	1.8	3.8	1.4	1.1	.23	.24	0	0	
30	0	0	.24	.92	---	1.4	.72	.22	.08	0	0	
31	0	---	.24	.65	---	1.2	---	.26	---	0	0	---
TOTAL	2.11	2.43	22.36	105.52	935.86	182.9	28.63	17.12	6.28	3.80	.01	0
MEAN	.068	.081	.72	3.40	32.3	5.90	.95	.55	.21	.12	.0003	0
MAX	1.7	2.0	18	27	339	26	1.8	1.2	.49	2.1	.01	0
MIN	0	0	0	.23	.36	1.2	.52	.22	.01	0	0	0
AC-FT	4.2	4.8	44	209	1860	363	57	34	12	7.5	.02	0

CAL YR 1979 TOTAL 907.71 MEAN 2.49 MAX 119 MIN 0 AC-FT 1800
WTR YR 1980 TOTAL 1307.02 MEAN 3.57 MAX 339 MIN 0 AC-FT 2590

11120530 TECOLOTITO CREEK NEAR GOLETA, CA

LOCATION.--Lat 34°26'05", long 119°52'04", in Los Dos Pueblos Grant, Santa Barbara County, Hydrologic Unit 18060013, on right bank 0.2 mi (0.3 km) east of Glen Annie Road, and 2.1 mi (3.4 km) west of Goleta.

DRAINAGE AREA.--4.42 mi² (11.45 km²).

PERIOD OF RECORD.--October 1970 to September 1972, January to September 1980.

GAGE.--Water-stage recorder and concrete channel. Altitude of gage is 40 ft (12.2 m), from topographic map. Prior to Jan. 25, 1980, at same site at different datum.

REMARKS.--Records fair. No regulation above station. Some pumping for irrigation and water is occasionally released to channel from Tecolote Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s (45.6 m³/s) Feb. 16, 1980, gage height, 4.47 ft (1.362 m), from rating curve extended above 160 ft³/s (4.53 m³/s), on basis of slope-conveyance computation of flow in concrete channel; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 16	1330	*1,610 45.6	4.47 1.362	Mar. 5	1115	211 5.98	2.02 0.616
Feb. 20	1715	122 3.46	1.72 0.524				

Minimum daily discharge, 0.21 ft³/s (0.006 m³/s) Sept. 26, 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				---	.56	2.0	1.2	1.0	5.1	.55	.50	.41
2				---	.50	14	1.2	.82	.77	.97	.30	.47
3				---	.47	5.8	1.1	.79	.71	.86	.29	.42
4				---	.47	2.6	1.0	.68	.57	.48	.33	.42
5				---	.47	35	1.1	.77	.59	.41	.39	.54
6				---	.44	30	1.0	.85	1.1	.42	.37	.33
7				---	.43	9.3	.96	.83	1.6	.42	.32	.32
8				---	.47	5.3	1.0	.72	1.0	.49	.32	.34
9				---	.49	3.9	1.1	.66	.73	.42	.34	.35
10				---	.53	3.5	1.2	.86	.50	.41	.38	.37
11				---	.52	3.1	1.2	.77	.46	.41	.34	.35
12				---	.51	2.5	1.2	.72	.43	.41	.51	.35
13				---	.70	2.4	1.2	1.3	.45	.60	.50	.39
14				---	1.0	2.4	1.2	4.9	.51	.40	.40	.42
15				---	6.6	2.4	1.2	6.8	.51	.38	.40	.43
16				---	280	2.3	1.2	7.0	.53	.49	.36	.38
17				---	154	2.3	1.2	7.7	.53	.50	.37	.33
18				---	58	2.3	1.2	7.7	.57	.41	.41	.30
19				---	16	2.3	1.2	8.0	.57	.37	.40	.28
20				---	36	2.2	1.2	8.5	.68	.39	.38	.30
21				---	17	2.2	1.1	8.5	.68	.41	.39	.34
22				---	8.8	2.2	1.7	8.3	.53	.41	.32	.31
23				---	4.5	2.1	.95	8.4	.53	.42	.37	.25
24				---	3.8	1.9	.82	8.4	.61	.50	.35	.24
25				---	.47	3.4	2.0	.85	.59	.41	.32	.24
26				.47	2.9	1.9	.87	8.5	.61	.41	.39	.21
27				.43	2.5	1.6	.88	8.6	.59	.52	.32	.21
28				3.3	2.3	1.4	.96	8.6	.61	.40	.33	.30
29				1.8	2.2	1.3	1.0	8.6	.65	.39	.32	.28
30				.66	---	1.3	1.1	8.6	.59	.45	.35	.23
31				.66	---	1.2	---	8.6	---	.43	.38	---
TOTAL				---	605.56	154.7	33.09	154.97	23.90	14.24	11.45	10.11
MEAN				---	20.9	4.99	1.10	5.00	.80	.46	.37	.34
MAX				---	280	35	1.7	8.6	5.1	.97	.51	.54
MIN				---	.43	1.2	.82	.66	.43	.37	.29	.21
AC-FT				---	1200	307	66	307	47	28	23	20

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 (2.1 km) northwest of Gaviota, and 1.6 mi (2.6 km) upstream from mouth.

DRAINAGE AREA.--18.8 mi² (48.7 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 100 ft (30 m), from topographic map.

REMARKS.--Records good. No regulation. Small pumping for domestic use.

AVERAGE DISCHARGE.--14 years, 6.45 ft³/s (0.183 m³/s), 4,670 acre-ft/yr (5.76 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s (113 m³/s) Jan. 24, 1967, gage height, 8.40 ft (2.560 m), from rating curve extended above 1,300 ft³/s (36.8 m³/s) on basis of slope-area measurement of maximum flow; maximum gage height, 9.09 ft (2.771 m) Mar. 4, 1978; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft³/s (8.50 m³/s) and maximum (*), from rating curve extended above 150 ft³/s (4.25 m³/s) on basis of computation of flow over weir at gage height 9.09 ft (2.771 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 16	1345	1,820 51.5	7.43 2.265	Mar. 5	1030	1,090 30.9	6.08 1.853
Feb. 19	0515	*2,560 72.5	8.13 2.478				

Minimum daily discharge, 0.56 ft³/s (0.016 m³/s) Oct. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.66	.72	.93	1.8	17	11	5.8	3.4	2.1	1.5	1.2
2	.59	.67	.69	.93	1.8	56	10	5.4	3.3	2.8	1.5	1.3
3	.58	.80	.70	.93	1.8	49	9.9	5.1	3.0	2.4	1.6	1.4
4	.58	.89	.69	.93	1.8	27	9.9	4.9	2.9	2.2	1.7	1.3
5	.58	.77	.65	.93	1.8	191	11	4.8	2.8	2.1	1.7	1.2
6	.58	.79	.68	.93	1.7	202	9.6	4.7	2.8	2.0	1.6	1.1
7	.56	4.6	.74	1.1	1.6	72	9.0	4.5	2.8	1.9	1.6	1.1
8	.56	1.4	.77	1.4	1.6	51	8.6	4.5	2.8	1.9	1.4	1.1
9	.57	.78	.77	6.0	1.6	41	8.5	4.3	2.9	1.9	1.4	1.1
10	.58	.77	.77	5.4	1.6	41	8.3	5.3	2.7	1.8	1.4	1.1
11	.57	.77	.77	31	1.6	33	7.8	4.2	2.7	1.8	1.4	1.1
12	.58	.77	.77	11	1.6	28	7.4	4.0	2.5	1.7	1.4	1.1
13	.61	.72	.77	8.6	2.0	25	7.3	4.1	2.6	1.8	1.4	1.1
14	.62	.69	.77	13	3.2	23	7.4	4.0	2.6	1.8	1.5	1.1
15	.60	.70	.77	6.5	10	21	7.4	3.8	2.5	1.8	1.5	1.1
16	.59	.68	.77	4.3	498	20	7.0	3.7	2.5	1.7	1.4	1.1
17	.59	.77	.77	3.6	313	19	7.0	3.6	2.7	1.7	1.3	.98
18	.60	.72	.77	3.1	246	18	6.9	3.5	2.6	1.7	1.4	.80
19	.64	.67	.77	2.8	431	17	6.7	3.6	2.7	1.7	1.4	.98
20	1.3	.67	.77	2.5	238	16	6.5	3.8	2.6	1.7	1.4	1.0
21	.67	.74	.92	2.4	173	16	6.3	3.8	2.5	1.7	1.4	1.1
22	.63	.77	.89	2.3	75	15	8.4	3.6	2.3	1.7	1.4	1.0
23	.63	.73	.78	2.1	50	14	7.0	3.3	2.2	1.7	1.3	.98
24	.63	.67	13	2.1	37	14	6.6	3.3	2.2	1.7	1.3	.90
25	.67	.69	2.6	2.1	29	14	6.3	3.3	2.2	1.7	1.6	.95
26	.71	.71	1.2	2.0	25	13	6.3	3.2	2.1	1.7	1.2	.97
27	.60	.75	1.0	1.8	22	13	6.3	3.2	2.0	1.7	1.1	.99
28	.59	.72	.93	3.2	20	12	6.2	3.2	2.0	1.6	1.2	1.0
29	.59	.67	.93	3.2	18	11	7.1	3.1	2.1	1.5	1.1	1.0
30	.61	.66	.93	2.2	---	11	6.1	3.2	2.0	1.5	1.0	.88
31	.63	---	.93	2.0	---	11	---	3.4	---	1.5	1.1	---
TOTAL	19.44	26.40	38.99	131.28	2210.5	1111	233.8	124.2	77.0	56.5	43.2	32.03
MEAN	.63	.88	1.26	4.23	76.2	35.8	7.79	4.01	2.57	1.82	1.39	1.07
MAX	1.3	4.6	13	31	498	202	11	5.8	3.4	2.8	1.7	1.4
MIN	.56	.66	.65	.93	1.6	11	6.1	3.1	2.0	1.5	1.0	.80
AC-FT	39	52	77	260	4380	2200	464	246	153	112	86	64

CAL YR 1979	TOTAL	1847.19	MEAN	5.06	MAX 209	MIN .54	AC-FT	3660
WTR YR 1980	TOTAL	4104.34	MEAN	11.2	MAX 498	MIN .56	AC-FT	8140

JALAMA CREEK BASIN

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 (1.0 km) downstream from Gasper Creek, 1.4 mi (2.3 km) upstream from mouth, and 8.9 mi (14.3 km) southwest of Lompoc.

DRAINAGE AREA.--20.5 mi² (53.1 km²).

PERIOD OF RECORD.--September 1965 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 80 ft (24 m), from topographic map.

REMARKS.--Records good. No regulation or diversion above station. Some pumping upstream from wells for irrigation of about 400 acres (1.62 km²).

AVERAGE DISCHARGE.--15 years, 3.97 ft³/s (0.112 m³/s), 2,880 acre-ft/yr (3.55 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,020 ft³/s (114 m³/s) Mar. 4, 1978, gage height, 11.34 ft (3.456 m), from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of slope-area measurement at gage height 8.05 ft (2.454 m); no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	0515	279 7.90	4.80 1.463	Feb. 20	1730	2,160 61.2	8.03 2.448
Jan. 14	Unknown	429 12.1	5.27 1.606	Mar. 5	1015	233 6.60	4.63 1.411
Feb. 16	1030	*2,480 70.2	8.36 2.548				

Minimum daily discharge, 0.10 ft³/s (0.003 m³/s) Oct. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.24	.32	.38	1.3	10	4.3	1.6	1.5	.85	.32	.32
2	.12	.22	.32	.38	1.3	21	4.2	1.7	1.3	1.2	.33	.32
3	.11	.21	.30	.38	1.2	36	4.0	1.6	1.3	1.2	.36	.36
4	.10	.33	.28	.38	1.2	16	4.0	1.6	1.3	.88	.41	.38
5	.10	.27	.26	.38	1.2	61	4.1	1.7	1.2	.75	.35	.38
6	.11	.26	.26	.38	1.2	64	3.8	1.6	1.2	.71	.34	.37
7	.11	.99	.26	1.6	1.1	29	3.4	1.5	1.2	.66	.31	.38
8	.12	1.1	.23	1.3	1.1	22	3.2	1.5	1.1	.64	.28	.38
9	.13	.42	.24	1.2	1.1	18	3.1	1.5	1.2	.63	.26	.38
10	.15	.32	.26	1.3	1.1	16	2.9	2.0	1.1	.57	.26	.38
11	.17	.32	.30	46	1.2	16	2.6	1.7	1.0	.55	.25	.38
12	.17	.32	.32	25	1.2	13	2.4	1.5	.94	.55	.21	.38
13	.19	.29	.32	20	1.3	11	2.4	1.5	.94	.56	.24	.42
14	.21	.26	.28	50	1.9	10	2.3	1.5	.93	.56	.29	.43
15	.21	.26	.26	20	16	9.4	2.1	1.5	.86	.58	.32	.36
16	.21	.26	.26	8.5	448	8.6	1.9	1.5	.82	.54	.32	.38
17	.21	.38	.26	5.5	387	8.0	1.9	1.6	.89	.47	.35	.32
18	.19	.35	.26	3.8	217	8.0	1.9	1.5	1.0	.47	.38	.32
19	.32	.26	.26	2.7	155	7.6	1.8	1.5	1.0	.50	.38	.32
20	.84	.23	.29	2.2	301	6.8	1.6	1.6	.97	.53	.38	.31
21	.37	.21	.37	2.0	136	6.6	1.6	1.9	.94	.53	.34	.28
22	.27	.21	.38	1.5	52	6.4	2.1	1.7	.90	.52	.35	.29
23	.21	.25	.37	1.4	35	6.0	2.0	1.5	.89	.50	.31	.32
24	.18	.23	5.5	1.0	26	5.9	1.7	1.4	.87	.47	.27	.32
25	.24	.24	2.7	1.1	21	6.3	1.6	1.4	.91	.50	.29	.31
26	.33	.26	.70	1.2	17	5.9	1.6	1.5	.82	.53	.28	.26
27	.22	.29	.48	1.2	15	5.3	1.6	1.4	.84	.52	.26	.26
28	.18	.32	.42	1.5	13	5.0	1.7	1.4	.80	.45	.26	.26
29	.19	.32	.38	2.4	11	4.7	1.6	1.3	.81	.40	.27	.26
30	.18	.32	.38	1.6	---	4.6	1.6	1.3	.80	.34	.26	.26
31	.20	---	.38	1.4	---	4.4	---	1.4	---	.37	.32	---
OTAL	6.51	9.94	17.60	207.68	1867.4	452.5	75.0	47.9	30.33	18.53	9.55	10.09
EAN	.21	.33	.57	6.70	64.4	14.6	2.50	1.55	1.01	.60	.31	.34
AX	.84	1.1	5.5	50	448	64	4.3	2.0	1.5	1.2	.41	.43
IN	.10	.21	.23	.38	1.1	4.4	1.6	1.3	.80	.34	.21	.26
C-FT	13	20	35	412	3700	898	149	95	60	37	19	20

AL YR 1979	TOTAL	1102.68	MEAN 3.02	MAX 127	MIN .10	AC-FT 2190
TR YR 1980	TOTAL	2753.03	MEAN 7.52	MAX 448	MIN .10	AC-FT 5460

11121000 SANTA YNEZ RIVER AT JAMESON LAKE, NEAR MONTECITO, CA

LOCATION.--Lat 34°29'32", long 119°30'25", in SW¼NE¼NW¼ sec.28, T.5 N., R.25 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Juncal Dam, 6.5 mi (10.5 km) north of Carpinteria, and 8 mi (13 km) northeast of Montecito.

DRAINAGE AREA.--13.9 mi² (36.0 km²), 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 (616.18 m) Water and Power Resources Service datum, or 2,000 ft (609.6 m) 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 the city of Montecito, spill and release to river, and 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 (68.220 m), 5,725 acre-ft (7.06 hm³). Dead storage, 32 acre-ft (39,500 m³), below lowest outlet at gage height 139.0 ft (42.37 m) 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 (3 km) downstream from Juncal Dam, is diverted at elevation 2,250 ft (685.8 m) through a tunnel to Jameson Lake and is included in these records.

COOPERATION.--Reservoir-operation records and related data were furnished by Montecito County Water District.

AVERAGE DISCHARGE.--49 years (water years 1932-80), 7.01 ft³/s (0.199 m³/s), 5,080 acre-ft/yr (6.26 hm³/yr).

MONTHLY NET DISCHARGE, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Gage height (feet) ^a	Contents (acre-feet)	Change in contents (acre-feet)	Draft (acre-feet)	Spill and release (acre-feet)	Evapo-ration and seepage (acre-feet)	Total inflow (acre-feet)	Rain on reser-voir (acre-feet)	Net inflow (acre-feet)
Sept. 30.....	217.23	^b 4,900	--	--	--	--	--	--	--
Oct. 31.....	215.82	4,730	-170	160	0	25	15	15	0
Nov. 30.....	214.67	4,590	-140	147	0	13	20	9	11
Dec. 31.....	213.71	4,480	-110	154	0	13	57	22	35
CAL YR 1979.....	--	--	^b -970	1,916	4,098	531	5,545	338	5,207
Jan. 31.....	215.43	4,680	+200	119	0	4	323	87	236
Feb. 29.....	224.07	5,760	+1,080	51	5,290	10	6,431	208	6,223
Mar. 31.....	224.01	5,750	-10	49	2,970	24	3,033	57	2,976
Apr. 30.....	223.97	5,740	-10	173	860	39	1,062	11	1,051
May 31.....	223.81	5,720	-20	190	225	42	437	2	435
June 30.....	223.21	5,650	-70	210	0	69	209	0	209
July 31.....	221.70	5,450	-200	216	0	84	100	0	100
Aug. 31.....	219.71	5,200	-250	216	0	64	30	0	30
Sept. 30.....	217.81	4,970	-230	207	0	38	15	0	15
WTR YR 1980.....	--	--	+70	1,892	9,345	425	11,732	411	11,321

^a Gage height at 0800.

^b Computed on basis of revised capacity table put into use Oct. 1, 1979.

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 larger quantities, which are not susceptible to precise measurement. When this occurs, evaporation and seepage are 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 SW¼NW¼SW¼ sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on upstream face of Gibraltar Dam, 7 mi (11 km) north of Santa Barbara.

DRAINAGE AREA.--216 mi² (559 km²).

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."

AGE.--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 measured by river gaging station below dam (station 11123000).

REMARKS.--Records of total inflow represent all water reaching Gibraltar Reservoir, including precipitation on reservoir. Total inflow computed on basis of records of storage diversion (draft) to city of Santa Barbara, spill and release to river, evaporation, and seepage. Records of net inflow exclude precipitation on reservoir surface. Monthly evaporation from reservoir surface computed on basis of evaporation from Colorado land pan. Area and capacity tables are based on survey made in May 1979, revised. Reservoir capacity at spillway level, elevation, 1,399.82 ft (426.665 m), 8,940 acre-ft (11.0 hm³). Silt level of reservoir at elevation 1,346 ft (410.3 m). Lowest outlet at elevation 1,333.86 ft (406.561 m). 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 1979 TO SEPTEMBER 1980

Date	Elevation (feet) ^a	Contents (acre- feet)	Change in contents (acre- feet)	Draft (acre- feet)	Spill and release (acre- feet)	Evapo- ration and seepage (acre- feet)	Total inflow (acre- feet)	Rain on reservoir (acre- feet)	Net inflow (acre- feet)
Sept. 30.....	1,389.74	^b 6,450	--	--	--	--	--	--	--
Oct. 31.....	1,387.74	6,010	-440	369	0	81	10	10	0
Nov. 30.....	1,387.66	5,990	-20	0	0	37	17	17	0
Dec. 31.....	1,388.00	6,070	+80	0	0	34	114	36	78
CAL YR 1979.....	--	--	^b -1,800	4,895	34,565	1,023	38,703	581	38,122
Jan. 31.....	1,398.55	8,620	+2,550	200	0	22	2,772	157	2,615
Feb. 29.....	1,399.96	8,980	+360	265	56,140	35	56,800	406	56,394
Mar. 31.....	1,400.10	9,010	+30	483	23,300	58	23,871	100	23,771
Apr. 30.....	1,401.40	9,350	+340	987	5,100	86	6,513	26	6,487
May 31.....	1,401.18	9,300	-50	787	1,430	93	2,260	6	2,254
June 30.....	1,399.92	8,960	-340	732	529	128	1,049	0	1,049
July 31.....	1,396.72	8,160	-800	642	347	154	343	0	343
Aug. 31.....	1,393.61	7,380	-780	635	0	145	0	0	0
Sept. 30.....	1,390.90	6,720	-660	561	0	99	0	0	0
WTR YR 1980.....	--	--	+270	5,661	86,846	972	93,749	758	92,991

^a Elevation at 0800.

^b Computed on basis of revised capacity table put into use Oct. 1, 1979.

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 susceptible 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 NW¼SW¼SW¼ sec.11, T.5 N., R.27 W., Santa Barbara County, Hydrologic Unit 18060010, on left bank 700 ft (213 m) downstream from Gibraltar Dam, and 7 mi (11 km) north of Santa Barbara.

DRAINAGE AREA.--216 mi² (559 km²).

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 (374.0 m) 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 good. Flow regulated by Jameson Lake (station 11121000) and Gibraltar Reservoir (station 11122000). City of Santa Barbara diverted 5,660 acre-ft (6.98 hm³) during current year from Gibraltar Reservoir; Montecito County Water District diverted 1,890 acre-ft (2.33 hm³) during current year from Jameson Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,200 ft³/s (1,530 m³/s) Jan. 25, 1969, gage height, 25.8 ft (7.86 m), from rating curve extended above 2,100 ft³/s (59.5 m³/s) on basis of computations of flow from gate openings and flow over dam at gage heights 17.5 ft (5.33 m) and 25.8 ft (7.86 m); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft³/s (385 m³/s), Feb. 16, recorded gage height, 16.63 ft (5.069 m), gage height from floodmark, 18.5 ft (5.64 m); no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	262	141	60	9.0	13		
2					0	247	139	54	14	13		
3					0	650	118	49	12	12		
4					0	505	82	50	9.7	12		
5					0	557	81	51	8.3	12		
6					0	1470	90	48	7.4	12		
7					0	1070	97	43	6.9	12		
8					0	746	101	42	7.3	12		
9					0	639	103	41	4.5	12		
10					0	517	105	42	3.5	12		
11					0	486	105	37	3.9	8.5		
12					0	412	98	26	3.4	6.8		
13					0	372	95	24	7.4	7.0		
14					0	338	89	23	7.4	7.0		
15					41	310	26	22	6.5	7.0		
16					4710	285	55	21	6.5	7.0		
17					3170	239	78	17	6.5	7.0		
18					3270	259	85	14	3.2	2.8		
19					5300	222	78	8.8	.44	0		
20					3750	222	77	2.9	8.0	0		
21					3000	213	77	.53	14	0		
22					1500	210	72	2.1	13	0		
23					1000	182	68	3.9	13	0		
24					729	180	83	4.3	13	0		
25					472	183	82	4.5	13	0		
26					401	184	73	5.0	13	0		
27					354	182	66	4.6	13	0		
28					319	155	57	4.8	13	0		
29					286	156	78	5.0	13	0		
30					---	151	70	5.1	13	0		
31		---			---	145	---	4.4	---	0		---
TOTAL	0	0	0	0	28302	11749	2569	719.93	266.84	175.1	0	0
MEAN	0	0	0	0	976	379	85.6	23.2	8.89	5.65	0	0
MAX	0	0	0	0	5300	1470	141	60	14	13	0	0
MIN	0	0	0	0	0	145	26	.53	.44	0	0	0
AC-FT	0	0	0	0	56140	23300	5100	1430	529	347	0	0
CAL YR 1979	TOTAL	17419.80	MEAN	47.7	MAX	2170	MIN	0	AC-FT	34550		
WTR YR 1980	TOTAL	43781.87	MEAN	120	MAX	5300	MIN	0	AC-FT	86840		

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 (0.5 km) downstream from Los Laureles Canyon Creek, 10 mi (16 km) downstream from Gibraltar Reservoir, and 13.3 mi (21.4 km) east of Santa Ynez.

DRAINAGE AREA.--277 mi² (717 km²).

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 (240.12 m) National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Jameson Lake and Gibraltar Reservoir (stations 11121000, 11122000). Water diverted out of basin from these reservoirs to cities of Montecito and Santa Barbara for municipal supply. Low flow affected by intermittent pumping for irrigation from infiltration gallery in riverbed at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,500 ft³/s (1,910 m³/s) Jan. 25, 1969, gage height, 18.88 ft (5.755 m), from rating curve extended above 11,600 ft³/s (329 m³/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, 17,800 ft³/s (504 m³/s) Feb. 16, gage height, 11.84 ft (3.609 m); no flow Oct. 1 to Dec. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	.20	10	432	149	93	26	13	.54	.48
2			0	.20	10	472	145	85	26	13	.21	.25
3			0	.20	10	871	139	77	24	14	.50	.15
4			0	.20	10	731	106	74	22	13	.26	.16
5			0	.16	10	711	100	73	20	12	.39	.15
6			0	.16	10	1640	101	71	18	12	.57	.12
7			0	.16	9.8	1350	103	66	17	11	.69	.12
8			0	.16	10	951	127	61	16	10	.70	.13
9			0	1.0	9.8	829	155	58	15	11	.70	.15
10			0	7.9	10	681	144	59	12	12	.70	.19
11			0	26	11	617	141	56	9.5	9.5	.49	.16
12			0	24	11	547	135	55	9.5	9.5	.58	.13
13			0	17	13	486	131	54	9.5	7.0	.61	.13
14			0	38	17	475	124	53	8.2	6.0	.63	.13
15			0	39	47	431	88	50	7.0	6.0	.35	.12
16			0	24	4890	400	62	48	6.5	5.4	.40	.11
17			0	18	4700	360	88	45	4.6	5.3	.55	.10
18			0	16	4330	288	98	43	4.1	4.6	.58	.09
19			0	13	6330	293	93	35	4.1	4.7	.58	.08
20			0	11	4500	267	90	31	4.6	4.1	.35	.07
21			0	9.6	3800	246	91	26	4.6	2.5	.35	.06
22			0	8.9	2070	238	91	20	8.2	1.2	.49	.05
23			0	8.2	1540	214	85	20	12	1.1	.53	.04
24			.19	7.7	1200	202	88	21	14	.98	.54	.03
25			.20	7.5	994	203	97	23	14	.88	.55	.04
26			.10	7.3	657	203	87	24	15	.78	.55	.07
27			.10	7.3	605	198	83	23	14	.68	.55	.09
28			.16	8.1	569	185	82	24	13	.60	.53	.10
29			.20	15	492	163	101	26	13	.54	.53	.11
30			.20	14	---	162	102	26	14	.62	.50	.12
31		---	.20	12	---	153	---	27	---	.34	.49	---
TOTAL	0	0	1.35	341.94	36875.6	14999	3226	1447	385.4	193.32	15.99	3.73
MEAN	0	0	.044	11.0	1272	484	108	46.7	12.8	6.24	.52	.12
MAX	0	0	.20	39	6330	1640	155	93	26	14	.70	.48
MIN	0	0	0	.16	9.8	153	62	20	4.1	.34	.21	.03
AC-FT	0	0	2.7	678	73140	29750	6400	2870	764	383	32	7.4
CAL YR 1979	TOTAL	22004.47	MEAN	60.3	MAX	1990	MIN	0	AC-FT	43650		
WTR YR 1980	TOTAL	57489.33	MEAN	157	MAX	6330	MIN	0	AC-FT	114000		

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 (1.0 km) downstream from Pine Canyon, and 9.9 mi (15.9 km) east of Santa Ynez.

DRAINAGE AREA.--74.0 mi² (191.7 km²).

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 (238.774 m) 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 (0.991 m) higher.

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

AVERAGE DISCHARGE.--39 years, 17.5 ft³/s (0.496 m³/s), 12,680 acre-ft/yr (15.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s (200 m³/s) Feb. 24, 1969, gage height, 14.45 ft (4.404 m), from floodmark, present datum, from rating curve extended above 2,500 ft³/s (70.8 m³/s) on basis of slope-area measurement at gage height 14.16 ft (4.316 m); no flow at times since 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 400 ft³/s (11.3 m³/s) on basis of slope-area measurement at 12.37 ft (3.770 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 12	0915	322 9.12	8.87 2.704	Mar. 3	1145	332 9.40	8.96 2.731
Feb. 16	1715	*2,620 74.2	11.15 3.399	Mar. 5	1545	597 16.9	9.41 2.868
Feb. 19	1000	1,750 49.6	10.57 3.222				

Minimum daily discharge, no flow Oct. 1 to Dec. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	2.8	8.9	90	48	24	15	5.2	.50	.21
2			0	2.7	8.6	108	47	23	14	5.7	.50	.21
3			0	2.6	8.2	262	45	22	14	6.3	.49	.21
4			0	2.6	7.6	157	44	22	13	5.7	.50	.15
5			0	2.5	7.5	255	45	21	13	5.0	.50	.14
6			0	2.4	7.2	350	44	20	13	4.5	.50	.14
7			0	2.6	6.7	245	40	20	12	4.3	.50	.14
8			0	2.6	7.0	197	38	20	12	4.0	.52	.11
9			0	6.5	6.8	169	37	20	11	3.9	.55	.09
10			0	19	6.8	152	35	21	11	3.7	.58	.09
11			.02	108	6.8	138	34	20	11	3.4	.59	.01
12			.08	108	6.8	127	33	19	10	3.3	.56	.01
13			.11	50	7.9	116	32	19	10	3.4	.55	.01
14			.16	163	10	109	31	20	10	3.5	.50	.01
15			.23	77	50	103	30	19	9.5	3.5	.51	.01
16			.31	34	751	97	29	18	9.0	3.1	.52	.01
17			.35	25	531	92	28	17	8.6	2.9	.53	.01
18			.47	21	588	89	28	16	8.5	2.8	.53	.01
19			.47	16	947	84	27	16	8.3	2.6	.51	.01
20			.57	14	537	79	26	15	8.0	2.5	.50	.01
21			.64	13	500	76	26	16	7.7	2.3	.50	.01
22			.80	12	350	73	29	17	7.3	2.1	.40	.01
23			.97	11	270	69	28	17	6.7	1.9	.39	.01
24			2.2	10	220	66	27	16	6.4	1.7	.39	.01
25			4.8	9.8	190	66	25	16	6.4	1.4	.35	.01
26			3.9	9.3	150	64	24	15	6.2	1.1	.29	.01
27			3.2	8.6	125	59	24	15	5.7	.82	.29	.01
28			3.0	9.3	110	56	24	15	5.2	.67	.27	.01
29			2.8	14	99	54	28	15	5.2	.59	.21	.01
30			2.6	11	---	52	25	15	5.1	.55	.21	.01
31		---	2.7	9.5	---	49	---	15	---	.61	.21	---
TOTAL	0	0	30.38	779.8	5524.8	3703	981	564	282.8	93.04	13.95	2.31
MEAN	0	0	.98	25.2	191	119	32.7	18.2	9.43	3.00	.45	.07
MAX	0	0	4.8	163	947	350	48	24	15	6.3	.59	.21
MIN	0	0	0	2.4	6.7	49	24	15	5.1	.55	.21	.01
AC-FT	0	0	60	1550	10960	7340	1950	1120	561	185	28	4.1
CAL YR 1979	TOTAL	6339.55	MEAN 17.4	MAX 393	MIN 0	AC-FT 12570						
WTR YR 1980	TOTAL	11975.10	MEAN 32.7	MAX 947	MIN 0	AC-FT 23750						

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 (9.8 km) east of Santa Ynez.

DRAINAGE AREA.--417 mi² (1,080 km²).

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, Water and Power Resources Service 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 (182.9 m), 3,114 acre-ft (3.84 hm³), included in contents. Capacity below sill of inlet to Tecolote tunnel, elevation, 660 ft (201.2 m), 32,514 acre-ft (40.1 hm³), below spillway level, elevation, 720 ft (219.5 m), 125,292 acre-ft (154 hm³); below top of 4 radial gates, elevation, 750 ft (228.6 m), 204,874 acre-ft (253 hm³). 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 Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 221,100 acre-ft (273 hm³) Feb. 24, 1969, elevation, 755.11 ft (230.158 m); minimum since initial filling in April 1958, 105,300 acre-ft (130 hm³) Dec. 24, 25, 1977, elevation, 710.56 ft (216.579 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 206,600 acre-ft (255 hm³) Feb. 20, elevation, 750.57 ft (228.774 m); minimum, 176,800 acre-ft (218 hm³) Dec. 23, elevation, 740.44 ft (225.686 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Total diversions (acre-feet)
Sept. 30.....	742.97	183,900	--	--
Oct. 31.....	742.04	181,300	-2,600	1,270
Nov. 30.....	741.23	179,000	-2,300	1,500
Dec. 31.....	740.54	177,100	-1,900	1,780
CAL YR 1979.....	--	--	-11,200	24,718
Jan. 31.....	741.56	179,900	+2,800	794
Feb. 29.....	750.26	205,700	+25,800	524
Mar. 31.....	749.96	204,800	-900	1,270
Apr. 30.....	749.98	204,800	0	2,380
May 31.....	749.81	204,300	-500	2,320
June 30.....	748.70	200,900	-3,400	3,510
July 31.....	747.19	196,300	-4,600	3,580
Aug. 31.....	745.44	191,100	-5,200	3,390
Sept. 30.....	744.16	187,400	-3,700	2,350
WTR YR 1980.....	--	--	+3,500	24,668

11128250 ALAMO PINTADO CREEK NEAR SOLVANG, CA

LOCATION.--Lat 34°37'06", long 120°07'11", in SE¼NW¼NW¼ 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 (2.4 km) northeast of Solvang.

DRAINAGE AREA.--29.4 mi² (76.1 km²).

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 (164.741 m) Santa Barbara County datum.

REMARKS.--Records poor. No regulation above station. Pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--10 years, 0.51 ft³/s (0.014 m³/s), 369 acre-ft/yr (455,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 724 ft³/s (20.5 m³/s) Feb. 9, 1978, gage height, 6.80 ft (2.073 m), from floodmark, from rating curve extended above 3.0 ft³/s (0.085 m³/s) on basis of slope-area measurements at gage heights 6.00 ft (1.829 m) and 6.80 ft (2.073 m); no flow most of each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 10.32 ft (3.146 m), from information by Santa Barbara County Flood Control District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10 ft³/s (0.28 m³/s) and maximum (*), from rating curve extended above 140 ft³/s (3.96 m³/s) on basis of slope-area measurements at gage heights 6.00 ft (1.829 m) and 6.80 ft (2.073 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 14	1915	11 0.31	3.03 0.924	Feb. 21	1000	139 3.94	3.91 1.192
Feb. 16	1745	213 6.03	4.37 1.332	Mar. 6	0800	183 5.18	4.20 1.280
Feb. 19	0800	*397 11.2	5.34 1.628				

Minimum daily discharge, no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	0	0					
2				0	0	.43	0					
3				0	0	1.2	0					
4				0	0	0	0					
5				0	0	9.1	0					
6				0	0	65	0					
7				0	0	16	0					
8				0	0	6.6	0					
9				0	0	2.2	0					
10				0	0	.32	0					
11				0	0	.27	0					
12				0	0	.22	0					
13				0	0	.26	0					
14				1.2	0	.10	0					
15				.14	0	0	0					
16				0	32	0	0					
17				0	21	0	0					
18				0	19	0	0					
19				0	139	0	0					
20				0	88	0	0					
21				0	70	0	0					
22				0	20	0	0					
23				0	7.1	0	0					
24				0	2.3	0	0					
25				0	.93	0	0					
26				0	.58	0	0					
27				0	.29	0	0					
28				0	0	0	0					
29				0	0	0	.01					
30				0	---	0	0					
31		---		0	---	0	---		---			---
TOTAL	0	0	0	1.34	400.20	101.70	.01	0	0	0	0	0
MEAN	0	0	0	.043	13.8	3.28	.0003	0	0	0	0	0
MAX	0	0	0	1.2	139	65	.01	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	2.7	794	202	.02	0	0	0	0	0
CAL YR 1979	TOTAL	44.62	MEAN	.12	MAX	18	MIN	0	AC-FT	89		
WTR YR 1980	TOTAL	503.25	MEAN	1.38	MAX	139	MIN	0	AC-FT	998		

SANTA YNEZ RIVER BASIN

11128300 ALISAL RESERVOIR NEAR SOLVANG, CA

LOCATION.--Lat 34°32'56", long 120°07'45", in SE¼NE¼NW¼ sec.4, T.5 N., R.31 W., Santa Barbara County, Hydrologic Unit 18060010, in cove, on right bank 0.4 mi (0.6 km) upstream from reservoir spillway, and 3 mi (5 km) south of Solvang.

DRAINAGE AREA.--7.83 mi² (20.28 km²).

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

GAGE.--Water-stage recorder. 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 (2.79 hm³) between bottom of outlet gate at elevation 555.70 ft (169.377 m) and crest of spillway at elevation 599.88 ft (182.843 m). Dead storage, 110 acre-ft (136,000 m³). Inflow must total 150 acre-ft (185,000 m³) 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 (3.42 hm³) Mar. 4, 1978, elevation, 604.31 ft (184.194 m); minimum, 748 acre-ft (922,000 m³) Nov. 8-10, 1972, elevation, 577.15 ft (175.915 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 2,700 acre-ft (3.33 hm³) Feb. 16, elevation, 603.53 ft (183.956 m); minimum, 2,190 acre-ft (2.70 hm³) Dec. 20, elevation, 597.86 ft (182.228 m).

MONTHEND ELEVATION NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.....	598.29	2,230	--
Oct. 31.....	598.06	2,210	-20
Nov. 30.....	597.99	2,200	-10
Dec. 31.....	598.27	2,220	+20
CAL YR 1979.....	--	--	-160
Jan. 31.....	599.95	2,380	+160
Feb. 29.....	600.13	2,390	+10
Mar. 31.....	600.02	2,380	-10
Apr. 30.....	599.97	2,380	0
May 31.....	599.92	2,370	-10
June 30.....	599.77	2,360	-10
July 31.....	599.40	2,330	-30
Aug. 31.....	598.88	2,280	-50
Sept. 30.....	598.48	2,240	-40
WTR YR 1980.....	--	--	+10

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 (8 m) downstream from Alisal Creek, 0.8 mi (1.3 km) southwest of Solvang, and 10 mi (16 km) downstream from Lake Cachuma.

DRAINAGE AREA.--579 mi² (1,500 km²).

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 (110.469 m) 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 (230 m) upstream at different datum. Oct. 1, 1953, to Sept. 30, 1968, water-stage recorder at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records fair except those for period of no gage-height, May 22 to Sept. 30, which are poor. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since November 1952 Lake Cachuma (stations 11121000, 11122000, 11125500). Water diverted out of basin from Jameson Lake, Gibraltar Reservoir, and Lake Cachuma to cities of Montecito, Santa Barbara, and Goleta for municipal supply. Water for irrigation pumped from wells along banks of river in valley upstream.

EXTREMES FOR PERIOD OF RECORD (1928-36 AND SINCE 1946).--Maximum discharge, 82,000 ft³/s (2,320 m³/s), estimated, Jan. 25, 1969, gage height, 17.1 ft (5.21 m), from floodmark; no flow for several months in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,600 ft³/s (612 m³/s) Feb. 19, gage height, 7.16 ft (2.182 m); no flow Sept. 1-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	2.1	2.3	3.7	4.6	236	270	116	5.2	1.2	.19	
2	5.0	2.1	2.3	3.3	4.4	1020	268	98	5.0	1.2	.16	
3	1.3	1.8	2.4	3.0	4.6	2220	259	54	4.9	1.3	.14	
4	.86	1.9	2.4	2.8	4.4	1630	250	45	4.7	1.3	.12	
5	.21	2.1	2.2	3.3	4.2	2620	240	43	4.6	1.4	.10	
6	.03	2.4	2.2	3.9	4.3	4710	230	41	4.4	1.5	.12	
7	.02	3.0	1.9	4.3	4.0	4260	83	64	4.3	1.5	.14	
8	.02	3.5	1.8	4.5	3.8	2020	124	53	4.3	1.6	.16	
9	.02	3.0	1.6	6.5	3.5	1520	132	38	4.2	1.7	.19	
10	.01	2.9	1.8	7.3	3.3	1300	125	23	4.2	1.8	.23	
11	.03	2.6	1.6	15	3.2	1010	128	18	4.2	1.7	.27	
12	.04	2.7	1.6	15	3.2	868	125	14	4.2	1.6	.32	
13	.04	2.6	1.6	13	3.9	810	104	15	4.0	1.5	.37	
14	.04	2.5	1.2	19	4.1	685	55	15	3.7	1.4	.44	
15	.04	2.4	1.0	22	19	373	51	13	3.4	1.3	.55	
16	.02	2.5	1.1	12	2500	495	89	14	3.0	1.2	.54	
17	.03	2.2	1.0	9.5	2460	511	47	13	2.7	1.1	.53	
18	.03	2.1	.99	8.0	9120	507	45	12	2.4	1.1	.52	
19	.04	1.9	1.2	7.2	13500	473	46	11	2.2	.98	.51	
20	.05	1.9	1.1	6.3	10900	445	44	9.8	1.9	.93	.50	
21	.07	1.9	1.4	6.0	8350	438	41	9.0	1.7	.92	.49	
22	.14	1.9	1.4	5.6	4580	411	68	8.4	1.6	.81	.49	
23	.25	1.8	1.4	4.9	3990	393	77	8.1	1.4	.74	.48	
24	.36	1.9	4.9	5.1	2690	380	61	7.8	1.2	.64	.47	
25	.43	2.0	5.8	4.7	1910	378	86	7.5	1.1	.55	.46	
26	.55	1.7	3.7	4.5	751	373	104	7.0	.96	.48	.45	
27	1.6	1.8	2.8	4.7	1020	342	91	6.8	1.0	.41	.31	
28	2.8	2.4	3.1	5.0	347	327	55	6.4	1.0	.34	.23	
29	2.3	2.5	3.8	5.8	259	316	98	6.2	1.1	.30	.16	
30	2.2	2.6	3.6	4.6	---	305	112	6.0	1.1	.25	.12	
31	2.2	---	3.4	4.6	---	291	---	5.6	---	.22	.10	---
TOTAL	49.73	68.7	68.59	225.1	62451.5	31667	3508	788.6	89.66	32.97	9.86	0
MEAN	1.60	2.29	2.21	7.26	2154	1022	117	25.4	2.99	1.06	.32	0
MAX	29	3.5	5.8	22	13500	4710	270	116	5.2	1.8	.55	0
MIN	.01	1.7	.99	2.8	3.2	236	41	5.6	.96	.22	.10	0
AC-FT	99	136	136	446	123900	62810	6960	1560	178	65	20	0
CAL YR 1979 TOTAL	27258.81			MEAN 74.7	MAX 4080	MIN 0	AC-FT 54070					
WTR YR 1980 TOTAL	98959.71			MEAN 270	MAX 13500	MIN 0	AC-FT 196300					

SANTA YNEZ RIVER BASIN

11129800 ZACA CREEK NEAR BUELLTON, CA

LOCATION.--Lat 34°38'55", long 120°11'00", in San Carlos de Jonata Grant, Santa Barbara County, Hydrologic Unit 18060010, on upstream end of center pier of bridge on frontage road, 0.9 mi (1.4 km) upstream from Dry Creek, 2.4 mi (3.9 km) north of Buellton, and 4.0 mi (6.4 km) upstream from mouth.

DRAINAGE AREA.--32.8 mi² (85.0 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 471.54 ft (143.725 m) National Geodetic Vertical Datum of 1929.

REMARKS.-- Records fair. Some pumping from wells along stream for irrigation above station.

AVERAGE DISCHARGE.--17 years, 1.06 ft³/s (0.030 m³/s), 768 acre-ft/yr (947,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,390 ft³/s (39.4 m³/s) Feb. 24, 1969, gage height, 9.20 ft (2.804 m); maximum gage height, 9.66 ft (2.944 m) Mar. 4, 1978; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 19	0645	*96	2.72	3.83	1.167
Mar. 6	0745	62	1.76	3.46	1.055

Minimum daily discharge, no flow several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	1.3	1.4	.90	.04			
2				0	0	2.0	1.6	.77	.02			
3				0	0	3.5	1.4	.37	.01			
4				0	0	1.1	1.5	.30	0			
5				0	0	7.3	1.8	.25	0			
6				0	0	40	1.7	.20	0			
7				0	0	21	1.4	.16	0			
8				0	0	13	1.1	.20	0			
9				0	0	8.6	.89	.24	0			
10				0	0	6.8	.71	.51	0			
11				.39	0	6.2	.60	.24	0			
12				.25	0	4.0	.42	.14	0			
13				.38	0	3.5	.67	.10	0			
14				.30	0	3.3	.66	.08	0			
15				.02	.25	2.8	.55	.06	0			
16				.01	7.0	2.3	.38	.05	0			
17				0	5.2	2.0	.25	.05	0			
18				0	15	2.0	.25	.05	0			
19				0	60	1.7	.23	.04	0			
20				0	56	1.6	.21	.04	0			
21				0	51	1.7	.23	.05	0			
22				0	28	1.6	1.1	.06	0			
23				0	16	1.5	.91	.04	0			
24				0	8.5	1.3	.77	.03	0			
25				0	5.2	1.9	.60	.03	0			
26				0	3.5	1.8	.60	.03	0			
27				0	3.2	1.4	.67	.03	0			
28				.05	2.4	1.2	.82	.03	0			
29				.11	1.8	1.1	2.4	.02	0			
30				.02	---	1.1	1.3	.02	0			
31		---		0	---	1.1	---	.03	---			---
TOTAL	0	0	0	1.53	263.05	149.7	27.12	5.12	.07	0	0	0
MEAN	0	0	0	.049	9.07	4.83	.90	.17	.002	0	0	0
MAX	0	0	0	.39	60	40	2.4	.90	.04	0	0	0
MIN	0	0	0	0	0	1.1	.21	.02	0	0	0	0
AC-FT	0	0	0	3.0	522	297	54	10	.1	0	0	0

CAL YR 1979 TOTAL 92.97 MEAN .25 MAX 18 MIN 0 AC-FT 184
WTR YR 1980 TOTAL 446.59 MEAN 1.22 MAX 60 MIN 0 AC-FT 886

11132500 SALSIPUEDES CREEK NEAR LOMPOC, CA

LOCATION.--Lat 34°35'19", long 120°24'27", in W½ 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 (0.6 km) downstream from El Jaro Creek, and 4.4 mi (7.1 km) southeast of Lompoc.

DRAINAGE AREA.--47.1 mi² (122.0 km²).

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 (67 m), from topographic map.

REMARKS.--Records good, except those below 5 ft³/s (0.14 m³/s), which are fair. No regulation above station. Small diversions for irrigation above station.

AVERAGE DISCHARGE.--39 years, 9.83 ft³/s (0.278 m³/s), 7,120 acre-ft/yr (8.78 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,400 ft³/s (323 m³/s) Mar. 15, 1952, gage height, 20.8 ft (6.34 m); no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s (19.8 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 16	1045	*4,890 138	8.77 2.673	Mar. 6	0415	1,660 47.0	5.44 1.658
Feb. 20	1745	3,740 106	7.76 2.365				

Minimum daily discharge, 1.3 ft³/s (0.037 m³/s) Oct. 9, 10, Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.7	1.8	2.3	3.4	35	18	7.7	6.4	5.2	1.8	1.8
2	1.4	1.8	1.7	2.2	3.4	74	17	7.5	5.7	5.4	1.8	1.9
3	1.5	2.0	1.8	2.2	3.4	94	16	7.1	5.6	6.0	1.8	2.0
4	1.5	2.0	1.9	2.2	3.4	43	16	6.6	5.6	4.7	1.9	2.0
5	1.6	1.9	1.8	2.2	3.4	225	18	6.6	5.5	4.0	1.9	1.8
6	1.4	1.7	1.9	2.1	3.4	476	17	6.5	5.5	3.4	1.8	1.9
7	1.4	3.2	1.9	2.5	3.0	101	15	6.6	5.6	3.2	1.9	1.9
8	1.4	4.6	1.9	3.1	3.0	78	14	6.6	5.5	2.9	1.9	1.8
9	1.3	1.9	1.9	4.8	3.0	70	13	6.5	5.6	2.8	1.9	1.7
10	1.3	1.6	2.2	4.7	3.0	70	13	7.7	5.1	2.7	1.9	1.9
11	1.5	1.6	2.2	64	3.1	62	12	6.5	5.1	2.7	1.7	1.9
12	1.6	1.5	1.9	36	3.0	51	12	6.1	5.0	2.7	1.7	2.0
13	1.6	1.5	1.9	27	3.4	49	11	6.5	5.0	2.7	1.9	2.0
14	1.7	1.5	1.9	68	5.3	49	12	6.9	5.3	2.7	2.3	2.0
15	1.9	1.5	2.2	26	33	44	11	6.4	4.7	2.5	2.3	1.9
16	1.8	1.5	2.2	11	1180	40	11	6.6	5.1	2.4	2.3	2.1
17	1.8	1.7	2.2	8.7	734	39	9.6	6.9	6.1	2.4	2.3	1.8
18	1.7	1.7	2.2	7.6	452	38	9.5	7.2	6.4	2.4	2.3	1.7
19	1.9	1.7	2.2	5.9	404	36	9.5	7.5	6.9	2.5	2.3	1.7
20	3.1	1.7	2.3	4.9	594	32	9.2	7.1	6.2	2.4	2.3	1.8
21	2.7	1.7	2.4	4.5	197	31	8.9	7.4	6.1	2.3	1.9	1.8
22	1.9	1.7	2.3	4.2	97	30	12	7.2	6.7	2.3	2.0	1.7
23	1.8	1.7	2.5	3.9	71	28	11	7.0	6.4	2.1	2.1	1.6
24	1.8	1.7	27	3.8	58	26	10	6.9	6.0	2.1	1.9	1.6
25	1.9	1.9	10	3.8	51	28	9.9	6.4	5.4	2.0	1.8	1.6
26	2.2	2.0	3.5	3.6	47	25	9.8	6.1	5.0	2.0	2.0	1.7
27	2.1	1.9	2.9	3.4	50	23	9.5	6.4	4.6	1.9	2.0	1.7
28	1.8	1.9	2.8	3.4	40	21	10	6.3	5.2	1.8	1.9	1.8
29	1.6	1.9	2.8	4.9	37	20	10	6.1	5.5	1.8	1.6	1.6
30	1.6	1.9	2.5	3.7	---	20	9.1	6.3	5.4	1.8	1.5	1.3
31	1.6	---	2.2	3.4	---	19	---	---	---	1.9	1.7	---
TOTAL	54.1	56.6	100.9	330.0	4092.2	1977	364.0	209.6	168.2	87.7	60.4	54.0
MEAN	1.75	1.89	3.25	10.6	141	63.8	12.1	6.76	5.61	2.83	1.95	1.80
MAX	3.1	4.6	27	68	1180	476	18	7.7	6.9	6.0	2.3	2.1
MIN	1.3	1.5	1.7	2.1	3.0	19	8.9	6.1	4.6	1.8	1.5	1.3
AC-FT	107	112	200	655	8120	3920	722	416	334	174	120	107
CAL YR 1979	TOTAL	4148.47	MEAN	11.4	MAX	563	MIN	.81	AC-FT	8230		
WTR YR 1980	TOTAL	7554.70	MEAN	20.6	MAX	1180	MIN	1.3	AC-FT	14980		

SANTA YNEZ RIVER BASIN

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.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT 02...	1200	1.4	1360	7.7	16.5	--	--	--	--	--	--
NOV 07...	0930	1.7	1330	7.9	12.0	--	--	--	--	--	--
DEC 03...	1400	1.8	1340	8.4	10.5	--	--	--	--	--	--
JAN 03...	1600	2.4	1400	8.3	11.0	570	200	140	54	120	43
FEB 01...	1000	3.3	1380	8.2	10.5	--	--	--	--	--	--
MAR 03...	0950	119	750	8.3	13.0	--	--	--	--	--	--
APR 02...	0750	17	1345	8.4	8.5	--	--	--	--	--	--
MAY 02...	1140	7.9	1300	8.5	15.0	--	--	--	--	--	--
JUN 02...	0945	5.6	1170	8.4	15.5	--	--	--	--	--	--
JUL 08...	1145	3.1	1220	8.4	20.0	--	--	--	--	--	--
AUG 04...	0945	2.0	1280	8.1	18.5	--	--	--	--	--	--
28...	1045	1.9	1260	8.1	18.0	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (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 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- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT 02...	--	--	--	--	--	--	--	930	--	--	--
NOV 07...	--	--	--	--	--	--	--	932	--	--	--
DEC 03...	--	--	--	--	--	--	--	985	--	--	--
JAN 03...	2.2	2.7	370	310	120	.6	29	--	1000	.45	.17
FEB 01...	--	--	--	--	--	--	--	934	--	--	--
MAR 03...	--	--	--	--	--	--	--	521	--	--	--
APR 02...	--	--	--	--	--	--	--	898	--	--	--
MAY 02...	--	--	--	--	--	--	--	880	--	--	--
JUN 02...	--	--	--	--	--	--	--	835	--	--	--
JUL 08...	--	--	--	--	--	--	--	839	--	--	--
AUG 04...	--	--	--	--	--	--	--	884	--	--	--
28...	--	--	--	--	--	--	--	883	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 03...	1600	680	290

11133500 SANTA YNEZ RIVER NEAR LOMPOC, CA

LOCATION.--Lat 34°38'30", long 120°25'50", near boundary of La Mission Vieja de la Purisima Grant, Santa Barbara County, Hydrologic Unit 18060010, on downstream side of Robinson Bridge on State Highway 246, 1.5 mi (2.4 km) east of Lompoc, 2.5 mi (4.0 km) downstream from Salsipuedes Creek, and 13.1 mi (21.1 km) downstream from Lake Cachuma.

DRAINAGE AREA.--790 mi² (2,050 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November to December 1906, October 1907 to September 1918, April 1925 to September 1960, October 1978 to September 1980 (discontinued). Records equivalent, except for low-flow periods, to those published as "at Narrows" (station 11133000) May 1947 to November 1951 (irrigation seasons only), May 1952 to September 1963, October 1964 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 79.25 ft (24.155 m) National Geodetic Vertical Datum of 1929. See WSP 1715 for history of changes prior to September 1960.

REMARKS.--Records good. Flow regulated by Jameson Lake, Gibraltar Reservoir, and since 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.--Maximum discharge, 80,000 ft³/s (2,270 m³/s) Jan. 25, 1969, gage height, 24.20 ft (7.376 m), gage was supplementary to station 11133000 at this time; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 9, 1907, 120,000 ft³/s (3,400 m³/s), gage height, 22.0 ft (6.71 m) from floodmarks, site and datum then in use, from mean-depth study.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,300 ft³/s (462 m³/s) Feb. 19, gage height, 11.35 ft (3.459 m) from rating curve extended above 7,400 ft³/s (210 m³/s); no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	1.8	17	488	291	141	12	7.0		
2			0	1.8	17	696	256	134	13	7.0		
3			0	1.7	16	1830	248	107	13	7.7		
4			0	1.4	17	1700	256	88	12	6.4		
5			0	1.3	16	2060	265	76	12	5.8		
6			0	1.2	16	3930	265	68	11	5.8		
7			0	2.1	16	2720	211	60	10	5.8		
8			0	2.8	16	1670	167	68	10	4.7		
9			0	3.8	16	1690	175	56	9.2	4.2		
10			0	5.3	16	1660	153	53	7.7	3.7		
11			0	83	16	1500	153	38	7.7	3.2		
12			0	69	16	1440	167	38	7.0	2.2		
13			0	48	17	1350	175	36	6.4	2.3		
14			0	98	19	1220	141	33	6.4	2.4		
15			0	83	37	1120	107	31	7.7	1.5		
16			0	46	2510	905	102	29	8.4	1.1		
17			0	39	2370	874	106	27	9.2	1.5		
18			0	33	7330	874	84	27	10	1.6		
19			0	28	9220	799	60	25	10	1.5		
20			0	26	12100	743	60	23	8.4	1.9		
21			0	26	6950	785	56	21	7.7	1.5		
22			0	21	3880	676	60	20	7.7	1.0		
23			0	17	2600	626	68	18	7.7	1.6		
24			4.3	18	1890	602	97	17	7.0	1.8		
25			7.2	19	1540	488	93	17	7.0	1.8		
26			1.6	19	874	465	93	15	5.8	1.6		
27			1.6	18	743	465	112	14	4.8	1.6		
28			1.5	20	592	512	123	12	4.8	.98		
29			1.6	24	525	465	107	10	5.3	0		
30			1.7	19	---	421	117	12	7.0	0		
31		---	1.8	18	---	319	---	12	---	0		---
TOTAL	0	0	21.3	795.2	53392	35093	4368	1326	255.9	89.18	0	0
MEAN	0	0	.69	25.7	1841	1132	146	42.8	8.53	2.88	0	0
MAX	0	0	7.2	98	12100	3930	291	141	13	7.7	0	0
MIN	0	0	0	1.2	16	319	56	10	4.8	0	0	0
AC-FT	0	0	42	1580	105900	69610	8660	2630	508	177	0	0
CAL YR 1979	TOTAL	35872.14	MEAN	98.3	MAX	3580	MIN	0	AC-FT	71150		
WTR YR 1980	TOTAL	95340.58	MEAN	260	MAX	12100	MIN	0	AC-FT	189100		

SANTA YNEZ RIVER BASIN

11133500 SANTA YNEZ RIVER NEAR LOMPOC, CA

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.
 CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
JAN 03...	1245	1.7	1600	8.2	17.0	700	350	150	78	120	41
FEB 01...	1300	17	1550	8.3	19.5	--	--	--	--	--	--
MAR 04...	1415	1450	740	8.3	15.5	--	--	--	--	--	--
APR 02...	0925	254	1035	8.4	10.5	--	--	--	--	--	--
MAY 01...	1000	138	1060	8.5	16.0	--	--	--	--	--	--
JUN 02...	1130	14	1340	8.4	17.0	--	--	--	--	--	--
JUL 08...	1025	5.1	1440	8.2	22.0	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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, 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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
JAN 03...	2.0	4.6	350	400	130	.5	28	--	1120	.04	.07
FEB 01...	--	--	--	--	--	--	--	1170	--	--	--
MAR 04...	--	--	--	--	--	--	--	495	--	--	--
APR 02...	--	--	--	--	--	--	--	715	--	--	--
MAY 01...	--	--	--	--	--	--	--	791	--	--	--
JUN 02...	--	--	--	--	--	--	--	1010	--	--	--
JUL 08...	--	--	--	--	--	--	--	1090	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 03...	1245	550	20

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 (460 m) south of Lompoc Union High School.

DRAINAGE AREA.--11.6 mi² (30.0 km²).

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 (29.852 m) Santa Barbara County Flood Control District datum.

REMARKS.--Records good except those below 10 ft³/s (0.28 m³/s), which are poor. No regulation or diversion above station; some pumping from wells along stream for irrigation.

AVERAGE DISCHARGE.--10 years, 1.61 ft³/s (0.046 m³/s), 1,170 acre-ft/yr (1.44 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 787 ft³/s (22.3 m³/s) Feb. 16, 1980, gage height, 6.30 ft (1.920 m), from rating curve extended above 280 ft³/s (7.93 m³/s) on basis of slope-area measurement at gage height 4.34 ft (1.323 m); no flow many days in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 5.83 ft (1.777 m), from floodmark, discharge, 680 ft³/s (19.3 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*) from rating curve extended as explained above:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Dec. 24	0945	298 8.44	3.91 1.192	Feb. 20	1715	199 5.64	3.30 1.006
Jan. 11	0315	165 4.67	3.07 0.936	Mar. 5	2300	216 6.12	3.41 1.039
Feb. 16	1330	*787 22.3	6.30 1.920				

Minimum daily discharge, 0.25 ft³/s (0.007 m³/s) Oct. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.29	.49	.58	.86	3.2	2.0	2.1	1.3	.75	.63	.75
2	.40	.35	.51	.47	.85	7.3	2.0	2.1	1.4	.73	.66	.82
3	.32	.28	.50	.44	.82	5.8	2.0	2.1	1.3	.70	.69	.94
4	.34	.28	.46	.41	.82	3.3	2.2	2.1	1.2	.68	.59	.95
5	.29	.28	.45	.42	.79	36	2.3	2.0	1.3	.66	.71	.94
6	.26	.33	.49	.41	.78	38	2.2	1.9	1.3	.62	.69	.78
7	.28	2.4	.50	.61	.78	9.1	2.2	1.8	1.2	.64	.66	.74
8	.31	.60	.46	.55	.81	7.0	2.1	1.7	1.2	.52	.68	.66
9	.31	.48	.51	1.3	.83	5.4	2.0	1.8	1.2	.52	.60	.52
10	.35	.48	.54	1.4	.88	4.6	2.0	1.7	1.4	.66	.63	.51
11	.28	.47	.43	33	.88	4.3	2.0	1.7	1.1	.65	.69	.42
12	.31	.43	.47	7.5	.89	3.7	1.9	1.7	1.0	.67	.64	.44
13	.29	.42	.51	8.0	1.0	3.4	1.8	1.7	1.1	.57	.60	.44
14	.30	.44	.52	9.5	1.4	3.2	1.7	1.6	1.2	.60	.63	.51
15	.34	.42	.52	3.5	2.4	3.3	1.8	1.6	1.3	.67	.71	.59
16	.31	.42	.52	2.9	136	3.2	1.7	1.6	1.2	.65	.76	.55
17	.35	.52	.41	2.3	89	2.9	1.7	1.6	1.2	.65	.82	.48
18	.26	.49	.45	1.9	45	2.9	1.7	1.5	1.2	.58	.70	.43
19	.33	.49	.48	1.3	25	2.8	1.6	1.5	1.1	.63	.50	.45
20	.69	.55	.47	1.2	42	2.7	1.7	1.5	1.1	.70	.47	.49
21	.31	.55	.53	1.3	21	2.8	1.7	1.5	1.1	.69	.45	.52
22	.31	.49	.50	1.1	11	2.8	2.4	1.4	1.0	.62	.47	.51
23	.34	.52	.50	1.1	8.2	2.7	2.3	1.4	.98	.72	.53	.47
24	.30	.57	37	1.1	6.2	2.6	2.2	1.4	.96	.62	.56	.42
25	.35	.54	6.7	1.1	4.9	2.6	2.1	1.4	.92	.60	.58	.40
26	.28	.54	3.5	.90	4.1	2.4	2.1	1.4	.89	.62	.57	.42
27	.26	.53	2.4	.87	4.0	2.4	2.1	1.3	.86	.68	.59	.43
28	.30	.56	1.6	1.1	3.9	2.4	2.2	1.3	.83	.69	.64	.49
29	.36	.58	1.2	1.0	3.5	2.3	2.1	1.3	.80	.54	.60	.48
30	.27	.53	.90	.89	---	2.3	2.0	1.3	.78	.70	.63	.39
31	.25	---	.74	.87	---	2.0	---	1.1	---	.65	.66	---
TOTAL	10.10	15.83	65.26	89.02	418.59	179.4	59.8	50.1	33.42	19.98	19.34	16.94
MEAN	.33	.53	2.11	2.87	14.4	5.79	1.99	1.62	1.11	.64	.62	.56
MAX	.69	2.4	37	33	136	38	2.4	2.1	1.4	.75	.82	.95
MIN	.25	.28	.41	.41	.78	2.0	1.6	1.1	.78	.52	.45	.39
AC-FT	20	31	129	177	830	356	119	99	66	40	38	34

CAL YR 1979 TOTAL 567.22 MEAN 1.55 MAX 37 MIN .25 AC-FT 1130
WTR YR 1980 TOTAL 977.78 MEAN 2.67 MAX 136 MIN .25 AC-FT 1940

SANTA YNEZ RIVER BASIN

11134800 MIGUELITO CREEK AT LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1980.

CHEMICAL ANALYSES: June 1980 to September 1980.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
JUN 02...	1450	1.3	1330	8.6	17.0	660	300	150	70	84	22
JUL 10...	1120	.86	1440	8.3	19.0	--	--	--	--	--	--
AUG 04...	1235	.61	1440	8.2	18.0	--	--	--	--	--	--
28...	1245	.72	1420	8.2	19.0	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
JUN 02...	1.4	2.7	360	310	110	.2	40	--	985	.33	.03
JUL 10...	--	--	--	--	--	--	--	1050	--	--	-
AUG 04...	--	--	--	--	--	--	--	910	--	--	-
28...	--	--	--	--	--	--	--	1070	--	--	-

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JUN 02...	1450	160	20

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 (3.4 km) upstream from Santa Lucia Creek, 3 mi (5 km) northwest of Lompoc, and 7 mi (11 km) upstream from mouth at Pacific Ocean.

WATER-DISCHARGE RECORDS

GAGE.--Water-stage recorder. Datum of gage is 40.78 ft (12.430 m) 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 (0.277 m) lower.

REMARKS.--Records good. 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 ft³/s (2,210 m³/s), estimated, Jan. 25, 1969, gage height, 24.91 ft (7.593 m), present datum, from floodmark; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,200 ft³/s (459 m³/s), Feb. 20, gage height, 9.66 ft (2.944 m); minimum daily, 2.9 ft³/s (0.082 m³/s) Dec. 11, 13.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	3.4	4.1	5.0	5.9	595	249	166	6.9	7.6	5.8	6.6
2	3.0	3.4	4.1	5.0	6.1	682	250	157	7.8	7.6	5.8	6.6
3	3.0	3.3	4.0	5.0	5.9	1890	224	133	5.7	6.8	5.8	6.1
4	3.0	3.3	4.0	5.2	6.0	1680	221	94	5.1	6.2	7.5	6.0
5	3.0	3.2	4.0	5.5	5.8	1930	217	72	5.1	6.0	6.0	6.6
6	3.0	3.2	3.8	5.7	5.8	4470	213	64	5.5	6.1	5.1	7.2
7	3.0	119	3.4	15	5.6	3750	190	56	5.7	6.2	4.9	6.7
8	3.0	75	3.2	6.0	5.5	2560	142	77	5.2	5.4	5.7	7.5
9	3.0	11	3.1	12	5.3	2420	153	74	5.8	5.4	4.1	7.7
10	3.0	9.0	3.2	8.8	5.2	2050	153	67	5.8	5.6	4.0	8.4
11	3.0	7.0	2.9	121	5.3	1540	142	52	6.4	5.4	4.6	7.8
12	3.0	6.1	3.0	21	5.2	1210	139	43	6.9	5.0	4.5	7.5
13	3.0	5.7	2.9	22	5.2	1040	134	37	8.7	4.5	5.0	7.7
14	3.0	5.4	3.0	38	5.0	848	122	35	9.0	4.9	5.7	7.6
15	3.0	5.1	3.2	39	33	712	98	33	8.4	4.6	5.6	7.6
16	3.1	4.9	3.2	29	3010	702	94	24	8.5	4.7	5.4	6.9
17	3.2	4.7	3.4	15	3330	783	116	23	8.3	4.8	5.5	6.6
18	3.6	4.6	3.2	12	8480	783	99	24	8.2	5.3	7.6	6.4
19	5.8	4.5	3.1	10	9580	712	77	24	7.6	4.9	5.8	6.2
20	45	4.4	3.2	8.5	11600	599	84	23	7.4	4.4	5.5	6.0
21	7.0	4.4	3.2	7.7	6920	543	88	22	7.1	4.9	4.8	5.9
22	5.6	4.3	3.2	7.3	3420	453	105	18	7.1	4.8	5.4	5.8
23	5.0	4.3	3.1	6.9	2520	460	83	15	7.5	4.5	4.9	5.7
24	4.5	4.2	232	6.6	2000	471	128	14	7.0	4.3	4.9	5.6
25	4.3	4.2	14	6.4	1720	363	111	14	7.1	5.0	5.5	5.5
26	4.1	4.2	5.4	6.2	1240	380	129	16	7.5	4.4	6.4	5.4
27	3.9	4.1	5.5	6.1	1030	309	144	14	7.8	4.2	6.1	5.3
28	3.8	4.1	5.5	6.0	860	385	144	9.9	7.7	5.0	5.8	5.2
29	3.7	4.1	5.4	8.9	590	365	112	8.3	7.8	4.9	6.0	5.1
30	3.6	4.1	5.0	5.1	---	323	148	7.5	7.6	5.8	4.9	5.0
31	3.5	---	5.0	5.9	---	290	---	7.0	---	5.9	4.9	---
TOTAL	154.7	328.2	355.3	461.8	56410.8	35298	4309	1423.7	212.2	165.1	169.5	194.2
MEAN	4.99	10.9	11.5	14.9	1945	1139	144	45.9	7.07	5.33	5.47	6.47
MAX	45	119	232	121	11600	4470	250	166	9.0	7.6	7.6	8.4
MIN	3.0	3.2	2.9	5.0	5.0	290	77	7.0	5.1	4.2	4.0	5.0
AC-FT	307	651	705	916	111900	70010	8550	2820	421	387	336	385
CAL YR 1979	TOTAL	39018.4		MEAN 107	MAX 4880	MIN 2.9	AC-FT	77390				
WTR												

SANTA YNEZ RIVER BASIN

11135000 SANTA YNEZ RIVER AT PINE CANYON, NEAR LOMPOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT 02...	1600	5.4	1680	6.9	25.0	--	--	--	--	--	--
NOV 07...	1330	4.3	1550	7.4	17.0	--	--	--	--	--	--
DEC 05...	1030	4.7	1700	7.5	15.0	--	--	--	--	--	--
JAN 03...	1100	5.2	1740	7.3	16.0	220	140	62	17	270	77
FEB 01...	1100	6.9	1880	6.8	20.5	--	--	--	--	--	--
MAR 04...	1250	1670	801	8.4	16.0	--	--	--	--	--	--
APR 02...	0810	225	1060	8.4	10.5	--	--	--	--	--	--
MAY 05...	0910	72	1130	8.4	15.0	--	--	--	--	--	--
JUN 02...	1340	11	1500	7.7	24.0	--	--	--	--	--	--
JUL 10...	1320	6.9	1600	7.8	28.5	--	--	--	--	--	--
AUG 05...	1140	7.1	1900	7.0	22.0	--	--	--	--	--	--
SEP 09...	1105	6.3	1560	7.3	21.0	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+N03 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT 02...	--	--	--	--	--	--	--	1120	--	--	--
NOV 07...	--	--	--	--	--	--	--	1030	--	--	--
DEC 05...	--	--	--	--	--	--	--	1130	--	--	--
JAN 03...	7.8	15	81	350	240	.6	29	--	1100	15	8.9
FEB 01...	--	--	--	--	--	--	--	1230	--	--	--
MAR 04...	--	--	--	--	--	--	--	552	--	--	--
APR 02...	--	--	--	--	--	--	--	734	--	--	--
MAY 05...	--	--	--	--	--	--	--	827	--	--	--
JUN 02...	--	--	--	--	--	--	--	1030	--	--	--
JUL 10...	--	--	--	--	--	--	--	1070	--	--	--
AUG 05...	--	--	--	--	--	--	--	1230	--	--	--
SEP 09...	--	--	--	--	--	--	--	1110	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 03...	1100	580	70

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 (30 m) upstream from bridge on northbound lane of Highway 101 at Los Alamos.

DRAINAGE AREA.--34.9 mi² (90.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 580 ft (177 m), from topographic map.

REMARKS.--Records fair. No regulation above station. Pumping for irrigation of about 1,000 acres (4.05 km²) above station.

AVERAGE DISCHARGE.--10 years, 1.22 ft³/s (0.035 m³/s), 884 acre-ft/yr (1.09 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft³/s (36.0 m³/s) Feb. 10, 1978, gage height, 9.58 ft (2.920 m), from rating curve extended above 100 ft³/s (2.83 m³/s) on basis of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft³/s (0.85 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 19	0830	228	6.46	3.42	1.042
Mar. 6	0700	*231	6.54	3.45	1.052

Minimum daily discharge, no flow many months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	.02	.16	.04					
2				0	.01	1.1	.04					
3				0	0	2.0	.04					
4				0	0	1.3	.04					
5				0	0	19	.14					
6				0	0	82	.09					
7				0	0	25	0					
8				0	0	15	0					
9				0	0	11	.01					
10				0	0	9.1	.03					
11				.16	0	7.6	.02					
12				.23	0	4.3	.01					
13				.35	.02	3.1	0					
14				1.5	.05	1.9	0					
15				.45	.08	.42	0					
16				.09	17	.29	0					
17				.05	20	.28	0					
18				.04	70	.13	0					
19				.02	146	.06	0					
20				0	135	.05	0					
21				0	107	.05	0					
22				0	52	.04	.10					
23				0	25	.03	0					
24				0	14	.02	0					
25				0	8.0	.04	0					
26				0	3.7	.03	0					
27				.01	2.0	.03	0					
28				.06	1.1	.04	0					
29				.03	.57	.07	.25					
30				.02	---	.06	.13					
31		---		.02	---	.04	---		---			---
TOTAL	0	0	0	3.03	601.55	184.24	.94	0	0	0	0	0
MEAN	0	0	0	.098	20.7	5.94	.031	0	0	0	0	0
MAX	0	0	0	1.5	146	82	.25	0	0	0	0	0
MIN	0	0	0	0	0	.02	0	0	0	0	0	0
AC-FT	0	0	0	6.0	1190	365	1.9	0	0	0	0	0
CAL YR 1979	TOTAL 149.52	MEAN .41	MAX 44	MIN 0	AC-FT 297							
WTR YR 1980	TOTAL 789.76	MEAN 2.16	MAX 146	MIN 0	AC-FT 1570							

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 (1.1 km) east of junction of San Antonio Road and Lompoc-Casmalia Road, and 3.8 mi (6.1 km) south of Casmalia.

DRAINAGE AREA.--135 mi² (350 km²).

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 (49 m), from topographic map. Prior to June 27, 1958, at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good. 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.--25 years, 5.74 ft³/s (0.163 m³/s), 4,160 acre-ft/yr (5.13 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,440 ft³/s (97.4 m³/s) Mar. 4, 1978, gage height, 13.22 ft (4.029 m), from rating curve extended above 1,100 ft³/s (31.2 m³/s) on basis of slope-area measurement at gage height 12.93 ft (3.941 m); minimum daily, 0.10 ft³/s (0.003 m³/s) June 19, 20, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1215	132 3.74	5.93 1.807	Mar. 6	1045	293 8.30	7.05 2.149
Feb. 16	1815	*967 27.4	8.98 2.737				

Minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Oct. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.46	.64	.93	1.7	4.4	1.4	1.3	1.2	.59	.47	1.7
2	.46	.47	.66	.92	1.7	7.6	1.5	1.2	.89	.64	.46	.89
3	.47	.49	.69	.97	1.7	30	1.9	1.1	.76	.65	.45	.65
4	.48	.54	.66	.88	1.7	9.9	1.7	1.1	1.0	.58	.48	.56
5	.45	.50	.63	.92	1.6	115	2.7	1.0	1.9	.57	.49	.98
6	.45	.50	.63	.92	1.6	232	1.6	1.0	1.2	.52	.52	1.3
7	.41	.58	.64	.92	1.6	110	1.3	.97	.76	.52	.62	1.5
8	.40	.63	.64	1.0	1.6	60	1.2	.96	.64	.51	.72	1.0
9	.44	.54	.64	1.2	1.5	25	1.3	.90	.82	.52	.73	.76
10	.46	.52	.64	1.9	1.5	16	2.0	.89	.66	.52	1.1	.96
11	.46	.53	.64	47	1.6	13	2.3	1.3	.88	.52	.94	1.6
12	.47	.52	.66	30	1.5	10	2.5	.91	1.7	.52	.70	2.9
13	.50	.52	.66	25	1.5	8.2	1.7	1.2	1.7	.52	.55	2.4
14	.47	.50	.67	54	2.1	11	1.7	1.4	1.3	.52	1.0	1.2
15	.47	.53	.68	22	8.0	5.0	1.4	1.0	.77	.52	1.3	.66
16	.49	.52	.64	9.1	240	4.1	1.5	3.4	.63	.52	1.2	.58
17	.53	.60	.65	7.3	227	5.1	1.4	2.8	.61	.51	1.6	.52
18	.51	.56	.64	4.6	382	4.0	1.4	2.7	.63	.53	.89	.52
19	.53	.52	.65	3.9	345	4.0	1.4	2.0	.65	.53	.70	.51
20	.87	.51	.71	3.1	444	2.2	2.0	1.5	.71	.53	1.4	.49
21	.60	.51	.77	2.7	335	2.3	1.3	3.4	.60	.52	1.2	.48
22	.52	.53	.77	2.3	106	2.2	2.8	2.2	.57	.54	1.1	.47
23	.53	.53	.82	2.1	43	2.4	2.4	1.6	.62	.52	1.3	.48
24	.53	.53	2.7	2.0	24	2.2	1.4	1.6	.57	.56	1.3	.47
25	.57	.59	4.9	2.0	17	2.9	1.2	1.6	.56	.51	.73	.49
26	.60	.64	2.0	1.9	12	3.1	1.2	1.4	.56	.50	.58	.69
27	.53	.64	1.2	1.9	8.3	1.9	1.3	.86	.56	.50	.54	.93
28	.51	.64	1.0	1.9	7.1	1.7	1.4	.78	.54	.49	1.3	.64
29	.46	.64	.92	1.9	5.3	1.6	4.9	1.3	.58	.48	1.2	.51
30	.42	.64	.92	1.8	---	2.6	1.6	1.2	.58	.49	1.3	.46
31	.45	---	.92	1.8	---	1.6	---	1.2	---	.51	1.7	---
TOTAL	15.53	16.43	29.99	238.86	2226.6	701.0	53.4	45.77	25.15	16.46	28.57	27.30
MEAN	.50	.55	.97	7.71	76.8	22.6	1.78	1.48	.84	.53	.92	.91
MAX	.87	.64	4.9	54	444	232	4.9	3.4	1.9	.65	1.7	2.9
MIN	.40	.46	.63	.88	1.5	1.6	1.2	.78	.54	.48	.45	.46
AC-FT	31	33	59	474	4420	1390	106	91	50	33	57	54
CAL YR 1979	TOTAL	1097.42	MEAN	3.01	MAX	161	MIN	.40	AC-FT	2180		
WTR YR 1980	TOTAL	3425.06	MEAN	9.36	MAX	444	MIN	.40	AC-FT	6790		

11136100 SAN ANTONIO CREEK NEAR CASMALIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.
 CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT 05...	1040	.41	3220	7.2	18.0	--	--	--	--	--	--
NOV 07...	0900	.50	3120	7.5	15.5	--	--	--	--	--	--
DEC 04...	0905	.63	2800	8.1	14.5	--	--	--	--	--	--
JAN 04...	0835	.85	3100	7.9	9.0	1000	640	270	83	400	56
29...	0920	1.9	2750	7.8	10.5	880	530	230	73	350	56
MAR 04...	0820	10	1780	8.1	10.0	--	--	--	--	--	--
27...	0820	1.9	2800	8.2	10.0	--	--	--	--	--	--
MAY 01...	1030	1.4	3000	8.1	15.5	790	340	210	65	370	50
JUN 04...	1010	.64	3150	8.1	16.5	--	--	--	--	--	--
JUL 02...	0935	.57	3350	8.2	18.0	--	--	--	--	--	--
31...	0935	.52	3450	8.1	18.5	740	260	190	64	530	60
AUG 29...	0805	1.1	2490	7.7	14.5	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT 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, 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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT 05...	--	--	--	--	--	--	--	2190	--	--	--
NOV 07...	--	--	--	--	--	--	--	2040	--	--	--
DEC 04...	--	--	--	--	--	--	--	1970	--	--	--
JAN 04...	5.5	18	380	730	470	.4	50	--	2280	7.3	.85
29...	5.2	16	350	650	400	.4	52	--	2000	4.0	.70
MAR 04...	--	--	--	--	--	--	--	1190	--	--	--
27...	--	--	--	--	--	--	--	1940	--	--	--
MAY 01...	5.7	19	450	430	490	.5	48	--	1920	4.2	.92
JUN 04...	--	--	--	--	--	--	--	2180	--	--	--
JUL 02...	--	--	--	--	--	--	--	2310	--	--	--
31...	8.5	27	480	390	710	.8	12	--	2250	7.5	1.60
AUG 29...	--	--	--	--	--	--	--	1620	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 04...	0835	2000	60
29...	0920	1800	700
MAY 01...	1030	2000	100
JUL 31...	0935	4200	120

SANTA MARIA RIVER BASIN

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA

LOCATION.--Lat 35°01'19", long 120°13'39", in SW¼ 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 (1.1 km) downstream from Buckhorn Canyon, and 13 mi (21 km) northeast of Santa Maria.

DRAINAGE AREA.--886 mi² (2,290 km²).

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 (232 m), from topographic map. Prior to October 1959, nonrecording gage at different site and datum.

REVISED RECORDS.--WDR-CA-77-1: 1976.

REMARKS.--Records fair. No regulation above station. Pumping from wells along stream for irrigation of several thousand acres in Upper Cuyama Valley.

AVERAGE DISCHARGE.--23 years (water years 1904, 1905, 1960-80) 22.3 ft³/s (0.632 m³/s), 16,160 acre-ft/yr (19.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft³/s (504 m³/s) Feb. 25, 1969, gage height, 13.70 ft (4.176 m), from rating curve extended above 4,900 ft³/s (139 m³/s) on basis of slope-area measurement at gage height 10.85 ft (3.307 m); maximum gage height, 14.74 ft (4.493 m) Mar. 4, 1978; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 17	0215	2,530	71.6	*9.42	2.871	Mar. 6	Unknown	700	19.8	Unknown	
Feb. 19	2215	*3,130	88.6	8.97	2.734						

Minimum daily discharge, 0.22 ft³/s (0.006 m³/s) Dec. 17-20, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.31	.27	.25	5.9	40	22	21	7.8	3.5	1.4	.97
2	.41	.31	.27	.25	4.6	30	21	19	7.8	3.5	1.3	.97
3	.42	.32	.26	.25	4.2	200	19	18	7.7	3.4	1.4	.98
4	.41	.33	.26	.25	3.8	130	19	16	7.7	3.2	1.5	.96
5	.40	.32	.26	.24	3.6	260	23	15	11	3.0	1.5	.94
6	.40	.31	.27	.24	3.4	330	25	14	25	2.8	1.5	.95
7	.39	.34	.26	.25	3.2	270	21	12	7.2	2.6	1.4	.95
8	.40	.31	.26	.24	3.2	200	22	11	6.9	2.5	1.4	.92
9	.40	.30	.26	.32	3.2	160	22	10	7.0	2.3	1.3	.88
10	.39	.30	.28	2.2	3.0	130	21	11	6.9	2.3	1.3	.84
11	.37	.30	.24	24	3.0	115	20	13	6.5	2.2	1.3	.84
12	.36	.30	.24	52	3.0	100	20	11	6.0	2.0	1.2	.84
13	.36	.29	.23	58	3.0	80	19	10	5.6	2.0	1.1	.84
14	.36	.29	.23	104	4.9	68	18	11	5.5	2.0	1.3	.83
15	.35	.28	.23	64	36	65	17	10	5.3	2.0	1.3	.86
16	.35	.29	.23	30	181	63	17	10	5.2	1.9	1.3	.86
17	.35	.40	.22	17	1000	60	16	9.8	4.9	1.9	1.3	.84
18	.34	.30	.22	12	800	57	15	9.5	4.8	1.9	1.3	.72
19	.34	.30	.22	8.6	1800	52	14	9.4	4.7	1.8	1.3	.74
20	.43	.30	.22	6.6	1300	47	14	9.4	4.6	1.8	1.3	.73
21	.35	.30	.23	5.7	1000	44	14	9.2	4.3	1.8	1.2	.71
22	.34	.29	.22	5.1	650	42	20	8.5	4.2	1.7	1.2	.70
23	.33	.28	.23	4.5	450	37	25	7.8	4.0	1.7	1.2	.70
24	.33	.28	.46	4.2	320	35	21	7.8	3.9	1.7	1.2	.66
25	.33	.28	.70	4.1	230	35	19	8.0	3.8	1.6	1.1	.64
26	.35	.28	.36	4.0	170	38	16	8.0	3.7	1.6	1.1	.62
27	.33	.27	.32	3.8	100	31	15	7.8	3.5	1.5	1.1	.58
28	.31	.27	.29	4.0	75	27	14	7.6	3.4	1.5	1.1	.64
29	.31	.27	.27	5.0	50	25	55	7.8	3.4	1.4	1.0	.67
30	.31	.27	.28	8.5	---	25	34	7.8	3.5	1.5	1.0	.65
31	.31	---	.26	8.0	---	23	---	7.8	---	1.5	1.0	---
TOTAL	11.25	8.99	8.55	437.59	8214.0	2819	618	338.2	185.8	66.1	38.9	24.03
MEAN	.36	.30	.28	14.1	283	90.9	20.6	10.9	6.19	2.13	1.25	.80
MAX	.43	.40	.70	104	1800	330	55	21	25	3.5	1.5	.98
MIN	.31	.27	.22	.24	3.0	23	14	7.6	3.4	1.4	1.0	.58
AC-FT	22	18	17	868	16290	5590	1230	671	369	131	77	48
CAL YR 1979	TOTAL	3432.64	MEAN	9.40	MAX	413	MIN	.22	AC-FT	6810		
WTR YR 1980	TOTAL	12770.41	MEAN	34.9	MAX	1800	MIN	.22	AC-FT	25330		

11136800 CUYAMA RIVER BELOW BUCKHORN CANYON, NEAR SANTA MARIA, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT 04...	1330	.38	1490	7.7	19.5	--	--	--	--	--	--
NOV 06...	1445	.29	1360	8.1	18.0	--	--	--	--	--	--
DEC 03...	1425	.26	1320	8.4	17.0	--	--	--	--	--	--
JAN 03...	1455	.25	1340	8.3	15.5	550	330	110	67	110	30
30...	1410	12	3000	8.0	15.5	--	--	--	--	--	--
MAR 03...	1025	209	1450	8.3	14.0	--	--	--	--	--	--
26...	1435	37	1860	8.2	14.5	--	--	--	--	--	--
APR 30...	0930	31	2750	8.0	14.5	--	--	--	--	--	--
JUN 03...	0900	7.6	2000	7.9	16.5	--	--	--	--	--	--
30...	0850	3.5	1460	8.0	17.0	630	480	130	73	120	29
JUL 29...	0850	1.5	1260	7.7	18.0	--	--	--	--	--	--
AUG 27...	0730	1.2	1300	7.9	14.5	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY (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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT 04...	--	--	--	--	--	--	--	1110	--	--	--
NOV 06...	--	--	--	--	--	--	--	994	--	--	--
DEC 03...	--	--	--	--	--	--	--	1050	--	--	--
JAN 03...	2.0	4.1	220	480	57	.6	16	--	978	.04	.03
30...	--	--	--	--	--	--	--	2670	--	--	--
MAR 03...	--	--	--	--	--	--	--	1090	--	--	--
26...	--	--	--	--	--	--	--	1510	--	--	--
APR 30...	--	--	--	--	--	--	--	2500	--	--	--
JUN 03...	--	--	--	--	--	--	--	1710	--	--	--
30...	2.1	4.7	150	560	64	.7	9.7	--	1050	.14	.03
JUL 29...	--	--	--	--	--	--	--	1020	--	--	--
AUG 27...	--	--	--	--	--	--	--	1040	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 03...	1455	390	30
JUN 30...	0850	400	30

SANTA MARIA RIVER BASIN

11137900 HUASNA RIVER NEAR ARROYO GRANDE, CA

LOCATION.--Lat 35°04'40", long 120°22'15", in Huasna Grant, San Luis Obispo County, Hydrologic Unit 18060007, on right bank 300 ft (90 m) downstream from Huasna Creek, and 12 mi (19 km) southeast of Arroyo Grande.

DRAINAGE AREA.--103 mi² (267 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 640 ft (195 m), from topographic map.

REMARKS.--Records 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.

AVERAGE DISCHARGE.--21 years, 18.7 ft³/s (0.530 m³/s), 13,550 acre-ft/yr (16.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,000 ft³/s (595 m³/s) Jan. 25, 1969, gage height, 15.90 ft (4.846 m), from rating curve extended above 1,300 ft³/s (36.8 m³/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 ft³/s (1.13 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 13	2145	621 17.6	5.20 1.585	Mar. 3	1130	534 15.1	5.02 1.530
Feb. 18	0630	*2560 72.5	7.66 2.335	Mar. 6	0845	765 21.7	5.47 1.667
Feb. 20	0315	1790 50.7	6.29 1.917				

Minimum daily discharge, 0.04 ft³/s (0.001 m³/s) Oct. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.57	.69	.55	.69	3.7	104	51	7.0	5.7	2.4	.46	.28
2	.62	.63	.48	.69	3.6	119	44	6.8	4.6	1.8	.66	.28
3	.66	.66	.57	.69	3.3	329	39	6.6	4.4	1.6	1.4	.28
4	.70	.69	.57	.69	3.0	192	37	6.2	3.6	2.0	.72	.76
5	.77	.69	.57	.69	3.0	335	38	6.1	3.0	1.8	.59	1.2
6	.56	.69	.57	.69	3.0	543	39	6.2	2.6	.54	.76	1.4
7	.66	.69	.57	.69	2.9	349	7.6	6.1	2.8	.39	.43	1.6
8	.51	.69	.57	.71	2.7	243	26	5.6	3.4	.39	.44	1.7
9	.19	.69	.57	1.3	2.7	204	23	5.2	3.4	.52	.42	1.5
10	.09	.69	.57	2.0	2.7	186	19	6.8	4.1	.39	.37	.95
11	.27	.69	.57	4.8	2.6	180	17	6.0	4.2	.47	.37	.43
12	.39	.69	.57	37	2.5	167	16	5.8	3.2	.54	.37	.33
13	.04	.59	.57	271	2.4	151	14	4.9	2.3	.67	.46	.37
14	.04	.57	.59	381	2.7	139	13	4.8	2.0	.97	.46	.33
15	.14	.57	.69	156	14	128	11	4.6	2.0	1.3	.56	.23
16	.25	.59	.69	80	365	118	10	5.1	2.1	1.4	1.1	.55
17	.35	.82	.69	52	611	108	9.0	5.5	2.6	1.3	1.4	.33
18	.51	.83	.69	49	1330	99	8.4	6.5	2.3	.77	1.5	.36
19	.63	.82	.69	29	935	96	7.8	7.5	3.3	.77	1.5	.79
20	.88	.80	.69	18	1100	92	7.6	7.1	2.9	.96	1.3	.66
21	.57	.57	.69	13	774	85	7.6	7.1	2.5	1.5	.69	.77
22	.56	.52	.69	9.1	391	84	9.0	8.2	3.1	.80	.74	.67
23	.22	.55	.69	6.5	261	81	14	8.2	2.3	.52	.88	.20
24	.15	.57	1.2	6.2	197	77	9.6	8.1	2.5	.49	1.1	.27
25	.51	.57	.84	7.4	164	71	8.2	8.4	2.1	.51	1.1	.14
26	.51	.57	.59	6.9	148	70	7.7	7.9	1.1	.35	.59	.10
27	.33	.57	.57	6.4	141	62	7.3	6.8	1.0	.30	.46	.10
28	.32	.57	.57	5.8	131	58	7.0	7.3	2.0	.28	.62	.10
29	.85	.57	.57	5.6	114	56	6.7	8.8	2.3	.32	.83	.10
30	.90	.57	.57	5.2	---	55	6.5	7.0	2.5	.54	.95	.28
31	.81	---	.65	4.3	---	54	---	5.8	---	.64	.41	---
TOTAL	14.56	19.41	19.66	1163.04	6716.8	4635	521.0	204.0	85.9	27.23	23.64	17.06
MEAN	.47	.65	.63	37.5	232	150	17.4	6.58	2.86	.88	.76	.57
MAX	.90	.83	1.2	381	1330	543	51	8.8	5.7	2.4	1.5	1.7
MIN	.04	.52	.48	.69	2.4	54	6.5	4.6	1.0	.28	.37	.10
AC-FT	29	38	39	2310	13320	9190	1030	405	170	54	47	34
CAL YR 1979 TOTAL	3181.68		MEAN 8.72		MAX 504	MIN .04	AC-FT 6310					
WTR YR 1980 TOTAL	13447.30		MEAN 36.7		MAX 1330	MIN .04	AC-FT 26670					

11137900 HUASNA RIVER NEAR ARROYO GRANDE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

CHEMICAL ANALYSES: Water years 1979 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
JUN 05...	1145	2.3	760	--	20.0	340	120	90	28	43	22
JUL 17...	1430	1.3	936	--	23.0	--	--	--	--	--	--
AUG 15...	1245	.51	934	--	22.0	--	--	--	--	--	--
SEP 11...	1100	.57	910	7.5	20.5	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (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+N03 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
JUN 05...	1.0	1.2	220	150	43	.5	29	530	518	.30	.28
JUL 17...	--	--	--	--	--	--	--	593	--	--	-
AUG 15...	--	--	--	--	--	--	--	631	--	--	-
SEP 11...	--	--	--	--	--	--	--	684	--	--	-

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JUN 05...	1145	150	40

SANTA MARIA RIVER BASIN

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 (5.6 km) upstream from mouth, 4 mi (6 km) northeast of Garey, and 4.4 mi (7.1 km) downstream from Twitchell Dam.

DRAINAGE AREA.--1,132 mi² (2,932 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 401.94 ft (122.511 m) Water and Power Resources Service datum.

REMARKS.--Records good. Flow regulated since February 1959 by Twitchell Reservoir, capacity 240,000 acre-ft (296 hm³). 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 ft³/s (258 m³/s) June 13, 1973, gage height, 8.22 ft (2.505 m), result of sluicing at dam; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 391 ft³/s (11.1 m³/s) June 17, 18; minimum daily, 1.7 ft³/s (0.048 m³/s) Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	2.2	1.9	6.8	36	6.8	107	216	296	360	328	306
2	3.6	1.8	2.4	5.3	29	6.5	118	216	298	355	328	305
3	3.2	2.6	2.8	5.0	26	6.2	158	218	298	351	329	306
4	3.2	4.8	2.7	4.6	24	6.0	160	220	300	352	330	306
5	3.2	3.7	2.4	4.7	23	8.6	162	222	305	353	328	305
6	2.7	3.2	1.7	4.7	21	11	162	223	309	354	325	302
7	3.2	3.9	2.0	4.8	18	7.9	162	226	313	356	326	301
8	2.9	6.9	2.5	5.3	18	6.8	164	230	317	353	327	298
9	2.5	4.5	2.8	13	18	6.3	178	235	323	348	330	298
10	2.6	3.6	3.1	23	17	6.0	209	239	326	347	331	294
11	2.6	3.3	2.7	69	17	5.7	209	241	377	351	332	290
12	2.6	3.1	2.8	115	17	5.2	211	244	374	352	331	288
13	2.6	3.0	2.8	187	17	5.0	211	249	374	352	330	287
14	2.5	2.8	2.9	159	22	4.8	211	255	375	352	331	285
15	2.5	2.9	3.0	21	96	4.7	211	256	382	350	325	284
16	2.3	2.7	3.1	13	92	4.6	211	258	388	348	325	283
17	2.0	6.4	3.2	11	20	4.4	211	264	391	349	321	284
18	1.8	5.8	3.3	9.1	18	4.4	211	271	391	349	322	282
19	2.4	4.1	3.6	7.8	16	4.2	211	279	390	349	324	280
20	16	3.0	4.3	6.9	14	3.9	211	286	388	350	318	278
21	9.2	3.0	4.8	6.3	13	4.0	211	287	381	346	315	193
22	5.9	3.1	5.2	5.7	12	3.8	213	286	369	345	313	21
23	5.0	3.2	4.3	63	11	3.6	212	280	363	342	311	11
24	4.7	2.7	14	237	9.8	3.6	211	275	363	338	309	8.1
25	5.5	2.9	31	256	9.1	3.5	213	277	362	337	309	5.6
26	12	3.0	10	316	8.4	3.2	214	275	362	339	307	4.2
27	5.7	3.1	6.7	314	7.8	2.8	213	276	359	340	308	3.4
28	4.6	2.9	5.5	308	7.5	35	214	278	359	336	306	3.1
29	3.7	2.8	5.2	305	7.2	53	214	280	362	331	306	2.8
30	2.8	2.6	5.0	290	---	103	214	285	361	330	308	2.4
31	2.3	---	7.7	95	---	105	---	290	---	327	306	---
TOTAL	129.7	103.6	155.4	2872.0	644.8	439.5	5817	7937	10556	10742	9939	6116.6
MEAN	4.18	3.45	5.01	92.6	22.2	14.2	194	256	352	347	321	204
MAX	16	6.9	31	316	96	105	214	290	391	360	332	306
MIN	1.8	1.8	1.7	4.6	7.2	2.8	107	216	296	327	306	2.4
AC-FT	257	205	308	5700	1280	872	11540	15740	20940	21310	19710	12130
CAL YR 1979 TOTAL	40373.97			MEAN 111	MAX 407	MIN .07	AC-FT 80080					
WTR YR 1980 TOTAL	55452.60			MEAN 152	MAX 391	MIN 1.7	AC-FT 110000					

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 (4.2 km) upstream from La Brea Creek, and 7 mi (11 km) east of Sisquoc.

DRAINAGE AREA.--281 mi² (728 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to current year. October 1929 to September 1933, at site 0.2 mi (0.3 km) 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 (190.287 m) Corps of Engineers datum. See WSP 1735 for history of changes prior to Aug. 24, 1951.

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

AVERAGE DISCHARGE.--37 years, 44.9 ft³/s (1,272 m³/s), 32,530 acre-ft/yr (40.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,200 ft³/s (657 m³/s) Dec. 6, 1966, gage height, 15.75 ft (4.801 m), from rating curve extended above 1,700 ft³/s (48.1 m³/s) on basis of slope-area measurements at gage heights 10.08 ft (3.072 m) and 15.75 ft (4.801 m); no flow Nov. 11-18, 1967.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 2, 1938, 11,000 ft³/s (312 m³/s), gage height, 8.1 ft (2.47 m), from high-water mark in gage well, at site in use 1929-33, from rating curve extended above 2,800 ft³/s (79.3 m³/s).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.08 m³/s) revised, and maximum (*) from rating curve extended above 310 ft³/s (8.78 m³/s) on basis of slope-area measurement of maximum flow:

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	1400	825 23.4	3.38 1.030	Feb. 19	1430	*5,120 145	7.57 2.307
Jan. 14	0315	854 24.2	3.42 1.042	Mar. 3	1600	897 25.4	3.48 1.061
Feb. 16	2000	4,050 115	6.75 2.057	Mar. 6	1400	1,370 38.8	4.08 1.244

Minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	2.2	1.5	2.4	28	308	106	62	33	12	2.2	1.2
2	1.0	2.2	1.5	2.4	24	334	102	56	32	12	2.1	1.2
3	1.0	2.4	1.5	2.4	23	825	98	51	31	13	2.1	1.4
4	1.1	2.4	1.4	2.3	21	674	98	67	30	13	2.1	1.4
5	1.2	2.4	1.4	2.1	20	744	100	62	29	12	2.1	1.4
6	1.4	2.4	1.4	2.0	19	1150	102	55	28	11	1.9	1.4
7	1.5	3.8	1.2	1.9	18	983	92	50	27	10	1.8	1.4
8	1.5	2.4	1.2	1.8	18	861	85	47	26	9.7	1.6	1.4
9	1.6	2.4	1.4	2.4	17	748	81	46	25	9.3	1.5	1.5
10	1.8	2.4	1.4	8.2	16	674	76	50	24	8.5	1.5	1.5
11	1.8	2.2	1.2	306	16	589	73	52	24	8.1	1.4	1.5
12	1.9	2.1	1.2	364	16	501	70	47	23	7.8	1.4	1.5
13	2.1	2.1	1.2	259	16	442	67	46	23	7.4	1.4	1.5
14	1.9	1.8	1.2	766	19	413	65	46	22	6.7	1.5	1.5
15	1.9	1.8	1.2	433	54	396	62	46	21	6.4	1.6	1.5
16	2.1	1.8	1.2	208	998	379	59	43	20	6.0	1.6	1.5
17	2.2	1.8	1.2	119	1570	340	56	40	20	5.7	1.6	1.4
18	2.4	1.8	1.2	86	1600	301	55	38	20	5.1	1.6	1.4
19	2.6	1.8	1.2	62	2970	274	52	37	19	4.8	1.6	1.4
20	3.4	1.6	1.2	48	2130	242	52	36	18	4.6	1.5	1.5
21	3.0	1.6	1.2	40	2010	218	56	36	18	4.3	1.5	1.5
22	2.8	1.5	1.2	32	1310	203	78	36	17	4.0	1.5	1.4
23	2.6	1.5	1.2	29	1080	173	76	36	16	4.0	1.5	1.4
24	2.4	1.5	2.1	25	927	160	64	35	15	3.8	1.5	1.2
25	2.4	1.5	1.9	23	762	162	56	35	15	3.8	1.5	1.2
26	2.4	1.6	4.8	21	615	162	54	35	14	3.6	1.5	1.4
27	2.4	1.5	4.8	20	508	142	51	35	14	3.0	1.5	1.4
28	2.2	1.5	3.6	19	418	128	54	34	12	2.8	1.5	1.4
29	2.2	1.5	3.0	27	335	123	108	34	12	2.8	1.4	1.2
30	2.2	1.5	2.8	40	---	116	76	33	12	2.8	1.3	1.1
31	2.2	---	2.6	34	---	108	---	33	---	2.6	1.3	---
TOTAL	62.2	59.0	55.1	2988.9	17558	12873	2224	1359	640	210.6	50.1	41.7
MEAN	2.01	1.97	1.78	96.4	605	415	74.1	43.8	21.3	6.79	1.62	1.39
MAX	3.4	3.8	4.8	766	2970	1150	108	67	33	13	2.2	1.5
MIN	1.0	1.5	1.2	1.8	16	108	51	33	12	2.6	1.3	1.1
AC-FT	123	117	109	5930	34830	25530	4410	2700	1270	418	99	83
CAL YR 1979 TOTAL	17078.1		MEAN 46.8	MAX 904	MIN 1.0	AC-FT 33870						
WTR YR 1980 TOTAL	38121.6		MEAN 104	MAX 2970	MIN 1.0	AC-FT 75610						

SANTA MARIA RIVER BASIN

11138500 SISQUOC RIVER NEAR SISQUOC, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

CHEMICAL ANALYSES: Water years 1978 to current year.

CHEMICAL ANALYSES, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
OCT 04...	0900	1.2	1070	7.2	16.5	--	--	--	--	--	--
NOV 06...	1005	2.5	1060	7.7	16.0	--	--	--	--	--	--
DEC 03...	0930	1.5	1020	8.2	14.5	--	--	--	--	--	--
JAN 03...	1000	2.3	1090	8.2	11.0	510	300	100	63	62	35
30...	0930	41	980	8.3	8.5	--	--	--	--	--	--
MAR 18...	1200	302	900	8.3	11.5	--	--	--	--	--	--
26...	0730	172	970	8.2	12.5	--	--	--	--	--	--
MAY 01...	0715	62	1100	8.1	14.5	--	--	--	--	--	--
JUN 04...	0725	30	970	8.3	11.5	--	--	--	--	--	--
JUL 02...	0655	13	970	8.2	17.0	470	290	90	59	54	20
31...	0655	2.8	1000	7.7	18.0	--	--	--	--	--	--
AUG 28...	1200	1.5	980	8.3	17.5	--	--	--	--	--	--

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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 CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
OCT 04...	--	--	--	--	--	--	--	826	--	--	--
NOV 06...	--	--	--	--	--	--	--	810	--	--	--
DEC 03...	--	--	--	--	--	--	--	822	--	--	--
JAN 03...	1.2	2.4	210	390	25	.4	21	--	791	.08	.05
30...	--	--	--	--	--	--	--	781	--	--	--
MAR 18...	--	--	--	--	--	--	--	668	--	--	--
26...	--	--	--	--	--	--	--	719	--	--	--
MAY 01...	--	--	--	--	--	--	--	761	--	--	--
JUN 04...	--	--	--	--	--	--	--	692	--	--	--
JUL 02...	1.1	2.5	180	360	16	.4	13	--	704	.06	.03
31...	--	--	--	--	--	--	--	782	--	--	--
AUG 28...	--	--	--	--	--	--	--	774	--	--	--

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 03...	1000	160	50
JUL 02...	0655	180	20

LOCATION.--Lat 34°52'21", long 120°14'37", in NE¼ 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 (1.8 km) upstream from mouth, and 3 mi (5 km) east of Sisquoc.

PERIOD OF RECORD.--October 1943 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 500 ft (152 m), from topographic map. Prior to Dec. 9, 1948, at datum 0.9 ft (0.27 m) higher.

REMARKS.--Records fair. No regulation above station. Some diversion by pumping from wells along stream to irrigate about 100 acres (405,000 m²) above gage.

AVERAGE DISCHARGE.--37 years, 1.59 ft³/s (0.045 m³/s), 1,150 acre-ft/yr (1.42 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 788 ft³/s (22.3 m³/s) Dec. 6, 1966, gage height, 5.48 ft (1.670 m), from rating curve extended above 220 ft/s (6.23 m³/s) on basis of computation of maximum flow at contracted opening; maximum gage height, 6.05 ft (1.844 m) Feb. 18, 1980; no flow at times in some years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.42 m³/s) and maximum (*) from rating curve extended above 120 ft³/s (3.40 m³/s):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Feb. 16	1700	256	7.25	5.60	1.707	Feb. 19	1500	204	5.78	5.15	1.570
Feb. 18	0600	*301	8.52	6.05	1.844	Mar. 6	0800	62	1.76	4.12	1.256

Minimum daily discharge, 0.11 ft³/s (0.003 m³/s) Dec. 14, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.23	.22	.26	.52	8.3	4.6	2.2	1.4	1.1	.65	.40
2	.27	.23	.21	.26	.55	8.3	4.4	2.1	1.3	1.1	.62	.40
3	.29	.36	.19	.26	.60	15	4.2	2.0	1.2	1.1	.65	.39
4	.28	.30	.21	.26	.62	13	4.0	1.9	1.1	1.0	.71	.37
5	.25	.27	.17	.26	.63	24	4.4	1.9	1.2	1.0	.70	.41
6	.23	.24	.17	.26	.67	45	3.9	1.8	1.1	1.0	.67	.40
7	.26	.28	.19	.26	.63	36	3.4	1.8	1.1	1.0	.66	.40
8	.26	.24	.19	.31	.63	22	3.4	1.7	1.1	1.0	.65	.40
9	.25	.23	.16	.42	.67	17	3.4	1.7	1.1	1.0	.62	.39
10	.23	.23	.19	.53	.72	13	3.4	2.4	1.1	.96	.61	.39
11	.25	.22	.17	1.1	.75	11	3.1	1.9	1.1	.96	.60	.38
12	.27	.22	.18	1.0	.75	8.9	2.9	1.7	1.0	.98	.57	.38
13	.25	.21	.17	3.7	.75	7.6	2.7	1.7	1.1	.95	.53	.37
14	.27	.21	.11	16	.76	7.0	2.6	1.6	1.1	.93	.59	.36
15	.25	.23	.12	5.5	1.2	6.6	2.5	1.6	1.0	1.1	.58	.36
16	.26	.23	.12	1.9	.63	6.5	2.3	1.5	1.1	1.1	.55	.35
17	.27	.30	.11	1.0	116	6.2	2.3	1.5	1.0	1.0	.55	.34
18	.25	.26	.11	.75	235	6.9	2.3	1.5	1.2	1.1	.55	.34
19	.33	.25	.14	.52	144	7.0	2.2	1.4	1.2	1.0	.54	.33
20	.45	.24	.14	.52	113	6.6	2.2	1.6	1.0	1.0	.51	.32
21	.29	.24	.16	.52	115	6.9	2.3	1.7	1.0	.97	.52	.32
22	.27	.24	.14	.52	71	6.6	3.7	1.6	1.0	.95	.49	.31
23	.24	.23	.13	.52	48	6.3	3.4	1.6	1.0	.92	.45	.30
24	.23	.23	.40	.52	30	6.1	2.9	1.5	1.0	.90	.45	.30
25	.29	.24	.29	.52	20	6.4	2.6	1.5	1.0	.90	.45	.29
26	.27	.26	.26	.52	14	6.0	2.6	1.5	1.0	.88	.44	.29
27	.23	.23	.26	.52	11	6.0	2.5	1.4	.88	.84	.45	.29
28	.21	.23	.26	.52	8.7	6.2	2.5	1.4	.88	.80	.44	.28
29	.20	.22	.26	.52	8.7	5.6	2.6	1.4	.88	.72	.40	.28
30	.21	.23	.26	.52	---	5.2	2.4	1.4	1.0	.71	.40	.27
31	.24	---	.26	.52	---	4.9	---	1.4	---	.67	.40	---
TOTAL	8.15	7.33	5.95	40.79	1007.85	342.1	91.7	51.9	32.14	29.64	17.00	10.41
MEAN	.26	.24	.19	1.32	34.8	11.0	3.06	1.67	1.07	.96	.55	.35
MAX	.45	.36	.40	16	235	45	4.6	2.4	1.4	1.1	.71	.41
MIN	.20	.21	.11	.26	.52	4.9	2.2	1.4	.88	.67	.40	.27
AC-FT	16	15	12	81	2000	679	182	103	64	59	34	21
CAL YR 1979	TOTAL	389.88		MEAN	1.07	MAX	31	MIN	.11	AC-FT	773	
WTR YR 1980	TOTAL	1644.96		MEAN	4.49	MAX	235	MIN	.11	AC-FT	3260	

SANTA MARIA RIVER BASIN

11140000 SISQUOC RIVER NEAR GAREY, CA

LOCATION.--Lat 34°53'38", long 120°18'20", in SW¼ 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 (1.0 km) northeast of Garey, and 3.7 mi (6.0 km) downstream from Tepusquet Creek.

DRAINAGE AREA.--471 mi² (1,220 km²).

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 (108.14 m) 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 (1.829 m) higher. Since Oct. 1, 1959, supplementary gage on downstream side of bridge near right bank at same datum.

REMARKS.--Records fair. No regulation above station. Pumping from wells along stream for irrigation of about 7,000 acres (28.3 km²) above station.

AVERAGE DISCHARGE.--40 years, 42.2 ft³/s (1.141 m³/s), 29,200 acre-ft/yr (36.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,500 ft³/s (694 m³/s) Jan. 25, 1969, gage height, 13.00 ft (3.962 m); maximum gage height, 13.50 ft (4.115 m) Dec. 6, 1966; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.66 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Jan. 11	2230	796 22.5	5.51 1.679	Feb. 19	2030	*7,980 226	7.80 2.377
Jan. 14	0415	715 20.2	5.29 1.612	Mar. 6	1230	1,300 36.8	6.84 2.085
Feb. 16	2115	5,800 164	7.57 2.307				

Minimum daily discharge, no flow for several months.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1				0	0	146	64	22	0			
2				0	0	160	58	13	0			
3				0	0	591	53	8.8	.10			
4				0	0	610	48	8.8	0			
5				0	0	709	55	13	0			
6				0	0	1080	73	8.1	0			
7				0	0	883	48	6.0	0			
8				0	0	777	37	3.9	0			
9				0	0	732	41	2.4	0			
10				0	0	638	33	3.9	0			
11			66		0	561	30	5.5	0			
12			515		0	472	22	2.7	0			
13			352		0	400	18	1.8	0			
14			481		0	337	17	1.6	0			
15			307		0	310	16	1.8	0			
16			125	1110	262	12	1.4	0				
17			23	1930	240	10	.60	0				
18			.13	2140	233	8.1	0	0				
19			.02	5660	206	7.7	0	0				
20			0	4310	173	7.3	0	0				
21			0	4440	160	7.0	.17	0				
22			0	3110	160	27	.40	0				
23			0	2420	132	30	.78	0				
24			0	1980	127	16	.82	0				
25			0	1040	127	11	.44	0				
26			0	594	125	8.0	.36	0				
27			0	391	113	6.8	0	0				
28			0	352	104	6.0	0	0				
29			0	212	91	55	0	0				
30			0	---	67	50	0	0				
31		---	0	---	67	---	0	---				---
TOTAL	0	0	0	1869.15	29689	10793	874.9	108.27	.10	0	0	0
MEAN	0	0	0	60.3	1024	348	29.2	3.49	.003	0	0	0
MAX	0	0	0	515	5660	1080	73	22	.10	0	0	0
MIN	0	0	0	0	0	67	6.0	0	0	0	0	0
AC-FT	0	0	0	3710	58890	21410	1740	215	.2	0	0	0
CAL YR 1979	TOTAL	14294.74	MEAN	39.2	MAX	1420	MIN	0	AC-FT	28350		
WTR YR 1980	TOTAL	43334.42	MEAN	118	MAX	5660	MIN	0	AC-FT	85950		

11140600 BRADLEY DITCH NEAR DONOVAN ROAD, AT SANTA MARIA, CA

LOCATION.--Lat 34°58'00", long 120°25'00", in NE¼NE¼NE¼ sec.11, T.10 N., R.34 W., Santa Barbara County, on left bank 250 ft (76 m) upstream from bridge on Donovan Road (revised), and 0.2 mi (0.3 km) east of U.S. Highway 101 in Santa Maria.

PERIOD OF RECORD.--October 1970 to September 1978, October 1979 to September 1980.

GAGE.--Water-stage recorder on concrete-lined channel. Altitude of gage is 225 ft (69 m), from topographic map. Prior to September 1978, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records poor. Extensive channel modification in 1979 water year widened the concrete-lined channel.

AVERAGE DISCHARGE.--9 years, 1.24 ft³/s (0.035 m³/s), 898 acre-ft/yr (1.11 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 379 ft³/s (10.7 m³/s) Mar. 4, 1978, gage height, 5.85 ft (1.783 m), from rating curve based on computation of flow in concrete-lined channel; no flow for several days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.83 m³/s) and maximum (*), from rating curve extended above 200 ft³/s (5.66 m³/s) on the basis of slope-area computation in concrete-lined channel at gage heights 4.00 ft (1.219 m) and 5.00 ft (1.524 m):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Feb. 14	2300	*366 10.4	3.57 1.088	Feb. 18	0045	180 5.10	2.71 0.826
Feb. 16	1415	349 9.88	3.50 1.067	Mar. 5	0845	242 6.85	3.02 0.920

Minimum daily discharge, no flow Dec. 28 to Jan. 2, Jan. 21-24, Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.56	.05	0	0	.03	.69	1.1	.63	.93	2.3	.78
2	.17	1.1	.01	0	.02	.85	.78	.96	.61	.79	2.0	.94
3	.17	1.5	.01	.82	.05	6.6	.70	.88	.94	1.0	2.4	1.1
4	.18	.52	.27	.62	.64	.23	1.7	.39	1.1	.52	1.9	1.7
5	.29	.24	1.3	.83	.37	48	2.2	.06	1.4	.36	1.7	1.2
6	.11	.10	1.8	.38	.36	18	.07	.26	.76	.41	1.4	1.6
7	.06	.75	1.8	.44	.46	6.0	.84	.36	.41	.24	.72	1.1
8	.04	.02	2.2	.58	.35	2.2	.92	.20	.11	1.2	1.4	1.6
9	.81	.03	1.8	2.2	.47	.70	1.0	.25	.84	.92	2.2	2.1
10	.61	.44	1.9	4.3	.81	.50	.88	1.1	.84	.65	1.7	1.5
11	.50	.13	1.5	15	.60	.50	.65	1.2	.84	1.5	1.3	1.3
12	.35	.38	.22	4.8	.53	.50	.65	1.0	.84	1.2	1.1	.35
13	.37	1.3	.99	1.6	.33	.73	.65	.43	.84	1.2	1.4	.39
14	.02	1.9	.32	9.3	32	.72	.65	.26	.84	.73	1.2	.16
15	.02	.64	.31	1.2	18	.66	.65	.69	.84	1.4	.79	.45
16	.06	1.4	.36	4.4	.87	.49	.65	.70	.84	.97	1.2	.39
17	.18	.71	.69	.52	25	.63	.65	.52	.84	1.9	2.1	.51
18	.54	.03	1.3	.09	69	.60	.65	.45	.84	1.9	1.2	.51
19	1.4	.27	1.9	.01	34	.56	.65	.51	.84	.55	1.0	.35
20	2.0	1.3	2.4	.01	15	1.1	.65	1.0	.84	.55	.72	.14
21	.02	.91	1.7	0	9.9	1.2	.65	1.2	.84	.27	.70	.06
22	.03	.10	1.3	0	6.2	.80	.65	.65	.84	.82	1.7	.49
23	.46	.80	.48	0	3.1	.30	.65	.43	.84	1.1	.65	.78
24	.11	.35	2.9	0	.44	.35	.65	.42	.84	2.5	.88	.95
25	1.0	.64	.81	.06	.06	1.1	.65	.31	.84	2.2	.56	.94
26	.22	.85	.14	.08	.04	.49	.65	.09	.84	1.8	1.5	1.2
27	.06	.50	.03	.63	.32	.69	.65	.18	.84	1.1	1.3	.83
28	.01	1.0	0	.41	.28	1.1	.65	.27	.84	.57	.90	.19
29	.01	.80	0	.30	.06	.87	.65	.58	.84	1.6	1.5	.84
30	.40	.83	0	.26	---	.63	1.2	.73	.58	1.7	1.6	.68
31	.67	---	0	.02	---	.59	---	.73	---	1.9	.49	---
TOTAL	11.04	20.10	28.49	48.86	305.39	97.72	23.33	17.91	24.18	34.48	41.51	25.13
MEAN	.36	.67	.92	1.58	10.5	3.15	.78	.58	.81	1.11	1.34	.84
MAX	2.0	1.9	2.9	15	87	48	2.2	1.2	1.4	2.5	2.4	2.1
MIN	.01	.02	0	0	0	.03	.07	.06	.11	.24	.49	.06
AC-FT	22	40	57	97	606	194	46	36	48	68	82	50
WTR YR 1980	TOTAL 678.14	MEAN 1.85	MAX 87	MIN 0	AC-FT 1350							

SANTA MARIA RIVER BASIN

11141000 SANTA MARIA RIVER AT GUADALUPE, CA

LOCATION.--Lat 34°58'35", long 120°34'15", in Guadalupe Grant, Santa Barbara County, Hydrologic Unit 18060008, on downstream side of bridge on State Highway 1, 0.5 mi (0.8 km) north of Guadalupe, and 4.5 mi (7.2 km) upstream from mouth.

DRAINAGE AREA.--1,741 mi² (4,509 km²).

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 (19.788 m) 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 (30 m) upstream at same datum NGVD.

REMARKS.--Records poor. Cuyama River regulated since February 1959 by Twitchell Reservoir, capacity, 240,000 acre-ft (296 hm³). 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.--40 years, 29.6 ft³/s (0.838 m³/s), 21,450 acre-ft/yr (26.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,800 ft³/s (929 m³/s) Jan. 16, 1952, gage height, 8.18 ft (2.493 m); maximum gage height, 10.00 ft (3.048 m) Feb. 26, 1969; no flow for all or parts of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,700 ft³/s (275 m³/s) Feb. 20; gage height, 7.40 ft (2.256 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					0	0	0					
2					0	0	.02					
3					0	5.0	.49					
4					0	1.0	.91					
5					0	148	1.5					
6					0	371	.18					
7					0	220	0					
8					0	70	0					
9					0	30	.16					
10					0	5.0	1.9					
11					0	.70	1.5					
12					0	1.6	1.5					
13					0	1.2	.22					
14					0	.70	0					
15					0	.40	.01					
16					37	.10	.02					
17					459	.03	0					
18					288	.03	0					
19					1720	.03	.06					
20					3490	.03	0					
21					2480	.03	0					
22					923	.03	0					
23					177	.03	0					
24					150	.03	0					
25					75	.03	0					
26					15	.03	0					
27					0	0	0					
28					0	0	0					
29					0	0	0					
30					---	0	0					
31		---			---	0	---		---			---
TOTAL	0	0	0	0	9814	855.00	8.47	0	0	0	0	0
MEAN	0	0	0	0	338	27.6	.28	0	0	0	0	0
MAX	0	0	0	0	3490	371	1.9	0	0	0	0	0
MIN	0	0	0	0	0	0	0	0	0	0	0	0
AC-FT	0	0	0	0	19470	1700	17	0	0	0	0	0
CAL YR 1979	TOTAL	1122.50	MEAN	3.08	MAX	457	MIN	0	AC-FT	2230		
WTR YR 1980	TOTAL	10677.47	MEAN	29.2	MAX	3490	MIN	0	AC-FT	21180		

Crest-stage partial-record stations

The following table contains annual maximum discharges for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for the current water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been obtained.

Annual maximum discharge at crest-stage partial-record stations during water year 1980

					Annual maximum		
Station No.	Station name	Location	Drainage area (mi ²)	Period of record	Date	Gage height (feet)	Discharge (ft ³ /s)
Bristol Lake basin							
10253000	Gourd Creek near Ludlow, CA	Lat 34°40'35", long 116°01'20", in SW¼ sec.23, T.7 N., R.9 E., Hydrologic Unit 18090208, at culvert on U.S. Highway 66, 8.5 mi (13.7 km) southeast of Ludlow.	0.30	1959-74 1976-80	--	--	0
Mojave River basin							
10261800	Beacon Creek at Helendale, CA	Lat 34°45'00", long 117°18'53", in SE¼ sec.29 T.8 N., R.4 W., Hydrologic Unit 18090208, at culvert on county road (formerly U.S. Highway 66 and 91), 0.6 mi (1.0 km) northeast of Helendale.	0.72	1959-60 1961-67† 1968-69 1976-80	2-14-80	12.75	23
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 (6.9 km) east of Barstow.	0.24	1959-66 1967-73† 1976-80	2-14-80	10.40	40
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 (13.0 km) southwest of Valyermo.	0.48	1961-66† 1967-69 1971-73 1977-80	2-16-80	3.01	37
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 (12.1 km) northwest of Palmdale.	1.37	1959-73 1977-80	2-16-80	14.60	53
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 (13.7 km) northwest of Fairmont.	3.60	1959-64 1965-73† 1974 1978-80	2-16-80	--	<10
Mission Creek basin							
11119740	Mission Creek at Santa Barbara, CA	Lat 34°27'09", long 119°42'30", in Pueblo Lands of Santa Barbara, Santa Barbara County, Hydrologic Unit 18060013, on left bank 0.4 mi (0.6 km) north of intersection of Foothill Road (Hwy 192) and Mission Canyon Road, 0.8 mi (1.3 km) north of Santa Barbara.	2.78	1972-80 (discontinued)	2-16-80	19.16	640 (estimated)
Santa Ynez River basin							
11133700	Purissima Creek near Lompoc, CA	Lat 34°41'34", long 120°25'51", in Purissima Grant, Santa Barbara County, Hydrologic Unit 18060010, on right bank 1.1 mi (1.8 km) northeast of junction of Buener Road and Lompoc-Casmalia Road, and 4.0 mi (6.4 km) northeast of Lompoc.	4.75	1972-75† 1976-80	2-16-80	1.94	48
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 (0.2 km) east of Dewolf Avenue at Highway 246, 3.3 mi (5.3 km) west of Lompoc.	7.80	1971-72† 1973-78 1980	2-16-80	2.96	469

† Operated as a continuous-record gaging station

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements Date	Discharge (ft ³ /s)
Santa Ana River basin						
11071500 Temescal Creek near Elsinore	Santa Ana River	Lat 33°40'07", long 117°19'45", River- side County, at Graham Street foot bridge in the city of Elsinore.	763	1916	3-14-80 3-21-80 3-28-80 4-4-80 4-11-80 4-18-80 5-14-80 6-9-80	179 238 229 221 197 176 90 42
Toro Canyon Creek basin						
Toro Canyon Creek		Lat 34°27'13", long 119°33'37", Santa Barbara County, 1.4 mi (2.3 km) northeast of intersection of East Valley and Toro Canyon Roads, at high- line wires crossing.			9-13-79	0
Toro Canyon Creek		Lat 34°26'53", long 119°33'36", Santa Barbara County, 1.1 mi (1.8 km) north- east of intersection of East Valley and Toro Canyon Roads, at Guest Ranch Crossing.			9-13-79	0.02
Toro Canyon Creek		Lat 34°26'04", long 119°34'13", Santa Barbara County, at intersection of East Valley and Toro Canyon Roads, 1.8 mi (2.9 km) northeast of Summerland.			9-13-79	<0.01
Toro Canyon Creek		Lat 34°25'46", long 119°34'25", Santa Barbara County, 0.4 mi (0.6 km) south of intersection of East Valley and Toro Canyon Roads, 0.1 mi (0.2 km) west of Tonto Road, 1.5 mi (2.4 km) northeast of Summerland.			9-13-79	0
Toro Canyon Creek		Lat 34°24'58", long 119°34'33", Santa Barbara County, 0.1 mi (0.2 km) west of intersection of Toro Canyon Road and Via Real, 1.4 mi (2.3 km) east of Summerland.			9-13-79	0
Romero Creek basin						
Romero Creek		Lat 34°27'10", long 119°35'23", Santa Barbara County, 1.3 mi (2.1 km) north- east of intersection of Sheffield and East Valley Roads, at intersection of Romero Canyon and Bella Vista Drive, Montecito.			9-13-79 1-22-80	0.01 0.25
Romero Creek		Lat 34°26'52", long 119°35'22", Santa Barbara County, at debris basin 0.3 mi (0.5 km) downstream from intersection of Romero Canyon Road and Bella Vista Drive, Montecito.			9-13-79 1-22-80	0 0.17
Romero Creek		Lat 34°26'12", long 119°35'48", Santa Barbara County, 0.2 mi (0.3 km) east of intersection of East Valley Road and Sheffield Drive, Montecito.			9-13-79 1-22-80 5-16-80	0 0 0
Picay Creek	Romero Creek	Lat 34°26'10", long 119°35'25", Santa Barbara County, 0.6 mi (1.0 km) east of intersection of East Valley Road and Sheffield Drive, Montecito.			1-22-80 5-16-80	0.15 0.19
Romero Creek		Lat 34°25'54", long 119°36'09", Santa Barbara County, 0.3 mi (0.5 km) southwest of intersection of East Valley Road and Sheffield Drive, Montecito.			9-13-79 1-22-80 5-16-80	0 0.08 0.73
Romero Creek		Lat 34°25'24", long 119°36'44", Santa Barbara County, 0.1 mi (0.2 km) north of Highway 101, at crossing on Sheffield Drive, Montecito.			9-13-79 1-22-80 5-16-80	0.42 0.74 2.15
Romero Creek		Lat 34°25'18", long 119°37'07", Santa Barbara County, 0.4 mi (0.6 km) west of intersection of Sheffield Drive and North Jameson Lane, Montecito.			9-13-79 1-22-80	0.04 0.54
Romero Creek		Lat 34°25'13", long 119°37'10", Santa Barbara County, 0.1 mi (0.2 km) south of Highway 101, at crossing on Fernald Point Road, Montecito.			9-13-79 1-22-80 5-16-80	0.01 0.45 2.04

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
San Ysidro Creek basin						
San Ysidro Creek		Lat 34°27'13", long 119°37'16", in SW¼NE¼ SE¼ sec.5, T.4 N., R.26 W., Santa Barbara County, 0.5 mi (0.8 km) north of intersection of San Ysidro Creek and Mountain Drive, Montecito.			9-12-79	0.22
					1-22-80	1.00
*11119660 San Ysidro Creek		Lat 34°27'00", long 119°37'19", in Pueblo Lands of Santa Barbara, Santa Barbara County, 0.8 mi (1.3 km) north-northeast of intersection of San Ysidro and East Valley Roads, Montecito.	3.07	1969 1972-79	9-12-79	0.22
					1-22-80	1.03
					4-4-80	3.51
					5-14-80	1.28
San Ysidro Creek		Lat 34°26'46", long 119°37'18", in Pueblo Lands of Santa Barbara, Santa Barbara County, 0.7 mi (1.1 km) northeast of intersection of San Ysidro and East Valley Roads, at bridge on Mountain Drive.			9-12-79	0.16
					1-22-80	1.14
San Ysidro Creek		Lat 34°26'21", long 119°37'11", in Pueblo Lands of Santa Barbara, Santa Barbara County, 0.7 mi (1.1 km) east of inter- section of San Ysidro and East Valley Roads, at bridge on East Valley Road, Montecito.			9-12-79	0.04
					1-22-80	0.89
					4-4-80	3.14
					5-14-80	1.40
San Ysidro Creek		Lat 34°25'32", long 119°37'14", in Pueblo Lands of Santa Barbara, Santa Barbara County, 0.5 mi (0.8 km) west of intersection of San Leandro Lane and Sheffield Roads, at bridge on San Leandro Lane, Montecito.			9-12-79	0
					1-22-80	0.64
					4-4-80	3.30
					5-14-80	0.59
San Ysidro Creek		Lat 34°25'17", long 119°37'21", in Pueblo Lands of Santa Barbara County, 0.6 mi (1.0 km) west of intersection of North Jameson Lane and Sheffield Road, at bridge on North Jameson Lane, Montecito.			9-12-79	0
					1-22-80	0.46
					4-4-80	2.28
					5-14-80	0.59
Oak Creek Basin						
Oak Creek		Lat 34°27'16", long 119°37'58", Santa Barbara County, 1.5 mi (2.4 km) north of intersection of San Ysidro and East Valley Roads, Montecito.			9-12-79	0
					1-22-80	0
Oak Creek		Lat 34°26'51", long 119°38'04", Santa Barbara County, 0.4 mi (0.6 km) east of intersection of Mountain Drive and Hot Springs Road, at crossing on Mountain Drive, Montecito.			9-12-79	<0.01
					1-22-80	0.02
					2-27-80	0.02
					4-4-80	0.02
Oak Creek		Lat 34°26'13", long 119°37'50", Santa Barbara County, 0.1 mi (0.2 km) east of intersection of East Valley and San Ysidro Roads, at bridge on East Road, Montecito.			9-12-79	0
					1-22-80	0
					2-27-80	0.12
					4-4-80	0.06
Oak Creek		Lat 34°25'58", long 119°37'49", Santa Barbara County, 0.3 mi (0.5 km) south of intersection of East Valley and San Ysidro Roads, at Santa Rosa Lane, Montecito.			9-12-80	0
					1-22-80	0
					2-27-80	0.46
					5-14-80	0
Oak Creek		Lat 34°25'42", long 119°37'43", Santa Barbara County, 0.6 mi (1.0 km) south of intersection of East Valley and San Ysidro Roads, and 0.1 mi (0.2 km) east of intersection of San Ysidro and Sinaloa Roads, at bridge on Sinaloa Road, Montecito.			9-12-79	0
					1-22-80	0
					2-27-80	0.38
					4-4-80	0
Oak Creek		Lat 34°25'26", long 119°37'36", Santa Barbara County, 0.9 mi (1.4 km) southeast of intersection of East Valley and San Ysidro Roads, at crossing at San Leandro Lane, Montecito.			9-12-79	0
					1-22-80	0
					2-27-80	0.09
					5-14-80	0
Oak Creek		Lat 34°25'17", long 119°37'30", Santa Barbara County, 0.3 mi (0.5 km) east of intersection at San Ysidro Road and North Jameson Lane, Montecito.			9-12-79	0
					1-22-80	0
					2-27-80	0
					4-4-80	0
					5-14-80	0

* Formerly operated as crest-stage partial-record station.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEAR 1980--Continued

Stream	Tributary to	Location	Drainage area (mi ²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft ³ /s)
Mission Creek basin --Continued						
#11119750 Mission Creek		Lat 34°25'35", long 119°43'20", in Pueblo Lands of Santa Barbara, Santa Barbara County, on left bank just south of end of Los Olivos Street in Santa Barbara.	8.38		9-26-79	1.89
					9-27-79	2.21
					9-28-79	1.98
					10-1-79	1.64
					1-18-80	0.69
					1-21-80	0
					3-28-80	2.78
					3-31-80	2.11
					5-13-80	1.01
					5-23-80	4.48
Mission Creek		Lat 34°24'51", long 119°41'41", in Pueblo Lands of Santa Barbara, Santa Barbara County, downstream side of bridge on Guiterrez Street between De La Vina and Chapala Streets.			9-27-79	1.11
					9-28-79	1.15
					10-1-79	1.23
					1-18-80	0.87
					3-28-80	2.70
					3-31-80	2.23
					5-13-80	0.63
					5-23-80	4.78
Tecolotito Creek basin						
Tecolotito Creek		Lat 34°27'48", long 119°52'34", Santa Barbara County, 2.1 mi (3.4 km) north of Highway 101, and 3.3 mi (5.3 km) northwest of Goleta.			2-6-80	0.10
					2-27-80	1.42
					3-5-80	53.6
					3-18-80	0.98
					4-8-80	0.54
					4-18-80	0.39
					5-6-80	0.32
					5-22-80	6.03
					6-3-80	0.32
					6-16-80	0.11
					7-3-80	0.15
					7-22-80	0.10
					8-4-80	0.04
					8-20-80	0.20
					8-28-80	0.10
					9-16-80	0.12
Los Carneros Creek	Tecolotito Creek	Lat 34°26'51", long 119°51'20", Santa Barbara County, 0.7 mi (1.1 km) north of Highway 101 and 1.7 mi (2.7 km) northwest of Goleta.			2-6-80	0.29
					2-27-80	1.79
					3-5-80	36.3
					3-19-80	0.99
					4-8-80	0.70
					4-18-80	0.48
					5-6-80	0.52
					5-22-80	0.44
					6-3-80	0.38
					6-16-80	0.27
					7-3-80	0.44
					7-22-80	0.63
					8-4-80	0.25
					8-20-80	0.66
					8-28-80	0.34
					9-16-80	0.24
Los Carneros Creek	Tecolotito Creek	Lat 34°26'24", long 119°51'09", Santa Barbara County, 300 ft (91 m) west of Los Carneros Road, and 1.4 mi (2.3 km) northwest of Goleta.			2-6-80	0.32
					2-27-80	1.96
					3-5-80	37.8
					3-19-80	1.06
					4-8-80	0.59
					4-18-80	0.53
					5-6-80	0.57
					5-22-80	0.47
					6-3-80	0.52
					6-16-80	0.33
					7-3-80	0.67
					7-22-80	0.39
					8-4-80	0.31
					8-20-80	0.74
					8-28-80	0.42
					9-16-80	0.29

#Operated as a continuous record station.

GROUND WATER
IMPERIAL COUNTY
Arroyo Seco Valley (7-37)

SITE NUMBER 331603114550601 LOCAL NUMBER 010S019E25R01S

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 194.47 FEET BELOW LAND SURFACE DATUM AUG 01, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	194.41

SITE NUMBER 331659114481001 LOCAL NUMBER 010S021E30C01S

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
JUL 23, 1980	37.11

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 25.00 FEET BELOW LAND SURFACE DATUM JUN 01, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	22.32

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 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 142.58 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 168.50 FEET BELOW LAND SURFACE DATUM JUL 22, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	168.50

IMPERIAL COUNTY--Continued

Ocotillo Valley (7-25)

SITE NUMBER 330701116003502 LOCAL NUMBER 012S009E23D02S

ABOUT 0.5 MI SOUTH OF HWY 78 AND 0.75 MI NORTH OF SAN FELIPE CREEK. DRILLED IRRIGATION WATER-TABLE WELL IN ALLUVIUM. DIAM 14 TO 12.75 IN, DEPTH 673 FT, 14-IN CS# 0-265 FT, 12.75-IN CS# 265-273 FT, PERFORATED 265-673 FT. ALTITUDE OF LSD -15 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 142.55 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 168.06 FEET BELOW LAND SURFACE DATUM JUL 22, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	168.06

Amos Valley (7-34)

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 194.50 FEET BELOW LAND SURFACE DATUM JUL 23, 1980.

LOWEST WATER LEVEL 198.90 FEET BELOW LAND SURFACE DATUM FEB 11, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	194.50

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 51.37 FEET BELOW LAND SURFACE DATUM SEP 24, 1980.

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
APR 30, 1980	51.41	SEP 24, 1980	51.37

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 11.55 FEET BELOW LAND SURFACE DATUM OCT 24, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 16, 1979	2.61	JAN 10, 1980	6.30	APR 29, 1980	6.38	SEP 19, 1980	6.93
22	4.15	FEB 06	6.45	MAY 27	6.50		
NOV 14	5.39	MAR 06	6.60	JUL 24	6.94		
DEC 13	5.99	APR 02	6.47	AUG 21	7.03		

GROUND WATER

IMPERIAL COUNTY--Continued

Ogilby Valley (7-35)

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 284.80 FEET BELOW LAND SURFACE DATUM FEB 11, 1981.

LOWEST WATER LEVEL 285.53 FEET BELOW LAND SURFACE DATUM JAN 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	284.81

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 131.00 FEET BELOW LAND SURFACE DATUM DEC 10, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 01, 1980	104.40	SEP 25, 1980	104.48

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
016S009E24D01S	80-05-01	1600	755	8.5	29.5	38	10	3.0	150	88

SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
11	4.0	102	140	90	1.0	14	476	400	30

IMPERIAL COUNTY--Continued

Coyote Wells Valley (7-29)

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 79.70 FEET BELOW LAND SURFACE DATUM NOV 10, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 01, 1980	58.89	SEP 25, 1980	59.36

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
016S009E24R01S	80-05-01	1430	620	8.4	27.5	50	12	5.0	110	81

SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT (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)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
6.7	5.2	97	86	61	.6	14	345	200	10

Imperial Valley (7-30)

SITE NUMBER 324603115480501 LOCAL NUMBER 016S011E23B01S

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
APR 30, 1980	39.65	SEP 24, 1980	39.55

GROUND WATER

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 1928-77, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.00 FEET BELOW LAND SURFACE DATUM NOV 15, 1945.

LOWEST WATER LEVEL 40.97 FEET BELOW LAND SURFACE DATUM SEP 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 22, 1980	25.60

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
MAY 22, 1980	3.67

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. RECORDS AVAILABLE 1928, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.00 FEET BELOW LAND SURFACE DATUM FEB 08, 1928.

LOWEST WATER LEVEL 6.90 FEET BELOW LAND SURFACE DATUM DEC 18, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 21, 1980	6.34

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 61.22 FEET BELOW LAND SURFACE DATUM SEP 15, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 22, 1980	43.40

INYO COUNTY—Continued

Owens Valley (6-12)

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 56.50 FEET BELOW LAND SURFACE DATUM DEC 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 22, 1980	55.16 S

SITE NUMBER 364815118110401 LOCAL NUMBER 013S035E17J01M

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. RECORDS AVAILABLE 1924, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 28.00 FEET BELOW LAND SURFACE DATUM MAY 16, 1924.

LOWEST WATER LEVEL 50.83 FEET BELOW LAND SURFACE DATUM SEP 26, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 22, 1980	63.00 P

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 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
MAY 21, 1980	35.54

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 51.64 FEET BELOW LAND SURFACE DATUM OCT 12, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 22, 1980	44.35

P Pumping.

S Nearby, pumping.

GROUND WATER

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, CASED 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 28.30 FEET BELOW LAND SURFACE DATUM OCT 07, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 28, 1979	28.19	JAN 17, 1980	28.14	JUN 18, 1980	28.20

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)
015S044E36M01M	80-06-18	0825	9720	7.3	28.0	730	450	76	130	1900

SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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, ORTHOPH- OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (MG/L AS B)	IRON, DIS- SOLVED (MG/L AS FE)
81	31	170	280	910	2800	1.1	47	6220	.15	.01	18000	70

Panamint Valley (6-58)

SITE NUMBER 360226117134701 LOCAL NUMBER 022S044E09B01M

ABOUT 0.63 MI WEST OF BALLARAT. 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
JUN 16, 1980	4.01

Indian Wells Valley (6-54)

SITE NUMBER 354758117464001 LOCAL NUMBER 024S039E33N01M

ABOUT 11 MI NORTH OF RIDGECREST. DUG UNUSED WATER-TABLE WELL. DIAM 10 IN, DEPTH 163 FT IN 1946, 161.9 FT IN 1952, 161.4 FT IN 1972. ALTITUDE OF LSD 2254.5 FT. RECORDS AVAILABLE 1920, 1946, 1952-54, 1959, 1961-66, 1968 TO CURRENT YEAR.

HIGHEST WATER LEVEL 58.86 FEET BELOW LAND SURFACE DATUM MAR 16, 1954.

LOWEST WATER LEVEL 62.05 FEET BELOW LAND SURFACE DATUM DEC 15, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 15, 1979	62.05

INYO COUNTY--Continued

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 121.79 FEET BELOW LAND SURFACE DATUM JUN 19, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 19, 1980	121.79

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 39.58 FEET BELOW LAND SURFACE DATUM JAN 14, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 19, 1980	39.45

Middle Armagosa 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 5.50 FEET BELOW LAND SURFACE DATUM OCT 02, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02, 1979	5.50	JUN 17, 1980	4.07

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, 1950.

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
JAN 17, 1980	76.06	JUN 16, 1980	76.14

GROUND WATER

KERN COUNTY

Indian Wells Valley (6-54)

SITE NUMBER 354408117485801 LOCAL NUMBER 026S039E19Q01M

AT INYOKERN. DRILLED UNUSED WATER-TABLE WELL IN GRAVEL OF QUATERNARY AGE. DIAM 16 IN, DEPTH 371 FT, CASED TO 256 FT. ALTITUDE OF LSD 2418.3 FT. RECORDS AVAILABLE 1945, 1952-64, 1966-73, 1975 TO CURRENT YEAR.

HIGHEST WATER LEVEL 207.50 FEET BELOW LAND SURFACE DATUM SEP 07, 1945.

LOWEST WATER LEVEL 225.60 FEET BELOW LAND SURFACE DATUM NOV 09, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 12, 1979	225.44

SITE NUMBER 353922117442301 LOCAL NUMBER 026S039E24M01M

ABOUT 4 MI NORTHWEST OF RIDGECREST. DRILLED UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 1953 FT, FILLED IN WITH GRAVEL PACK TO 800 FT. ALTITUDE OF LSD 2366.46 FT. RECORDS AVAILABLE 1960, 1962-67, 1970-71, 1973, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 172.87 FEET BELOW LAND SURFACE DATUM NOV 09, 1960.

LOWEST WATER LEVEL 216.60 FEET BELOW LAND SURFACE DATUM DEC 05, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 11, 1979	214.80

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 91.02 FEET BELOW LAND SURFACE DATUM DEC 07, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 07, 1979	91.02

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)		
026S040E22P01M	80-05-28	1030	1600	8.6	27.0	12	0	2.9	1.2	430		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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, ORTHOPH OSPHATE DISSOL, (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
98	54	8.6	730	7.3	140	.7	29	1070	.16	.21	7000	190

KERN COUNTY--Continued

Indian Wells Valley (6-54)

SITE NUMBER 353844117424401 LOCAL NUMBER 026S040E30K02M

SOUTHEAST OF INYOKERN HWY AND JACK RANCH ROAD INTERSECTION. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN, DEPTH 802 FT, PERFORATED 220-470, 600-760 FT. ALTITUDE OF LSD 2340 FT. RECORDS AVAILABLE 1968-1971, 1974 TO CURRENT YEAR.

HIGHEST WATER LEVEL 183.03 FEET BELOW LAND SURFACE DATUM OCT 13, 1970.

LOWEST WATER LEVEL 206.39 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
DEC 13, 1979	202.82

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 11, 1979	119.79

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 211.66 FEET BELOW LAND SURFACE DATUM APR 17, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 17, 1980	211.66

SITE NUMBER 350701117590401 LOCAL NUMBER 032S037E26M01M

IN CALIFORNIA CITY. DRILLED IRRIGATION WATER-TABLE WELL. DIAM 16 IN, DEPTH 598 FT. ALTITUDE OF LSD 2420 FT.

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)		
032S037E26M01M	80-06-26	0825	700	7.8	24.0	81	0	22	6.4	130		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
77	6.3	3.0	170	87	70	.3	25	448	.41	.01	480	10

GROUND WATER

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 ROGERS 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 118.79 FEET BELOW LAND SURFACE DATUM OCT 15, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 1979	117.60	MAR 11, 1980	116.84

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 IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)
010N013W32D01S	80-06-25	1305	560	7.8	27.5	180	14	54	12	56

SODIUM AD-SORPTION RATIO PERCENT	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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, ORTHOPHOSPHATE, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	
39	1.8	2.6	170	66	39	.3	25	367	2.1	.01	210	10

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 130.04 FEET BELOW LAND SURFACE DATUM APR 16, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24, 1979	129.76	APR 16, 1980	130.04

Antelope Valley (6-44)

SITE NUMBER 350055118172601 LOCAL NUMBER 011N013W29H01S

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
OCT 24, 1979	307.42	MAR 26, 1980	304.02

LOS ANGELES COUNTY

San Fernando Valley (4-12)

SITE NUMBER 341319118273101 LOCAL NUMBER 002N015W28P01S

NORTH OF INTERSECTION OF ROSCOE 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
AUG 14, 1980	221.53

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, CAGED TO 392 FT, PERFORATED 100-364 FT. ALTITUDE OF LSD 2738.5 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 23, 1979	73.82	APR 10, 1980	64.48

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 30.81 FEET BELOW LAND SURFACE DATUM MAR 13, 1980.

LOWEST WATER LEVEL 88.56 FEET BELOW LAND SURFACE DATUM OCT 07, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 13, 1980	30.81

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CA)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)		
005N013W36L01S	80-06-27	1245	550	7.6	23.0	180	15	47	14	50		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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 CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (MG/L AS B)	IRON, DIS- SOLVED (MG/L AS FE)	
38	1.6	1.6	160	54	34	.3	40	349	2.6	.03	230	<10

GROUND WATER

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

			SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)		
006N009W28P02S			580	7.7	26.5	120	29	40	5.8	83		
ODIUM ERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
	59	3.2	2.8	95	160	37	1.6	27	419	.87	.01	310

SITE NUMBER 344150118055401 LOCAL NUMBER 007N012W13H02S

WEST OF 20TH STREET EAST AND NORTH OF LANCASTER BLVD. DOMESTIC WATER-TABLE WELL. DIAM 8 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 147.76 FEET BELOW LAND SURFACE DATUM OCT 14, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 1979	143.50	MAR 13, 1980	143.45

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 IDENTIFIER			DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
007N013W14E01S			80-06-25	0720	440	7.7	26.5	140	33	45	7.4	36
SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (MG/L AS CAC03)	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, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
	35	1.3	1.5	110	43	42	.2	30	290	4.2	.01	110

LOS ANGELES COUNTY--Continued

Antelope Valley (6-44)

SITE NUMBER 344841118335001 LOCAL NUMBER 008N016W03F01S

NORTH OF AVENUE D AND WEST OF 240TH STREET WEST. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 1.5 TO 2 IN, DEPTH 326 FT, 1.5-IN CSG 0-295.5 FT, 2-IN CSG 295.5-326 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 220.29 FEET BELOW LAND SURFACE DATUM OCT 23, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23, 1979	220.29	MAR 12, 1980	219.00

San Gabriel Valley (4-13)

SITE NUMBER 340535117573501 LOCAL NUMBER 001S010W07R02S

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(001S010W18A01S).

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
NOV 21, 1979	136.55	FEB 27, 1980	134.17	MAY 23, 1980	108.47	AUG 19, 1980	113.10
DEC 17	136.73	MAR 24	126.64	JUN 23	103.95	SEP 22	117.40
JAN 23, 1980	137.67	APR 25	111.34	JUL 24	108.99		

Coastal Plain of Los Angeles (4-11)

SITE NUMBER 334905118124601 LOCAL NUMBER 004S013W23B02S

PREVIOUSLY PUBLISHED AS 4S/13W-23G2. 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 26, 1979	110.88	FEB 25, 1980	109.18	MAY 20, 1980	107.18	AUG 20, 1980	116.88
DEC 20	111.48	MAR 21	109.60	JUN 20	105.98	SEP 23	117.08
JAN 21, 1980	111.38	APR 18	110.38	JUL 22	112.38		

GROUND WATER

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. FEET BELOW LAND SURFACE DATUM AUG 20, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 22, 1980	33.48

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
MAY 22, 1980	1.97

ORANGE COUNTY

Coastal Plain of Orange County (8-1)

SITE NUMBER 335459117580701 LOCAL NUMBER 003S010W18C01S

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 1961 TO CURRENT YEAR.

HIGHEST WATER LEVEL 90.11 FEET BELOW LAND SURFACE DATUM FEB 04, 1981.

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 15, 1979	92.71	FEB 05, 1980	92.32	JUN 12, 1980	91.37	AUG 26, 1980	90.76

ORANGE COUNTY--Continued

Coastal Plain of Orange County (8-1)

SITE NUMBER 335317117580201 LOCAL NUMBER 003S010W30B01S

NEAR GRANT AND GILBERT STREETS IN FULLERTON. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM UNKNOWN, DEPTH UNKNOWN. ALTITUDE OF LSD 250 FT.

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)
003S010W30B01S	80-09-05	1000	640	7.9	25.5	45	0	14	2.5	140

SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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, ORTHOPH DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
86	9.1	2.3	170	97	65	.9	19	443	.00	.04	220	20

MANGA-
NESE,
DIS-
SOLVED
(UG/L
AS MN)

20

SITE NUMBER 334900117502301 LOCAL NUMBER 004S009W17Q01S

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	DATE	WATER LEVEL
NOV 14, 1979	178.52	FEB 12, 1980	174.64	JUN 11, 1980	146.21	AUG 29, 1980	142.79

GROUND WATER

ORANGE COUNTY--Continued

Coastal Plain of Orange County (8-1)

SITE NUMBER 334704117560501 LOCAL NUMBER 004S010W33F01S

NEAR LAMPSON AVENUE AND JERRY LANE IN GARDEN GROVE. PUBLIC SUPPLY WATER-TABLE WELL. DIAM UNKNOWN, DEPTH 236 FT, PERFORATED 154-214 FT. ALTITUDE OF LSD 100 FT.

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)
004S010W33F01S	80-09-03	1000	800	7.2	18.0	360	170	110	21	69

SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT (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 SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
29	1.6	5.0	190	140	94	.5	23	618	9.3	.03	120	30

MANGA-
NESE,
DIS-
SOLVED
(UG/L
AS MN)

2

SITE NUMBER 334404117480701 LOCAL NUMBER 005S009W15R03S

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 19.20 FEET BELOW LAND SURFACE DATUM JUL 02, 1975.

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 06, 1979	21.50	FEB 08, 1980	21.44	JUN 11, 1980	19.93	AUG 27, 1980	20.40

ORANGE COUNTY--Continued

Coastal Plain of Orange County (8-1)

SITE NUMBER 334231117464601 LOCAL NUMBER 005S009W25E04S

NEAR CULVER DRIVE AND TRABUCO ROAD IN IRVINE. DRILLED COMMERCIAL WATER-TABLE WELL. DIAM 6.62 IN; DEPTH 290 FT, CASED TO 290 FT, PERFORATED 255-275 FT. ALTITUDE OF LSD 110 FT.

WATER QUALITY DATA

LOCAL IDENTIFIER			DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	
005S009W25E04S			80-08-21	0905	920	7.6	23.0	350	53	72	42	170	
SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	
	51	3.9	2.4	300	210	150	.7	41	875	1.4	.03	310	70
						MANGANESE, DIS-SOLVED (UG/L AS MN)							
50													

SITE NUMBER 334456117551201 LOCAL NUMBER 005S010W09R01S

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 FROM 1938-56, 1958, 1964-77 FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT. RECORDS AVAILABLE 1938-56, 1958, 1964 TO CURRENT YEAR.

HIGHEST WATER LEVEL 35.30 FEET BELOW LAND SURFACE DATUM FEB 04, 1970.

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 07, 1979	51.75	FEB 07, 1980	49.20	JUN 17, 1980	47.19	AUG 27, 1980	47.17

San Juan Valley (9-1)

SITE NUMBER 333935117351401 LOCAL NUMBER 006S007W11N02S

ON TRABUCO CANYON ROAD EAST OF TRABUCO OAKS ROAD. DRILLED IRRIGATION WATER-TABLE WELL. DEPTH 70 FT IN 1949. ALTITUDE OF LSD 993.6 FT. MEASUREMENTS FURNISHED BY ORANGE COUNTY FLOOD CONTROL DISTRICT PRIOR TO 1980. RECORDS AVAILABLE 1949-75, 1977, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.64 FEET BELOW LAND SURFACE DATUM FEB 15, 1962.

LOWEST WATER LEVEL 42.95 FEET BELOW LAND SURFACE DATUM SEP 13, 1971.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 21, 1980	15.79

GROUND WATER

RIVERSIDE COUNTY

Rice Valley (7-4)

SITE NUMBER 340300114473301 LOCAL NUMBER 001S021E32B01S

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 150.54 FEET BELOW LAND SURFACE DATUM JUL 19, 1979.

LOWEST WATER LEVEL 152.74 FEET BELOW LAND SURFACE DATUM MAR 18, 1964.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 24, 1980	150.66

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 410.80 FEET BELOW LAND SURFACE DATUM MAR 19, 1981.

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	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 13, 1979	463.00	MAY 06, 1980	455.15	MAY 29, 1980	446.80	JUL 15, 1980	440.20

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)
003S004E29F01S	79-12-13	1200	320	10.5	20.5	15	--	6.0	.0	43
	80-05-28	1130	235	10.4	21.0	17	0	5.9	.6	39
	80-07-15	1305	335	9.9	23.5	77	26	23	4.8	20

SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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 SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPH OSPATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
81	4.8	5.5	74	24	11	.4	.5	--	--	--	0	--
78	4.1	5.6	72	22	11	.2	.2	128	.04	.01	30	<10
42	1.4	5.5	51	60	24	.8	.6	177	.02	.00	20	<10

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 439.23 FEET BELOW LAND SURFACE DATUM MAR 19, 1981.

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	DATE	WATER LEVEL
DEC 13, 1979	476.98	MAY 06, 1980	467.63	JUL 15, 1980	459.33

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (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)
003S004E29R01S	79-12-13	1100	325	7.7	19.5	120	--	38	6.0	19
	80-05-06	1115	290	7.6	20.5	110	5	36	6.0	20
	80-07-15	1415	340	7.5	23.0	120	4	39	6.4	19

SODIUM PERCENT	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
25	.8	4.0	112	29	5.0	--	20	--	--	--	0	--
27	.8	4.7	110	30	5.6	1.1	19	192	.82	.00	2	30
24	.7	4.1	120	34	7.1	1.0	20	206	.83	.00	20	20

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	DATE	WATER LEVEL
OCT 04, 1979	170.49 S	APR 25, 1980	170.55 S

Rice Valley (7-4)

SITE NUMBER 335503114490201 LOCAL NUMBER 003S021E18D01S

ABOUT 4.5 MI NORTH-NORTHWEST OF MIDLAND, UNUSED WATER-TABLE WELL IN ALLUVIUM. 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
JUL 24, 1980	285.63

S Nearby, pumping.

GROUND WATER

RIVERSIDE COUNTY--Continued

Pinto Valley (7-6)

SITE NUMBER 334712115485601 LOCAL NUMBER 004S011E27Q01S

ABOUT 3.5 MI NORTH OF COTTONWOOD SPRING, IN SHOKETREE 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 212-228, 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 194.40 FEET BELOW LAND SURFACE DATUM APR 11, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04, 1979	190.94	APR 25, 1980	193.59

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)	SODIUM PERCENT
004S011E27Q01S	79-10-04	1450	440	7.7	26.0	124	38	7.0	43	42
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
1.7	3.0	119	27	41	2.6	33	272	20	30	

Chuckwalla Valley (7-5)

SITE NUMBER 334647115195801 LOCAL NUMBER 004S016E32M01S

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 79.95 FEET BELOW LAND SURFACE DATUM AUG 24, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 24, 1980	72.87

SITE NUMBER 335133115141901 LOCAL NUMBER 004S017E06C01S

ABOUT 13.5 MI NORTHEAST OF DESERT CENTER. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. 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 25.02 FEET BELOW LAND SURFACE DATUM APR 23, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 24, 1980	24.40

RIVERSIDE COUNTY--Continued

Palo Verde Mesa (7-39)

SITE NUMBER 334120114400001 LOCAL NUMBER 006S022E03B01S

ABOUT 5.5 MI NORTHWEST OF BLYTHE, DRILLED UNUSED WATER-TABLE WELL. DIAM 12.75 IN, DEPTH 370 FT IN 1971, PERFORATED 275-414 FT, CASD 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 170.44 FEET BELOW LAND SURFACE DATUM JUL 24, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 24, 1980	170.44

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, CASD 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
JUL 24, 1980	158.69

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. CASD TO 712 FT, PERFORATED 620-648, 670-690 FT. ALTITUDE OF LSD 369 FT. RECORDS AVAILABLE 1977, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 9.45 FEET BELOW LAND SURFACE DATUM JUN 27, 1979.

LOWEST WATER LEVEL 10.62 FEET BELOW LAND SURFACE DATUM JAN 23, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	9.53

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 8.59 FEET BELOW LAND SURFACE DATUM JUL 23, 1980.

LOWEST WATER LEVEL 9.85 FEET BELOW LAND SURFACE DATUM JAN 22, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	8.59

GROUND WATER

RIVERSIDE COUNTY--Continued

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
JUL 24, 1980	169.06

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 11.5 FEET BELOW LAND SURFACE DATUM JUL 26, 1979.

LOWEST WATER LEVEL 13.43 FEET BELOW LAND SURFACE DATUM JAN 22, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	12.24

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 12.75 FEET BELOW LAND SURFACE DATUM JAN 21, 1970.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 23, 1980	10.40

Upper Santa Ana Valley (8-2)

SITE NUMBER 335732117252801 LOCAL NUMBER 002S005W32B01S

ABOUT 800 FT NORTH OF DEWEY AVE AND 660 FT EAST OF HILLSIDE AVE 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 TO CURRENT YEAR.

HIGHEST WATER LEVEL 47.20 FEET BELOW LAND SURFACE DATUM MAY 16, 1967.

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 17, 1979	48.40	JUN 10, 1980	47.70

RIVERSIDE COUNTY--Continued

Upper Santa Ana Valley (8-2)

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. MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT. 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	DATE	WATER LEVEL
OCT 17, 1979	32.40	APR 21, 1980	24.70

San Jacinto Basin (8-5)

SITE NUMBER 335512117000001 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. MEASUREMENTS FURNISHED BY RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT; 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
JUN 13, 1980	111.14

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. 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
JUN 13, 1980	111.50

GROUND WATER

RIVERSIDE COUNTY--Continued

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	DATE	WATER LEVEL
OCT 15, 1979	97.13	DEC 26, 1979	82.29	FEB 29, 1980	68.11	MAY 14, 1980	56.00
NOV 20	83.71	JAN 31 1980	90.08	APR 08	46.86	JUL 31	69.17 R

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (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)		
008S002W28R01S	80-06-30	1145	380	7.9	20.0	74	0	27	1.7	50		
SODIUM AD-SORPTION RATIO	POTASSIUM DIS-SOLVED (MG/L AS K)	ALKALINITY (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, ORTHOPHOSPHATE DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	
59	2.5	.7	130	11	23	.9	25	221	.80	.02	110	30

SITE NUMBER 332719117061501 LOCAL NUMBER 008S002W29G01S

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	DATE	WATER LEVEL
OCT 15, 1979	25.92	JAN 31, 1980	24.71	MAY 14, 1980	18.32	SEP 02, 1980	18.77
NOV 20	26.60	FEB 29	18.44	JUN 30	19.08		
DEC 26	27.08	APR 08	17.70	JUL 31	20.04		

SAN BERNARDINO COUNTY

Searles Valley (6-52)

SITE NUMBER 354040117223201 LOCAL NUMBER 026S043E18A01M

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 31.20 FEET BELOW LAND SURFACE DATUM JAN 14, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 28, 1980	30.84

R Recently, pumped.

SAN BERNARDINO COUNTY---Continued

Pilot Knob Valley (6-51)

SITE NUMBER 35311117174301 LOCAL NUMBER 028S043E12A01M

ON CHINA LAKE NAVAL WEAPONS CENTER AT RANDSBURG WASH HEADQUARTERS. DRILLED UNUSED WATER-TABLE WELL IN ALLUVIUM. DIAM 8 IN, DEPTH 498 FT WHEN DRILLED AND 485 FT IN 1952, PERFORATED 307-498 FT. ALTITUDE OF LSD 2400 FT. RECORDS AVAILABLE 1950, 1952-53, 1961, 1966, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 276.00 FEET BELOW LAND SURFACE DATUM DEC 07, 1950.

LOWEST WATER LEVEL 333.50 FEET BELOW LAND SURFACE DATUM JUL 28, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 28, 1980	333.50

Cuddeback Valley (6-50)

SITE NUMBER 351627117230001 LOCAL NUMBER 030S043E32N01M

AT CUDEBACK AIR-GROUND GUNNERY RANGE. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM. DIAM 10 IN, DEPTH 429 FT, CASED TO 429 FT, PERFORATED 203-403 FT. ALTITUDE OF LSD 2838 FT. RECORDS AVAILABLE 1957, 1968, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 324.65 FEET BELOW LAND SURFACE DATUM AUG 06, 1980.

LOWEST WATER LEVEL 327. FEET BELOW LAND SURFACE DATUM FEB 24, 1957.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 06, 1980	324.65

Superior Valley (6-49)

SITE NUMBER 351353117025101 LOCAL NUMBER 031S046E16J01M

ABOUT 0.5 MI SOUTH OF SOUTH EDGE OF SUPERIOR LAKE AND 21 MI NORTH OF BARSTOW. 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 TO CURRENT YEAR.

HIGHEST WATER LEVEL 93.00 FEET BELOW LAND SURFACE DATUM DEC 15, 1953.

LOWEST WATER LEVEL 108.93 FEET BELOW LAND SURFACE DATUM JUL 29, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 29, 1980	108.93

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 211.35 FEET BELOW LAND SURFACE DATUM MAY 30, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1979	210.19	JAN 09, 1980	209.96	APR 02, 1980	210.20	JUN 21, 1980	210.11
NOV 14	210.23	FEB 06	210.12	29	210.13	AUG 20	210.22
DEC 12	210.23	MAR 05	210.09	MAY 31	210.07	SEP 18	210.19

GROUND WATER

SAN BERNARDINO COUNTY--Continued

Dale Valley (7-9)

SITE NUMBER 340959115451301 LOCAL NUMBER 001N012E17N02S

ABOUT 18 MI EAST OF TWENTYNINE PALMS ON AMBOY ROAD. DRILLED DOMESTIC WATER-TABLE WELL. DIAM 8 IN, DEPTH 130 FT. ALTITUDE OF LSD 1211 FT.

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)
001N012E17N02S	80-08-01	0750	2700	8.1	27.5	150	83	51	5.0	510

SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT- Y (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, ORTHOPH- OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
87	18	9.2	65	660	390	.6	8.4	1680	.34	.01	5200	90

MANGA-
NESE,
DIS-
SOLVED
(UG/L
AS MN)

10

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 26.80 FEET BELOW LAND SURFACE DATUM JUL 06, 1978.

LOWEST WATER LEVEL 45.83 FEET BELOW LAND SURFACE DATUM APR 09, 1948.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 01, 1980	27.09

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
AUG 01, 1980	28.04

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
JUL 24, 1980	267.43

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
AUG 01, 1980	337.07

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
JUL 31, 1980	93.00

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, 1978 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 18, 1979	88.62	JAN 09, 1980	86.61	APR 02, 1980	88.73	JUL 23, 1980	88.78
NOV 14	88.65	FEB 06	88.66	29	88.77	AUG 20	88.76
DEC 12	88.63	MAR 05	88.65	MAY 31	88.97	SEP 18	88.76

GROUND WATER

SAN BERNARDINO COUNTY--Continued

Johnson Valley (7-18)

SITE NUMBER 342528116393501 LOCAL NUMBER 004N003E22C01S

ABOUT 3.5 MI NORTHEAST OF INTERSECTION OF HWY 247 AND STONY RIDGE ROAD. DIAM 12 IN, DEPTH 288 FT. ALTITUDE OF LSD 2895 FT. RECORDS AVAILABLE 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 115.00 FEET BELOW LAND SURFACE DATUM APR 11, 1980.

LOWEST WATER LEVEL 115.00 FEET BELOW LAND SURFACE DATUM APR 11, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 11, 1980	115.00

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)
004N003E22C01S	80-04-11	1120	2200	7.1	20.0	780	620	190	74	170

SODIUM PERCENT	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT- Y (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, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
32	2.7	6.5	160	630	230	.3	23	1430	1.6	.00	290	340

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
FEB 28, 1980	73.35	AUG 06, 1980	73.30

SITE NUMBER 342448116371501 LOCAL NUMBER 004N003E24Q01S

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
FEB 28, 1980	58.56	AUG 06, 1980	56.10

SAN BERNARDINO COUNTY--Continued

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
JUL 31, 1980	258.32

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 5.55 FEET BELOW LAND SURFACE DATUM JAN 22, 1981.

LOWEST WATER LEVEL 6.36 FEET BELOW LAND SURFACE DATUM APR 24, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 24, 1980	6.23

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 136.24 FEET BELOW LAND SURFACE DATUM NOV 20, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 19, 1980	133.69	AUG 06, 1980	134.76

WATER QUALITY DATA

LOCAL IDENT- IFIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CA)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)		
005N001E17D01S	80-03-28	0915	3700	8.9	20.0	53	0	10	6.8	730		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY (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, ORTHOPH- OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
96	44	17	330	45	970	.9	2.8	1980	.17	.12	1100	18

GROUND WATER

SAN BERNARDINO COUNTY--Continued

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
JUL 31, 1980	215.70

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
JUL 31, 1980	43.50

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
JUL 31, 1980	202.72

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. RECORDS AVAILABLE 1925, 1953-55, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 258.20 FEET BELOW LAND SURFACE DATUM SEP 15, 1954.

LOWEST WATER LEVEL 268.60 FEET BELOW LAND SURFACE DATUM SEP 13, 1953.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1980	258.99

SAN BERNARDINO COUNTY--Continued

Fenner Valley (7-2)

SITE NUMBER 344352115145601 LOCAL NUMBER 008N016E36R01S

ABOUT 11 MI NORTHEAST OF DANBY. DRILLED DOMESTIC WATER-TABLE WELL. DIAM UNKNOWN, DEPTH 800 FT. ALTITUDE OF LSD 1717 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 336.38 FEET BELOW LAND SURFACE DATUM JUL 21, 1979.

LOWEST WATER LEVEL 336.38 FEET BELOW LAND SURFACE DATUM JUL 21, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1980	336.25 P

SITE NUMBER 344931115103601 LOCAL NUMBER 008N017E02D01S

IN FENNER. DRILLED UNUSED WATER-TABLE WELL. DIAM 15.5 TO 12.5 IN. DEPTH 1090 FT. 15.5-IN CSG 0-121 FT, 12.5-IN CSG 0-582 FT. ALTITUDE OF LSD 2086 FT. RECORDS AVAILABLE 1925, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 362.58 FEET BELOW LAND SURFACE DATUM JUL 31, 1980.

LOWEST WATER LEVEL 452. FEET BELOW LAND SURFACE DATUM DEC 14, 1925.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1980	362.58

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 WATER AND POWER RESOURCES SERVICE 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 85.51 FEET BELOW LAND SURFACE DATUM JUN 29, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 29, 1980	84.89

SITE NUMBER 345709116390501 LOCAL NUMBER 010N003E15Q01S

ABOUT 0.5 MI WEST OF HARVARD ROAD AND NORTH OF CHEROKEE. 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 111.15 FEET BELOW LAND SURFACE DATUM DEC 04, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAR 26, 1980	111.12

P Pumping.

GROUND WATER

SAN BERNARDINO COUNTY--Continued

Piute Valley (7-45)

SITE NUMBER 345629114472601 LOCAL NUMBER 010N021E21Q02S

NORTHEAST OF IBIS, 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 118.69 FEET BELOW LAND SURFACE DATUM JAN 21, 1981.

LOWEST WATER LEVEL 130.00 FEET BELOW LAND SURFACE DATUM OCT 25, 1917.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1980	118.76

Kelso Valley (6-31)

SITE NUMBER 350040115385701 LOCAL NUMBER 011N012E25G02S

IN KELSO, DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 16 IN, DEPTH 700 FT, ALTITUDE OF LSD 2120 FT. RECORDS AVAILABLE 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 465.83 FEET BELOW LAND SURFACE DATUM JUL 31, 1980.

LOWEST WATER LEVEL 484.1 FEET BELOW LAND SURFACE DATUM JUL 19, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1980	465.83

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 57.25 FEET BELOW LAND SURFACE DATUM JUL 29, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 29, 1980	57.25

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
JUL 30, 1980	38.02

SAN BERNARDINO COUNTY--Continued

Lanfair Valley (7-1)

SITE NUMBER 350253115024301 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 510.40 FEET BELOW LAND SURFACE DATUM JAN 15, 1981.

LOWEST WATER LEVEL 570.00 FEET BELOW LAND SURFACE DATUM JAN 01, 1937.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 31, 1980	518.10

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
JUN 19, 1980	65.64

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 187.83 FEET BELOW LAND SURFACE DATUM JUL 29, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 29, 1980	187.83

Langford Valley (6-36)

SITE NUMBER 351547116405001 LOCAL NUMBER 014N003E32J01S

ON CAMP IRWIN. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 14 TO 12 IN, DEPTH 550 FT, 14-IN CSG 0-34 FT, 12-IN CSG 314-550 FT, PERFORATED 200-310, 340-536 FT. ALTITUDE OF LSD 2468.41 FT. RECORDS AVAILABLE 1945, 1955, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 173.00 FEET BELOW LAND SURFACE DATUM JUN 01, 1945.

LOWEST WATER LEVEL 186.04 FEET BELOW LAND SURFACE DATUM JUL 13, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 29, 1980	184.07

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
JUN 19, 1980	76.40

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 134.28 FEET BELOW LAND SURFACE DATUM JUL 12, 1978.

LOWEST WATER LEVEL 137.02 FEET BELOW LAND SURFACE DATUM AUG 20, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 29, 1980	134.32

Upper Kingston Valley (6-22)

SITE NUMBER 352316115420701 LOCAL NUMBER 015N012E16H01S

ABOUT 3 MI SOUTH OF VALLEY WELLS STATION. DRILLED STOCK WATER-TABLE WELL. DIAM 8 IN, DEPTH 350 FT. ALTITUDE OF LSD 3908 FT. RECORDS AVAILABLE 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 207.18 FEET BELOW LAND SURFACE DATUM JUL 20, 1978.

LOWEST WATER LEVEL 208.64 FEET BELOW LAND SURFACE DATUM JUL 30, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 30, 1980	208.64

Ivanpah Valley (6-30)

SITE NUMBER 352306115193901 LOCAL NUMBER 015N015E13G02S

ABOUT 4.3 MI NORTH-NORTHWEST OF IVANPAH. DRILLED INDUSTRIAL WATER-TABLE WELL. DIAM 18 IN, DEPTH 828 FT IN 1923, 735 FT IN 1970. ALTITUDE OF LSD 2927 FT. RECORDS AVAILABLE 1923, 1940, 1970, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 367.00 FEET BELOW LAND SURFACE DATUM MAY 15, 1923.

LOWEST WATER LEVEL 392.00 FEET BELOW LAND SURFACE DATUM JAN 01, 1940.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 20, 1980	373.23

SAN BERNARDINO COUNTY--Continued

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	DATE	WATER LEVEL
OCT 03, 1979	99.73	JUN 20, 1980	102.62

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 13.97 FEET BELOW LAND SURFACE DATUM JUL 28, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 30, 1980	12.87

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 AVAILABLE 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	DATE	WATER LEVEL
OCT 03, 1979	45.05	JUN 20, 1980	44.63

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
JUL 30, 1980	358.64

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 38.04 FEET BELOW LAND SURFACE DATUM JAN 15, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 20, 1980	37.68

Upper Mojave River Valley (6-42)

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 102.22 FEET BELOW LAND SURFACE DATUM NOV 21, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 06, 1980	102.09

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 TO CURRENT YEAR.

HIGHEST WATER LEVEL 51.39 FEET BELOW LAND SURFACE DATUM NOV 21, 1980.

LOWEST WATER LEVEL 55.16 FEET BELOW LAND SURFACE DATUM AUG 06, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
AUG 06, 1980	55.16

SITE NUMBER 343900117261801 LOCAL NUMBER 006N005W19J02S

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
MAR 06, 1980	78.87

SAN BERNARDINO COUNTY--Continued

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	DATE	WATER LEVEL
MAR 05, 1980	15.74	APR 09, 1980	7.99	AUG 06, 1980	8.91

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (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)
008N004W12Q01S	80-04-09	1230	1725	7.1	19.0	450	120	140	24	170
SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	
45	3.5	3.9	330	210	170	.5	26	943	330	<10

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 19.30 FEET BELOW LAND SURFACE DATUM JUN 03, 1980.

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
OCT 10, 1979	21.29	FEB 26, 1980	19.55	JUN 03, 1980	19.30

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (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)		
009N001W11R02S	79-10-10	1540	1100	7.2	23.5	360	100	110	21	100		
	80-06-03	1125	1030	7.1	22.0	290	75	85	20	98		
SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	
44	2.4	4.3	260	130	140	.5	18	683	.05	.03	380	2300
42	2.5	4.2	220	110	140	.3	15	607	.13	.01	310	1100

GROUND WATER

SAN BERNARDINO COUNTY--Continued

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
APR 09, 1980	77.87	AUG 06, 1980	71.51

Harper Valley (6-47)

SITE NUMBER 350103117134501 LOCAL NUMBER 011N003W30G01S

AT BLACKS RANCH, EAST OF HARPER LAKE. DRILLED STOCK WATER-TABLE WELL. DIAM AND DEPTH UNKNOWN. ALTITUDE OF LSD 2031 FT. RECORDS AVAILABLE 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 10.18 FEET BELOW LAND SURFACE DATUM MAR 05, 1980.

LOWEST WATER LEVEL 11.12 FEET BELOW LAND SURFACE DATUM AUG 06, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 05, 1980	10.18	AUG 06, 1980	11.12

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 175.95 FEET BELOW LAND SURFACE DATUM AUG 06, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 04, 1980	152.76	AUG 06, 1980	175.95

SAN BERNARDINO COUNTY--Continued

Harper Valley (6-47)

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
MAR 05, 1980	264.17	JUL 28, 1980	264.11

WATER QUALITY DATA

LOCAL IDENT- I- FIER	DATE OF SAMPLE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH FIELD (UNITS)	TEMPER- ATURE, WATER (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)		
011N006W17P02S	80-03-27	1550	650	7.3	23.0	64	0	22	2.2	120		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY (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, ORTHOPH DIS- OSPHATE DISSOL. (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	
79	6.5	3.3	150	23	110	.7	10	383	.10	.04	1100	<10

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, 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 161.28 FEET BELOW LAND SURFACE DATUM DEC 04, 1980.

LOWEST WATER LEVEL 193.94 FEET BELOW LAND SURFACE DATUM JAN 02, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUN 13, 1980	163.57

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 1952-75, 1978, 1980 TO CURRENT YEAR.

HIGHEST WATER LEVEL 136.36 FEET BELOW LAND SURFACE DATUM JUN 24, 1952.

LOWEST WATER LEVEL 185.48 FEET BELOW LAND SURFACE DATUM JUL 22, 1965.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	177.90

GROUND WATER

SAN DIEGO COUNTY--Continued

Borrego Valley (7-24)

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 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 40.30 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 43.40 FEET BELOW LAND SURFACE DATUM JUL 22, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	43.40

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 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 108.98 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

LOWEST WATER LEVEL 109.06 FEET BELOW LAND SURFACE DATUM FEB 11, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	109.01

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 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
JUL 22, 1980	60.66

SITE NUMBER 325808116232801 LOCAL NUMBER 014S006E08F03S

ABOUT 1 MI NORTHEAST OF TROUTMAN MTN. UNUSED WATER-TABLE WELL. DIAM 8 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 1645 FT. RECORDS AVAILABLE 1962, 1965, 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 65.31 FEET BELOW LAND SURFACE DATUM MAR 16, 1962.

LOWEST WATER LEVEL 78.15 FEET BELOW LAND SURFACE DATUM DEC 27, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	77.80

SAN DIEGO COUNTY--Continued

San Diego River Valley (9-15)

SITE NUMBER 325159116551101 LOCAL NUMBER 0155001E18L03S

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 19.49 FEET BELOW LAND SURFACE DATUM DEC 19, 1979.

LOWEST WATER LEVEL 21.80 FEET BELOW LAND SURFACE DATUM JUL 10, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1979	19.49	JUL 10, 1980	21.80

Vallecito-Carrizo Valley (7-28)

SITE NUMBER 325215116110701 LOCAL NUMBER 0155008E17D02S

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 63.60 FEET BELOW LAND SURFACE DATUM MAY 04, 1966.

LOWEST WATER LEVEL 71.40 FEET BELOW LAND SURFACE DATUM FEB 01, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
JUL 22, 1980	71.26

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 17, 1979	18.18	FEB 05, 1980	10.95	MAY 14, 1980	9.82	JUL 29, 1980	9.83
NOV 16	17.51	MAR 31	8.61	JUN 25	9.55	SEP 04	9.75
DEC 27	14.44						

GROUND WATER

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
CT 01, 1979	9.24	DEC 17, 1979	9.55	APR 28, 1980	7.17	JUL 21, 1980	7.84
09	9.12	26	9.51	MAY 05	7.18	29	7.89
15	9.22	JAN 02, 1980	9.32	12	7.24	AUG 04	7.95
22	9.28	14	7.90	19	7.23	11	8.05
29	9.17	21	7.42	27	7.35	18	8.12
OV 05	9.20	FEB 29	5.74	JUN 04	7.43	25	8.08
13	9.11	MAR 23	6.30	16	7.49	SEP 02	8.10
19	9.31	31	6.47	23	7.65	08	8.13
26	9.22	APR 08	6.75	30	7.66	15	8.14
EC 03	9.41	15	6.87	JUL 07	7.65	24	8.38
10	9.51	21	7.06	17	7.76	29	8.45

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
ICT 01, 1979	17.16	DEC 17, 1979	18.79	MAY 12, 1980	8.34	AUG 04, 1980	11.25
09	17.41	26	18.86	19	8.33	11	11.59
15	17.58	JAN 02, 1980	18.95	27	8.27	18	12.34
22	17.90	15	14.74	JUN 04	8.34	SEP 02	13.35
29	17.98	FEB 29	7.81	16	8.08	08	13.86
IOV 05	18.19	APR 01	8.25	23	8.71	15	14.29
13	18.25	08	8.19	30	9.02	24	14.65
19	18.35	15	8.14	JUL 07	7.14	29	14.89
27	18.56	21	8.19	18	10.14		
DEC 03	18.58	28	8.23	21	6.34		
10	18.68	MAY 07	8.24	29	10.32		

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
NOV 16, 1979	139.66	MAR 31, 1980	117.39	JUN 26, 1980	132.39	SEP 04, 1980	133.97
FEB 01, 1980	126.81 R	MAY 15	122.20	JUL 30	133.72		

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (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)	SODIUM PERCENT
010S001W16H01S	80-05-15	1120	890	7.2	18.5	320	74	33	71	32

SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (MG/L AS CAC03)	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 SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
1.7	3.4	179	82	114	.2	47	598	0	20

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, 1960-63, 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 16, 1979	11.89	FEB 04, 1980	11.01	MAY 15, 1980	10.26	JUL 30, 1980	11.79
NOV 16	12.34	MAR 31	9.16	JUN 26	10.95	SEP 04	12.34
DEC 27	12.79						

R Recently, pumped.

GROUND WATER

SAN DIEGO COUNTY--Continued

Santa Margarita Valley (9-4)

SITE NUMBER 331544117222101 LOCAL NUMBER 010S005W35K05S

ABOUT 0.5 MI NORTHWEST OF VANDERGRIFF 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
ICT 02, 1979	5.81	NOV 14, 1979	5.17	DEC 28, 1979	5.45	JUN 25, 1980	5.31
10	5.61	21	5.62	JAN 03 1980	5.43	AUG 14	5.88
18	5.75	29	5.70	APR 02	4.58	SEP 19	7.91
25	5.37	DEC 07	5.59	15	3.49		
IOV 01	5.47	13	5.58	MAY 22	4.39		
08	5.20	20	5.60	JUN 17	4.39		

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 1.01 FEET BELOW LAND SURFACE DATUM JAN 29, 1981.

LOWEST WATER LEVEL 5.08 FEET BELOW LAND SURFACE DATUM DEC 06, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1979	4.40	JUL 14, 1980	1.51

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 12.96 FEET BELOW LAND SURFACE DATUM JAN 29, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1979	12.50 S	JUL 14, 1980	11.60

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 9.40 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

LOWEST WATER LEVEL 9.96 FEET BELOW LAND SURFACE DATUM DEC 19, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1979	9.96	JUL 14, 1980	9.71

S Nearby, pumping.

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 9.37 FEET BELOW LAND SURFACE DATUM JUL 14, 1980.

LOWEST WATER LEVEL 11.03 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1979	10.30	JUL 14, 1980	9.37

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 6.83 FEET BELOW LAND SURFACE DATUM JAN 29, 1981.

LOWEST WATER LEVEL 12.87 FEET BELOW LAND SURFACE DATUM DEC 07, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 19, 1979	9.72	JUL 14, 1980	7.80

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 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 30, 1980	292.35

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 AVAILABLE 1960, 1967-75, 1978 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	DATE	WATER LEVEL
OCT 10, 1979	347.15	MAY 30, 1980	346.60

GROUND WATER

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 31.86 FEET BELOW LAND SURFACE DATUM JUL 17, 1980.

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 18, 1979	41.24	JAN 17, 1980	40.78	APR 18, 1980	33.25	JUL 17, 1980	31.86
NOV 19	41.39	FEB 20	38.48	MAY 28	32.17	AUG 20	32.04
DEC 27	41.83	MAR 18	35.09	JUN 18	32.08	SEP 17	32.06

Santa Barbara Basin (3-17)

SITE NUMBER 342506119423801 LOCAL NUMBER 004N027W21B01S

NEAR WILSON SCHOOL IN SANTA BARBARA. UNUSED WATER-TABLE WELL. DIAM 16 IN, DEPTH 454 FT, CASED TO 454 FT, PERFORATED 145-350 FT. ALTITUDE OF LSD 68 FT. MEASUREMENTS BEGINNING 5/11/76 FURNISHED BY CITY OF SANTA BARBARA. RECORDS AVAILABLE 1931, 1948-50, 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 37.00 FEET BELOW LAND SURFACE DATUM JAN 23, 1948.

LOWEST WATER LEVEL 122.00 FEET BELOW LAND SURFACE DATUM OCT 21, 1931.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10, 1979	76.60	FEB 12, 1980	78.10	MAY 20, 1980	79.61	AUG 06, 1980	80.16
NOV 13	77.70	MAR 11	75.00	JUN 05	79.17	SEP 09	79.92
JAN 16, 1980	77.40	APR 19	77.75	JUL 10	79.70		

SITE NUMBER 342510119413801 LOCAL NUMBER 004N027W22B06S

NEAR COTA STREET AND VERA CRUZ AVENUE IN SANTA BARBARA. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. DIAM 14 IN, DEPTH REPORTED 700 FT, PERFORATED 210-240, 415-435, 465-480, 560-580, 600-620, 640-670 FT. ALTITUDE OF LSD 35 FT.

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (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)		
004N027W22B06S	79-10-03	--	770	6.5	23.5	310	68	87	22	39		
SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (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, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	
22	1.0	1.7	240	120	35	.3	33	486	.68	.03	60	140

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 WATER AND POWER RESOURCES SERVICE. 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 28, 1979	56.70	JAN 15, 1980	56.70	APR 04, 1980	56.70	JUL 18, 1980	46.7
NOV 28	56.70	FEB 27	59.70	MAY 17	60.7	AUG 19	47.7
DEC 24	56.70	MAR 26	47.70	JUN 26	48.7	SEP 26	50.7

SITE NUMBER 343840120304801 LOCAL NUMBER 007N035W36J03S

ABOUT 3 MI WEST OF LOMPOC. DRILLED UNUSED WATER-TABLE WELL. 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 19, 1979	21.52	JAN 25, 1980	21.60	APR 24, 1980	19.79	JUL 23, 1980	28.80
NOV 26	20.60	FEB 26	18.36	MAY 27	20.42	AUG 22	26.35
DEC 17	20.97	MAR 24	18.97	JUN 25	24.78	SEP 24	22.69

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 53.08 FEET BELOW LAND SURFACE DATUM JUL 10, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 05, 1979	35.54	JAN 05, 1980	32.14	MAR 31, 1980	28.72	JUL 10, 1980	33.86
10	35.26	10	32.12	APR 05	29.37	15	34.80
15	34.90	15	31.07	10	29.82	20	34.80
20	34.50	20	30.47	15	30.78	24	34.94
25	34.00	23	30.25	20	31.12	25	35.36
31	33.56	25	30.13	24	30.79 S	31	40.78
NOV 05	33.16	31	29.91	25	30.55	AUG 05	43.55
10	32.79	FEB 05	29.86	30	30.31	10	41.39
15	32.50	10	29.90	MAY 05	30.28	15	40.96
20	32.27	15	29.57	10	30.32	20	40.47
25	31.91	20	28.87	17	31.54	25	40.26
26	31.96	25	28.86	27	33.40	31	40.97
30	31.80	29	28.73	31	33.26	SEP 05	40.58
DEC 05	31.49	MAR 05	28.49	JUN 05	33.22	10	40.43
10	31.74	10	28.34	10	32.98	15	40.30
15	31.39	11	28.34	15	33.42	20	40.63
17	31.21	15	28.80	20	33.08	22	40.88
20	30.94	20	28.72	25	33.58	25	41.16
25	30.53	25	29.11	30	33.51	30	40.05
31	30.60	27	29.16	JUL 05	33.45		

S Nearby, pumping.

GROUND WATER

SANTA BARBARA COUNTY--Continued

San Antonio Creek Valley (3-14)

SITE NUMBER 344443120164501 LOCAL NUMBER 008N032W30H07S

IN LOS ALAMOS. DRILLED PUBLIC SUPPLY WATER-TABLE WELL. 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	DATE	WATER LEVEL
OCT 24, 1979	29.26	MAY 13, 1980	25.49

WATER QUALITY DATA

LOCAL IDENTIFIER	DATE OF SAMPLE	TIME	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CAC03)	HARDNESS, NONCARBONATE (MG/L AS CAC03)	CALCIUM SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
008N032W30H07S	79-10-24	1020	565	6.7	18.0	170	85	40	18	44
	80-05-13	1040	690	6.7	18.0	240	130	56	25	58

SODIUM PERCENT	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY (MG/L AS CAC03)	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 SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
35	1.5	3.1	89	89	63	.1	57	378	2.3	.38	90	60
34	1.6	3.3	110	150	70	.2	57	493	.81	.07	120	3400

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 296 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 334.30 FEET BELOW LAND SURFACE DATUM AUG 25, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
APR 30, 1980	320.34

Santa Maria Valley (3-12)

SITE NUMBER 345548120242202 LOCAL NUMBER 010N034W24K01S

EAST OF HWY 101 AND SOUTH OF BATTLES ROAD. DRIVEN UNUSED WATER-TABLE 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 08, 1979	149.3	JAN 20, 1980	146.00	APR 15, 1980	139.80	JUL 11, 1980	149.60

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 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
NOV 14, 1979	50.70	MAY 29, 1980	47.62

Pleasant Valley (4-6)

SITE NUMBER 341351118583801 LOCAL NUMBER 002N020W28R02S

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. RECORDS AVAILABLE 1956 TO CURRENT YEAR.

HIGHEST WATER LEVEL 77.51 FEET BELOW LAND SURFACE DATUM MAY 29, 1980.

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
OCT 18, 1979	80.31	MAY 29, 1980	77.51

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. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 334.40 FEET BELOW LAND SURFACE DATUM APR 11, 1978.

LOWEST WATER LEVEL 364.62 FEET BELOW LAND SURFACE DATUM NOV 16, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
NOV 14, 1979	345.50

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 TO CURRENT YEAR.

HIGHEST WATER LEVEL 29.28 FEET BELOW LAND SURFACE DATUM NOV 15, 1978.

LOWEST WATER LEVEL 29.28 FEET BELOW LAND SURFACE DATUM NOV 15, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
MAY 29, 1980	17.52 R

R recently, pumped.

GROUND WATER

VENTURA COUNTY--Continued

Santa Clara River Valley (4-4)

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. 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
OCT 18, 1979	27.92	MAY 29, 1980	20.54

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FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	2.54×10^1	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^0	kilometers (km)
<i>Area</i>		
acres	4.047×10^3	square meters (m ²)
	4.047×10^{-1}	square hectometers (hm ²)
	4.047×10^{-3}	square kilometers (km ²)
square miles (mi ²)	2.590×10^0	square kilometers (km ²)
<i>Volume</i>		
gallons (gal)	3.785×10^0	liters (L)
	3.785×10^0	cubic decimeters (dm ³)
	3.785×10^{-3}	cubic meters (m ³)
million gallons	3.785×10^3	cubic meters (m ³)
	3.785×10^{-3}	cubic hectometers (hm ³)
cubic feet (ft ³)	2.832×10^1	cubic decimeters (dm ³)
	2.832×10^{-2}	cubic meters (m ³)
cfs-days	2.447×10^3	cubic meters (m ³)
	2.447×10^{-3}	cubic hectometers (hm ³)
acre-feet (acre-ft)	1.233×10^3	cubic meters (m ³)
	1.233×10^{-3}	cubic hectometers (hm ³)
	1.233×10^{-6}	cubic kilometers (km ³)
<i>Flow</i>		
cubic feet per second (ft ³ /s)	2.832×10^1	liters per second (L/s)
	2.832×10^1	cubic decimeters per second (dm ³ /s)
	2.832×10^{-2}	cubic meters per second (m ³ /s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm ³ /s)
	6.309×10^{-5}	cubic meters per second (m ³ /s)
million gallons per day	4.381×10^1	cubic decimeters per second (dm ³ /s)
	4.381×10^{-2}	cubic meters per second (m ³ /s)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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