



# Water Resources Data California Water Year 1984

Volume 2. Pacific Slope Basins from Arroyo Grande  
to Oregon State Line except  
Central Valley



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-84-2  
Prepared in cooperation with the California Department of  
Water Resources and with other agencies

# CALENDAR FOR WATER YEAR 1984

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1983

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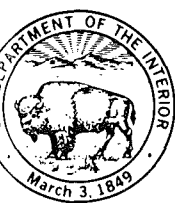
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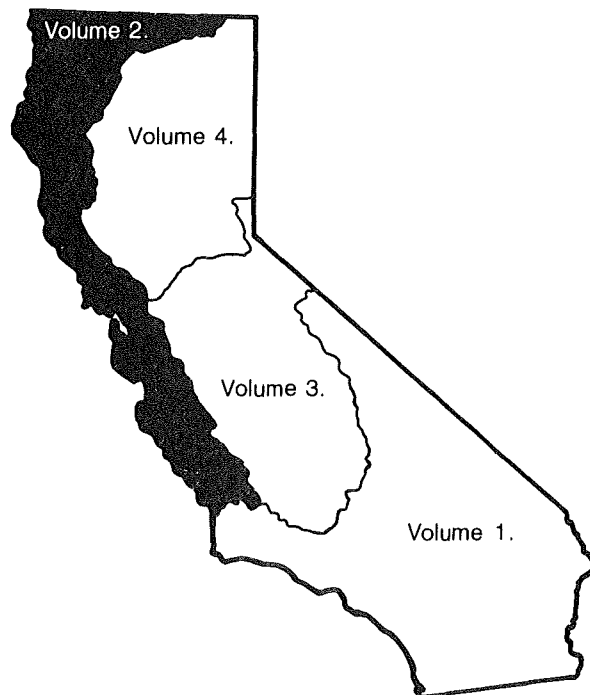
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# Water Resources Data California Water Year 1984

Volume 2. Pacific Slope Basins from Arroyo Grande  
to Oregon State Line except  
Central Valley

by S. Anderson, K.L. Markham, V. Piro, W.F. Shelton, D.A. Grillo



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CA-84-2  
Prepared in cooperation with the California Department of  
Water Resources and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

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2800 Cottage Way  
Sacramento, California 95825

## PREFACE

This volume of the annual hydrologic data report of California is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for California are contained in 4 volumes:

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

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

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

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<b>16. Abstract (Limit: 200 words)</b>  Water resources data for the 1984 water year for California consists of records of stage, discharge, and water quality of streams; stage and contents in lakes and reservoirs; and water levels and water quality in wells. Volume 2 contains discharge records for 132 gaging stations; stage and contents for 18 lakes and reservoirs; water quality for 11 stations; water levels for 9 observation wells. Also included are 2 low-flow partial-record stations and 19 water-quality partial-record stations. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in California.				
<b>17. Document Analysis. a. Descriptors</b>  *California, *Hydrologic data, *Surface water, *Water quality, *Ground water, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water levels, Water analyses  <b>b. Identifiers/Open-Ended Terms</b>  <b>c. COSATI Field/Group</b>				
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SURFACE-WATER AND WATER-QUALITY STATIONS  
IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

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

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# WATER RESOURCES DATA FOR CALIFORNIA, 1984

## Volume 2

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### INTRODUCTION

Water-resources data for the 1984 water year for California consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and records of water levels in selected observation wells. Records for a few pertinent streamflow and water-quality stations in bordering States are also included. These data, a contribution to the National Water Data System, were collected by the Geological Survey and cooperating local, State, and Federal agencies in California.

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

For water years 1961 through 1974, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate reports or in conjunction with streamflow records. Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published together as an official Survey report on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report CA-84-2." For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. Water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161.

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

## 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:

Alameda County Flood Control and Water Conservation District, Paul E. Lanferman, Engineer-Manager.  
Alameda County Flood Control and Water Conservation District, Zone 7, Mun J. Mar, General Manager.  
Alameda County Water District, Roy E. Cloverdale, General Manager.  
California Department of Water Resources, David N. Kennedy, Director.  
Contra Costa County Flood Control and Water Conservation District, Milton Kubicek, Deputy Director.  
Humboldt Bay Municipal Water District, Arthur Bolli, General Manager.  
Marin County Department of Public Works, Thomas F. Campanella, Director.  
Marin Municipal Water District, Richard W. Rogers, General Manager.  
Monterey County Flood Control and Water Conservation District, Robert L. Binder, Acting District Engineer.  
Pacheco Pass Water District, Vincent Castello, President, Board of Directors.  
San Benito County Water Conservation and Flood Control District, Ralph G. Towle, District Secretary.  
San Francisco Water Department, Eugene Kelleher, General Manager.  
San Luis Obispo County Engineering Department, George Protopapas, County Engineer.  
San Mateo County, Edward Barnes, Senior Civil Engineer.  
Santa Clara Valley Water District, John T. O'Halloran, General Manager.  
Santa Cruz County Flood Control and Water Conservation District, D.A. Porath, District Engineer.  
Sonoma County Planning Department, Steven Sharpe, Planner.  
Sonoma County Water Agency, Robert F. Beach, General Manager.

Assistance in the form of funds or services was given by the Corps of Engineers, U.S. Army; Bureau of Indian Affairs and National Park Service, U.S. Department of the Interior.

The following organizations aided in collecting records: Pacific Gas and Electric Company; Pacific Power and Light Company.

## SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

During the 1984 water year runoff in northern coastal California varied from 128 percent of the 1951-80 median in the Klamath River basin to 102 percent in the Eel River basin, as shown by runoff comparisons for selected gaging stations in figure 1. Central coastal runoff varied from 114 percent of the median in the Napa River basin north of San Francisco Bay to 89 percent in the more southern Arroyo Grande area. November and December were exceptionally wet months with more than twice the 1951-80 runoff for this period at nearly all locations, as shown by the bar graphs of monthly discharges in figure 2. Figure 2 illustrates the variation of monthly and annual flow during the 1984 water with the median flows for three representative gaging stations.

From January 1984 on, however, precipitation and runoff were less than normal. Precipitation for the water year along the north and central coastal areas varied from 116 percent of normal at Crescent City to 57 percent at Pismo Beach. No significant peak flows occurred in the coastal areas this water year, because of lack of notably intense storm systems.

The total contents in 10 major reservoirs of northern and central California were 137 percent of average at the beginning of the year, decreased to 115 percent in late May following the spring runoff, and then increased to 117 percent of average at the end of the year.

Ground Water

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

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

Water levels along California's central and northern coastal areas continued the seasonal pattern established in previous years. Water levels showed little change from recent years.

Water Quality

Water samples collected at seven NASQAN stations and one Hydrologic Benchmark station reported in this volume were analyzed for water-quality constituents during the 1984 water year. Dissolved-solids concentrations generally decreased slightly from the previous year and were largest at Pajaro River near Chittenden, where the median concentration was 680 mg/L. The smallest concentration was in water sampled at Smith River near Crescent City, where the median concentration was 50 mg/L. Concentrations of water-quality constituents were less than maximum levels recommended by the U.S. Environmental Protection Agency.

The largest density of fecal-coliform bacteria was measured in water samples from the Pajaro River near Chittenden and ranged from 270 to <sup>K</sup>7,800 col/100 mL (a decrease from a maximum of <sup>K</sup>17,000 col/100 mL reported in 1983).

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

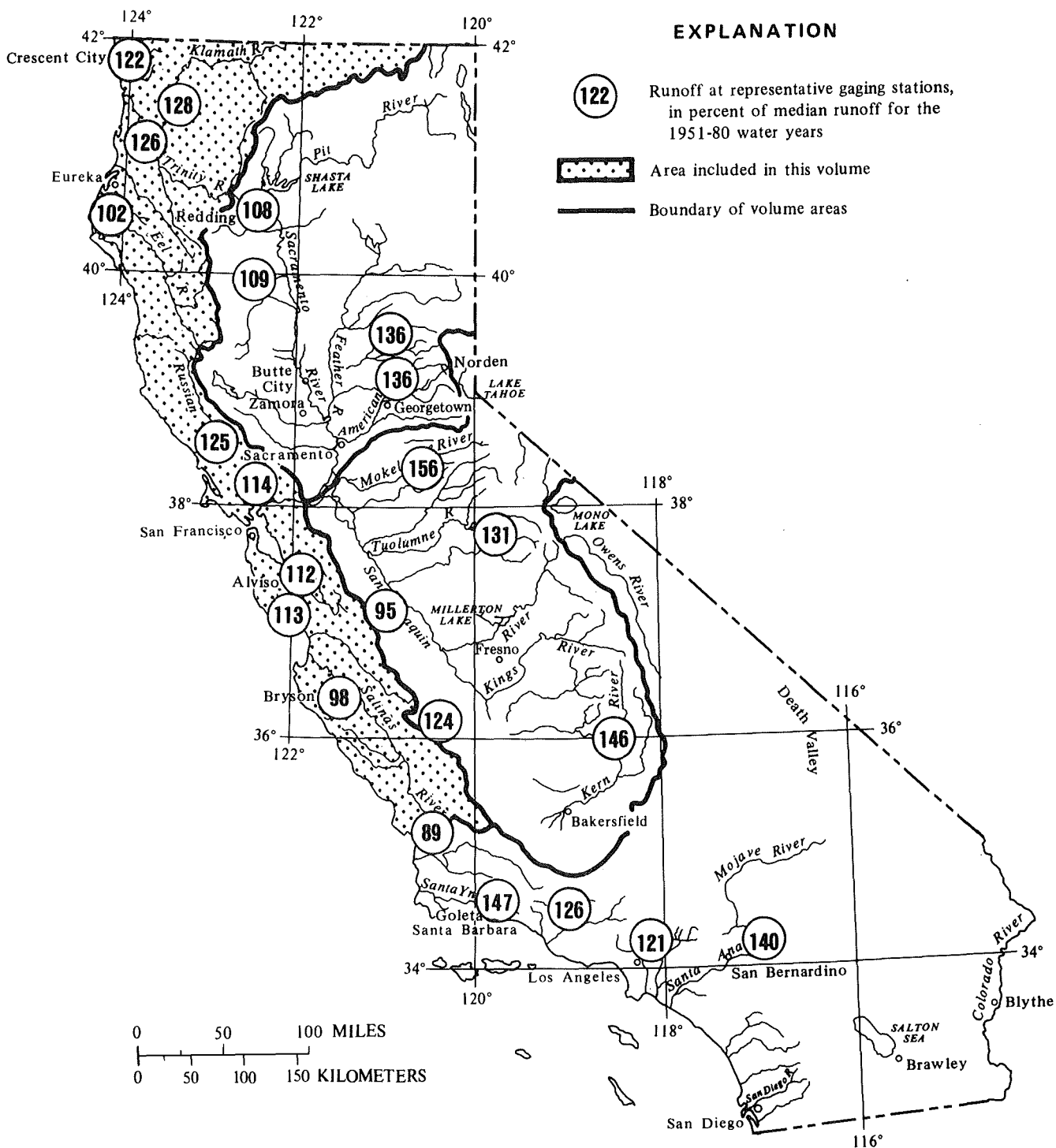


FIGURE 1. — Runoff for the 1984 water year.

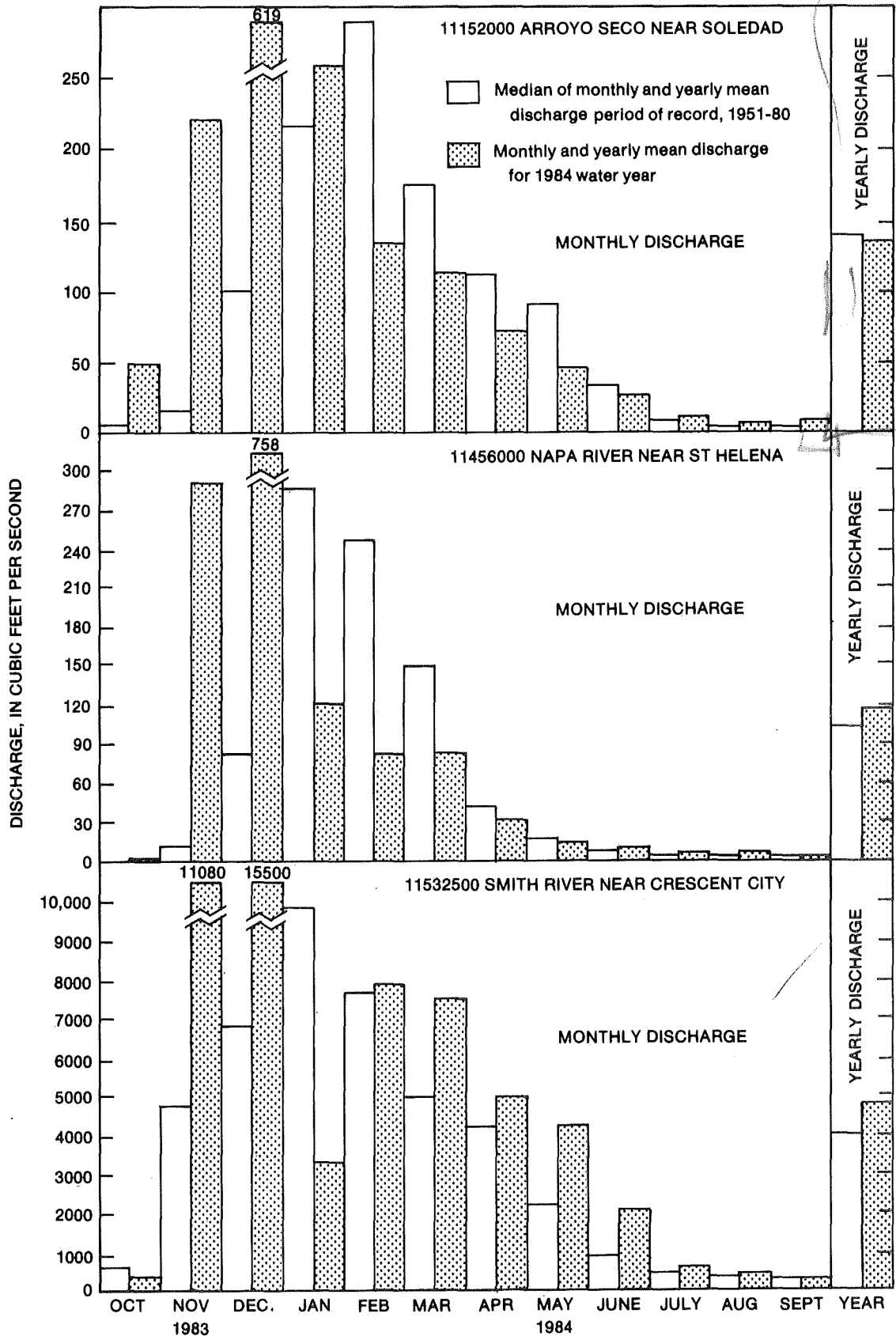


FIGURE 2. — Comparison of 1984 water year discharge with 30-year median discharge at three representative gaging stations.

### Sediment

Suspended-sediment discharge and concentration were monitored daily at 11 stations and periodically at 24 stations in the area included in this volume. Monthly and annual bedload discharge were estimated for nine of the daily stations. These stations are located as far north as Crescent City and as far south as Bryson. The large variation in precipitation and drainage-basin characteristics results in significant differences in sediment-discharge rates and concentrations.

Sediment discharge was generally less than normal during the 1984 water year, with the majority of sediment transported during storms in late November and December. Mean annual sediment discharge was 47 percent of average for Redwood Creek at Orick (1971-83), 108 percent for Russian River near Guerneville (1970-83), and 43 percent for Cull Creek near Castro Valley (1979-83).

During the 1984 water year, sediment discharge for the 11 stations monitored daily ranged from 3,830 ton/yr for Supply Creek at Hoopa (15.8 mi<sup>2</sup> drainage area) to 1.50 million ton/yr for Russian River near Guerneville (1,338 mi<sup>2</sup> drainage area). Annual sediment discharge per square mile of drainage area ranged from a minimum of 32 ton/mi<sup>2</sup> for Trinity River near Douglas City (regulated) to a maximum of 3,710 ton/mi<sup>2</sup> for Cull Creek near Castro Valley.

### 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.

Bacteria--Continued

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

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

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

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

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

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m<sup>3</sup>), and periphyton and benthic organisms in grams per square meter (g/m<sup>2</sup>).

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.

Biomass--Continued

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

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

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

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

Cubic foot per second (ft<sup>3</sup>/s), is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

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

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

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

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

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

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

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

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

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

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

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap that is required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate (CaCO<sub>3</sub>).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periphyton are microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, the periphyton also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton are useful indicators of water quality.

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

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

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

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

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

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

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

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

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

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

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

Primary productivity--Continued

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

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

Pseudomonas aeruginosa is a motile, gram-negative, rod-shaped bacterium that excretes a water-soluble, greenish, fluorescent pigment. The bacterium is noted for its aerobic, nutritional versatility, utilizing more than one hundred organic compounds as its sole source of carbon and energy, but can be an anaerobe in the presence of nitrate, reducing it to either nitrite, ammonia, or free nitrogen. P. aeruginosa is a pathogen of humans and animals and has been suggested as an indicator of sewage contamination because the human intestinal tract appears to be the major reservoir from which this bacterium reaches water environments. Its sanitary significance in surface waters is primarily related to its association with outer-ear infections of swimmers.

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

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

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

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

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

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft or 0.09 m above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Sediment--Continued

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

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

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

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

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

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

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

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Nephelometric turbidity units (NTU), obtained from the Nephelometric method for turbidity determination which measures the intensity of light scattered by suspended particles at 90 degrees from the path of incident light source (see also p. 26).

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

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

#### DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on a

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

As an added means of identification, each surface-water station, water-quality station, and partial-record station has been assigned a station number. These are in the same downstream order as used in this report. In assigning station numbers, no distinction is made between partial-record and continuous-record stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging or partial-record stations have the same number as the gaging or partial-record station. Gaps are left between the numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 11467000, which appears just to the left of the station name, includes the 2-digit number "11" plus the 6-digit downstream order number "467000". In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records for California are in Part 10 (The Great Basin), and Part 11 (Pacific slope basins in California). All records for a drainage basin encompassing more than one State could be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

#### NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

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

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

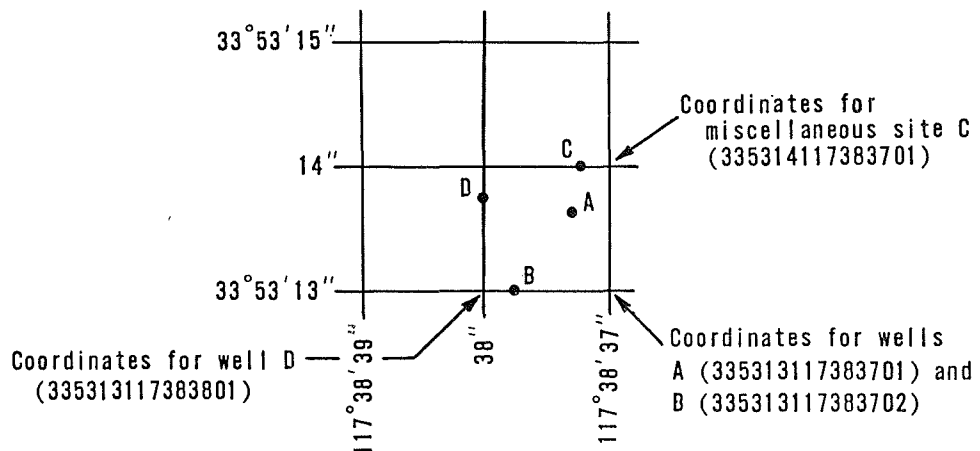


FIGURE 3.--System for numbering wells and miscellaneous sites (latitude and longitude)

### Local well numbers

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

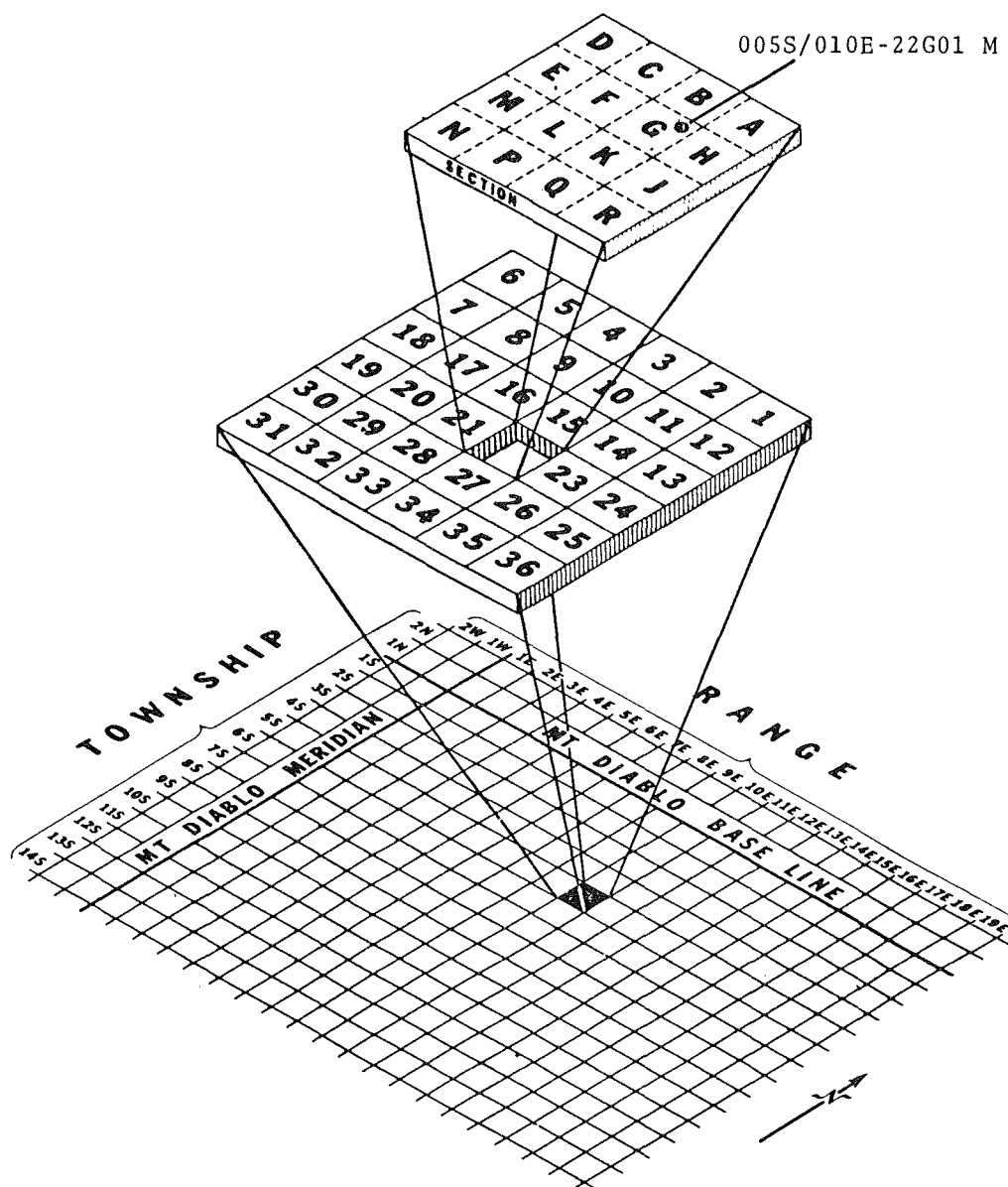


FIGURE 4.--California well-numbering system.

## SPECIAL NETWORKS AND PROGRAMS

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

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

Volume 2:

11475560 Elder Creek near Branscomb, CA

Volume 3:

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

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

Volume 1:

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

Volume 2:

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

Volume 3:

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

National stream-quality accounting network (continued)Volume 4:

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

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

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

## EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

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

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

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

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

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

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

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

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

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

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

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum of 1929, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 10.

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

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

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

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

be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

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

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

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

#### Accuracy of field data and computed results

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

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

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

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

#### Other data available

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

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

#### Records of discharge collected by agencies other than the Geological Survey

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

### EXPLANATION OF WATER-QUALITY RECORDS

#### Collection and examination of data

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

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

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

#### Water analysis

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

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the District Office.

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

#### pH

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

#### Water temperature

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

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

### Sediment

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

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

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

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

### Turbidity

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

## EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

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

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

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

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

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

In this report basin names and numbers, for example Salinas Valley basin (3-4), are from "California's Ground Water," California Department of Water Resources Bulletin No. 118, 1975, 135 p.

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

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

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
- 1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.
- 2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.
- 2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.
- 3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.
- 3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.
- 3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.
- 3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.
- 3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.
- 3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.
- 3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.
- 3-B1. *Aquifer--test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.
- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
- 3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.
- 3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.
- 3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.
- 4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.
- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.
- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.
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- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

## 11141150 ARROYO GRANDE ABOVE PHOENIX CREEK, NEAR ARROYO GRANDE, CA

LOCATION.--Lat 35°11'03", long 120°26'11", in Arroyo Grande Grant, San Luis Obispo County, Hydrologic Unit 18060006, on right bank at county road bridge 100 ft upstream from Phoenix Creek, and 8.8 mi northeast of Arroyo Grande.

DRAINAGE AREA.--13.5 mi<sup>2</sup>.

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

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

REMARKS.--Records fair. No regulation or diversion above station except for small stock ponds.

AVERAGE DISCHARGE.--17 years, 3.15 ft<sup>3</sup>/s, 2,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,270 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 6.83 ft in gage well, 6.57 ft from floodmarks, from rating curve extended above 350 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow, maximum gage height, 8.29 ft Apr. 4, 1978; minimum daily discharge, 0.12 ft<sup>3</sup>/s Sept. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 188 ft<sup>3</sup>/s Dec. 25 (0030 hrs), gage height, 6.01 ft, no other peak above base of 40 ft<sup>3</sup>/s; minimum daily, 0.71 ft<sup>3</sup>/s Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	3.2	3.4	4.1	3.7	2.8	2.3	2.2	1.6	1.4	.87	.87
2	2.1	2.4	3.4	3.8	3.8	2.8	2.3	2.2	1.6	1.3	.88	.95
3	1.9	2.3	7.2	3.8	3.8	2.9	2.2	2.2	1.7	1.2	.82	1.0
4	1.8	2.3	4.8	3.8	3.8	2.9	2.2	2.1	1.7	1.2	.81	.98
5	1.9	2.3	4.1	3.8	3.8	2.8	2.3	2.1	1.7	1.3	.83	.91
6	1.9	2.3	3.8	3.5	3.4	2.8	2.4	2.0	1.8	1.2	.81	.84
7	1.9	2.2	3.6	3.4	3.4	2.7	2.2	1.9	1.8	1.2	.76	.79
8	1.9	2.2	3.4	3.4	3.3	2.7	2.1	1.9	1.7	1.2	.76	.79
9	1.9	2.3	6.5	3.4	3.4	2.7	2.1	1.8	1.6	1.1	.81	.83
10	1.8	2.4	5.1	3.4	3.5	2.7	2.1	1.8	1.5	1.1	.89	.91
11	1.7	3.5	5.7	3.4	3.2	2.7	1.9	1.7	1.5	1.0	.90	.98
12	1.7	3.1	4.8	3.4	3.1	2.7	1.9	1.8	1.5	1.1	.87	1.0
13	1.7	3.6	4.3	3.4	3.5	3.3	1.9	1.8	1.5	1.0	.86	.93
14	1.7	3.0	4.2	3.4	3.6	3.8	1.8	1.9	1.6	.93	.87	.91
15	1.8	2.6	4.1	3.4	3.5	3.1	1.8	1.8	1.6	.94	1.0	.90
16	1.8	2.5	3.8	3.6	3.9	2.9	1.8	1.7	1.7	.94	1.0	.85
17	1.8	3.1	4.0	3.5	3.4	2.9	1.8	1.8	1.8	.94	.92	.78
18	1.8	2.8	3.8	3.4	3.4	2.8	2.0	1.7	1.7	.96	.97	.79
19	1.9	2.7	3.8	3.6	3.4	2.9	2.2	1.7	1.8	1.1	1.0	.76
20	1.9	3.8	3.8	3.5	3.3	2.8	2.0	1.7	1.8	1.1	1.1	.77
21	1.9	2.8	3.8	3.6	3.3	2.8	1.9	1.6	1.7	1.0	1.2	.81
22	1.9	2.5	3.8	3.4	3.1	2.8	1.9	1.5	1.6	1.1	1.1	.80
23	1.9	2.6	3.8	3.4	3.2	2.7	1.9	1.5	1.7	1.1	1.1	.89
24	2.1	8.3	13	3.4	2.8	2.5	2.0	1.6	1.6	1.1	1.1	.84
25	2.1	5.1	34	3.4	2.8	2.6	2.0	1.6	1.6	.98	1.2	.72
26	2.1	4.0	9.0	3.4	2.8	2.5	2.1	1.5	1.5	.89	1.2	.71
27	2.1	3.8	8.3	3.5	2.8	2.5	2.2	1.5	1.4	.90	1.2	.83
28	2.1	3.6	5.6	3.6	2.8	2.4	2.2	1.5	1.5	.88	1.2	.76
29	2.2	3.4	4.8	3.6	2.8	2.4	2.2	1.5	1.4	.88	1.1	.73
30	2.4	3.4	4.3	3.6	---	2.3	2.2	1.5	1.4	.89	1.1	.79
31	2.4	---	4.3	3.6	---	2.3	---	1.5	---	.89	.97	---
TOTAL	60.4	94.1	182.3	109.5	96.6	85.5	61.9	54.6	48.6	32.82	30.20	25.42
MEAN	1.95	3.14	5.88	3.53	3.33	2.76	2.06	1.76	1.62	1.06	.97	.85
MAX	2.4	8.3	34	4.1	3.9	3.8	2.4	2.2	1.8	1.4	1.2	1.0
MIN	1.7	2.2	3.4	3.4	2.8	2.3	1.8	1.5	1.4	.88	.76	.71
AC-FT	120	187	362	217	192	170	123	108	96	65	60	50
CAL YR 1983	TOTAL	2578.55	MEAN	7.06	MAX	112	MIN	.88	AC-FT	5110		
WTR YR 1984	TOTAL	881.94	MEAN	2.41	MAX	34	MIN	.71	AC-FT	1750		

11141280 LOPEZ CREEK NEAR ARROYO GRANDE, CA

LOCATION.--Lat 35°13'48", long 120°28'22", in SE 1/4 NE 1/4 sec.16, T.31 S., R.14 E., San Luis Obispo County, Hydrologic Unit 18060006, on right bank 0.7 mi upstream from small right-bank tributary, 3.2 mi upstream from mouth, and 9.2 mi northeast of Arroyo Grande.

DRAINAGE AREA.--21.6 mi<sup>2</sup>.

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

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

REMARKS.--Records fair. Small diversions above station for domestic use.

AVERAGE DISCHARGE.--17 years, 12.0 ft<sup>3</sup>/s, 8,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,830 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 9.26 ft in gage well, 10.8 ft from floodmarks, from rating curve extended above 300 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; maximum gage height, 9.62 ft Mar. 1, 1983; minimum daily discharge, 0.30 ft<sup>3</sup>/s Aug. 1, 1977.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 9	1700	104	6.81
Dec. 25	0115	*305	7.50

Minimum daily, 2.4 ft<sup>3</sup>/s Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	11	10	20	10	8.6	8.1	5.8	5.2	4.5	3.2	2.7
2	11	10	10	19	10	8.6	8.1	5.8	5.4	4.5	3.0	2.7
3	10	9.5	24	18	10	8.6	8.1	5.8	5.2	4.4	3.1	2.8
4	9.5	9.5	20	16	10	8.3	8.1	5.8	5.2	4.4	3.0	2.6
5	9.5	9.5	15	16	9.0	8.1	8.1	5.8	5.2	4.3	2.9	2.5
6	9.5	9.5	13	16	8.6	8.4	8.1	5.7	5.2	4.2	3.0	2.5
7	9.1	9.5	12	15	8.9	8.1	7.5	5.8	5.2	4.2	2.9	2.5
8	8.6	9.5	10	15	9.5	8.1	7.5	5.8	5.1	4.0	2.8	2.5
9	8.6	9.5	32	15	9.5	8.1	7.4	5.7	4.9	4.0	3.0	2.4
10	8.6	9.5	32	14	10	8.1	6.9	5.9	4.9	3.9	3.0	2.7
11	8.6	18	31	14	10	7.5	6.9	6.2	4.8	3.8	3.0	2.8
12	8.6	14	30	14	10	7.5	6.9	6.1	4.8	3.8	2.9	3.1
13	8.6	14	22	14	9.7	8.5	6.9	5.8	4.8	3.7	2.8	3.0
14	8.6	13	17	14	10	12	6.6	5.8	4.8	3.5	2.8	2.8
15	8.6	11	15	13	9.5	10	7.3	5.8	4.9	3.6	2.8	2.7
16	8.6	10	14	13	11	10	7.5	5.8	4.9	3.5	2.9	2.6
17	8.6	12	12	12	10	10	7.5	5.8	4.9	3.5	2.6	2.6
18	8.6	14	12	12	9.5	10	7.6	5.8	4.8	3.5	2.7	2.5
19	8.6	13	11	11	10	9.6	7.9	5.6	4.8	3.7	2.9	2.5
20	8.6	15	10	10	8.6	8.8	6.9	5.4	4.8	3.8	3.2	2.5
21	8.6	15	10	11	8.6	8.8	6.0	5.1	4.7	3.4	3.3	2.6
22	8.6	13	10	11	9.2	8.8	6.3	4.9	4.3	3.5	3.1	2.8
23	8.6	12	9.9	10	9.5	8.8	6.3	5.3	4.7	3.8	3.0	3.2
24	8.6	40	15	10	9.5	8.8	6.0	5.2	4.9	3.8	3.0	3.3
25	8.6	29	175	10	8.6	8.8	5.2	5.3	4.6	3.5	3.0	3.0
26	8.6	18	73	10	8.3	8.8	5.2	5.0	4.5	3.2	3.1	2.7
27	8.6	15	52	11	7.5	8.8	5.2	5.2	4.5	3.1	3.3	2.7
28	8.6	13	39	11	7.5	8.8	5.2	5.4	4.5	3.2	3.1	2.6
29	8.6	12	32	10	7.5	8.1	5.7	5.2	4.5	3.2	2.9	2.6
30	9.4	10	27	10	---	8.1	5.8	5.2	4.5	3.1	2.7	2.8
31	9.5	---	23	10	---	8.1	---	5.2	---	3.2	2.7	---
TOTAL	282.7	408.0	817.9	405	270.0	271.6	206.8	173.0	145.5	115.8	91.7	81.3
MEAN	9.12	13.6	26.4	13.1	9.31	8.76	6.89	5.58	4.85	3.74	2.96	2.71
MAX	16	40	175	20	11	12	8.1	6.2	5.4	4.5	3.3	3.3
MIN	8.6	9.5	9.9	10	7.5	7.5	5.2	4.9	4.3	3.1	2.6	2.4
AC-FT	561	809	1620	803	536	539	410	343	289	230	182	161
CAL YR 1983	TOTAL	14061.4	MEAN	38.5	MAX	600	MIN	7.5	AC-FT	27890		
WTR YR 1984	TOTAL	3269.3	MEAN	8.93	MAX	175	MIN	2.4	AC-FT	6480		

## 11141500 ARROYO GRANDE AT ARROYO GRANDE, CA

LOCATION.--Lat 35°07'28", long 120°34'05", in Pismo Grant, San Luis Obispo County, Hydrologic Unit 18060006, on left bank at Arroyo Grande, and 0.7 mi upstream from U.S. Highway 101.

DRAINAGE AREA.--102 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year. Records for water year 1940 incomplete, yearly estimate published in WSP 1315-B.

REVISED RECORDS.--WSP 931: 1940. WSP 1011: 1941, 1942(M). WSP 1929: Drainage area.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 97.77 ft National Geodetic Vertical Datum of 1929. Prior to July 10, 1947, at datum 0.50 ft higher.

REMARKS.--Records good. Flow regulated by Lopez Dam 7.8 mi upstream since 1968, usable capacity, 47,800 acre-ft. Many small and intermittent diversions by pumping from stream for irrigation of about 4,000 acres above station.

AVERAGE DISCHARGE.--29 years (water years 1940-68), 19.4 ft<sup>3</sup>/s, 14,060 acre-ft/yr; 16 years (water years 1969-84), 21.1 ft<sup>3</sup>/s, 15,290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 12.88 ft; no flow for several days in some years. Maximum discharge since construction of Lopez Dam in 1968, 4,620 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 10.68 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 719 ft<sup>3</sup>/s Dec. 25, gage height, 4.52 ft; minimum daily, 0.46 ft<sup>3</sup>/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	9.9	24	54	11	12	8.3	9.2	3.3	2.6	2.4	.67
2	9.5	8.8	25	45	11	11	7.9	8.6	2.7	2.1	2.7	1.1
3	9.6	8.7	36	39	11	13	7.5	7.5	2.5	2.1	3.0	2.0
4	8.9	9.3	29	34	12	12	9.3	8.3	2.2	2.3	4.0	2.1
5	7.9	8.8	30	32	13	9.9	8.8	11	2.8	2.5	4.6	2.3
6	9.1	9.2	27	31	16	9.5	9.2	9.2	3.6	2.3	4.3	2.2
7	9.4	9.3	24	29	14	9.4	9.4	6.5	4.5	1.7	4.1	1.2
8	8.4	8.2	22	30	12	9.4	9.2	5.1	3.8	2.2	3.5	1.9
9	8.3	8.0	25	28	12	9.5	7.8	5.0	3.0	1.6	2.4	1.4
10	7.8	7.5	49	26	14	8.0	7.7	5.0	2.8	2.7	2.6	1.8
11	6.1	10	53	30	16	9.3	6.8	3.7	4.1	2.2	1.8	1.9
12	4.8	10	67	24	16	9.3	6.8	4.6	4.1	2.6	2.8	1.5
13	5.1	11	52	21	15	11	7.4	5.0	4.0	3.0	2.9	1.6
14	4.9	11	43	20	16	12	6.5	5.9	3.2	3.1	2.4	1.1
15	5.2	10	39	20	15	11	6.8	4.6	4.0	3.8	2.1	2.9
16	7.2	11	31	19	16	11	6.8	4.4	3.2	4.0	2.5	4.1
17	6.8	11	26	19	18	10	5.4	4.6	4.3	3.1	2.3	3.0
18	6.4	11	26	18	17	13	6.4	3.0	3.8	4.0	2.1	2.3
19	5.8	11	24	19	17	12	8.2	2.7	3.0	4.5	2.8	1.9
20	6.1	14	22	20	16	9.5	7.9	3.5	2.5	3.5	3.8	2.5
21	5.6	16	20	19	16	10	6.4	4.6	2.6	3.8	3.3	2.5
22	5.4	15	17	19	18	8.5	9.2	4.6	2.1	4.5	3.6	2.6
23	6.5	16	17	21	15	6.9	7.9	3.7	2.0	5.1	2.9	3.2
24	6.5	27	35	18	14	7.2	8.0	3.3	2.0	4.9	2.8	3.8
25	5.5	25	421	18	15	8.1	6.8	3.9	2.2	3.5	2.2	3.5
26	3.9	22	414	18	15	7.7	7.1	3.5	2.6	1.7	3.3	2.8
27	3.5	22	248	16	14	8.5	7.0	3.5	2.3	2.5	3.8	1.6
28	3.9	22	158	15	13	8.5	5.5	4.3	2.3	3.5	2.4	1.9
29	4.8	21	105	14	12	8.5	7.3	3.9	2.4	3.4	.92	3.0
30	7.4	23	81	13	---	7.2	8.4	3.0	2.3	4.0	.83	4.5
31	7.6	---	66	11	---	7.9	---	3.4	---	2.6	.46	---
TOTAL	218.9	406.7	2256	740	420	300.8	227.7	159.1	90.2	95.4	85.61	68.87
MEAN	7.06	13.6	72.8	23.9	14.5	9.70	7.59	5.13	3.01	3.08	2.76	2.30
MAX	21	27	421	54	18	13	9.4	11	4.5	5.1	4.6	4.5
MIN	3.5	7.5	17	11	11	6.9	5.4	2.7	2.0	1.6	.46	.67
AC-FT	434	807	4470	1470	833	597	452	316	179	189	170	137
CAL YR 1983	TOTAL	48431.1	MEAN	133	MAX	2520	MIN	3.5	AC-FT	96060		
WTR YR 1984	TOTAL	5069.28	MEAN	13.9	MAX	421	MIN	.46	AC-FT	10050		

## BIG SUR RIVER BASIN

11143000 BIG SUR RIVER NEAR BIG SUR, CA

LOCATION.--Lat 36°14'45", long 121°46'20", in SW 1/4 SW 1/4 sec.29, T.19 S., R.2 E., Monterey County, Hydrologic Unit 18060006, on right bank at downstream side of bridge, 0.4 mi upstream from Post Creek, and 2.6 mi southeast of town of Big Sur.

DRAINAGE AREA.--46.5 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1950 to current year. Prior to October 1959, published as Sur River at Big Sur.

REVISED RECORDS.--WSP 1445: 1952(P), 1953(M). WSP 1715: 1951, drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 240 ft, from topographic map. Prior to Oct. 1, 1951, nonrecording gage at site 0.9 mi downstream at different datum.

REMARKS.--Records good except those for period of indefinite stage-discharge relationship, Aug. 11 to Sept. 13, which is fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--34 years, 106 ft<sup>3</sup>/s, 76,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,700 ft<sup>3</sup>/s Jan. 5, 1978, gage height, 14.30 ft; minimum daily, 2.6 ft<sup>3</sup>/s Aug. 23, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1545	1,550	7.04
Dec. 25	1215	*1,730	7.25

Minimum daily, 13 ft<sup>3</sup>/s several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	44	103	314	94	68	56	43	30	21	16	14
2	38	38	90	278	90	67	55	42	30	21	16	14
3	35	35	231	251	88	66	54	42	29	21	16	14
4	32	33	207	229	86	64	53	41	28	20	15	14
5	31	32	168	211	84	63	53	40	29	20	15	14
6	31	31	145	197	83	62	53	40	30	20	15	14
7	30	30	129	184	82	61	51	39	31	19	15	14
8	30	29	117	174	80	61	51	39	29	19	15	14
9	30	29	381	166	88	60	50	39	28	18	15	14
10	30	113	443	158	85	59	52	38	27	18	15	14
11	29	318	461	150	80	58	49	38	27	18	15	14
12	28	94	424	144	79	57	48	37	26	18	15	14
13	27	145	346	139	93	110	47	37	26	18	15	14
14	28	129	288	133	93	111	46	36	27	18	15	14
15	28	79	245	130	99	89	46	37	27	17	15	13
16	28	76	212	130	123	81	46	36	26	17	14	13
17	29	179	191	123	102	82	45	36	25	17	14	13
18	28	152	168	119	93	75	49	35	25	17	14	13
19	27	117	151	115	88	72	53	34	25	16	14	14
20	27	214	139	111	85	70	46	33	25	16	14	13
21	27	187	128	111	84	68	45	32	24	16	14	13
22	26	137	120	107	81	66	44	32	24	17	14	13
23	26	126	114	106	78	64	43	31	24	18	14	14
24	27	799	216	104	76	62	43	30	24	20	14	14
25	28	523	1380	102	74	61	43	30	23	19	14	13
26	28	287	952	100	73	60	43	30	23	18	14	13
27	27	199	719	98	71	59	44	30	22	17	14	13
28	28	154	570	96	70	57	43	30	22	17	14	13
29	29	127	476	95	69	56	43	30	21	17	14	13
30	51	114	416	93	---	55	43	30	21	17	14	13
31	53	---	360	92	---	56	---	30	---	16	14	---
TOTAL	963	4570	10090	4560	2471	2100	1437	1097	778	561	452	407
MEAN	31.1	152	325	147	85.2	67.7	47.9	35.4	25.9	18.1	14.6	13.6
MAX	53	799	1380	314	123	111	56	43	31	21	16	14
MIN	26	29	90	92	69	55	43	30	21	16	14	13
AC-FT	1910	9060	20010	9040	4900	4170	2850	2180	1540	1110	897	807

CAL YR 1983	TOTAL	118026	MEAN	323	MAX	2280	MIN	26	AC-FT	234100
WTR YR 1984	TOTAL	29486	MEAN	80.6	MAX	1380	MIN	13	AC-FT	58490

## 11143200 CARMEL RIVER AT ROBLES DEL RIO, CA

LOCATION.--Lat 36°28'28", long 121°43'37", in Los Laureles Grant, Monterey County, Hydrologic Unit 18060012, on right bank 150 ft upstream of county road bridge at Robles del Rio, 0.2 mi downstream from Hitchcock Canyon, and 11 mi southeast of town of Carmel.

DRAINAGE AREA.--193 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1715: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 270 ft, from topographic map. Prior to June 1981 at site 150 ft downstream on downstream side of county road bridge.

REMARKS.--Records good. Flow regulated by Los Padres Reservoir 11 mi upstream, capacity, 2,180 acre-ft and San Clemente Reservoir 4 mi upstream, capacity, 796 acre-ft. Diversion from San Clemente Reservoir for municipal supply amounted to 9,250 acre-ft for the current year.

AVERAGE DISCHARGE (unadjusted).--27 years, 97.8 ft<sup>3</sup>/s, 70,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,380 ft<sup>3</sup>/s Feb. 28, 1983, gage height, 11.49 ft; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 23, 1955, reached a stage of 11.7 ft from floodmarks, discharge, 6,930 ft<sup>3</sup>/s by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,390 ft<sup>3</sup>/s Dec. 25, gage height, 9.00 ft; minimum daily, 1.2 ft<sup>3</sup>/s Sept. 3, 10, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	12	152	418	95	64	63	32	11	8.3	3.2	1.4
2	32	15	132	367	90	62	59	35	10	7.4	3.7	1.3
3	52	15	303	328	87	61	63	36	10	7.0	4.0	1.2
4	41	13	473	300	82	59	70	35	10	6.6	3.9	1.3
5	31	13	342	280	80	59	76	33	11	6.1	3.9	1.4
6	43	13	289	265	78	57	74	30	12	5.9	3.9	1.4
7	26	13	247	245	76	53	71	30	13	5.6	3.7	1.4
8	15	15	211	230	73	53	70	29	13	5.9	3.7	1.4
9	14	15	561	218	81	51	69	27	12	6.1	3.7	1.3
10	13	17	794	203	90	50	69	26	10	6.0	3.8	1.2
11	13	246	620	190	77	49	69	26	10	5.9	3.9	1.4
12	13	96	490	180	75	48	66	26	9.7	6.1	4.2	1.4
13	13	72	400	170	81	66	66	24	9.7	7.2	3.9	1.2
14	13	136	330	162	108	136	59	24	9.8	6.0	3.7	1.3
15	12	80	275	155	113	99	43	27	9.7	5.9	3.6	1.4
16	12	60	234	148	175	92	42	27	9.0	5.8	3.5	1.4
17	12	64	208	140	143	93	43	26	9.1	5.5	3.4	1.3
18	19	108	177	135	123	87	42	25	8.8	5.0	3.3	1.3
19	42	80	153	130	104	85	44	29	8.8	4.5	3.3	1.4
20	26	157	135	125	97	80	28	29	8.6	4.1	3.4	1.3
21	27	211	118	119	102	78	29	23	8.3	4.1	3.4	1.4
22	25	154	107	115	94	75	29	21	8.0	3.9	3.4	1.4
23	24	123	101	110	85	72	29	19	7.5	4.3	3.2	1.4
24	24	365	307	107	82	69	29	18	7.0	4.2	3.3	1.5
25	28	663	2800	102	78	67	29	18	7.1	3.9	3.4	1.5
26	25	404	1580	101	75	67	29	17	9.1	3.9	3.5	1.3
27	18	296	1000	98	71	67	29	17	8.2	3.5	3.3	1.3
28	9.9	235	749	97	67	60	29	15	8.8	3.4	2.5	1.3
29	20	194	604	96	66	50	29	12	8.5	3.5	1.7	1.3
30	19	164	537	93	---	50	29	11	8.5	3.3	1.4	1.3
31	19	---	465	91	---	63	---	12	---	3.2	1.4	---
TOTAL	722.9	4049	14894	5518	2648	2122	1476	759	286.2	162.1	104.2	40.4
MEAN	23.3	135	480	178	91.3	68.5	49.2	24.5	9.54	5.23	3.36	1.35
MAX	52	663	2800	418	175	136	76	36	13	8.3	4.2	1.5
MIN	9.9	12	101	91	66	48	28	11	7.0	3.2	1.4	1.2
AC-FT	1430	8030	29540	10940	5250	4210	2930	1510	568	322	207	80
CAL YR 1983	TOTAL	166126.7	MEAN	455	MAX	6260	MIN	6.6	AC-FT	329500		
WTR YR 1984	TOTAL	32781.8	MEAN	89.6	MAX	2800	MIN	1.2	AC-FT	65020		

## CARMEL RIVER BASIN

11143250 CARMEL RIVER NEAR CARMEL, CA

LOCATION.--Lat 36°32'20", long 121°52'25", in Canada de la Segunda Grant, Monterey County, Hydrologic Unit 18060012, on right bank 0.3 mi downstream from Potrero Canyon, and 3 mi east of Carmel.

DRAINAGE AREA.--246 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 45 ft, from topographic map.

REMARKS.--Records good. Flow regulated by Los Padres Reservoir, capacity, 2,180 acre-ft and San Clemente Reservoir, capacity, 796 acre-ft. Diversion from San Clemente Reservoir for municipal supply amounted to 9,250 acre-ft for the current year.

AVERAGE DISCHARGE (unadjusted).--22 years, 123 ft<sup>3</sup>/s, 89,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,590 ft<sup>3</sup>/s Feb. 28, 1983, gage height, 18.22 ft in gage well, 18.22 ft from floodmarks; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,150 ft<sup>3</sup>/s Dec. 25, gage height, 11.11 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	11	112	435	114	89	68	30	4.5	.03		
2	28	10	98	398	111	87	65	33	4.5	.06		
3	47	10	206	368	107	86	64	31	4.5	0		
4	36	9.2	386	344	104	84	66	29	4.5	0		
5	30	8.0	255	319	99	82	66	27	4.5	0		
6	41	10	204	295	98	86	64	26	4.5	0		
7	27	9.9	172	277	96	76	59	24	4.5	0		
8	15	10	148	263	93	75	58	23	4.4	0		
9	14	11	411	248	97	74	58	22	4.2	0		
10	13	17	798	235	108	73	57	20	4.2	0		
11	13	162	799	225	99	71	58	19	4.2	0		
12	12	104	769	216	94	69	54	19	4.2	0		
13	12	74	547	207	98	74	52	19	3.7	0		
14	12	103	419	197	121	124	50	17	2.4	0		
15	12	86	340	191	114	107	43	19	2.1	0		
16	12	69	287	192	172	99	41	18	2.0	0		
17	11	67	252	180	156	98	41	17	1.5	0		
18	20	92	220	171	138	94	41	16	1.3	0		
19	40	83	195	165	126	92	33	15	1.2	0		
20	26	123	179	160	119	88	25	16	1.2	0		
21	26	181	164	158	123	83	25	14	.95	0		
22	26	138	156	153	119	81	25	12	.66	0		
23	25	107	151	148	110	77	25	10	.49	0		
24	24	298	208	144	106	75	25	9.1	.30	0		
25	27	597	2450	140	104	72	25	9.3	.13	0		
26	25	300	1490	136	100	72	25	7.8	0	0		
27	20	209	982	131	97	73	25	7.5	0	0		
28	12	163	748	127	93	69	25	6.5	0	0		
29	10	132	609	120	92	60	25	5.5	.02	0		
30	18	117	533	118	---	59	28	4.5	.02	0		
31	19	---	483	114	---	66	---	4.5	---	0		
TOTAL	690	3311.1	14771	6575	3208	2515	1316	530.7	70.67	0.09	0	0
MEAN	22.3	110	476	212	111	81.1	43.9	17.1	2.36	.003	0	0
MAX	47	597	2450	435	172	124	68	33	4.5	.06	0	0
MIN	10	8.0	98	114	92	59	25	4.5	0	0	0	0
AC-FT	1370	6570	29300	13040	6360	4990	2610	1050	140	.2	0	0

CAL YR 1983	TOTAL	186779.5	MEAN	512	MAX	8000	MIN	1.2	AC-FT	370500
WTR YR 1984	TOTAL	32987.56	MEAN	90.1	MAX	2450	MIN	0	AC-FT	65430

## 11144500 SANTA MARGARITA LAKE NEAR POZO, CA

LOCATION.--Lat 35°20'14", long 120°30'08", in NW 1/4 NW 1/4 sec.8, T.30 S., R.14 E., San Luis Obispo County, Hydrologic Unit 18060005 at left end of dam on Salinas River, 2 mi upstream from Pilitas Creek, and 7.5 mi northwest of Pozo.

DRAINAGE AREA.--112 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1941 to current year. Prior to October 1967, published as Salinas Reservoir near Pozo.

REVISED RECORDS.--WSP 1715: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Mar. 9, 1942, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete-arch dam, outlet closed Dec. 6, 1941. Usable capacity, 23,000 acre-ft between elevations 1,220.3 ft, bottom of outlet pipe and 1,300.7 ft spillway crest, NGVD. Additional storage of 400 acre-ft is not available for release. Water diverted at dam into pipeline to small reservoir 10 mi below, from which it is pumped to Camp San Luis Obispo and city of San Luis Obispo for water supply; water is also released down natural channel of river. Figures given herein represent usable contents.

COOPERATION.--Elevations furnished by County of San Luis Obispo.

EXTREMES (AT 2400) FOR PERIOD OF RECORD.--Maximum contents, 37,000 acre-ft Jan. 25, 1969, elevation, 1,313.30 ft; minimum, 1,730 acre-ft, elevation, 1242.5 ft, Nov. 6-10, 1943.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum usable contents, 23,400 acre-ft Dec. 28-30, elevation, 1,301.22 ft; minimum, 16,500 acre-ft Sept. 30, elevation, 1,290.16 ft.

## Capacity table (elevation, in feet, and contents, in acre-feet)

1,220.3	0	1,245	2,000	1,270	7,700	1,295	19,300
1,225	198	1,250	2,800	1,275	9,500	1,300	22,400
1,230	470	1,255	3,800	1,280	11,500	1,310	30,700
1,235	840	1,260	4,900	1,285	13,800	1,320	41,000
1,240	1,350	1,265	6,200	1,290	16,400		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19100	18400	18300	23300	22900	22900	22700	22100	20800	19500	18600	17500
2	19100	18400	18300	23300	22900	22900	22600	22000	20700	19500	18500	17500
3	19000	18400	18300	23300	22900	22900	22600	22000	20700	19500	18500	17400
4	19000	18300	18400	23200	22900	22800	22600	22000	20600	19440	18500	17400
5	19000	18300	18500	23100	22900	22800	22600	21900	20600	19400	18500	17400
6	19000	18300	18500	23000	22900	22800	22600	21900	20500	19400	18400	17300
7	19000	18300	18500	22800	22900	22800	22600	21900	20500	19300	18400	17300
8	18900	18300	18500	22800	22900	22800	22600	21800	20400	19300	18300	17300
9	18900	18200	18500	22700	22900	22800	22600	21800	20300	19300	18300	17200
10	18900	18200	19000	22700	22900	22800	22600	21800	20300	19200	18300	17200
11	18800	18300	19100	22700	22900	22800	22600	21700	20300	19200	18200	17200
12	18800	18300	19400	22800	22900	22800	22500	21700	20200	19100	18200	17100
13	18800	18300	19500	22800	22900	22800	22500	21700	20200	19100	18100	17100
14	18800	18200	19600	22800	22900	22800	22500	21600	20200	19100	18100	17100
15	18700	18200	19700	22800	22900	22800	22500	21600	20100	19100	18100	17100
16	18700	18200	19700	22800	22900	22800	22500	21500	20100	19000	18000	17000
17	18700	18200	19700	22800	22900	22800	22400	21500	20100	19000	18000	17000
18	18700	18200	19800	22800	22900	22800	22400	21400	20000	18900	18000	17000
19	18600	18100	19800	22800	22900	22800	22400	21400	20000	18900	18000	16900
20	18600	18100	19800	22800	22900	22800	22400	21400	20000	18900	17900	16900
21	18600	18100	19800	22900	22900	22800	22400	21300	19000	18800	17900	16800
22	18600	18100	19800	22900	22900	22800	22400	21300	19900	18800	17900	16800
23	18600	18100	19800	22900	22900	22800	22300	21200	19800	18800	17800	16800
24	18500	18100	19800	22900	22900	22800	22300	21200	19800	18800	17800	16700
25	18500	18300	21000	22900	22900	22700	22300	21100	19800	18700	17700	16700
26	18500	18300	22800	22900	22900	22700	22200	21100	19700	18700	17700	16700
27	18500	18300	23200	22900	22900	22700	22200	21000	19700	18700	17700	16600
28	18400	18300	23400	22900	22900	22700	22200	21000	19700	18700	17600	16600
29	18400	18300	23400	22900	22900	22700	22100	20900	19600	18600	17600	16600
30	18400	18300	23400	22900	---	22700	22100	20900	19600	18600	17600	16500
31	18400	---	23300	22900	---	22700	---	20800	---	18600	17500	---
MAX	19100	18400	23400	23300	22900	22900	22700	22100	20800	19500	18600	17500
MIN	18400	18100	18300	22700	22900	22700	22100	20800	19600	18600	17500	16500
a	1293.46	1293.25	1301.12	1300.54	1300.51	1300.20	1299.41	1297.42	1295.43	1293.81	1292.00	1290.22
b	-600	-100	+5000	-400	0	-200	-600	-1300	-1200	-1000	-1100	-1000
c	616	462	385	454	489	566	582	806	760	559	530	598

a Elevation, in feet NGVD, at end of month.

b Change in contents, in acre-feet.

c Diversions, in acre-feet, for municipal supply furnished by county of San Luis Obispo.

## SALINAS RIVER BASIN

11144600 SALINAS RIVER BELOW SALINAS DAM, NEAR POZO, CA

LOCATION.--Lat 35°20'07", long 120°30'10", in NW 1/4 NW 1/4 sec.8, T.30 S., R.14 E., San Luis Obispo County, Hydrologic Unit 18060005, on left bank 900 ft downstream from Salinas Dam, 2 mi upstream from Pilitas Creek, and 7.5 mi northwest of Pozo.

DRAINAGE AREA.--112 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,180 ft, from topographic map.

REMARKS.--Records good. Flow completely regulated by Santa Margarita Lake (station 11144500), 900 ft upstream, and water diverted to Camp San Luis Obispo and city of San Luis Obispo.

AVERAGE DISCHARGE.--11 years, 32.1 ft<sup>3</sup>/s, 23,260 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,160 ft<sup>3</sup>/s Feb. 10, 1978, gage height, 10.24 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 121 ft<sup>3</sup>/s Jan. 4, gage height, 3.27 ft; minimum daily, 0.01 ft<sup>3</sup>/s Apr. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	4.1	.10	45	.07	.05	.05	5.9	11	.97	2.2	2.2
2	5.5	3.3	.09	38	.07	.06	.05	6.0	11	1.8	1.9	2.2
3	5.5	3.6	.23	32	.07	.06	.02	6.3	11	1.8	1.8	2.2
4	5.5	3.7	.11	66	.07	.05	.02	6.0	11	1.1	1.8	2.2
5	5.4	3.7	.10	91	.09	.05	.02	6.1	11	.53	1.8	2.2
6	4.7	3.5	.09	88	.09	.05	.02	6.2	11	1.2	4.5	2.3
7	4.6	3.4	.08	67	.32	.04	.02	6.2	8.2	1.2	7.3	2.2
8	4.6	4.2	.08	55	.15	.02	.02	6.2	5.2	.60	7.4	2.2
9	4.6	4.6	.19	17	.12	.02	.02	6.2	5.1	.15	7.2	2.2
10	4.6	4.9	.13	.17	.12	.48	.02	6.1	5.1	.80	7.3	2.2
11	3.4	5.2	.18	.13	.12	.07	.01	6.1	5.1	.91	7.1	2.3
12	2.3	5.3	.15	.12	.12	.04	.15	6.1	5.2	.96	7.2	2.4
13	2.3	5.2	.09	.11	.12	.64	.05	6.0	3.4	.98	5.3	2.3
14	2.3	5.9	.11	.10	.12	.29	.03	6.0	2.4	1.1	2.1	2.3
15	2.3	6.3	.10	.10	.13	.08	.02	6.1	2.4	1.1	2.1	2.2
16	2.4	6.7	.08	.11	.17	.05	.02	9.0	2.3	1.4	2.3	2.2
17	2.4	9.9	.07	.64	.57	.04	.02	10	2.3	2.1	2.2	3.3
18	2.3	11	.07	.13	.16	.03	2.4	11	2.3	2.1	2.1	3.9
19	2.4	11	.07	.10	.16	.03	3.9	11	2.3	2.2	2.1	3.9
20	2.3	11	.24	.09	.13	.03	4.3	11	2.3	2.3	2.1	3.9
21	2.4	7.9	.12	.09	.12	.03	3.9	11	2.5	2.6	2.0	4.2
22	2.3	2.0	.09	.09	.12	.03	4.0	11	2.3	2.7	2.1	4.3
23	2.2	.08	.08	.09	.10	.95	4.2	11	2.3	2.5	2.4	4.3
24	2.7	.22	.29	.63	.72	.09	5.1	11	2.2	2.9	2.2	4.8
25	2.5	.12	.82	.11	.13	.07	5.6	11	2.3	2.5	2.2	4.3
26	2.5	.09	1.2	.09	.10	.05	5.6	11	2.4	2.4	2.1	4.3
27	2.9	.12	54	.09	.07	.05	5.7	11	2.2	2.3	2.5	4.4
28	3.2	.12	90	.09	.07	.04	5.9	11	2.3	2.2	2.1	4.4
29	3.2	.30	85	.07	.07	.22	5.9	11	2.4	2.2	2.1	4.5
30	3.2	.07	69	.07	---	.08	5.9	11	.77	2.2	2.2	4.3
31	3.3	---	55	.07	---	.05	---	11	---	2.3	2.2	---
TOTAL	105.3	127.52	357.96	502.29	4.47	3.84	62.96	264.5	141.27	52.10	101.9	94.6
MEAN	3.40	4.25	11.5	16.2	.15	.12	2.10	8.53	4.71	1.68	3.29	3.15
MAX	5.5	11	90	91	.72	.95	5.9	11	11	2.9	7.4	4.8
MIN	2.2	.07	.07	.07	.07	.02	.01	5.9	.77	.15	1.8	2.2
AC-FT	209	253	710	996	8.9	7.6	125	525	280	103	202	188
CAL YR 1983	TOTAL	42759.75	MEAN	117	MAX	3110	MIN	.02	AC-FT	84810		
WTR YR 1984	TOTAL	1818.71	MEAN	4.97	MAX	91	MIN	.01	AC-FT	3610		

11147070 SANTA RITA CREEK NEAR TEMPLETON, CA

LOCATION.--Lat 35°31'26", long 120°45'54", in Asuncion Grant, San Luis Obispo County, Hydrologic Unit 18060005, on left bank 1.6 mi upstream from mouth, and 4 mi west of Templeton.

DRAINAGE AREA.--18.2 mi<sup>2</sup>.

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

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

REMARKS.--Records good. Some regulation and pumping above station.

AVERAGE DISCHARGE.--23 years, 15.4 ft<sup>3</sup>/s, 11,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,060 ft<sup>3</sup>/s Jan. 19, 1969, gage height, 11.12 ft in gage well, 11.75 ft from floodmarks, from rating curve extended above 1,300 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 935 ft<sup>3</sup>/s Nov. 24 (1615 hrs), gage height, 6.63 ft, no other peak above base of 600 ft<sup>3</sup>/s; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	25	9.0	22	3.3	3.3	2.4	.64	.02			
2	1.6	9.0	7.1	17	3.3	3.3	2.5	.57	.01			
3	.85	3.5	58	13	3.3	3.3	2.4	.55	0			
4	.65	1.6	41	10	4.5	3.3	3.1	.44	0			
5	.49	1.0	24	8.1	3.9	3.0	20	.38	0			
6	.53	.72	18	6.9	3.8	2.9	21	.37	0			
7	.49	.42	15	5.6	3.7	2.9	16	.34	0			
8	.49	.30	12	5.1	3.7	2.9	2.4	.29	0			
9	.57	.30	85	4.4	4.5	2.9	1.7	.23	0			
10	.47	.33	58	3.9	5.2	2.9	1.6	.20	0			
11	.43	16	93	3.8	3.9	2.9	1.6	.18	0			
12	.35	4.2	67	3.3	3.7	2.9	1.5	.16	0			
13	.29	5.6	43	3.6	4.0	7.2	1.3	.16	0			
14	.29	11	30	3.3	5.6	22	1.1	.17	0			
15	.37	3.7	22	3.0	4.0	7.1	.99	.14	0			
16	.37	2.6	17	3.3	6.2	5.0	.99	.16	0			
17	.47	22	13	3.0	5.2	5.0	.89	.14	0			
18	.47	21	11	2.9	4.2	4.3	.93	.11	0			
19	.44	5.1	8.8	2.9	3.7	4.0	1.5	.09	0			
20	.37	33	7.6	2.9	3.7	3.7	1.1	.08	0			
21	.37	22	6.5	3.7	3.9	3.7	.94	.07	0			
22	.42	9.0	5.4	3.1	4.1	3.3	.83	.05	0			
23	.37	5.8	4.7	3.2	3.7	3.1	.83	.05	0			
24	.35	270	45	2.9	3.7	2.9	.70	.04	0			
25	.37	102	275	3.2	3.7	2.9	.66	.04	0			
26	.37	42	147	3.0	3.6	2.9	.63	.04	0			
27	.34	27	163	3.0	3.6	2.7	.61	.04	0			
28	.30	20	78	3.2	3.5	2.5	.64	.04	0			
29	.34	14	51	3.1	3.3	2.5	.65	.04	0			
30	4.7	10	38	3.2	---	2.4	.65	.03	0			
31	24	---	29	3.3	---	2.5	---	.02	---			
TOTAL	45.82	688.17	1482.10	162.9	116.5	126.2	92.14	5.86	0.03	0	0	0
MEAN	1.48	22.9	47.8	5.25	4.02	4.07	3.07	.19	.001	0	0	0
MAX	24	270	275	22	6.2	22	21	.64	.02	0	0	0
MIN	.29	.30	4.7	2.9	3.3	2.4	.61	.02	0	0	0	0
AC-FT	91	1360	2940	323	231	250	183	12	.06	0	0	0
CAL YR 1983	TOTAL	18655.50	MEAN	51.1	MAX 880	MIN	.01	AC-FT 37000				
WTR YR 1984	TOTAL	2719.72	MEAN	7.43	MAX 275	MIN	0	AC-FT 5390				

## SALINAS RIVER BASIN

11147500 SALINAS RIVER AT PASO ROBLES, CA

LOCATION.--Lat 35°37'43", long 120°41'00", in Paso de Robles Grant, San Luis Obispo County, Hydrologic Unit 18060005, on left bank at upstream side of 13th Street Bridge in Paso Robles, and 3.5 mi upstream from Huerhuero Creek.

DRAINAGE AREA.--390 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to September 1965, October 1969 to current year.

REVISED RECORDS.--WSP 981: 1942.

GAGE.--Water-stage recorder. Datum of gage is 670.61 ft National Geodetic Vertical Datum of 1929. Prior to June 14, 1951, nonrecording gage, and June 14, 1951, to Sept. 30, 1965, water-stage recorder at same site and datum.

REMARKS.--Records good. Flow regulated by Santa Margarita Lake (station 11144500) 32 mi upstream beginning in 1941. Small diversions above station.

AVERAGE DISCHARGE.--41 years, 101 ft<sup>3</sup>/s, 73,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,500 ft<sup>3</sup>/s Feb. 16, 1980, gage height, 15.99 ft, from rating curve extended above 6,200 ft<sup>3</sup>/s based on discharge measurement of maximum flow; maximum gage height, 17.24 ft, Apr. 3, 1958; no flow for long periods in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 25, 1969, reached a stage of 23.8 ft from floodmarks, discharge, 28,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	2115	2,320	8.69
Dec. 25	1930	*2,550	8.91

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	21	303	57	35	14	.66	0			
2		0	17	271	56	32	12	.64	0			
3		0	69	228	52	29	12	.73	0			
4		.07	204	199	51	26	7.9	.68	0			
5		6.9	119	218	50	28	9.7	.67	0			
6		6.1	82	229	45	23	23	.70	0			
7		6.0	65	225	45	21	19	.57	0			
8		5.4	59	206	45	18	16	.61	0			
9		4.6	110	184	46	17	12	.53	0			
10		5.4	368	177	48	17	9.7	.28	0			
11		7.4	271	136	49	15	8.4	.28	0			
12		10	400	108	43	14	7.2	.28	.23			
13		15	241	114	47	15	6.5	.28	0			
14		11	170	106	53	47	5.6	.28	0			
15		14	143	102	54	59	5.2	.44	0			
16		9.9	114	92	51	51	6.7	.43	0			
17		8.2	90	85	57	41	4.2	.35	0			
18		13	94	81	62	38	2.0	.27	0			
19		14	89	82	53	40	1.7	.15	0			
20		11	78	85	47	36	1.4	.15	0			
21		12	68	94	51	33	1.1	.15	0			
22		14	56	80	41	28	1.2	.15	0			
23		13	57	77	42	25	1.3	.06	0			
24		326	74	66	44	23	.92	0	0			
25		692	1280	67	37	18	.82	0	0			
26		172	1190	69	48	18	1.1	0	0			
27		100	731	68	46	15	.98	0	0			
28		56	555	64	45	12	.83	0	0			
29		36	479	61	41	9.8	.77	0	0			
30		29	404	61	---	8.4	.68	0	0			
31		---	365	53	---	11	---	0	---			
TOTAL	0	1597.97	8063	3991	1406	803.2	193.90	9.34	0.23	0	0	0
MEAN	0	53.3	260	129	48.5	25.9	6.46	.30	.008	0	0	0
MAX	0	692	1280	303	62	59	23	.73	.23	0	0	0
MIN	0	0	17	53	37	8.4	.68	0	0	0	0	0
AC-FT	0	3170	15990	7920	2790	1590	385	19	.5	.0	0	0
CAL YR 1983	TOTAL	180946.25	MEAN	496	MAX	10500	MIN	0	AC-FT	358900		
WTR YR 1984	TOTAL	16064.64	MEAN	43.9	MAX	1280	MIN	0	AC-FT	31860		

## 11148500 ESTRELLA RIVER NEAR ESTRELLA, CA

LOCATION.--Lat 35°43'02", long 120°38'21", in NW 1/4 NW 1/4 sec.36, T.25 S., R.12 E., San Luis Obispo County, Hydrologic Unit 18060004, on right bank 0.2 mi downstream from mouth of Ranchito Canyon, and 1.9 mi northwest of Estrella.

DRAINAGE AREA.--922 mi<sup>2</sup>, not including Carrizo Plains.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1960, published as Estrella Creek near Estrella.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 671.59 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. No regulation; pumpage from wells along river for irrigation above station.

AVERAGE DISCHARGE.--30 years, 28.9 ft<sup>3</sup>/s 20,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,500 ft<sup>3</sup>/s Feb. 24, 1969, gage-height, 10.4 ft from floodmarks, by slope-area measurement of maximum flow; maximum gage height, 10.9 ft, Jan. 25, 1969, from floodmarks; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 529 ft<sup>3</sup>/s Dec. 25 (1945 hrs), gage height, 2.77 ft, no other peak above base of 300 ft<sup>3</sup>/s; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			0	19	4.7	4.9	.99					
2			0	14	7.6	3.7	.96					
3			0	12	14	2.6	.79					
4			0	11	7.7	1.6	.79					
5			0	13	6.6	2.8	.90					
6			.01	13	6.2	2.8	1.2					
7			3.1	6.5	5.5	3.9	.80					
8			4.3	5.1	8.0	4.2	.56					
9			5.2	6.2	11	3.8	.46					
10			5.7	6.8	6.0	6.2	.36					
11			6.1	8.7	6.1	4.4	.29					
12			7.8	8.3	5.8	5.9	.25					
13			7.3	8.8	5.2	7.1	.22					
14			7.8	7.9	5.7	14	.21					
15			7.1	11	5.5	11	.18					
16			4.5	22	5.0	7.5	.16					
17			3.9	11	6.4	4.7	.14					
18			6.6	13	6.8	4.8	.16					
19			5.3	11	5.9	3.9	.18					
20			6.1	9.2	5.1	2.7	.16					
21			4.4	11	5.7	2.7	.13					
22			4.4	12	6.3	2.3	.11					
23			6.4	15	5.6	2.2	.09					
24			15	13	9.8	2.0	.07					
25			162	8.3	7.7	1.9	.06					
26			171	11	6.9	1.8	.05					
27			57	8.8	4.8	1.5	.03					
28			65	12	4.6	1.5	.02					
29			46	7.8	5.2	1.3	.01					
30			28	7.6	---	1.2	0					
31			21	5.0	---	1.1	---					
TOTAL	0	0	661.01	329.0	191.4	122.0	10.33	0	0	0	0	0
MEAN	0	0	21.3	10.6	6.60	3.94	.34	0	0	0	0	0
MAX	0	0	171	22	14	14	1.2	0	0	0	0	0
MIN	0	0	0	5.0	4.6	1.1	0	0	0	0	0	0
AC-FT	0	0	1310	653	380	242	20	0	0	0	0	0
CAL YR 1983	TOTAL	28289.23	MEAN	77.5	MAX	3670	MIN	0	AC-FT	56110		
WTR YR 1984	TOTAL	1313.74	MEAN	3.59	MAX	171	MIN	0	AC-FT	2610		

NOTE.--No gage-height record Mar. 18 to May 8.

## SALINAS RIVER BASIN

11148900 NACIMIENTO RIVER BELOW SAPAQUE CREEK, NEAR BRYSON, CA

LOCATION.--Lat 35°47'19", long 121°05'34", in SW 1/4 NE 1/4 sec.3, T.25 S., R.8 E., San Luis Obispo County,  
Hydrologic Unit 18060005, on left bank just downstream from Sapaque Creek, and 1.4 mi south of Bryson.

DRAINAGE AREA.--162 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

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

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

AVERAGE DISCHARGE.--13 years, 227 ft<sup>3</sup>/s, 164,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft<sup>3</sup>/s Jan. 16, 1978, gage height, 32.00 ft, from  
rating curve extended above 7,820 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for  
several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,510 ft<sup>3</sup>/s Dec. 25, gage height, 16.39 ft, no peak above  
base of 10,000 ft<sup>3</sup>/s; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	7.7	153	319	57	34	26	16	1.6			
2	12	10	132	280	57	33	27	16	1.4			
3	9.1	11	865	251	56	32	26	15	1.4			
4	7.1	8.6	589	227	54	31	25	15	1.3			
5	5.7	7.7	331	208	53	30	26	14	1.3			
6	4.6	7.1	247	189	51	29	26	13	1.2			
7	4.2	6.8	204	172	51	29	25	13	1.3			
8	3.7	6.0	176	160	48	28	24	12	1.4			
9	3.7	6.0	1080	148	49	28	23	12	1.2			
10	3.5	13	913	137	55	27	23	11	1.0			
11	3.5	1740	1150	130	48	27	23	10	.86			
12	3.4	205	799	122	46	27	22	10	.78			
13	3.2	188	490	117	46	32	22	9.3	.70			
14	3.1	228	367	112	51	155	21	8.2	.69			
15	3.0	128	297	106	51	84	20	8.1	.68			
16	3.2	98	253	105	52	67	19	8.4	.68			
17	3.3	124	218	101	56	60	18	8.4	.66			
18	3.4	224	192	93	51	54	19	8.1	.55			
19	3.5	140	173	90	47	49	25	7.8	.39			
20	3.5	330	162	86	45	45	27	7.2	.31			
21	3.6	332	147	87	44	42	22	6.2	.21			
22	3.5	194	140	84	44	39	20	5.9	.18			
23	3.5	145	132	80	41	37	19	5.4	.13			
24	3.4	1820	328	77	40	35	18	4.7	.11			
25	3.4	950	4430	74	38	34	17	4.1	.06			
26	3.4	367	1830	70	37	33	16	3.8	.03			
27	3.4	242	1050	67	36	31	16	3.5	.02			
28	3.2	190	711	65	35	30	18	3.0	0			
29	3.1	160	529	64	35	28	17	2.6	0			
30	3.7	143	435	63	---	27	17	2.4	0			
31	5.5	---	373	60	---	26	---	1.9	---			
TOTAL	141.4	8031.9	18896	3944	1374	1263	647	266.0	20.14	0	0	0
MEAN	4.56	268	610	127	47.4	40.7	21.6	8.58	.67	0	0	0
MAX	15	1820	4430	319	57	155	27	16	1.6	0	0	0
MIN	3.0	6.0	132	60	35	26	16	1.9	0	0	0	0
AC-FT	280	15930	37480	7820	2730	2510	1280	528	40	0	0	0
CAL YR 1983	TOTAL	218343.38	MEAN	598	MAX	13600	MIN	.34	AC-FT	433100		
WTR YR 1984	TOTAL	34583.44	MEAN	94.5	MAX	4430	MIN	0	AC-FT	68600		

11148900 NACIMIENTO RIVER BELOW SAPAQUE CREEK, NEAR BRYSON, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1972 to current year. Published as station 11148800 "near Bryson" in water years 1958-59, 1961-71.

WATER TEMPERATURES: Water years 1972-74.

SEDIMENT RECORDS: Water years 1972 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1971 to September 1974.

SEDIMENT RECORDS: October 1971 to September 1974.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					
31...	1405	6.5	18.5	2	.04
DEC					
06...	1435	246	9.0	4	2.7
JAN					
19...	1215	90	7.0	4	.97
MAR					
12...	1315	27	14.5	1	.07
APR					
13...	1455	23	21.0	4	.25
MAY					
25...	1505	4.4	25.0	2	.02

## SALINAS RIVER BASIN

## RESERVOIRS IN SALINAS RIVER BASIN, CA

11149300 LAKE NACIMIENTO (formerly published as Nacimiento Reservoir).--Lat 35°45'29", long 120°53'01", in NW 1/4 sec.15, T.25 S., R.10 E., San Luis Obispo County, Hydrologic Unit 18060005, at right end of dam on Nacimiento River, 8.6 mi southwest of Bradley, and 12.3 mi upstream from mouth. DRAINAGE AREA, 325 mi<sup>2</sup>. PERIOD OF RECORD, February 1957 to current year. Monthend contents prior to October 1970, published in WSP 2129. Prior to October 1978, published as "Nacimiento Reservoir." GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Monterey County Flood Control and Water Conservation District).

Reservoir is formed by earthfill dam completed in 1957. Total capacity, 350,000 acre-ft; usable capacity, 340,000 acre-ft between elevations 670.0 ft, outlet and 800.0 ft, crest of spillway. Dead storage, 10,000 acre-ft. Figures given herein represent total contents. Reservoir is used for flood control and water released down Nacimiento River for irrigation. Record of contents furnished by Monterey County Flood Control and Water Conservation District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 374,500 acre-ft Apr. 7, 1958, elevation, 804.7 ft; minimum observed since appreciable storage was attained, 10,910 acre-ft Oct. 11, 1960, elevation, 670.8 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 271,200 acre-ft Dec. 27, elevation, 784.10 ft; minimum observed, 122,400 acre-ft Sept. 30, elevation, 744.65 ft.

11150100 LAKE SAN ANTONIO.--Lat 35°47'55", long 120°53'02", in SW 1/4 sec.34, T.24 S., R.10 E., Monterey County, Hydrologic Unit 18060005, at dam on San Antonio River, 0.7 mi upstream from Sulphur Canyon, and 6.4 mi southwest of Bradley. DRAINAGE AREA, 323 mi<sup>2</sup>. PERIOD OF RECORD, December 1965 to current year. Monthend contents prior to October 1970, published in WSP 2129. GAGE, water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Monterey County Flood Control and Water Conservation District).

Reservoir is formed by earthfill dam completed in 1965. Total capacity, 350,000 acre-ft; usable capacity, 330,000 acre-ft between elevations 662.0 ft, minimum pool and 780.0 ft, crest of spillway. Dead storage, 20,000 acre-ft. Records given herein represent total contents. Reservoir is used for flood control and water released down San Antonio River for irrigation. Record of contents furnished by Monterey County Flood Control and Water Conservation District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 365,400 acre-ft Mar. 5, 1983, elevation, 782.65 ft; minimum since appreciable storage was attained, 22,000 acre-ft Dec. 13-17, 1977, elevation, 664.50 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents, 319,000 acre-ft Dec. 31, Jan. 1, elevation, 774.50 ft; minimum, 232,000 acre-ft Sept. 29, 30, elevation, 756.90 ft.

## MONTHEND CONTENTS, IN ACRE-FEET, AT 2400, OCTOBER 1983 TO SEPTEMBER 1984

Date	Lake Nacimiento	Lake San Antonio
Sept. 30, 1983	218,400	296,300
Oct. 31.....	216,500	294,200
Nov. 30.....	238,900	297,900
Dec. 31.....	254,900	319,000
Jan. 31, 1984..	211,600	304,000
Feb. 29.....	211,200	294,700
Mar. 31.....	211,800	294,400
Apr. 30.....	211,600	290,800
May 31.....	205,600	275,500
June 30.....	193,000	258,400
July 31.....	171,400	247,300
Aug. 31.....	144,900	238,700
Sept. 30.....	122,400	232,000

## 11149400 NACIMIENTO RIVER BELOW NACIMIENTO DAM, NEAR BRADLEY, CA

LOCATION.--Lat 35°45'41", long 120°51'16", in NE 1/4 NE 1/4 sec.14, T.25 S., R.10 E., San Luis Obispo County, Hydrologic Unit 18060005, Camp Roberts Military Reservation, on left bank 2.2 mi downstream from Nacimiento Dam, and 7.6 mi southwest of Bradley.

DRAINAGE AREA.--329 mi<sup>2</sup> (revised).

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

GAGE.--Water-stage recorder. Elevation of gage is 597 ft, from topographic map.

REMARKS.--Records good. Flow regulated by Nacimiento Dam (station 11149300), 2.2 mi upstream. No diversion above station.

AVERAGE DISCHARGE (unadjusted).--27 years, 304 ft<sup>3</sup>/s, 220,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,340 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 10.92 ft; no flow for many days in each year except 1964, 1966-76, 1978-84.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,270 ft<sup>3</sup>/s Dec. 27, gage height, 7.91 ft; minimum daily, 17 ft<sup>3</sup>/s Apr. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	27	22	2910	119	24	21	100	126	162	432	307
2	29	28	21	2830	116	25	21	100	127	162	428	304
3	26	27	25	2740	116	24	22	100	127	161	425	303
4	25	26	19	2660	116	25	22	100	170	160	425	303
5	25	26	19	2570	116	24	21	100	204	159	421	303
6	24	26	19	2480	116	24	22	100	202	159	421	303
7	24	26	18	2390	115	23	20	100	203	159	418	303
8	24	26	18	2290	116	23	17	100	203	159	417	303
9	24	27	30	2200	117	23	17	100	203	267	438	303
10	23	28	20	1630	117	23	18	100	203	401	454	303
11	23	30	20	782	116	21	18	100	205	401	452	316
12	23	28	19	211	116	21	18	100	210	401	446	304
13	24	27	19	126	116	21	19	100	211	401	447	397
14	25	28	19	72	117	22	68	100	211	401	442	397
15	25	25	19	75	118	22	130	100	211	401	442	393
16	25	24	19	77	118	22	130	100	211	402	428	393
17	24	21	19	97	118	22	111	100	211	421	385	393
18	25	23	20	123	118	22	99	100	212	421	385	374
19	26	23	20	125	118	22	100	100	212	421	381	373
20	25	23	20	130	118	23	101	100	213	421	379	365
21	26	22	20	130	85	24	100	100	213	421	374	336
22	26	21	529	130	42	23	100	100	213	421	374	336
23	26	22	1150	129	38	22	100	100	214	421	372	336
24	26	26	1530	156	36	21	100	100	213	421	366	336
25	26	24	1550	123	34	21	100	117	199	421	365	336
26	26	24	1590	123	31	21	100	127	124	421	362	336
27	26	24	2210	123	30	21	100	127	125	421	362	361
28	26	23	3210	123	27	21	100	126	150	421	373	382
29	26	22	3140	123	25	21	100	127	162	421	146	385
30	26	22	3060	122	---	20	100	121	162	421	144	385
31	26	---	2980	121	---	22	---	128	---	426	305	---
TOTAL	786	749	21374	27921	2685	693	1995	3273	5650	10676	12009	10359
MEAN	25.4	25.0	689	901	92.6	22.4	66.5	106	188	344	387	345
MAX	31	30	3210	2910	119	25	130	128	214	426	454	397
MIN	23	21	18	72	25	20	17	100	124	159	144	303
AC-FT	1560	1490	42400	55380	5330	1370	3960	6490	11210	21180	23820	20550
CAL YR 1983	TOTAL	317117.6	MEAN	869	MAX	4880	MIN	7.5	AC-FT	629000		
WTR YR 1984	TOTAL	98170	MEAN	268	MAX	3210	MIN	17	AC-FT	194700		

## SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA

LOCATION.--Lat 35°53'48", long 121°05'14", in Los Ojitos Grant, Monterey County, Hydrologic Unit 18060005, on downstream side of highway bridge, 0.4 mi upstream from Tule Canyon, and 3.3 mi south of Lockwood.

DRAINAGE AREA.--217 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year.

REVISED RECORDS.--WDR CA-82-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 800.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. No regulation; some pumping above station.

AVERAGE DISCHARGE.--19 years, 121 ft<sup>3</sup>/s, 87,660 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,000 ft<sup>3</sup>/s Jan. 26, 1969, gage height, 8.25 ft; maximum gage height, 12.64 ft, from floodmarks, Jan. 26, 1983; no flow for several months in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,710 ft<sup>3</sup>/s Dec. 25 (1200 hrs), gage height, 10.16 ft; no other peak above base of 1,500 ft<sup>3</sup>/s; minimum, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	15	110	314	68	51	35	15	.52			
2	34	16	108	286	63	49	32	16	.34			
3	27	16	274	264	61	46	32	18	.24			
4	24	14	366	243	59	49	32	18	.16			
5	16	13	219	212	57	46	34	15	.10			
6	13	11	166	201	57	42	32	16	.04			
7	12	11	143	187	57	42	29	16	.02			
8	11	11	123	174	55	44	30	15	0			
9	9.8	13	223	161	55	42	29	12	0			
10	9.1	17	533	149	55	42	29	14	0			
11	8.7	349	415	137	55	42	30	14	0			
12	8.2	187	459	129	55	41	29	12	0			
13	7.4	128	314	123	53	39	28	10	0			
14	7.2	219	255	116	53	94	28	9.0	0			
15	7.2	128	212	113	55	81	26	9.0	0			
16	7.4	100	174	106	55	63	25	9.7	0			
17	7.5	83	155	103	61	55	22	9.0	0			
18	7.7	99	137	98	53	51	20	6.7	0			
19	7.7	91	123	92	53	48	28	6.7	0			
20	7.5	83	113	90	51	48	32	7.4	0			
21	7.2	112	103	84	53	46	25	5.5	0			
22	6.9	95	103	79	51	41	24	6.1	0			
23	7.3	72	103	79	48	41	21	5.5	0			
24	7.4	208	163	79	53	39	25	4.9	0			
25	7.7	412	2470	79	48	37	22	3.6	0			
26	7.7	224	1030	74	49	37	21	3.6	0			
27	7.5	170	735	72	46	35	20	2.8	0			
28	7.0	132	528	70	44	32	22	1.6	0			
29	7.6	112	435	68	48	34	20	1.2	0			
30	8.7	111	385	65	---	32	16	.99	0			
31	11	---	363	68	---	34	---	.71	---			
TOTAL	361.4	3252	11040	4115	1571	1423	798	285.00	1.42	0	0	0
MEAN	11.7	108	356	133	54.2	45.9	26.6	9.19	.047	0	0	0
MAX	43	412	2470	314	68	94	35	18	.52	0	0	0
MIN	6.9	11	103	65	44	32	16	.71	0	0	0	0
AC-FT	717	6450	21900	8160	3120	2820	1580	565	2.8	0	0	0
CAL YR 1983	TOTAL	164615.5	MEAN	451	MAX	8440	MIN	.85	AC-FT	326500		
WTR YR 1984	TOTAL	22846.82	MEAN	62.4	MAX	2470	MIN	0	AC-FT	45320		

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966 to current year.  
 WATER TEMPERATURES: Water years 1966-73.  
 SEDIMENT RECORDS: Water years 1966 to current year.

PERIOD OF DAILY RECORD.--  
 WATER TEMPERATURES: October 1965 to September 1973.  
 SEDIMENT RECORDS: October 1965 to September 1974.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC						
06...	1040	167	8.5	31	14	25
JAN						
18...	1430	96	11.0	32	8.3	15
19...	1420	94	13.5	33	8.4	16
APR						
13...	1155	28	18.5	10	.76	--
MAY						
25...	1225	4.9	25.0	7	.09	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM
OCT								
04...	1610	28.0	1	14	13	37	76	97
04...	1615	28.0	1	14	--	--	1	19
04...	1620	28.0	1	14	--	1	5	22
04...	1625	28.0	1	14	--	2	10	27
04...	1630	28.0	1	14	18	57	94	99
SEP								
05...	0950	--	1	.00	--	--	2	18
05...	0955	--	1	.00	--	--	1	8
05...	1000	--	1	.00	--	--	1	6
05...	1005	--	1	.00	--	--	2	11
05...	1010	--	1	.00	--	--	1	4
05...	1015	--	1	.00	--	--	--	7

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	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM
OCT							
04...	100	--	--	--	--	--	--
04...	72	96	98	100	--	--	--
04...	46	64	75	83	93	100	--
04...	49	61	72	83	92	100	--
04...	99	100	--	--	--	--	--
SEP							
05...	45	69	82	89	97	100	--
05...	15	22	33	47	66	82	100
05...	22	41	59	75	91	100	--
05...	38	67	84	91	98	100	--
05...	10	19	28	38	51	78	100
05...	43	82	95	99	100	--	--

## SALINAS RIVER BASIN

11149900 SAN ANTONIO RIVER NEAR LOCKWOOD, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM
DEC							
06...	1115	8.5	22	167	117	118	3
JAN							
19...	1445	13.5	18	94	86.0	182	2
MAR							
06...	1500	15.0	19	42	58.0	34	1
APR							
13...	1210	18.5	23	28	58.0	20	1
MAY							
25...	1230	25.0	--	4.9	27.0	.00	--

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM
DEC							
06...	33	68	86	93	96	99	100
JAN							
19...	28	64	87	96	99	100	--
MAR							
06...	22	68	91	97	99	100	--
APR							
13...	19	61	87	96	98	100	--
MAY							
25...	--	--	--	--	--	--	--

## 11150500 SALINAS RIVER NEAR BRADLEY, CA

LOCATION.--Lat 35°55'49", long 120°52'04", in SW 1/4 NW 1/4 sec.14, T.23 S., R.10 E., Monterey County, Hydrologic Unit 18060005, on left bank 6 mi northwest of Bradley, and 7 mi downstream from San Antonio River.

DRAINAGE AREA.--2,535 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1948 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1285: 1950.

GAGE.--Water-stage recorder. Datum of gage is 442.69 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. Flow partly regulated by Santa Margarita Lake (station 11144500), Lake Nacimiento, formerly Nacimiento Reservoir (station 11149300) beginning in February 1957, and Lake San Antonio (station 11150100) beginning in December 1965. Several small diversions above station.

AVERAGE DISCHARGE (unadjusted).--36 years, 495 ft<sup>3</sup>/s, 358,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 117,000 ft<sup>3</sup>/s Feb. 24, 1969, gage height, 20.34 ft, from floodmarks; no flow at times in 1951, 1954-55, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,050 ft<sup>3</sup>/s Dec. 28, gage height, 8.47 ft; minimum daily, 45 ft<sup>3</sup>/s Mar. 30.

REVISIONS.--Revised daily discharges, in cubic feet per second, for February and March 1978, are given below. These figures supersede those published in the report for 1978.

Feb. 10, 1978..13900	Feb. 19, 1978.. 3720	Feb. 28, 1978.. 1160	Mar. 9, 1978..10700	Mar. 18, 1978.. 773	
11.....18600	20..... 2270	Mar. 1..... 1400	10..... 8750	19..... 550	
12.....16900	21..... 2000	2..... 1670	11..... 2110	20..... 473	
13.....24700	22..... 1910	3..... 2480	12..... 1820	21..... 447	
14.....16400	23..... 1840	4.....19500	13..... 1320	22..... 458	
15.....13800	24..... 1410	5.....24100	14..... 1020	23..... 637	
16.....12800	25..... 1310	6.....18200	15..... 878	24..... 573	
17.....11800	26..... 1230	7.....14000	16..... 794		
18.....11200	27..... 1190	8.....12000	17..... 844		
Month	Total	Mean	Max	Min	Ac-ft
February 1978	209384	7478	39900	78	415300
March 1978	128280	4138	24100	382	254400
WTR YR 1978	453570	1243	39900	67	899700

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	210	72	111	3520	518	217	66	319	268	445	429	276
2	119	72	102	3420	554	156	64	318	280	426	462	377
3	94	74	102	3070	571	110	56	350	368	413	475	437
4	83	74	135	3310	572	93	56	360	378	354	481	415
5	78	73	254	3290	581	88	56	363	421	355	492	351
6	76	70	190	3380	545	76	59	352	436	349	458	370
7	73	67	154	3330	545	73	59	328	455	420	462	376
8	72	69	137	3260	540	78	59	343	466	430	482	367
9	74	69	146	3140	538	80	59	355	467	293	493	376
10	69	69	243	2790	542	80	53	362	467	399	539	372
11	69	72	406	1790	526	80	47	362	465	439	553	370
12	69	72	383	531	518	79	78	275	449	443	555	406
13	69	74	458	591	450	75	97	238	431	406	548	440
14	69	74	358	456	439	75	99	245	446	506	543	439
15	68	74	291	418	431	80	142	238	458	515	547	439
16	64	74	262	409	458	101	196	236	398	469	536	440
17	63	72	239	396	486	102	207	246	502	411	466	412
18	62	69	224	428	495	90	176	261	445	440	430	421
19	59	64	211	433	516	86	167	266	447	437	430	391
20	50	64	190	429	541	85	167	262	451	430	455	407
21	61	64	180	418	524	76	166	254	440	430	475	429
22	72	59	204	402	338	67	156	237	416	426	490	439
23	71	61	1180	403	277	59	153	235	506	430	497	445
24	67	65	1680	442	258	60	154	243	504	432	499	453
25	64	247	1910	505	254	63	146	248	433	422	504	468
26	64	426	3190	500	241	62	161	272	387	412	508	468
27	64	245	2630	523	221	56	176	289	325	402	484	405
28	65	168	3860	540	222	57	332	297	307	405	462	457
29	66	126	3760	538	225	51	348	301	395	423	411	464
30	70	117	3720	529	---	45	328	291	441	496	112	463
31	72	---	3680	538	---	63	---	277	---	433	230	---
TOTAL	2326	2996	30590	43729	12926	2563	4083	9023	12652	13091	14508	12373
MEAN	75.0	99.9	987	1411	446	82.7	136	291	422	422	468	412
MAX	210	426	3860	3520	581	217	348	363	506	515	555	468
MIN	50	59	102	396	221	45	47	235	268	293	112	276
AC-FT	4610	5940	60680	86740	25640	5080	8100	17900	25100	25970	28780	24540
CAL YR 1983	TOTAL	665795.2	MEAN	1824	MAX	20700	MIN	5.8	AC-FT	1321000		
WTR YR 1984	TOTAL	160860.0	MEAN	440	MAX	3860	MIN	45	AC-FT	319100		

## SALINAS RIVER BASIN

11151300 SAN LORENZO CREEK BELOW BITTERWATER CREEK, NEAR KING CITY, CA

LOCATION.--Lat 36°16'05", long 121°03'55", in NE 1/4 sec.23, T.19 S., R.8 E., Monterey County, Hydrologic Unit 18060005, on left bank 1.3 mi downstream from Bitterwater Creek, 5 mi northeast of King City, and 10 mi upstream from mouth.

DRAINAGE AREA.--233 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 431.64 ft National Geodetic Vertical Datum of 1929. October 1958 to Apr. 24, 1967, at site 500 ft upstream at datum 5.00 ft higher. Apr. 25, 1967, to July 12, 1981, at site 200 ft upstream.

REMARKS.--Records fair. No regulation; small diversions above station.

AVERAGE DISCHARGE.--26 years, 15.3 ft<sup>3</sup>/s, 11,080 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,800 ft<sup>3</sup>/s Jan. 25, 1969, gage height, 15.33 ft in gage well, 16.2 ft, from floodmarks; no flow many days in 1961 and 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 195 ft<sup>3</sup>/s Dec. 25, gage height, 4.40 ft, no peak above base of 250 ft<sup>3</sup>/s; minimum daily, 1.4 ft<sup>3</sup>/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	7.9	16	24	11	6.9	5.9	4.3	2.0	1.6	1.6	2.3
2	29	8.5	14	20	10	6.5	6.0	4.3	2.0	1.7	1.6	2.0
3	21	8.3	21	17	11	6.4	5.8	3.8	2.2	1.7	2.1	2.0
4	17	7.6	57	15	9.8	6.3	5.6	3.4	2.4	1.7	2.1	2.0
5	11	7.2	33	14	9.6	6.0	6.5	3.6	2.9	1.7	1.9	1.8
6	11	7.2	31	14	8.8	5.9	6.6	3.6	2.7	1.8	1.9	1.5
7	11	9.6	23	15	8.8	6.1	6.4	3.6	2.6	1.6	1.8	1.5
8	10	9.4	22	15	9.0	6.2	5.6	3.5	2.5	1.6	1.7	1.6
9	9.4	8.2	34	16	9.9	6.0	5.4	3.3	2.4	1.6	1.5	1.6
10	8.8	8.4	79	15	12	5.9	5.8	3.1	2.3	1.6	1.7	1.7
11	8.8	22	59	16	11	5.7	5.5	3.0	2.3	1.6	1.9	1.9
12	8.3	23	77	15	11	5.8	5.2	2.9	2.3	1.5	2.0	2.0
13	7.9	18	49	16	11	7.4	4.5	2.7	2.3	1.6	2.1	1.9
14	8.5	18	29	15	12	34	4.0	2.7	2.3	1.4	1.8	1.7
15	8.8	16	26	15	11	21	3.5	2.8	2.3	1.5	2.0	1.7
16	9.0	13	24	14	11	16	3.6	2.9	2.2	1.8	2.3	1.9
17	8.6	13	23	14	11	13	3.7	2.9	2.1	1.5	2.1	1.9
18	8.6	14	23	14	10	11	4.1	2.6	2.1	1.5	1.9	1.9
19	8.8	14	21	13	9.5	9.4	6.3	2.5	2.1	1.5	1.7	2.0
20	8.9	22	21	12	8.8	8.9	6.6	2.3	2.1	1.7	2.0	1.9
21	8.9	38	21	13	8.4	7.2	5.2	2.2	2.1	1.7	2.2	2.1
22	8.9	22	21	14	8.3	6.6	4.4	2.1	1.9	2.0	2.4	2.2
23	8.9	21	21	13	7.8	6.3	4.1	1.9	1.7	2.2	2.2	2.3
24	9.0	22	31	11	7.6	6.0	3.8	1.9	1.7	2.2	2.3	2.3
25	9.3	147	171	11	7.1	6.3	3.3	2.0	1.7	2.3	2.5	2.3
26	9.3	56	134	11	7.1	6.6	3.5	1.9	1.6	1.9	2.6	2.4
27	8.3	28	49	10	7.1	6.3	4.0	1.9	1.5	1.6	2.6	2.1
28	5.9	22	46	10	7.1	5.9	5.0	1.9	1.5	1.7	2.5	1.9
29	6.4	19	37	10	6.8	5.0	4.5	1.9	1.5	1.9	2.4	1.9
30	6.8	17	35	10	---	5.2	4.5	2.0	1.6	1.9	2.1	1.9
31	7.1	---	26	11	---	5.4	---	2.0	---	1.8	2.1	---
TOTAL	343.2	647.3	1274	433	273.5	261.2	148.9	85.5	62.9	53.4	63.6	58.2
MEAN	11.1	21.6	41.1	14.0	9.43	8.43	4.96	2.76	2.10	1.72	2.05	1.94
MAX	40	147	171	24	12	34	6.6	4.3	2.9	2.3	2.6	2.4
MIN	5.9	7.2	14	10	6.8	5.0	3.3	1.9	1.5	1.4	1.5	1.5
AC-FT	681	1280	2530	859	542	518	295	170	125	106	126	115
CAL YR 1983	TOTAL	23827.5	MEAN	65.3	MAX	1930	MIN	3.1	AC-FT	47260		
WTR YR 1984	TOTAL	3704.7	MEAN	10.1	MAX	171	MIN	1.4	AC-FT	7350		

## 11151700 SALINAS RIVER AT SOLEDAD, CA

LOCATION.--Lat 36°24'40", long 121°19'06", on boundary between San Vicente and Los Coches Grants, Monterey County, Hydrologic Unit 18060005, near right bank on upstream end of pier on U.S. Highway 101, 0.9 mi south of Soledad, and 1 mi upstream from Arroyo Seco.

DRAINAGE AREA.--3,563 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1968 to September 1978, October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 170 ft, from topographic map.

REMARKS.--Records fair. Flow partly regulated by Santa Margarita Lake (station 11144500), Nacimiento Reservoir (station 11149300), and Lake San Antonio (station 11150100). Several small diversions above station.

AVERAGE DISCHARGE (unadjusted).--10 years (water years 1969-78), 530 ft<sup>3</sup>/s, 384,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106,000 ft<sup>3</sup>/s Feb. 25, 1969, gage height, 23.31 ft; maximum gage height, 23.39 ft Jan. 26, 1969; no flow Mar. 9-16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,830 ft<sup>3</sup>/s Dec. 29, gage height, 13.05 ft; minimum daily, 26 ft<sup>3</sup>/s Apr. 28, May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	642	81	235	3510	65	208	47	27	45	113	152	123
2	554	77	224	3390	64	198	48	26	38	141	123	102
3	413	73	225	3280	62	183	44	35	40	140	124	91
4	314	78	224	3020	58	168	43	47	49	130	135	113
5	255	74	220	3180	55	152	42	62	75	125	143	139
6	230	67	229	3180	52	144	40	78	87	105	159	159
7	214	71	257	3200	502	142	39	98	103	98	171	154
8	199	80	261	3150	502	142	39	105	115	97	167	147
9	188	86	250	3100	520	133	40	105	118	138	182	135
10	176	88	260	3000	531	125	40	111	126	143	193	134
11	166	113	301	2770	524	120	38	109	138	92	215	135
12	154	120	336	2110	504	113	38	107	150	120	245	140
13	146	117	391	1290	494	99	37	107	151	133	257	150
14	138	117	399	1070	483	97	37	99	156	116	257	153
15	134	117	422	929	442	98	36	90	156	116	253	165
16	132	117	395	888	442	109	37	90	148	167	252	176
17	132	118	376	841	424	108	36	89	142	164	247	197
18	129	120	355	824	443	103	36	86	154	137	227	191
19	124	120	335	791	446	97	34	83	184	123	200	179
20	118	136	310	791	467	93	31	81	165	120	182	175
21	114	137	292	675	468	85	31	83	151	112	184	161
22	107	132	280	685	458	79	32	81	148	113	203	165
23	102	131	283	709	405	74	32	73	144	126	223	171
24	106	135	501	686	340	69	31	60	154	141	232	174
25	105	145	1390	679	299	63	30	48	197	152	238	177
26	92	159	2010	719	276	66	28	39	188	150	238	174
27	91	194	2980	687	262	60	27	33	158	140	233	167
28	84	253	2690	668	242	56	26	43	115	130	231	151
29	79	252	3580	685	227	50	27	52	90	126	221	142
30	81	246	3560	671	---	49	28	54	90	135	200	169
31	74	---	3570	663	---	48	---	49	---	153	170	---
TOTAL	5593	3754	27141	51841	10057	3331	1074	2250	3775	3996	6257	4609
MEAN	180	125	876	1672	347	107	35.8	72.6	126	129	202	154
MAX	642	253	3580	3510	531	208	48	111	197	167	257	197
MIN	74	67	220	663	52	48	26	26	38	92	123	91
AC-FT	11090	7450	53830	102800	19950	6610	2130	4460	7490	7930	12410	9140
WTR YR 1984	TOTAL	123678	MEAN	338	MAX	3580	MIN	26	AC-FT	245300		

## SALINAS RIVER BASIN

11151870 ARROYO SECO NEAR GREENFIELD, CA

LOCATION.--Lat 36°14'15", long 121°28'50", in NE 1/4 SE 1/4 sec.36, T.19 S., R.4 E., Monterey County, Hydrologic Unit 18060005, on right bank 0.6 mi downstream from Rocky Creek, and 14.5 mi southwest of Greenfield.

DRAINAGE AREA.--113 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 780 ft, from topographic map. Prior to Aug. 27, 1970, at datum 2.00 ft higher.

REMARKS.--Records fair. No regulation; small diversion for fishponds above station by pumping.

AVERAGE DISCHARGE.--23 years, 172 ft<sup>3</sup>/s, 124,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,800 ft<sup>3</sup>/s Dec. 6, 1966, gage height, 14.50 ft, present datum, from rating curve extended above 5,700 ft<sup>3</sup>/s on basis of slope-area measurement at gage-height 12.65 ft, present datum; maximum gage height, 16.34 ft Feb. 7, 1978; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2000	2,200	9.12	Dec. 9	1630	2,540	9.37
Nov. 24	0845	3,190	9.75	Dec. 25	0545	*5,180	10.78

Minimum daily, 3.1 ft<sup>3</sup>/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	33	150	456	105	78	63	44	23	11	5.7	4.3
2	39	32	123	403	102	77	61	44	22	10	5.8	3.6
3	35	30	671	363	100	76	60	44	24	10	5.3	4.2
4	33	29	455	331	96	74	59	43	24	9.7	5.4	3.9
5	31	29	298	304	96	72	60	42	24	8.9	5.6	4.1
6	30	29	234	282	96	72	59	41	25	5.8	6.0	3.8
7	29	29	198	263	94	71	57	40	25	5.6	5.5	3.2
8	29	28	172	247	91	70	56	39	26	5.4	5.1	3.1
9	29	28	1010	233	100	68	55	38	23	5.3	4.9	3.3
10	29	574	826	219	100	68	54	37	22	5.2	4.9	3.6
11	29	278	968	206	93	69	52	37	22	5.3	4.6	4.2
12	28	99	728	198	90	68	50	37	21	5.4	5.1	4.8
13	28	195	521	188	98	168	49	37	21	5.9	5.1	5.0
14	28	119	402	179	112	171	48	36	22	5.8	4.9	5.3
15	28	82	324	173	105	108	47	37	23	5.2	4.4	5.3
16	28	82	273	172	146	97	46	37	21	4.9	4.8	4.7
17	29	201	241	165	118	96	46	36	19	4.8	5.1	4.0
18	29	129	210	159	108	88	49	35	18	4.9	5.0	4.6
19	29	120	190	152	101	84	62	34	17	5.4	4.7	5.6
20	28	246	174	147	98	81	51	33	16	5.2	4.2	5.4
21	28	170	159	148	98	78	48	33	16	4.4	4.3	5.0
22	28	123	150	142	93	75	46	31	16	5.1	4.1	5.0
23	27	110	141	137	90	73	45	31	15	6.5	3.9	5.3
24	26	1330	1150	133	88	70	44	29	15	9.8	3.8	6.0
25	26	469	3930	129	87	69	44	28	14	9.0	3.8	5.8
26	26	266	1790	126	84	68	46	29	13	7.8	4.2	6.1
27	25	194	1220	123	82	66	46	28	12	7.8	5.3	6.2
28	25	157	902	120	80	64	47	26	11	7.0	5.4	6.6
29	26	133	721	116	79	62	45	25	11	6.9	5.1	6.8
30	34	167	612	111	---	62	44	24	11	6.9	4.6	6.4
31	36	---	528	106	---	63	---	23	---	6.7	4.4	---
TOTAL	932	5511	19471	6231	2830	2506	1539	1078	572	207.6	151.0	145.2
MEAN	30.1	184	628	201	97.6	80.8	51.3	34.8	19.1	6.70	4.87	4.84
MAX	57	1330	3930	456	146	171	63	44	26	11	6.0	6.8
MIN	25	28	123	106	79	62	44	23	11	4.4	3.8	3.1
AC-FT	1850	10930	38620	12360	5610	4970	3050	2140	1130	412	300	288

CAL YR 1983 TOTAL 205341 MEAN 563 MAX 8790 MIN 19 AC-FT 407300  
WTR YR 1984 TOTAL 41173.8 MEAN 112 MAX 3930 MIN 3.1 AC-FT 81670

NOTE.--No gage-height record May 25 to July 5.

WATER-QUALITY RECORDS

SEDIMENT RECORDS: Water years 1962 to September 1984 (discontinued).

WATER TEMPERATURES: October 1962 to September 1975, October 1977 to September 1984 (discontinued).  
SEDIMENT RECORDS: October 1962 to September 1975, October 1977 to September 1984 (discontinued).

SEDIMENT CONCENTRATIONS: Maximum daily mean, 23,100 mg/L Feb. 7, 1978; minimum daily mean, no flow many days in 1966, 1968, and 1972.

SEDIMENT DISCHARGE: Maximum daily, 451,000 tons Feb. 7, 1978; minimum daily, 0 ton many days in 1966, 1968, 1970-73, 1977.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,010 mg/L Dec. 25; minimum daily mean, 1 mg/L several days.  
SEDIMENT DISCHARGE: Maximum daily, 11,700 tons Dec. 25; minimum daily, 0.02 ton several days during August and September.

[illegible]

## SALINAS RIVER BASIN

11151870 ARROYO SECO NEAR GREENFIELD, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	57	44	6.7	33	3	.27	150	16	6.5
2	39	41	4.3	32	3	.26	123	9	3.0
3	35	30	2.8	30	2	.16	671	196	606
4	33	23	2.0	29	2	.16	455	30	44
5	31	19	1.6	29	2	.16	298	10	8.0
6	30	17	1.4	29	2	.16	234	7	4.4
7	29	15	1.2	29	2	.16	198	5	2.7
8	29	14	1.1	28	2	.15	172	5	2.3
9	29	12	.94	28	2	.15	1010	341	1640
10	29	10	.78	574	352	1630	826	105	251
11	29	7	.55	278	66	95	968	196	694
12	28	6	.45	99	10	2.7	728	37	73
13	28	5	.38	195	47	43	521	20	28
14	28	4	.30	119	22	7.1	402	10	11
15	28	3	.23	82	12	2.7	324	16	14
16	28	3	.23	82	12	2.7	273	11	8.1
17	29	2	.16	201	34	27	241	7	4.6
18	29	2	.16	129	8	2.8	210	6	3.4
19	29	2	.16	120	8	4.4	190	5	2.6
20	28	1	.08	246	13	8.5	174	5	2.3
21	28	2	.15	170	4	1.8	159	5	2.0
22	28	3	.23	123	4	1.3	150	4	1.6
23	27	2	.15	110	5	1.5	141	4	1.5
24	26	2	.14	1330	764	4190	1150	395	2540
25	26	1	.07	469	25	40	3930	1010	11700
26	26	1	.07	266	4	2.9	1790	93	449
27	25	1	.07	194	4	2.1	1220	43	142
28	25	1	.07	157	3	1.3	902	21	51
29	26	1	.07	133	2	.72	721	11	21
30	34	5	.46	167	12	7.0	612	11	18
31	36	5	.49	---	---	---	528	10	14
TOTAL	932	---	27.49	5511	---	6076.15	19471	---	18349.0

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	456	8	9.8	105	2	.57	78	1	.21
2	403	7	7.6	102	2	.55	77	2	.42
3	363	6	5.9	100	2	.54	76	4	.82
4	331	5	4.5	96	2	.52	74	2	.40
5	304	5	4.1	96	2	.52	72	1	.19
6	282	5	3.8	96	2	.52	72	2	.39
7	263	4	2.8	94	2	.51	71	9	1.7
8	247	4	2.7	91	2	.49	70	5	.95
9	233	4	2.5	100	3	.81	68	3	.55
10	219	3	1.8	100	2	.54	68	4	.73
11	206	3	1.7	93	2	.50	69	6	1.1
12	198	2	1.1	90	2	.49	68	5	.92
13	188	2	1.0	98	5	1.3	168	30	36
14	179	2	.97	112	5	1.5	171	41	25
15	173	2	.93	105	5	1.4	108	7	2.0
16	172	3	1.4	146	8	3.2	97	3	.79
17	165	3	1.3	118	5	1.6	96	2	.52
18	159	4	1.7	108	6	1.7	88	2	.48
19	152	4	1.6	101	5	1.4	84	3	.68
20	147	4	1.6	98	4	1.1	81	2	.44
21	148	5	2.0	98	4	1.1	78	2	.42
22	142	5	1.9	93	4	1.0	75	1	.20
23	137	5	1.8	90	2	.49	73	1	.20
24	133	4	1.4	88	1	.24	70	1	.19
25	129	3	1.0	87	1	.23	69	2	.37
26	126	2	.68	84	1	.23	68	3	.55
27	123	2	.66	82	1	.22	66	4	.71
28	120	2	.65	80	1	.22	64	5	.86
29	116	2	.63	79	1	.21	62	6	1.0
30	111	2	.60	---	---	---	62	6	1.0
31	106	2	.57	---	---	---	63	6	1.0
TOTAL	6231	---	70.69	2830	---	23.70	2506	---	80.79

11151870 ARROYO SECO NEAR GREENFIELD, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	63	4	.68	44	6	.71	23	10	.62
2	61	3	.49	44	6	.71	22	6	.36
3	60	5	.81	44	6	.71	24	5	.32
4	59	9	1.4	43	5	.58	24	4	.26
5	60	6	.97	42	4	.45	24	7	.45
6	59	4	.64	41	5	.55	25	7	.47
7	57	3	.46	40	9	.97	25	7	.47
8	56	3	.45	39	6	.63	26	7	.49
9	55	2	.30	38	4	.41	23	8	.50
10	54	2	.29	37	2	.20	22	7	.42
11	52	2	.28	37	9	.90	22	6	.36
12	50	2	.27	37	6	.60	21	6	.34
13	49	2	.26	37	5	.50	21	6	.34
14	48	3	.39	36	6	.58	22	6	.36
15	47	2	.25	37	5	.50	23	5	.31
16	46	2	.25	37	4	.40	21	5	.28
17	46	2	.25	36	3	.29	19	5	.26
18	49	5	.66	35	3	.28	18	5	.24
19	62	11	1.8	34	6	.55	17	5	.23
20	51	6	.83	33	4	.36	16	6	.26
21	48	5	.65	33	4	.36	16	7	.30
22	46	9	1.1	31	3	.25	16	6	.26
23	45	8	.97	31	6	.50	15	5	.20
24	44	7	.83	29	6	.47	15	5	.20
25	44	11	1.3	28	8	.60	14	5	.19
26	46	8	.99	29	7	.55	13	4	.14
27	46	8	.99	28	6	.45	12	3	.10
28	47	7	.89	26	5	.35	11	3	.09
29	45	6	.73	25	5	.34	11	3	.09
30	44	6	.71	24	4	.26	11	5	.15
31	---	---	---	23	5	.31	---	---	---
TOTAL	1539	---	20.89	1078	---	15.32	572	---	9.06
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	11	4	.12	5.7	5	.08	4.3	2	.02
2	10	3	.08	5.8	4	.06	3.6	2	.02
3	10	2	.05	5.3	3	.04	4.2	3	.03
4	9.7	5	.13	5.4	3	.04	3.9	3	.03
5	8.9	4	.10	5.6	3	.05	4.1	3	.03
6	5.8	3	.05	6.0	3	.05	3.8	3	.03
7	5.6	2	.03	5.5	3	.04	3.2	3	.03
8	5.4	2	.03	5.1	3	.04	3.1	3	.03
9	5.3	2	.03	4.9	3	.04	3.3	3	.03
10	5.2	2	.03	4.9	3	.04	3.6	2	.02
11	5.3	3	.04	4.6	2	.02	4.2	2	.02
12	5.4	6	.09	5.1	2	.03	4.8	2	.03
13	5.9	5	.08	5.1	2	.03	5.0	2	.03
14	5.8	4	.06	4.9	2	.03	5.3	2	.03
15	5.2	4	.06	4.4	2	.02	5.3	2	.03
16	4.9	4	.05	4.8	2	.03	4.7	2	.03
17	4.8	4	.05	5.1	2	.03	4.0	2	.02
18	4.9	3	.04	5.0	2	.03	4.6	2	.02
19	5.4	3	.04	4.7	2	.03	5.6	2	.03
20	5.2	6	.08	4.2	2	.02	5.4	2	.03
21	4.4	5	.06	4.3	2	.02	5.0	2	.03
22	5.1	4	.06	4.1	2	.02	5.0	2	.03
23	6.5	3	.05	3.9	2	.02	5.3	2	.03
24	9.8	2	.05	3.8	2	.02	6.0	2	.03
25	9.0	2	.05	3.8	2	.02	5.8	2	.03
26	7.8	2	.04	4.2	2	.02	6.1	2	.03
27	7.8	2	.04	5.3	2	.03	6.2	2	.03
28	7.0	5	.09	5.4	2	.03	6.6	2	.04
29	6.9	4	.07	5.1	2	.03	6.8	2	.04
30	6.9	3	.06	4.6	2	.02	6.4	2	.03
31	6.7	3	.05	4.4	2	.02	---	---	---
TOTAL	207.6	---	1.86	151.0	---	1.00	145.2	---	.86
YEAR	41173.8		24676.81						

## SALINAS RIVER BASIN

11152000 ARROYO SECO NEAR SOLEDAD, CA

LOCATION.--Lat 36°16'50", long 121°19'20", in SW 1/4 NE 1/4 sec.16, T.19 S., R.6 E., Monterey County, Hydrologic Unit 18060005, on right bank just downstream from bridge, 1.5 mi downstream from Vaquero Creek, and 10 mi south of Soledad.

DRAINAGE AREA.--244 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1901 to current year. Records for water year 1902 incomplete, yearly estimate published in WSP 1315-B.

REVISED RECORDS.--WSP 881: 1902-9 (yearly summary only). WSP 1565: 1916-19, 1920-21(M), 1922, 1926-27, 1928-30(M), 1932, 1934, 1936(M). WSP 1715: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 339.20 ft National Geodetic Vertical Datum of 1929. Prior to June 16, 1929 nonrecording gage, and June 16, 1929, to Dec. 2, 1941, water-stage recorder at site 1 mi upstream at different datum. Dec. 3, 1941, to Sept. 30, 1959, water-stage recorder at datum 2.00 ft higher. Jan. 30 to Mar. 26, 1969, nonrecording gage at bridge at same datum.

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

AVERAGE DISCHARGE.--83 years, 173 ft<sup>3</sup>/s, 125,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,300 ft<sup>3</sup>/s Apr. 3, 1958, gage height, 16.40 ft, present datum, from rating curve extended above 12,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 16.30 ft; no flow at times during several years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,250 ft<sup>3</sup>/s Dec. 25 (0845 hrs), gage height 7.38 ft, no other peak above base of 2,500 ft<sup>3</sup>/s; minimum daily, 2.3 ft<sup>3</sup>/s Aug. 20, Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	52	203	519	136	103	82	54	28	12	7.0	4.5
2	78	49	157	466	133	101	81	55	27	11	6.7	4.6
3	58	46	559	421	129	100	77	53	28	11	6.6	4.7
4	51	43	557	381	126	97	77	51	28	10	5.8	4.4
5	45	42	366	352	121	95	77	51	29	9.4	5.1	3.8
6	42	41	293	329	120	93	77	49	30	9.7	5.1	3.7
7	41	39	251	307	117	93	75	49	30	9.3	4.4	3.9
8	40	38	219	289	115	91	71	48	31	8.2	3.7	3.9
9	42	38	700	275	121	90	71	46	28	7.7	3.1	3.7
10	41	68	903	261	126	88	69	43	27	6.9	3.0	2.7
11	40	769	879	248	116	90	70	43	26	7.0	2.9	2.3
12	38	200	770	237	113	93	69	43	25	7.4	2.6	2.5
13	37	159	577	228	113	105	67	42	25	7.1	2.9	3.3
14	39	271	475	221	139	283	63	42	26	6.4	2.4	3.9
15	40	154	401	213	121	146	61	43	27	6.1	2.6	4.9
16	41	124	348	209	165	132	60	45	26	5.8	3.2	5.4
17	42	162	311	201	149	125	57	45	23	5.3	3.0	5.1
18	42	255	280	192	135	118	58	43	21	4.7	2.6	5.0
19	41	161	255	184	128	113	77	42	20	4.7	2.5	5.3
20	41	243	235	179	124	107	71	41	19	5.0	2.3	5.3
21	40	281	218	180	121	102	63	39	19	4.9	2.5	6.5
22	38	202	206	175	122	98	60	39	19	4.9	3.0	7.0
23	39	168	197	168	116	95	57	36	18	5.5	2.9	6.4
24	39	764	782	163	113	91	57	33	18	6.0	2.8	6.7
25	38	687	3320	159	114	91	56	33	17	8.6	3.2	6.8
26	37	355	1620	152	111	87	56	34	16	10	3.1	7.3
27	36	251	1170	148	108	87	58	33	14	9.7	3.5	7.6
28	34	197	910	146	104	84	59	32	14	8.6	3.1	7.7
29	35	166	765	142	105	82	56	30	13	8.2	4.0	7.6
30	40	153	662	141	---	79	54	29	12	8.0	4.8	7.4
31	54	---	589	136	---	80	---	28	---	7.3	6.2	---
TOTAL	1395	6178	19178	7422	3561	3239	1986	1294	684	236.4	116.6	153.9
MEAN	45.0	206	619	239	123	104	66.2	41.7	22.8	7.63	3.76	5.13
MAX	126	769	3320	519	165	283	82	55	31	12	7.0	7.7
MIN	34	38	157	136	104	79	54	28	12	4.7	2.3	2.3
AC-FT	2770	12250	38040	14720	7060	6420	3940	2570	1360	469	231	305
CAL YR 1983	TOTAL	254813	MEAN	698	MAX	8840	MIN	22	AC-FT	505400		
WTR YR 1984	TOTAL	45443.9	MEAN	124	MAX	3320	MIN	2.3	AC-FT	90140		

11152300 SALINAS RIVER NEAR CHUALAR, CA  
(National stream-quality accounting network station)

LOCATION.--Lat 36°33'14", long 121°32'53", in Guadalupe Y Llanitos de Los Correos Grant, Monterey County, Hydrologic Unit 18060005, near left bank on downstream side of bridge on Chualar-River Road, and 2 mi southwest of Chualar.

DRAINAGE AREA.--4,042 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder installed January 1979 (nonrecording gage prior to 1979). Datum of gage is 68.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Daily discharge prior to January 1979 determined by discharge measurements at this site correlated to streamflow for Salinas River at Soledad (station 11151700) and Salinas River near Spreckels (station 11152500). Flow partly regulated by Santa Margarita Lake (station 11144500), Lake Nacimiento, formerly Nacimiento Reservoir (station 11149300), and Lake San Antonio (station 11150100). Large withdrawals from ground water and small surface-water diversions for municipal use and irrigation above station.

AVERAGE DISCHARGE.--8 years, 769 ft<sup>3</sup>/s, 557,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,000 ft<sup>3</sup>/s Mar. 3, 1983, gage height, 14.49 ft; no flow many days in 1977 and several days in 1978-81.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,990 ft<sup>3</sup>/s Dec. 25, gage height, 9.23 ft; minimum daily, 0.17 ft<sup>3</sup>/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	506	53	360	4100	616	310	53	5.3	4.6	7.5	21	35
2	487	52	350	3900	596	285	55	4.9	4.3	18	21	22
3	350	51	400	3650	572	270	49	4.7	4.1	26	15	14
4	263	49	600	3500	566	245	44	4.6	4.0	28	16	10
5	211	47	900	3400	535	225	44	4.4	3.8	28	24	5.5
6	173	46	640	3450	570	210	41	10	3.7	25	32	2.5
7	150	45	570	3800	593	190	35	21	3.6	11	41	.70
8	137	43	520	3950	568	175	34	31	3.7	6.2	43	.25
9	129	40	450	3850	543	155	34	32	7.0	4.5	35	.18
10	123	48	1010	3650	551	145	33	33	15	9.0	31	.17
11	117	177	1700	3400	564	135	31	35	27	22	30	.18
12	108	393	1500	2600	557	125	30	35	33	5.5	36	1.0
13	99	143	1350	1420	572	122	27	35	38	6.3	48	5.2
14	93	115	1150	966	557	119	25	36	43	9.0	53	9.7
15	84	124	1050	949	548	113	24	34	47	7.5	58	25
16	80	135	930	961	513	111	23	31	48	5.8	65	39
17	77	120	870	994	510	105	22	28	46	18	68	49
18	74	85	790	898	473	102	20	25	45	25	71	61
19	71	110	670	830	442	97	20	22	50	16	69	61
20	69	148	570	827	432	93	17	19	58	7.3	65	57
21	68	178	510	811	430	82	11	20	53	3.1	88	60
22	67	227	490	786	445	75	8.9	22	47	2.3	79	56
23	65	180	470	769	425	70	12	19	45	6.5	73	63
24	64	126	450	745	415	64	10	14	43	13	93	69
25	62	933	4000	728	400	62	8.7	7.8	53	16	90	73
26	61	610	6600	729	395	63	7.8	6.7	67	15	91	75
27	60	530	5700	700	380	65	7.3	6.1	57	11	107	72
28	59	470	5000	661	360	69	6.7	5.6	45	4.8	128	67
29	57	430	4600	678	335	61	6.1	5.3	31	2.0	129	57
30	55	390	4800	657	---	60	5.6	5.0	20	4.7	103	52
31	54	---	4300	619	---	54	---	4.8	---	12	70	---
TOTAL	4073	6098	53300	58978	14463	4057	745.1	567.2	949.8	376.0	1893	1042.38
MEAN	131	203	1719	1903	499	131	24.8	18.3	31.7	12.1	61.1	34.7
MAX	506	933	6600	4100	616	310	55	36	67	28	129	75
MIN	54	40	350	619	335	54	5.6	4.4	3.6	2.0	15	.17
AC-FT	8080	12100	105700	117000	28690	8050	1480	1130	1880	746	3750	2070
CAL YR 1984	TOTAL	979985.00	MEAN	2685	MAX	43500	MIN	40	AC-FT	1944000		
WTR YR 1984	TOTAL	146542.48	MEAN	400	MAX	6600	MIN	.17	AC-FT	290700		

NOTE.--No gage height record Nov. 26 to Jan. 12.

## SALINAS RIVER BASIN

11152300 SALINAS RIVER NEAR CHUALAR, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

CHEMICAL ANALYSES: Water years 1977 to current year.

BIOLOGICAL DATA: Water years 1977-81.

SPECIFIC CONDUCTANCE: Water years 1977-81.

WATER TEMPERATURES: Water years 1977-81.

SEDIMENT RECORDS: Water years 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1977 to September 1981.

WATER TEMPERATURES: January 1977 to September 1981.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, SATUR- ATION (PER- CENT)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV , 1983											
08...	1215	36	1020	8.4	11.5	765	12	11.3	104	84	95
JAN , 1984											
17...	1400	1010	586	8.3	10.5	765	23	10.9	97	--	K15
MAR											
20...	1400	88	1180	8.3	21.5	760	2.4	9.4	107	K+	K2
MAY											
07...	1400	24	999	8.3	25.0	765	5.0	9.3	113	81	710
JUL											
16...	1400	4.3	556	8.7	28.0	765	40	8.3	106	200	80
SEP											
10...	1300	.17	466	8.7	26.0	755	.90	8.6	107	K2	K4

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV , 1983											
08...	390	170	91	39	71	28	2	3.5	218	240	62
JAN , 1984											
17...	240	71	58	23	33	23	1	2.1	169	110	28
MAR											
20...	430	220	100	43	84	30	2	4.0	211	280	74
MAY											
07...	360	180	77	40	71	30	2	3.9	170	250	63
JUL											
16...	200	63	45	22	36	28	1	2.6	122*	120	26
SEP											
10...	190	58	43	21	28	24	.9	2.4	136	82	22

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV , 1983											
08...	.2	20	676	660	.92	3.7	.08	.9	.07	.04	.04
JAN , 1984											
17...	.3	21	384	380	.52	1.1	.05	.2	.13	.06	.06
MAR											
20...	.3	22	781	730	1.1	4.6	.05	.7	.09	.10	.06
MAY											
07...	.3	21	665	630	.90	<.10	<.01	.7	.05	.03	.02
JUL											
16...	.3	12	327	337	.44	<.10	.05	.6	.11	.02	.01
SEP											
10...	.2	14	302	290	.41	<.10	.05	.2	.02	.02	.02

See footnote at end of table.

11152300 SALINAS RIVER NEAR CHUALAR, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV , 1983										
08...	1215	10	2	82	<.5	1	<1	<3	2	5
JAN , 1984										
17...	1400	10	2	49	<.5	<1	<1	<3	<1	10
MAY										
07...	1400	<10	<1	81	<.5	<1	1	<3	3	4
SEP										
10...	1300	<10	1	45	<1	2	<1	<3	2	5

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1983											
08...	2	30	3	<.1	<10	3	3	<1	580	<6	14
JAN , 1984											
17...	<1	18	1	<.1	<10	3	2	<1	360	<6	19
MAY											
07...	<1	27	3	<.1	<10	1	2	<1	550	<6	9
SEP											
10...	7	15	8	<.1	<10	1	<1	<1	300	<6	17

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

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM
NOV										
08...	1215	41	11.5	43	4.8	85	--	--	--	--
JAN										
17...	1520	980	10.5	439	1160	13	21	86	99	100
MAR										
20...	1130	97	21.0	56	15	22	--	--	--	--
MAY										
07...	1400	24	25.0	94	6.1	13	--	--	--	--
JUL										
16...	1400	4.3	28.0	79	.92	96	--	--	--	--
SEP										
10...	1245	.17	26.0	0	.00	--	--	--	--	--

## SALINAS RIVER BASIN

11152500 SALINAS RIVER NEAR SPRECKELS, CA

LOCATION.--Lat 36°37'52", long 121°40'17", in Nacional Grant, Monterey County, Hydrologic Unit 18060005, on right bank on downstream side of bridge on Salinas-Monterey highway, 0.8 mi upstream from El Toro Creek, 1.6 mi northwest of Spreckels, and 2 mi south of Salinas.

DRAINAGE AREA.--4,156 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1900 to August 1901, October 1929 to current year. Records for water year 1930 incomplete, yearly estimate published in WSP 1315-B. Published as "near Salinas" 1900-1901.

REVISED RECORDS.--WSP 1565: 1930, 1935, 1945. WSP 1715: 1959.

GAGE.--Water-stage recorder. Datum of gage is 20.56 ft National Geodetic Vertical Datum of 1929. 1900-1901, May 10 to July 29, 1940, nonrecording gages at site 0.3 mi downstream at different datum. July 29, 1940, to May 22, 1969, water-stage recorder at site 0.3 mi downstream at datum 0.69 ft lower. May 23, 1969, to Jan. 13, 1970, nonrecording gage at same site and datum. Mar. 17, 1941, to June 30, 1961, supplementary nonrecording gages. July 1, 1961, to May 22, 1969, auxiliary water-stage recorder at site 0.3 mi downstream at datum 0.69 ft lower.

REMARKS.--Records fair. Flow partly regulated by Santa Margarita Lake (station 11144500) beginning in 1941, Lake Nacimiento, formerly Nacimiento Reservoir (station 11149300) beginning in February 1957, and Lake San Antonio (station 11150100) beginning in December 1965. Large withdrawals from ground water and small surface-water diversions from municipal use and irrigation of about 95,000 acres above station. Low flow represents waste water from Spreckels sugar refinery and Alisal sewage disposal plant.

AVERAGE DISCHARGE.--55 years (water years 1930-84), 462 ft<sup>3</sup>/s, 334,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,100 ft<sup>3</sup>/s Feb. 26, 1969, gage height, 26.51 ft, site and datum then in use; maximum gage height, 26.85 ft Jan. 16, 1952, site and datum then in use, from floodmarks; no flow at times in 1929-40.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,020 ft<sup>3</sup>/s Dec. 25, gage height, 10.97 ft; minimum daily, 0.58 ft<sup>3</sup>/s Aug. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	469	24	207	3460	574	295	20	2.7	1.2	1.4	1.7	9.9
2	465	20	205	3190	566	267	16	2.5	1.2	1.3	1.7	4.3
3	366	21	219	3170	547	257	16	2.3	1.2	1.2	1.6	2.5
4	276	18	329	2890	534	227	14	2.1	1.3	1.1	1.6	1.9
5	222	14	544	2780	522	214	13	1.9	1.3	1.2	1.6	1.5
6	188	15	359	2950	522	181	12	2.0	1.2	1.3	1.6	1.3
7	167	13	305	3180	522	164	11	1.3	1.1	1.3	1.8	1.3
8	151	13	277	3320	503	151	11	1.1	1.2	1.3	2.0	1.3
9	138	13	265	3220	501	138	10	1.1	1.3	1.2	2.1	1.4
10	123	16	601	3120	529	127	9.4	1.0	1.3	1.4	2.1	1.2
11	112	43	963	3020	580	117	8.7	.96	1.2	1.5	2.2	1.7
12	100	190	878	2580	596	110	8.3	1.0	1.1	1.5	2.1	2.3
13	88	121	855	1880	516	107	7.7	1.1	1.0	1.2	2.2	2.2
14	79	71	688	1330	523	109	7.3	.99	1.1	1.2	2.4	2.0
15	70	61	591	1210	513	107	6.8	1.1	1.1	1.2	2.4	1.9
16	64	63	548	1070	529	107	6.5	1.6	1.1	1.2	2.5	2.2
17	58	70	507	1000	514	98	6.0	1.2	1.2	1.3	2.3	2.0
18	58	58	487	1020	488	87	5.7	1.0	1.2	1.2	2.2	1.7
19	56	35	384	853	542	83	5.3	1.2	1.1	1.2	2.2	1.8
20	54	86	324	823	539	82	5.0	1.3	1.2	1.2	2.3	2.0
21	47	78	294	803	522	76	4.8	1.2	1.3	1.3	2.3	2.3
22	44	79	279	775	514	71	4.5	1.2	1.4	1.4	2.0	2.2
23	40	88	273	746	524	65	4.2	1.3	1.4	1.5	2.0	2.2
24	38	82	264	730	482	58	4.0	1.3	1.5	1.6	1.9	1.9
25	36	405	2520	706	425	50	3.8	1.3	1.2	1.6	1.9	2.0
26	38	596	4070	698	376	46	3.6	1.3	1.3	1.6	1.9	2.1
27	34	281	3510	702	353	42	3.4	1.3	1.3	1.7	1.2	2.2
28	29	258	3240	660	335	38	3.2	1.2	1.2	1.7	.58	2.2
29	25	266	3490	616	312	32	3.0	1.2	1.3	1.8	.72	2.6
30	22	233	3590	604	---	27	2.9	1.2	1.5	1.8	7.2	2.8
31	22	---	3440	589	---	24	---	1.3	---	1.7	18	---
TOTAL	3679	3331	34506	53695	14503	3557	237.1	43.25	37.0	43.1	80.30	68.9
MEAN	119	111	1113	1732	500	115	7.90	1.40	1.23	1.39	2.59	2.30
MAX	469	596	4070	3460	596	295	20	2.7	1.5	1.8	18	9.9
MIN	22	13	205	589	312	24	2.9	.96	1.0	1.1	.58	1.2
AC-FT	7300	6610	68440	106500	28770	7060	470	86	73	85	159	137
CAL YR 1983	TOTAL	1078031.00	MEAN	2954	MAX	59800	MIN	13	AC-FT	2138000		
WTR YR 1984	TOTAL	113780.65	MEAN	311	MAX	4070	MIN	.58	AC-FT	225700		

11152540 EL TORO CREEK NEAR SPRECKELS, CA

LOCATION.--Lat 36°35'00", long 121°42'50", in El Toro Grant, Monterey County, Hydrologic Unit 18060005, on right bank 0.3 mi downstream from San Benancio Gulch, and 4.7 mi southwest of Spreckels.

DRAINAGE AREA.--31.9 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 210 ft, from topographic map. Prior to Sept. 16, 1983, at site 700 ft upstream at same datum.

REMARKS.--Records poor. No regulation or diversion above station except for minor stock ponds.

AVERAGE DISCHARGE.--23 years, 1.97 ft<sup>3</sup>/s, 1,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft<sup>3</sup>/s Mar. 2, 1983, gage height, 6.10 ft, from rating curve extended above 93 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 6.07 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16 ft<sup>3</sup>/s Mar. 15 (1030 hrs), gage height, 4.01 ft, no peak above base of 20 ft<sup>3</sup>/s; no flow Sept. 5-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	.30	.91	3.2	5.1	1.4	.49	.59	.10	.11	.03	.01
2	.27	.34	.89	3.2	4.9	1.3	.44	.60	.11	.06	.03	.01
3	.25	.33	3.9	3.4	4.9	1.2	.46	.65	.11	.06	.03	.01
4	.23	.35	3.4	3.4	4.8	1.1	.46	.68	.13	.06	.03	.01
5	.21	.36	2.2	3.4	4.8	1.0	.50	.70	.15	.06	.03	0
6	.21	.34	1.9	3.5	4.8	1.1	.49	.66	.16	.05	.02	0
7	.22	.35	1.7	3.3	4.8	.98	.48	.66	.15	.05	.02	0
8	.23	.41	1.5	3.2	5.1	.91	.54	.66	.14	.06	.01	0
9	.19	.37	3.8	3.1	6.0	.88	.56	.66	.10	.05	.01	0
10	.19	1.0	4.2	3.1	4.9	.82	.57	.60	.11	.05	.02	0
11	.19	1.3	7.0	3.2	4.8	.77	.60	.59	.11	.05	.02	.01
12	.22	.30	5.4	3.2	4.8	.71	.53	.57	.11	.05	.02	.01
13	.18	.45	4.2	3.4	6.6	.80	.55	.58	.12	.04	.02	.03
14	.14	.30	3.7	3.8	9.3	.68	.52	.59	.12	.04	.02	.01
15	.15	.27	3.3	3.9	9.4	2.6	.55	.54	.11	.03	.02	.02
16	.16	.28	2.9	3.9	11	1.3	.55	.57	.09	.03	.02	.01
17	.16	1.0	2.9	3.8	3.0	1.3	.52	.56	.08	.03	.01	.01
18	.15	.32	2.7	4.2	2.3	.42	.63	.56	.08	.03	.01	.02
19	.17	.33	2.5	4.5	2.2	.41	.70	.56	.10	.03	.01	.02
20	.18	1.7	2.4	4.5	2.0	.32	.57	.53	.10	.03	.01	.03
21	.19	.64	2.2	5.2	5.5	.35	.55	.51	.08	.03	.01	.03
22	.18	.30	2.3	4.9	2.8	.34	.52	.32	.08	.03	.01	.03
23	.20	.29	2.6	4.8	2.1	.35	.56	.16	.07	.03	.01	.04
24	.22	2.0	3.2	4.7	2.0	.32	.57	.16	.08	.04	.01	.04
25	.24	2.6	12	4.9	2.0	.32	.59	.15	.10	.03	.02	.03
26	.21	1.2	6.0	4.8	1.8	.37	.55	.14	.08	.03	.02	.02
27	.23	.94	6.2	4.4	1.7	.37	.59	.13	.08	.03	.02	.01
28	.25	.92	4.2	4.2	1.5	.39	.57	.13	.06	.03	.02	.03
29	.29	.89	2.9	3.8	1.5	.35	.59	.11	.06	.03	.01	.01
30	.28	.93	3.9	4.5	---	.38	.62	.12	.18	.03	.01	.03
31	.32	---	3.7	4.9	---	.58	---	.11	---	.03	.01	---
TOTAL	6.77	21.11	110.60	122.3	126.4	24.12	16.42	14.15	3.15	1.31	0.54	0.48
MEAN	.22	.70	3.57	3.95	4.36	.78	.55	.46	.10	.042	.017	.016
MAX	.46	2.6	12	5.2	11	2.6	.70	.70	.18	.11	.03	.04
MIN	.14	.27	.89	3.1	1.5	.32	.44	.11	.06	.03	.01	0
AC-FT	13	42	219	243	251	48	33	28	6.2	2.6	1.1	1.0
CAL YR 1983	TOTAL	3974.49	MEAN	10.9	MAX	390	MIN	.14	AC-FT	7880		
WTR YR 1984	TOTAL	447.35	MEAN	1.22	MAX	12	MIN	0	AC-FT	887		

## TEMLADERO SLOUGH BASIN

11152600 GABILAN CREEK NEAR SALINAS, CA

LOCATION.--Lat 36°45'21", long 121°36'34", in La Natividad Grant, Monterey County, Hydrologic Unit 18060011, on left bank at downstream side of county road bridge, 0.3 mi downstream from small left-bank tributary, and 6.2 mi northeast of Salinas.

DRAINAGE AREA.--36.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1970 to current year. January 1959 to September 1970 in reports of Monterey County Flood Control and Water Conservation District.

GAGE.--Water-stage recorder. Concrete control since Oct. 9, 1975. Altitude of gage is 200 ft, from topographic map. Prior to Oct. 9, 1975, on right bank at different datum.

REMARKS.--Records fair. Natural flow of stream affected by small diversions, storage reservoirs, and return flow from irrigated areas.

AVERAGE DISCHARGE.--14 years, 5.76 ft<sup>3</sup>/s, 4,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 898 ft<sup>3</sup>/s, revised, Apr. 1, 1974, gage height, 11.13 ft, at datum then in use, from rating curve extended above 260 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 60 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)
Nov. 24	1500	*83	2.73	Dec. 27	0900	*83	2.73
Dec. 11	1130	61	2.63				

Minimum, no flow many days.

REVISIONS.-- Peak discharges and annual maximum (\*) for water years 1978 and 1980 to 1983 have been revised as shown in the following table. They supersede figures published in the reports for 1978 and 1980 to 1983.

Water Year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)	Water Year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)
1978	Feb. 9	1045	*453	3.71	1982	Mar. 31	2115	206	3.07
	Feb. 13	0930	292	3.29		Nov. 30	1815	184	3.02
1980	Jan. 13	1230	*378	3.51		Dec. 22	0015	258	3.20
1981	Jan. 30	0115	210	3.08		Jan. 22	1700	146	2.93
1982	Jan. 21	0100	118	2.85		Jan. 27	0130	332	3.39
	Feb. 16	0830	*381	3.52		Feb. 25	1900	*593	4.12
						Mar. 13	1400	396	3.56

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	.05	8.7	27	7.7	3.1	4.1	1.4				
2	1.9	0	6.2	25	7.3	2.7	3.6	1.3				
3	1.3	0	11	22	6.8	2.6	3.7	.91				
4	.94	.01	9.7	20	6.4	2.8	4.0	.83				
5	.81	.01	7.7	17	6.1	2.7	3.9	.77				
6	.92	0	6.9	15	5.8	2.7	3.8	.69				
7	.88	0	6.8	14	5.6	4.8	3.3	.60				
8	.67	.01	5.0	13	5.3	6.0	2.9	0				
9	.62	0	14	12	5.0	6.9	2.4	0				
10	.30	1.7	15	11	12	6.4	2.8	0				
11	.22	12	29	9.7	13	6.2	3.4	0				
12	.46	2.5	27	9.0	13	3.8	3.4	0				
13	1.2	3.5	20	8.4	16	5.0	2.7	0				
14	.53	2.8	16	7.6	22	5.3	2.8	0				
15	.68	.96	12	7.2	22	4.5	3.3	0				
16	.39	.94	8.1	6.6	30	6.9	2.6	0				
17	.64	4.8	7.5	6.2	21	5.7	2.7	0				
18	.23	2.4	6.5	5.8	15	4.4	3.5	0				
19	.06	1.9	6.0	5.6	12	3.4	4.4	0				
20	.01	8.9	5.8	5.4	11	3.3	3.9	0				
21	0	7.0	5.5	5.8	15	1.9	2.7	0				
22	0	4.0	5.7	6.3	11	2.8	2.2	0				
23	0	1.2	6.3	6.3	7.6	2.6	2.4	0				
24	0	23	7.6	6.3	6.0	2.2	1.8	0				
25	0	17	31	6.3	6.1	1.6	1.7	0				
26	0	14	27	6.3	7.4	2.3	1.4	0				
27	0	12	56	5.9	5.3	2.7	1.5	0				
28	0	12	42	5.9	4.0	2.3	1.5	0				
29	0	11	33	6.8	3.7	2.3	1.6	0				
30	0	9.4	38	7.9	---	3.1	1.5	0				
31	0	---	32	7.9	---	4.2	---	0				
TOTAL	15.46	153.08	513.0	319.2	309.1	117.2	85.5	6.50	0	0	0	0
MEAN	.50	5.10	16.5	10.3	10.7	3.78	2.85	.21	0	0	0	0
MAX	2.7	23	56	27	30	6.9	4.4	1.4	0	0	0	0
MIN	0	0	5.0	5.4	3.7	1.6	1.4	0	0	0	0	0
AC-FT	31	304	1020	633	613	232	170	13	0	0	0	0
CAL YR 1983	TOTAL	10709.5	MEAN	29.3	MAX	159	MIN	0	AC-FT	21240		
WTR YR 1984	TOTAL	1519.04	MEAN	4.15	MAX	56	MIN	0	AC-FT	3010		

11152650 RECLAMATION DITCH NEAR SALINAS, CA

LOCATION.--Lat 36°42'18", long 121°42'14", in Rincon Del Zanjon Grant, Monterey County, Hydrologic Unit 18060011, on right bank at upstream side of San Jon Road bridge, and 3.4 mi northwest of Salinas.

DRAINAGE AREA.--53.2 mi<sup>2</sup>

PERIOD OF RECORD.--October 1970 to current year. March 1968 to September 1970 in reports of Monterey County Flood Control and Water Conservation District.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 30 ft, from topographic map.

AVERAGE DISCHARGE.--14 years, 19.1 ft<sup>3</sup>/s, 13,843 acre-ft/yr.

REMARKS.--Records good. Flow is mostly drainage from Carr Lake area for farming.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 524 ft<sup>3</sup>/s Mar. 1, 1983; no flow Dec. 4, 10, 11, 1978.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	5.4	8.8	50	14	13	11	8.5	5.7	8.4	6.0	6.7
2	21	4.6	6.9	42	11	12	7.3	9.8	6.7	5.8	5.8	5.4
3	12	5.1	23	34	8.8	13	9.2	7.4	9.2	7.9	6.5	4.6
4	7.1	4.2	24	29	9.7	12	8.2	8.8	6.8	7.3	6.0	4.7
5	4.6	3.8	15	26	10	11	6.9	9.0	9.1	5.6	6.4	5.3
6	4.8	3.2	8.5	24	8.4	11	4.9	8.2	8.7	6.2	7.4	6.7
7	4.6	3.2	7.4	22	8.4	14	7.1	6.6	8.3	8.0	4.4	7.0
8	4.5	4.1	6.7	21	9.9	14	10	6.7	5.7	6.3	7.2	7.5
9	3.7	8.9	20	20	25	11	6.1	9.3	6.7	5.1	5.6	5.8
10	3.3	20	26	19	34	9.9	9.3	9.4	6.1	8.7	5.2	4.3
11	6.7	107	48	19	13	11	6.8	7.2	3.9	7.5	7.1	5.0
12	9.0	42	49	18	9.8	8.3	5.8	6.1	7.7	6.7	6.7	5.5
13	9.6	29	36	18	20	19	5.9	6.2	9.4	9.4	5.0	6.0
14	8.3	36	28	18	24	26	7.6	4.2	11	9.0	4.6	5.5
15	7.8	28	25	16	28	21	10	6.3	7.3	8.1	6.8	5.2
16	7.8	11	21	16	43	13	4.4	8.4	6.0	5.6	5.4	4.9
17	6.8	59	19	16	27	24	7.1	9.4	6.4	5.9	6.6	4.3
18	7.6	70	14	15	17	11	19	9.1	5.6	7.8	7.1	4.5
19	7.5	42	12	14	14	9.5	29	7.7	7.1	9.5	6.9	5.8
20	7.2	100	12	14	13	8.9	9.3	6.0	6.7	9.0	5.0	5.5
21	6.4	87	10	18	20	8.8	7.0	4.0	5.9	8.1	5.0	5.3
22	6.3	50	15	15	15	11	7.8	6.2	6.5	7.2	6.4	4.9
23	4.5	34	19	14	13	12	8.5	9.1	7.7	8.0	5.9	4.4
24	3.6	64	18	14	12	11	8.4	9.8	6.9	7.7	5.2	3.2
25	5.1	122	84	14	12	8.3	6.1	9.2	4.8	8.0	5.9	3.8
26	6.9	69	74	13	12	8.9	8.5	7.2	6.5	6.1	5.5	4.0
27	7.5	39	81	13	19	8.3	6.8	6.7	8.1	6.9	4.9	4.2
28	6.2	27	81	14	22	8.3	9.2	5.8	6.3	6.1	6.0	3.6
29	5.5	15	66	13	22	7.9	9.9	7.7	6.0	6.7	7.7	4.8
30	5.5	11	68	11	---	7.9	7.5	7.7	8.2	7.0	5.4	4.7
31	5.2	---	63	13	---	14	---	6.6	---	6.4	6.8	---
TOTAL	244.6	1104.5	989.3	603	495.0	379.0	264.6	234.3	211.0	226.0	186.4	153.1
MEAN	7.89	36.8	31.9	19.5	17.1	12.2	8.82	7.56	7.03	7.29	6.01	5.10
MAX	38	122	84	50	43	26	29	9.8	11	9.5	7.7	7.5
MIN	3.3	3.2	6.7	11	8.4	7.9	4.4	4.0	3.9	5.1	4.4	3.2
AC-FT	485	2190	1960	1200	982	752	525	465	419	448	370	304
CAL YR 1983	TOTAL	26888.0	MEAN	73.7	MAX	524	MIN	3.0	AC-FT	53330		
WTR YR 1984	TOTAL	5090.8	MEAN	13.9	MAX	122	MIN	3.2	AC-FT	10100		

## PAJARO RIVER BASIN

11153040 PACHECO CREEK AT DUNNEVILLE, CA

LOCATION.--Lat 36°57'36", long 121°25'01", in San Felipe Grant, San Benito County, Hydrologic Unit 18060002, on right bank at upstream side of San Felipe road bridge, and 1.5 mi north of the town of Dunneville.

DRAINAGE AREA.--154 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 170.9 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Flow regulated by Pacheco Lake 15 mi upstream, capacity, 6,150 acre-ft. Small diversions above station for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,090 ft<sup>3</sup>/s Feb. 16, 1982, gage height, 14.57 ft; no flow many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,750 ft<sup>3</sup>/s Dec. 25, gage height, 10.35 ft; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	0	0	163	12	11	4.6	.07		0	10	
2	5.4	0	.01	128	12	10	4.5	0		0	9.1	
3	4.6	0	5.2	106	11	9.9	3.9	0		0	4.2	
4	4.2	0	45	90	10	9.3	3.2	0		0	.58	
5	3.5	0	21	77	10	8.6	3.9	0		0	.16	
6	2.8	0	11	67	9.9	7.8	4.7	0		0	.16	
7	1.7	0	8.4	59	9.8	7.2	4.7	0		0	1.8	
8	.92	0	3.6	53	9.8	6.5	5.6	0		0	2.1	
9	1.0	0	40	47	10	6.5	6.3	0		0	1.7	
10	1.0	0	120	44	12	6.5	7.3	0		0	.65	
11	1.0	1.9	170	40	13	6.5	7.7	0		0	.20	
12	1.0	.51	200	37	13	6.3	7.8	0		0	.07	
13	1.0	3.2	115	35	13	8.5	7.7	0		0	0	
14	.52	5.7	64	33	53	88	7.0	0		.76	0	
15	.61	7.1	37	29	45	63	7.1	.31		.62	0	
16	1.2	5.5	29	29	113	41	5.3	7.9		.43	.05	
17	1.5	8.5	23	33	85	32	5.0	5.0		.04	.51	
18	1.6	12	20	29	56	27	4.4	4.6		.86	.14	
19	1.7	4.7	18	26	42	21	8.9	5.1		1.4	0	
20	1.9	8.0	17	24	32	18	7.0	3.1		1.1	0	
21	1.7	16	16	23	29	15	6.1	2.3		5.0	.98	
22	.84	3.2	15	23	31	13	5.1	1.1		9.4	.60	
23	.01	.80	140	23	25	11	4.4	.33		6.3	2.2	
24	0	183	750	21	22	9.2	3.6	.12		6.6	.66	
25	0	90	2800	20	19	8.5	2.6	0		5.9	.30	
26	0	14	800	18	17	7.9	1.9	0		7.2	.12	
27	0	1.3	500	18	15	7.0	1.2	0		7.7	0	
28	0	.05	330	16	14	6.5	.77	0		8.3	0	
29	0	0	213	14	12	5.8	.37	0		8.5	0	
30	0	0	233	14	---	5.4	.18	0		8.4	0	
31	0	---	230	13	---	5.0	---	0		9.7	0	
TOTAL	46.50	365.46	6974.21	1352	755.5	488.9	142.82	29.93	0	88.21	36.28	0
MEAN	1.50	12.2	225	43.6	26.1	15.8	4.76	.97	0	2.85	1.17	0
MAX	6.8	183	2800	163	113	88	8.9	7.9	0	9.7	10	0
MIN	0	0	0	13	9.8	5.0	.18	0	0	0	0	0
AC-FT	92	725	13830	2680	1500	970	283	59	0	175	72	0

CAL YR 1983 TOTAL 69393.91 MEAN 190 MAX 4000 MIN 0 AC-FT 137600  
WTR YR 1984 TOTAL 10279.81 MEAN 28.1 MAX 2800 MIN 0 AC-FT 20390

NOTE.--No gage-height record Dec. 4-29.

## RESERVOIRS IN PAJARO RIVER BASIN, CA

11153480 CHESBRO RESERVOIR.--Lat 37°07'00", long 121°41'34", near southwest boundary of Ojo de Agua de la Coche Grant, Santa Clara County, Hydrologic Unit 18060002, at left end of dam on Llagas Creek, and 2.5 mi west of Morgan Hill. DRAINAGE AREA, 19.3 mi<sup>2</sup>. PERIOD OF RECORD, December 1955 to current year. Monthly contents prior to October 1959 published in WSP 1735. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by South Santa Clara Valley Water Conservation District). Reservoir is formed by earthfill and rockfill dam completed in 1955. Capacity, 8,090 acre-ft between elevations 465 ft, elevation of outlet gates, and 525 ft, crest of spillway. Reservoir is used for flood control and water released down Llagas Creek for irrigation. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 8,520 acre-ft Feb. 19, 1980, elevation, 526.5 ft; maximum elevation, 527.4 ft Feb. 24, 1969; no contents at times in 1957, 1960-62, 1973, 1977.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 6,590 acre-ft Apr. 20-24, elevation, 519.3 ft; minimum observed, 4,780 acre-ft Sept. 30, elevation 511.1 ft.

11154020 UVAS RESERVOIR.--Lat 37°04'02", long 121°41'25", in Las Uvas Grant, Santa Clara County, Hydrologic Unit 18060002, at center of dam on Uvas Creek, and 4.8 mi southwest of Morgan Hill. DRAINAGE AREA, 30.4 mi<sup>2</sup>. PERIOD OF RECORD, December 1957 to current year. Monthly contents prior to October 1959 published in WSP 1735. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by South Santa Clara Valley Water Conservation District).

Reservoir is formed by earthfill and rockfill dam completed in 1957. Capacity, 10,000 acre-ft between elevations 410 ft, hydraulic gate valves, and 487.5 ft, crest of spillway. Water released down Uvas Creek for irrigation; at times diverted into Llagas Creek 3.6 mi below Chesbro Reservoir for ground-water recharge by percolation. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 11,030 acre-ft Mar. 16, 1967, elevation, 490.5 ft; no contents at times in 1961, 1976, and 1977.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 8,920 acre-ft Dec. 30, elevation, 483.7 ft; minimum observed, 107 acre-ft Sept. 30, elevation 416.5 ft.

MONTHEND CONTENTS, IN ACRE-FEET (INCLUDING MOMENTARY  
STORAGE ABOVE SPILLWAY CREST), AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Chesbro Reservoir	Uvas Reservoir
Sept. 30, 1983..	5,690	7,030
Oct. 31.....	5,520	6,550
Nov. 30.....	6,250	7,880
Dec. 31.....	5,980	8,840
Jan. 31, 1984...	6,040	7,240
Feb. 29.....	6,160	7,120
Mar. 31.....	6,480	8,190
Apr. 30.....	6,550	8,060
May 31.....	6,400	7,730
June 30.....	6,090	5,910
July 31.....	5,780	3,300
Aug. 31.....	5,490	709
Sept. 30.....	4,780	107

## PAJARO RIVER BASIN

11154200 UVAS CREEK NEAR GILROY, CA

LOCATION.--Lat 36°59'32", long 121°34'21", in Las Animas Grant, Santa Clara County, Hydrologic Unit 18060002, on left bank 400 ft upstream from county road bridge, 0.4 mi southwest of Gilroy, and 3.9 mi downstream from Bodfish Creek.

DRAINAGE AREA.--71.2 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 190 ft, from topographic map.

REMARKS.--Records fair. Flow regulated by Uvas Reservoir (station 11154020) 10 mi upstream. Diversion above station for irrigation.

AVERAGE DISCHARGE.--25 years, 44.6 ft<sup>3</sup>/s, 32,310 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,490 ft<sup>3</sup>/s Feb. 1, 1963, gage height, 17.66 ft, from rating curve extended above 3,300 ft<sup>3</sup>/s; maximum gage height, 20.21 ft Jan. 5, 1982; no flow for many days in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,160 ft<sup>3</sup>/s Dec. 25, gage height, 6.44 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	0	154	297	15	12	9.2	4.6	0	1.1	2.2	.21
2	1.6	0	154	272	14	12	8.3	3.3	0	.95	2.0	0
3	1.3	0	232	250	14	11	7.6	2.4	0	.16	2.2	0
4	.80	0	206	232	14	11	10	1.8	0	.03	2.3	0
5	.22	0	186	180	15	10	9.5	1.1	.22	0	2.4	0
6	0	0	177	165	17	9.7	14	.99	.59	0	2.6	0
7	0	0	163	150	16	9.6	16	.74	1.1	0	2.6	0
8	0	0	87	135	15	9.5	17	.06	.52	0	4.0	0
9	0	0	278	120	19	9.3	16	0	0	0	4.2	0
10	0	9.3	337	110	22	8.6	17	0	0	0	4.4	0
11	0	62	295	192	24	8.8	16	0	.03	0	4.7	0
12	0	17	245	163	24	8.6	16	0	0	0	4.6	0
13	0	31	228	98	36	19	15	0	0	0	4.8	0
14	0	32	217	89	40	41	15	0	0	0	4.5	0
15	0	13	193	86	25	31	15	.29	.18	0	4.0	0
16	0	9.2	181	86	96	27	14	0	.78	0	3.9	0
17	0	161	159	76	177	44	14	0	1.4	0	3.5	0
18	0	135	166	72	181	31	15	0	2.2	0	3.0	0
19	0	160	165	66	162	27	17	0	2.2	0	2.8	0
20	0	212	172	65	87	23	13	0	2.0	0	3.1	0
21	0	146	135	67	80	20	11	0	1.6	0	3.3	0
22	0	41	75	67	41	18	10	0	1.3	.07	2.6	0
23	0	27	61	62	27	16	10	.06	1.1	.44	2.5	0
24	0	305	60	22	23	15	9.4	0	1.0	.68	2.5	0
25	0	165	720	17	18	15	7.8	0	1.5	.98	2.9	0
26	0	74	575	14	16	14	7.2	0	1.3	.92	3.1	0
27	0	49	603	13	15	13	6.8	0	1.2	.88	3.1	0
28	0	64	464	12	15	11	6.6	0	.68	1.0	2.5	0
29	0	150	380	13	14	10	6.5	0	.07	1.2	1.9	0
30	0	154	387	14	---	9.7	6.4	0	.54	1.6	1.5	0
31	0	---	339	14	---	9.6	---	0	---	1.9	1.1	---
TOTAL	6.22	2016.5	7794	3219	1262	514.4	356.3	15.34	21.51	11.91	94.8	0.21
MEAN	.20	67.2	251	104	43.5	16.6	11.9	.49	.72	.38	3.06	.007
MAX	2.3	305	720	297	181	44	17	4.6	2.2	1.9	4.8	.21
MIN	0	0	60	12	14	8.6	6.4	0	0	0	1.1	0
AC-FT	12	4000	15460	6380	2500	1020	707	30	43	24	188	.4
CAL YR 1983	TOTAL	73941.88	MEAN	203	MAX	3140	MIN	0	AC-FT	146700		
WTR YR 1984	TOTAL	15312.19	MEAN	41.8	MAX	720	MIN	0	AC-FT	30370		

## 11156500 SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL, CA

LOCATION.--Lat 36°36'34", long 121°12'07", in SE 1/4 SE 1/4 sec.21, T.15 S., R.7 E., San Benito County, Hydrologic Unit 18060002, on left bank 0.9 mi northwest of Willow Creek School, 1.3 mi downstream from Willow Creek, and 10 mi northwest of San Benito.

DRAINAGE AREA.--249 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1565: 1948(M), 1949.

GAGE.--Water-stage recorder. Datum of gage is 925.52 ft National Geodetic Vertical Datum of 1929. Prior to Jan. 28, 1948, and Nov. 11, 1955, to Sept. 30, 1965, at site 0.9 mi downstream at different datum. Jan. 28, 1948, to Nov. 10, 1955, and Oct. 1, 1965, to Oct. 22, 1970, at present site at datum 2.37 ft higher.

REMARKS.--Records good. Flow regulated by Hernandez Reservoir 40 mi upstream beginning in December 1961, capacity, 18,700 acre-ft. Small diversion above station for irrigation.

AVERAGE DISCHARGE.--45 years, 27.1 ft<sup>3</sup>/s, 19,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,210 ft<sup>3</sup>/s Apr. 3, 1958, gage height, 8.35 ft, site and datum then in use, from rating curve extended above 600 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of February 1938, reached a stage of about 9.0 ft former datum, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 377 ft<sup>3</sup>/s Dec. 25, gage height, 6.22 ft; minimum daily, 3.1 ft<sup>3</sup>/s May 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	17	18	40	14	10	8.4	5.2	53	32	43	38
2	27	16	17	36	13	9.0	8.2	5.2	53	32	43	37
3	21	14	33	34	13	8.7	7.9	4.9	53	32	42	38
4	18	13	36	33	13	9.7	7.7	4.2	53	32	42	37
5	17	12	32	35	13	8.9	7.4	4.0	55	35	41	37
6	16	11	22	25	12	9.6	7.2	4.1	53	40	41	39
7	15	11	20	26	13	9.3	6.8	3.8	53	43	41	37
8	15	11	19	40	13	8.6	6.3	3.6	53	45	40	38
9	15	11	23	34	13	8.4	6.4	3.4	53	44	40	37
10	14	12	46	30	15	8.3	6.4	3.3	53	44	44	36
11	16	30	46	28	14	8.3	6.2	3.3	53	43	44	38
12	25	21	43	27	14	8.3	5.7	3.2	50	43	44	32
13	28	21	34	27	14	9.8	5.3	3.1	45	42	44	25
14	31	20	35	26	15	16	4.8	3.1	42	42	44	22
15	35	17	35	25	15	15	4.3	4.5	39	42	45	20
16	35	15	33	25	22	13	4.5	11	36	41	45	19
17	38	16	26	24	20	14	4.6	18	37	41	45	19
18	40	17	24	23	19	11	5.2	28	37	40	45	19
19	40	15	22	22	17	11	6.8	32	37	40	45	19
20	39	30	22	21	16	9.0	6.3	42	36	39	46	19
21	37	29	22	21	15	9.7	5.6	45	36	39	46	19
22	31	23	22	22	14	7.5	5.2	44	35	43	46	19
23	32	20	20	21	13	7.2	4.8	44	33	43	46	19
24	34	22	26	20	13	7.5	4.8	44	32	42	46	19
25	35	28	159	19	13	8.4	4.9	44	32	42	47	19
26	37	27	153	18	12	8.9	5.4	44	32	41	47	18
27	38	24	90	17	12	8.9	5.9	44	32	41	40	17
28	33	21	61	17	12	9.3	6.0	45	32	45	39	16
29	34	20	50	16	11	9.0	5.6	46	32	44	36	10
30	31	21	50	16	---	8.9	5.3	48	32	44	35	8.0
31	21	---	45	15	---	8.5	---	53	---	43	37	---
TOTAL	888	565	1284	783	413	299.7	179.9	690.9	1272	1259	1329	770.0
MEAN	28.6	18.8	41.4	25.3	14.2	9.67	6.00	22.3	42.4	40.6	42.9	25.7
MAX	40	30	159	40	22	16	8.4	53	55	45	47	39
MIN	14	11	17	15	11	7.2	4.3	3.1	32	32	35	8.0
AC-FT	1760	1120	2550	1550	819	594	357	1370	2520	2500	2640	1530

CAL YR 1983 TOTAL 46134.7 MEAN 126 MAX 3460 MIN 6.6 AC-FT 91510  
WTR YR 1984 TOTAL 9733.5 MEAN 26.6 MAX 159 MIN 3.1 AC-FT 19310

NOTE.--No gage-height record Jan. 9 to Feb. 8.

## PAJARO RIVER BASIN

11159600 SAN BENITO RIVER AT STATE HIGHWAY 156, NEAR HOLLISTER, CA

LOCATION.--Lat 36°51'07", long 121°25'44", in San Justo Grant, San Benito County, Hydrologic Unit 18060002, on right bank at downstream side of bridge on State Highway 156, and 1.6 mi west of Hollister.

DRAINAGE AREA.--607 mi<sup>2</sup>.

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

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

REMARKS.--Records fair. Flow regulated by Hernandez Reservoir 73 mi upstream, capacity, 18,700 acre-ft. Some small diversions above station for irrigation.

AVERAGE DISCHARGE.--14 years, 43.1 ft<sup>3</sup>/s, 31,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,900 ft<sup>3</sup>/s Mar. 1, 1983, gage height, 11.97 ft, from rating curve extended above 4,050 ft<sup>3</sup>/s; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 840 ft<sup>3</sup>/s Dec. 25, gage height, 5.42 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	1.8	46	231	37	42	14	5.1	0	5.3	6.6	11
2	3.9	2.4	49	173	36	40	14	5.1	0	5.9	6.3	10
3	3.3	2.5	77	153	36	39	14	3.3	0	5.3	6.2	11
4	3.3	2.4	162	135	35	37	14	.51	0	4.7	6.8	13
5	3.2	2.4	114	121	36	32	14	0	2.0	4.9	6.8	14
6	2.8	2.1	78	105	36	35	15	0	9.5	4.8	6.5	13
7	2.8	2.4	61	93	34	29	13	0	11	7.7	7.3	12
8	2.8	2.6	53	87	35	27	12	0	13	7.4	6.1	11
9	2.7	2.8	68	78	35	25	11	0	13	7.5	8.0	7.0
10	2.4	15	114	71	39	23	11	0	9.9	7.8	8.8	11
11	1.9	25	132	70	40	21	11	0	10	7.2	10	12
12	2.2	13	242	68	37	22	10	0	8.3	7.5	10	13
13	4.1	15	166	69	37	24	9.4	0	6.8	7.8	11	12
14	4.5	21	113	66	44	31	7.9	0	7.8	7.8	10	10
15	4.4	18	104	64	49	36	7.3	0	6.4	7.6	10	7.5
16	3.7	17	94	63	74	35	7.1	0	6.0	8.3	11	2.2
17	3.3	31	88	61	103	35	6.8	0	7.1	7.6	12	4.0
18	2.8	19	85	58	81	33	7.4	0	7.6	6.9	11	2.9
19	2.8	21	83	56	76	29	9.4	0	6.2	7.2	8.9	3.3
20	2.8	35	85	53	74	26	11	0	5.8	7.5	10	4.3
21	2.2	122	86	54	74	22	10	0	5.8	6.3	14	4.2
22	1.5	114	90	54	74	20	8.0	0	5.6	7.5	15	5.3
23	1.3	90	100	52	72	23	7.0	0	4.5	8.8	15	6.9
24	1.3	114	104	49	72	23	4.3	0	4.6	10	12	5.1
25	1.3	182	401	48	70	17	4.5	0	5.7	9.6	16	4.9
26	1.3	107	507	45	60	17	4.9	0	5.5	9.6	12	4.3
27	1.3	53	371	45	52	16	3.6	0	5.5	10	12	3.3
28	1.3	35	314	43	45	15	3.8	0	5.5	9.8	15	3.1
29	1.3	35	230	42	39	13	3.0	0	5.8	9.8	14	1.7
30	1.5	44	257	40	---	13	4.5	0	5.6	7.8	14	1.0
31	1.8	---	292	39	---	13	---	0	---	6.3	14	---
TOTAL	90.8	1147.4	4766	2386	1532	813	272.9	14.01	184.5	232.2	326.3	224.0
MEAN	2.93	38.2	154	77.0	52.8	26.2	9.10	.45	6.15	7.49	10.5	7.47
MAX	15	182	507	231	103	42	15	5.1	13	10	16	14
MIN	1.3	1.8	46	39	34	13	3.0	0	0	4.7	6.1	1.0
AC-FT	180	2280	9450	4730	3040	1610	541	28	366	461	647	444

CAL YR 1983 TOTAL 99431.5 MEAN 272 MAX 8860 MIN 1.3 AC-FT 197200  
WTR YR 1984 TOTAL 11989.11 MEAN 32.8 MAX 507 MIN 0 AC-FT 23780

11159000 PAJARO RIVER AT CHITTENDEN, CA  
(National stream-quality accounting network station)

LOCATION.--Lat 36°54'01", long 121°35'48", in Salsipuedes Grant, Santa Cruz County, Hydrologic Unit 18060002, on left bank at downstream side of bridge on State Highway 129, 0.6 mi downstream from Pescadero Creek, 0.6 mi southeast of Chittenden, and 2.3 mi downstream from San Benito River.

DRAINAGE AREA.--1,186 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1954, published as "near Chittenden."

GAGE.--Water-stage recorder. Datum of gage is 82.28 ft National Geodetic Vertical Datum of 1929. Prior to May 13, 1949, nonrecording gage on former bridge 100 ft downstream at same datum except that water-stage recorder, also 100 ft downstream and at same datum, was used Dec. 20, 1946, to June 11, 1947, June 21 to Sept. 23, 1947, and Dec. 19, 1947, to May 6, 1948. May 7, 1948, to Aug. 19, 1975, at downstream side of right bank pier of bridge at same datum.

REMARKS.--Records fair. Flow regulated by Hernandez Reservoir, capacity, 18,700 acre-ft, Pacheco Lake, capacity, 6,150 acre-ft, Chesbro Reservoir (station 11153480), Uvas Reservoir (station 11154020), and San Felipe Lake. Many diversions above station for irrigation.

AVERAGE DISCHARGE.--45 years, 163 ft<sup>3</sup>/s, 118,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,000 ft<sup>3</sup>/s Dec. 24, 1955, gage height, 32.46 ft, from rating curve extended above 8,300 ft<sup>3</sup>/s on basis of slope-conveyance study; maximum gage height, 33.11 ft Apr. 3, 1958; no flow at times in July, August 1948.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1938, reached a stage of 31.3 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,240 ft<sup>3</sup>/s Dec. 26, gage height, 15.45 ft; minimum daily, 4.30 ft<sup>3</sup>/s Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	24	390	1030	143	130	76	36	18	11	13	13
2	21	23	394	875	138	125	70	36	18	12	14	12
3	20	23	520	797	133	120	69	34	19	10	15	9.9
4	20	22	762	705	130	116	68	32	20	10	14	9.1
5	20	22	600	640	128	111	71	29	18	11	12	8.0
6	20	22	520	592	123	105	71	30	18	12	13	9.4
7	20	22	504	543	121	101	73	30	17	13	12	9.2
8	18	22	423	514	123	98	71	29	15	11	16	7.4
9	18	22	523	479	132	95	70	29	15	11	12	7.3
10	18	29	1370	464	136	91	73	30	15	12	12	8.1
11	19	167	1150	453	133	88	73	31	14	12	13	8.7
12	19	104	1460	429	129	88	68	30	13	11	11	9.4
13	22	62	1100	368	136	100	67	26	13	12	10	8.6
14	26	108	920	337	171	161	64	24	13	12	9.9	9.0
15	22	61	810	321	190	171	62	25	13	12	9.3	9.4
16	21	45	720	324	262	170	60	24	15	12	9.7	10
17	21	127	680	306	384	185	57	23	14	12	8.6	8.9
18	22	362	780	292	374	165	57	22	13	12	8.9	8.6
19	25	274	840	256	353	149	67	22	15	10	8.9	8.7
20	24	400	552	250	268	140	62	23	13	9.0	7.7	7.9
21	28	369	370	236	261	122	55	23	18	9.4	11	7.0
22	32	251	265	220	231	113	54	23	13	11	12	7.3
23	31	173	261	210	198	109	52	22	14	13	14	7.1
24	31	441	271	195	180	104	49	21	14	13	12	5.8
25	25	965	1960	187	167	97	44	21	14	11	12	4.3
26	22	638	3780	180	156	92	41	21	12	12	13	4.5
27	21	469	3340	170	148	88	40	21	13	13	12	7.1
28	21	346	2640	165	141	83	40	21	12	13	9.5	7.9
29	21	408	1890	158	136	76	37	19	13	13	8.1	9.1
30	22	407	1540	152	---	73	37	17	11	13	8.9	9.5
31	24	---	1380	148	---	73	---	18	---	13	11	---
TOTAL	704	6408	32715	11996	5325	3539	1798	792	443	361.4	353.5	252.2
MEAN	22.7	214	1055	387	184	114	59.9	25.5	14.8	11.7	11.4	8.41
MAX	32	965	3780	1030	384	185	76	36	20	13	16	13
MIN	18	22	261	148	121	73	37	17	11	9.0	7.7	4.3
AC-FT	1400	12710	64890	23790	10560	7020	3570	1570	879	717	701	500
CAL YR 1983	TOTAL	346158.0	MEAN	948	MAX	14200	MIN	14	AC-FT	686600		
WTR YR 1984	TOTAL	64687.1	MEAN	177	MAX	3780	MIN	4.3	AC-FT	128300		

## PAJARO RIVER BASIN

11159000 PAJARO RIVER AT CHITTENDEN, CA--Continued

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1952 to current year.  
 BIOLOGICAL DATA: Water years 1978-81.  
 SPECIFIC CONDUCTANCE: Water years 1978-81.  
 WATER TEMPERATURES: Water years 1978-81.  
 SEDIMENT RECORDS: Water years 1978 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1978 to September 1981.  
 WATER TEMPERATURES: May 1978 to September 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI KF AGAR (COLS. PER 100 ML)
DEC , 1983											
20...	1230	416	658	7.6	11.5	765	40	9.9	91	330	480
MAR , 1984											
21...	1330	124	940	8.1	17.5	765	33	9.5	99	K1200	150
JUN											
14...	1045	14	1480	8.4	16.0	760	12	8.8	90	K7800	650
SEP											
11...	1330	9.0	1250	8.4	23.0	755	14	7.7	91	270	170

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC , 1983											
20...	250	44	47	33	45	28	1	1.9	210	90	39
MAR , 1984											
21...	350	89	61	49	69	30	2	2.4	266	140	62
JUN											
14...	520	130	88	72	120	33	2	3.1	389	200	120
SEP											
11...	460	38	72	67	110	34	2	3.3	437*	130	88

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC , 1983											
20...	.2	19	399	400	.54	1.8	.07	.7	.18	.05	.08
MAR , 1984											
21...	.3	17	580	560	.79	4.6	.05	1.1	.12	.07	.05
JUN											
14...	.3	23	884	860	1.2	9.4	.04	1.4	.21	.18	.18
SEP											
11...	.3	26	781	760	1.1	4.0	.04	2.2	.31	.26	.26

See footnotes at end of table.

11159000 PAJARO RIVER AT CHITTENDEN, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
DEC , 1983										
20...	1230	20	1	64	.6	<1	<1	<3	<1	30
MAR , 1984										
21...	1330	<10	1	90	.6	<1	<1	<3	3	10
JUN										
14...	1045	10	1	110	1	<1	1	<3	2	13
SEP										
11...	1330	10	3	100	<1	1	<1	<3	4	10

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	HOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC , 1983											
20...	<1	17	47	<.1	<10	2	1	<1	380	<6	6
MAR , 1984											
21...	2	17	29	<.1	<10	2	1	<1	570	<6	10
JUN											
14...	3	29	43	.1	10	6	1	<1	660	<6	17
SEP											
11...	7	24	20	<1.0	<10	<1	2	<1	620	8	4

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

\* Laboratory value

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

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
MAR									
21...	1115	126	17.0	163	55	49	60	86	100
JUN									
14...	1020	14	16.0	169	6.4	47	--	--	--
SEP									
11...	1155	9.0	23.0	112	2.7	71	--	--	--

## PAJARO RIVER BASIN

11159000 PAJARO RIVER AT CHITTENDEN, CA--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM
SEP							
11...	1200	23.0	1	9.4	1	4	16
11...	1205	23.0	1	9.4	--	1	11
11...	1210	23.0	1	9.4	--	1	8
11...	1215	23.0	1	9.4	1	5	20

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
SEP							
11...	54	86	98	100	--	--	--
11...	64	96	100	--	--	--	--
11...	34	58	69	77	88	94	100
11...	46	62	71	78	89	97	100

## 11159200 CORRALITOS CREEK AT FREEDOM, CA

LOCATION.--Lat 36°56'22", long 121°46'10", in Los Corralitos Grant, Santa Cruz County, Hydrologic Unit 18060002, on right bank just upstream from Green Valley Road bridge, 0.2 mi north of Freedom, and 2.3 mi north of Watsonville.

DRAINAGE AREA.--27.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1956 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 80 ft, from topographic map.

REMARKS.--Records fair. No regulation; Watsonville Water Works can divert up to 8.0 ft<sup>3</sup>/s daily above station for municipal supply, domestic use, and irrigation.

AVERAGE DISCHARGE.--28 years, 16.6 ft<sup>3</sup>/s, 12,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,610 ft<sup>3</sup>/s, Jan. 4, 1982, gage height, 16.66 ft, from rating curve extended above 1900 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 15.6 ft, from floodmarks, discharge, 3,620 ft<sup>3</sup>/s, on basis of contracted-opening measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 488 ft<sup>3</sup>/s (0845 hrs) Dec. 25, gage height, 5.79 ft, no peak above base of 600 ft<sup>3</sup>/s; no flow Sept. 25-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	3.4	25	61	10	8.2	6.3	4.9	.91	.33	.19	.17
2	3.2	2.5	22	56	10	7.9	6.2	5.2	.89	.36	.32	.12
3	2.6	1.1	69	53	9.9	7.7	6.0	4.8	.97	.35	.07	.12
4	1.2	.94	56	48	9.6	7.6	6.0	4.2	.87	.32	.04	.37
5	.90	.92	44	43	9.2	7.6	5.9	4.3	1.1	.34	.04	.09
6	.85	.89	39	36	9.1	6.9	5.8	4.1	1.2	.36	.03	.06
7	.84	.92	34	33	8.7	6.9	5.4	4.3	1.8	.27	.06	.05
8	.82	.90	30	30	8.6	6.6	5.6	3.9	1.1	.29	.04	.09
9	.80	.93	146	28	16	6.3	5.1	3.4	.85	.24	.03	.23
10	.80	38	120	26	14	6.2	6.0	3.1	.69	.28	.03	.01
11	.80	87	115	24	12	6.1	5.3	3.2	.61	.28	.02	.03
12	.80	18	93	23	12	5.9	4.7	3.1	.75	.29	.07	.65
13	.85	40	70	22	27	18	4.6	2.7	.67	.24	.01	1.5
14	.84	26	58	21	25	29	4.5	2.5	.90	.22	.05	.18
15	.83	13	53	20	29	29	4.0	2.4	1.1	.21	.01	.08
16	.84	20	49	22	38	28	4.0	2.4	.93	.48	.06	.02
17	.84	144	45	20	24	35	4.0	2.3	.76	.50	.04	.01
18	.85	61	37	17	20	22	6.4	2.4	.61	.22	.07	.01
19	.85	49	33	16	18	19	8.8	2.0	.72	.18	.08	.01
20	.82	70	30	15	16	16	5.1	2.0	.60	.30	.07	.04
21	.80	45	30	18	17	12	4.4	1.8	.51	.28	.13	.09
22	.80	33	32	18	14	11	3.9	1.6	.63	.15	.26	.02
23	.81	26	32	16	11	9.8	3.6	1.7	.51	.10	.31	.04
24	.81	200	47	14	11	9.2	3.6	1.5	.46	.12	.36	.01
25	.77	105	319	13	10	9.0	4.2	1.4	.41	.20	.18	0
26	.75	59	172	12	9.8	8.7	5.1	1.3	.39	.46	.09	0
27	.74	47	164	13	9.2	8.0	5.3	1.2	.40	.65	.13	0
28	.74	39	104	12	8.6	7.5	5.3	1.2	.50	.44	.22	0
29	.82	32	78	11	8.4	6.9	5.0	1.1	.36	.21	.23	0
30	1.3	28	85	11	---	6.5	4.9	1.0	.39	.16	.09	0
31	4.1	---	72	10	---	6.7	---	1.0	---	.13	.11	---
TOTAL	38.17	1192.50	2303	762	425.1	375.2	155.0	82.0	22.59	8.96	3.44	4.00
MEAN	1.23	39.8	74.3	24.6	14.7	12.1	5.17	2.65	.75	.29	.11	.13
MAX	5.4	200	319	61	38	35	8.8	5.2	1.8	.65	.36	1.5
MIN	.74	.89	22	10	8.4	5.9	3.6	1.0	.36	.10	.01	0
AC-FT	76	2370	4570	1510	843	744	307	163	45	18	6.8	7.9
CAL YR 1983	TOTAL	22614.75	MEAN	62.0	MAX	802	MIN	.74	AC-FT	44860		
WTR YR 1984	TOTAL	5371.96	MEAN	14.7	MAX	319	MIN	0	AC-FT	10660		

## APTOS CREEK BASIN

11159690 APTOS CREEK NEAR APTOS, CA

LOCATION.--Lat 37°00'06", long 121°54'18", in Aptos Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank under county road bridge, 0.4 mi downstream from small right-bank tributary, and 1.7 mi north of Aptos.

DRAINAGE AREA.--10.2 mi<sup>2</sup>.

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

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

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

AVERAGE DISCHARGE.--13 years, 10.7 ft<sup>3</sup>/s, 7,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,980 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 12.10 ft, from rating curve extended above 340 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 0.36 ft<sup>3</sup>/s July 30 to Aug. 2, 1972.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	Unknown	340	7.33
Dec. 25	1200	*357	7.43

Peaks also occurred on Nov. 10, 17, Dec. 9.

Minimum daily, 1.6 ft<sup>3</sup>/s several days during August and September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	5.5	8.0	36	6.4	5.9	5.1	5.2	3.9	1.9	1.9	1.8
2	3.6	3.5	13	30	6.1	5.8	5.1	5.3	3.9	1.9	2.0	1.9
3	3.3	3.3	59	25	6.1	5.6	4.8	5.3	3.9	1.9	2.1	1.9
4	3.0	3.2	22	21	5.9	5.6	4.8	5.3	3.9	2.1	2.1	1.7
5	2.6	3.1	17	19	5.9	5.6	4.8	5.1	4.2	2.1	2.1	1.7
6	2.3	3.0	15	18	5.6	5.3	4.6	4.8	4.8	2.1	2.1	1.7
7	2.3	2.9	14	16	5.6	5.3	4.6	4.8	5.3	2.1	2.1	1.7
8	2.3	2.8	13	15	5.6	5.3	4.3	4.8	5.2	2.1	2.1	1.7
9	2.3	3.1	108	14	7.1	5.3	3.9	4.5	4.5	2.1	1.9	1.7
10	2.3	63	94	13	6.5	5.3	4.8	4.2	4.2	2.1	1.9	1.7
11	2.3	57	104	12	5.8	5.3	4.3	4.2	3.9	2.1	1.9	1.7
12	2.3	15	36	11	5.8	5.3	4.2	4.2	3.9	2.1	1.9	1.7
13	2.3	35	20	11	9.0	8.3	4.2	3.8	3.6	2.1	1.9	1.6
14	2.3	20	17	10	8.4	10	3.9	3.6	3.9	1.9	1.8	1.6
15	2.3	10	15	9.5	9.9	11	3.9	3.9	3.9	1.9	1.6	1.6
16	2.3	31	13	10	8.2	11	3.6	4.2	4.2	1.7	1.7	1.6
17	2.3	82	12	9.4	7.3	12	3.6	4.2	3.9	1.7	1.7	1.6
18	2.6	29	11	9.1	6.9	9.2	4.9	4.2	3.9	1.8	1.7	1.6
19	2.8	24	10	8.7	6.8	8.3	5.1	4.2	3.7	1.9	1.7	1.6
20	2.9	32	9.7	8.3	6.6	7.6	4.1	4.2	3.6	1.9	1.7	1.6
21	2.9	21	9.4	8.1	7.1	6.9	3.9	4.2	3.4	1.9	1.7	1.6
22	2.9	14	10	8.9	6.7	6.4	3.9	4.2	3.3	1.9	1.7	1.6
23	2.9	15	9.5	7.9	6.5	6.1	3.8	3.9	3.1	1.9	1.7	1.6
24	2.9	163	53	7.5	6.5	5.9	3.7	3.9	3.0	1.9	1.7	1.6
25	2.9	38	213	7.5	6.4	5.9	4.8	3.9	2.9	1.9	1.7	1.6
26	2.9	20	99	7.2	6.3	5.8	5.1	3.9	2.5	1.9	1.7	1.6
27	2.9	14	95	7.2	6.3	5.3	5.1	3.9	2.5	1.9	1.7	1.6
28	2.9	11	70	7.0	6.1	5.3	5.1	3.9	2.5	1.9	1.7	1.6
29	2.4	9.5	54	7.0	6.1	5.1	5.1	3.9	2.5	1.9	1.6	1.6
30	3.1	8.7	61	6.7	---	5.0	5.1	3.9	2.0	1.9	1.7	1.6
31	4.5	---	44	6.7	---	5.2	---	3.9	---	1.9	1.7	---
TOTAL	85.5	742.6	1328.6	387.7	193.5	205.9	134.2	133.5	110.0	60.4	56.5	49.7
MEAN	2.76	24.8	42.9	12.5	6.67	6.64	4.47	4.31	3.67	1.95	1.82	1.66
MAX	4.5	163	213	36	9.9	12	5.1	5.3	5.3	2.1	2.1	1.9
MIN	2.3	2.8	8.0	6.7	5.6	5.0	3.6	3.6	2.0	1.7	1.6	1.6
AC-FT	170	1470	2640	769	384	408	266	265	218	120	112	99

CAL YR 1983	TOTAL	12438.9	MEAN	34.1	MAX	357	MIN	1.9	AC-FT	24670
WTR YR 1984	TOTAL	3488.1	MEAN	9.53	MAX	213	MIN	1.6	AC-FT	6920

NOTE.--No gage-height record Oct. 18 to Jan. 23.

11160000 SOQUEL CREEK AT SOQUEL, CA

LOCATION.--Lat 36°59'29", long 121°57'17", in NE 1/4 sec.10, T.11 S., R.1 W., Santa Cruz County, Hydrologic Unit 18060001, on left bank 0.2 mi upstream from highway bridge in town of Soquel, and 0.4 mi downstream from Bates Creek.

DRAINAGE AREA.--40.2 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 1715: Drainage area. WSP 2129: 1958, 1959-60(P).

GAGE.--Water-stage recorder. Datum of gage is 21.38 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No regulation; small diversion above station for irrigation.

AVERAGE DISCHARGE.--33 years, 45.8 ft<sup>3</sup>/s, 33,180 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,800 ft<sup>3</sup>/s Dec. 23, 1955, gage height, 22.33 ft, from rating curve extended above 2,900 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow on several days during August and September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	0745	1,160	6.43
Dec. 25	0715	*1,680	7.53

Minimum daily, 1.1 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	10	34	114	25	22	23	17	11	5.5	3.5	2.7
2	8.8	9.8	55	96	24	21	22	17	11	5.7	3.6	2.5
3	8.5	9.0	203	85	24	20	22	16	11	5.9	3.4	2.7
4	8.4	8.7	77	76	23	19	21	15	11	6.0	3.5	2.5
5	8.4	8.4	52	69	22	19	21	15	12	6.1	3.3	2.3
6	8.4	8.4	45	64	22	18	21	15	13	6.0	3.6	2.3
7	8.3	8.2	42	60	22	18	20	14	13	5.8	3.3	2.3
8	8.0	8.3	42	56	22	18	20	13	11	5.7	3.1	2.3
9	8.0	8.4	319	53	36	18	20	13	11	5.5	3.0	2.3
10	8.0	203	244	50	28	18	22	13	9.6	5.3	3.1	2.3
11	8.0	176	290	48	24	17	20	13	9.2	5.1	3.2	2.3
12	7.6	53	199	45	24	17	19	13	9.1	5.0	2.9	2.3
13	7.6	89	136	44	49	39	18	13	8.9	5.0	3.3	2.3
14	7.6	53	100	42	46	72	18	13	9.5	4.8	2.6	2.3
15	7.6	35	83	41	55	102	17	15	10	4.6	2.5	2.3
16	7.4	59	72	42	66	69	17	17	10	4.1	2.8	2.3
17	7.2	305	66	38	41	92	17	17	9.6	4.1	2.6	2.3
18	7.3	92	59	36	34	53	23	16	9.1	4.2	2.9	2.3
19	7.2	66	55	35	32	45	25	16	8.6	4.4	2.1	2.3
20	7.2	92	51	33	30	40	20	15	8.1	3.9	2.5	2.3
21	7.1	57	47	37	33	35	19	15	7.9	3.9	2.5	2.2
22	7.0	43	48	33	28	32	17	14	7.8	3.9	2.4	2.1
23	7.1	47	47	32	26	30	17	14	7.8	3.8	2.3	2.1
24	6.9	479	188	30	25	28	16	13	7.6	4.2	2.5	2.1
25	6.8	150	929	29	24	28	17	13	7.4	4.0	2.5	2.1
26	6.5	78	384	28	23	27	18	13	6.8	3.6	2.4	2.1
27	6.7	56	373	27	23	26	18	13	6.2	3.3	2.3	2.1
28	6.5	46	228	27	22	25	18	11	5.9	3.4	2.3	1.7
29	6.7	40	170	26	22	24	17	11	5.9	3.4	2.3	1.2
30	9.0	39	187	26	---	23	16	11	5.7	3.6	2.3	1.1
31	12	---	147	25	---	24	---	11	---	3.7	2.4	---
TOTAL	240.6	2337.2	4972	1447	875	1039	579	435	274.7	143.5	87.0	66.0
MEAN	7.76	77.9	160	46.7	30.2	33.5	19.3	14.0	9.16	4.63	2.81	2.20
MAX	12	479	929	114	66	102	25	17	13	6.1	3.6	2.7
MIN	6.5	8.2	34	25	22	17	16	11	5.7	3.3	2.1	1.1
AC-FT	477	4640	9860	2870	1740	2060	1150	863	545	285	173	131
CAL YR 1983	TOTAL	61267.9	MEAN	168	MAX	3300	MIN	6.5	AC-FT	121500		
WTR YR 1984	TOTAL	12496.0	MEAN	34.1	MAX	929	MIN	1.1	AC-FT	24790		

## SAN LORENZO RIVER BASIN

11160020 SAN LORENZO RIVER NEAR BOULDER CREEK, CA

LOCATION.--Lat 37°12'24", long 122°08'38", in NE 1/4 SW 1/4 sec.25, T.8 S., R.3 W., Santa Cruz County, Hydrologic Unit 18060001, on right bank 22 ft upstream from culvert on State Highway 9, 100 ft upstream from small right-bank tributary, and 5.8 mi north of town of Boulder Creek.

DRAINAGE AREA.--6.17 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Concrete control since Sept. 1, 1971. Altitude of gage is 710 ft, from topographic map.

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

AVERAGE DISCHARGE.--16 years, 7.95 ft<sup>3</sup>/s, 5,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 11.48 ft, from rating curve extended above 230 ft<sup>3</sup>/s on basis of computation of flow through culvert at gage height 8.48 ft; minimum daily, 0.08 ft<sup>3</sup>/s Aug. 2, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1945	138	4.09	Dec. 3	1515	168	4.41
Nov. 17	1215	117	3.87	Dec. 9	1700	240	5.12
Nov. 24	1345	236	5.08	Dec. 25	0645	*322	5.88

Minimum daily, 0.61 ft<sup>3</sup>/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.5	2.5	23	5.4	5.3	4.3	3.3	2.2	1.2	.98	.78
2	1.6	1.4	2.2	20	5.1	5.2	4.2	3.2	2.1	1.1	.98	.77
3	1.6	1.3	78	17	5.1	5.1	4.0	2.8	2.2	1.2	.98	.75
4	1.5	1.3	48	14	5.0	4.9	4.0	2.8	2.1	1.1	.98	.70
5	1.5	1.3	17	13	4.8	4.6	3.9	2.8	2.3	1.1	.98	.69
6	1.4	1.2	8.2	12	4.8	4.3	3.8	2.8	2.6	1.1	.98	.73
7	1.4	1.1	4.6	11	5.0	4.1	3.6	2.8	2.6	1.1	.98	.76
8	1.4	1.1	4.3	11	5.1	4.1	3.9	2.7	2.3	1.1	.93	.71
9	1.4	1.2	112	10	6.0	4.0	3.6	2.7	2.2	1.1	.92	.70
10	1.4	29	91	9.8	5.7	3.9	4.1	2.6	2.0	1.1	.94	.70
11	1.4	14	113	9.5	5.1	3.7	3.8	2.6	1.9	1.1	.96	.77
12	1.3	3.2	75	8.9	5.1	3.7	3.6	2.5	1.9	.98	.97	.75
13	1.3	9.3	39	8.6	14	13	3.6	2.4	2.0	.98	.92	.72
14	1.4	3.2	24	8.1	12	8.9	3.6	2.4	1.9	.98	.91	.70
15	1.4	2.3	19	7.9	15	8.5	3.5	2.5	1.8	.98	.91	.70
16	1.4	3.9	17	7.9	18	9.3	3.5	2.5	1.8	.98	.91	.72
17	1.4	38	16	7.4	11	12	3.4	2.4	1.7	.98	.90	.68
18	1.3	5.9	15	7.2	10	8.1	4.0	2.4	1.7	.98	.82	.68
19	1.3	11	14	7.0	8.5	6.6	4.0	2.3	1.8	.98	.82	.72
20	1.2	45	13	6.8	7.9	5.9	3.6	2.3	1.8	.98	.86	.73
21	1.2	11	13	6.9	8.8	5.4	3.4	2.2	1.7	.98	.89	.73
22	1.2	4.2	13	6.8	7.9	5.1	3.4	2.2	1.6	.98	.84	.69
23	1.2	3.1	12	6.5	7.4	4.8	3.3	2.2	1.6	.98	.81	.70
24	1.2	93	42	6.1	7.0	4.5	3.3	2.2	1.6	.98	.82	.67
25	1.2	63	209	6.1	7.0	4.5	3.4	2.2	1.5	.99	.90	.64
26	1.1	18	71	6.1	6.4	4.5	3.4	2.2	1.4	.98	.92	.64
27	1.1	4.3	54	5.8	5.9	4.4	3.4	2.1	1.3	.98	.90	.61
28	1.1	3.6	40	5.8	5.7	4.2	3.3	2.1	1.3	.98	.87	.62
29	1.2	3.2	32	5.6	5.5	4.4	3.3	2.2	1.3	.98	.80	.62
30	1.4	3.0	32	5.5	---	4.4	3.3	2.2	1.3	.98	.80	.67
31	1.5	---	28	5.5	---	4.5	---	2.1	---	.98	.81	---
TOTAL	42.0	382.6	1258.8	286.8	220.2	175.9	109.5	76.7	55.5	31.91	27.98	21.05
MEAN	1.35	12.8	40.6	9.25	7.59	5.67	3.65	2.47	1.85	1.03	.90	.70
MAX	2.0	93	209	23	18	13	4.3	3.3	2.6	1.2	.98	.78
MIN	1.1	1.1	2.2	5.5	4.8	3.7	3.3	2.1	1.3	.98	.80	.61
AC-FT	83	759	2500	569	437	349	217	152	110	63	55	42

CAL YR 1983 TOTAL 9400.50 MEAN 25.8 MAX 527 MIN 1.1 AC-FT 18650  
WTR YR 1984 TOTAL 2688.94 MEAN 7.35 MAX 209 MIN .61 AC-FT 5330'

NOTE.--No gage-height record Feb. 13 to Mar. 23.

11160060 BEAR CREEK AT BOULDER CREEK, CA

LOCATION.--Lat 37°07'40", long 122°06'57", in NW 1/4 NW 1/4 sec.29, T.9 S., R.2 W., Santa Cruz County, Hydrologic Unit 18060001, on left bank on downstream side of private road bridge, in town of Boulder Creek, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--16.0 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 460 ft, from topographic map.

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

AVERAGE DISCHARGE.--7 years, 25.6 ft<sup>3</sup>/s, 18,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,480 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 13.30 ft, from rating curve extended above 600 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 0.12 ft<sup>3</sup>/s Sept. 23, 24, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2000	359	3.57	Dec. 9	1545	359	3.57
Nov. 24	1330	293	3.27	Dec. 25	Unknown	*1,100e	Unknown

Minimum daily, 0.22 ft<sup>3</sup>/s several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	3.5	14	44	13	10	9.7	5.5	1.6	1.0	.72	.70
2	2.3	3.1	12	36	13	9.7	9.6	6.0	1.5	1.1	.72	.60
3	2.0	2.8	121	32	12	9.6	9.3	6.0	1.3	.92	.75	.58
4	1.8	2.7	57	30	12	9.1	9.0	5.7	1.4	.92	.72	.58
5	1.6	2.7	32	29	11	8.9	8.9	5.7	1.5	.92	.72	.58
6	1.6	2.6	24	27	11	8.9	8.9	5.7	1.7	.92	.72	.58
7	1.6	2.5	20	27	11	8.6	8.6	5.4	1.9	.92	.72	.53
8	1.5	2.3	20	26	11	8.6	8.7	5.2	2.2	.96	.76	.52
9	1.4	2.3	167	26	13	8.6	8.3	5.1	2.3	1.0	.80	.52
10	1.4	81	106	25	12	8.3	9.4	4.9	2.2	1.0	.72	.52
11	1.4	43	146	25	11	8.1	8.6	4.9	2.4	1.1	.72	.52
12	1.4	18	95	24	11	7.9	8.0	4.9	2.4	1.2	.75	.52
13	1.5	25	61	23	19	22	7.9	4.9	2.4	1.2	.80	.52
14	1.6	14	47	22	16	15	7.8	4.9	2.5	1.5	.92	.52
15	1.7	8.8	42	22	21	13	7.3	5.0	2.8	1.3	.95	.49
16	1.8	21	39	22	23	13	7.2	5.1	4.7	1.1	.96	.44
17	1.9	70	34	20	18	17	7.2	5.1	3.5	.81	.97	.22
18	2.0	23	31	19	16	13	8.5	4.9	3.2	.81	.92	.22
19	2.0	19	28	18	15	12	7.2	4.9	3.0	.81	.75	.23
20	2.0	36	25	18	14	12	6.0	4.7	2.9	.81	.73	.24
21	1.9	22	22	17	13	11	5.4	4.6	3.1	.73	.81	.24
22	1.9	15	20	17	12	11	5.4	4.6	2.8	.72	.72	.24
23	1.9	13	18	16	12	10	5.1	4.4	2.6	.72	.72	.24
24	1.9	112	95	16	12	10	5.1	4.2	2.6	.72	.72	.22
25	1.9	50	250	15	11	10	5.1	4.1	2.8	.72	.72	.22
26	1.9	25	110	15	11	10	5.1	2.5	2.8	.72	.72	.22
27	1.8	19	80	15	10	10	5.1	1.7	2.8	.72	.72	.22
28	1.7	16	70	14	10	9.3	5.1	1.5	2.8	.72	.72	.22
29	1.7	14	66	14	10	9.3	4.6	1.5	2.3	.72	.72	.58
30	3.3	15	73	14	---	9.3	5.3	1.7	1.2	.72	.72	.24
31	3.9	---	52	13	---	9.6	---	1.5	---	.72	.68	---
TOTAL	59.9	684.3	1977	681	384	332.8	217.4	136.8	73.2	28.23	23.79	12.27
MEAN	1.93	22.8	63.8	22.0	13.2	10.7	7.25	4.41	2.44	.91	.77	.41
MAX	3.9	112	250	44	23	22	9.7	6.0	4.7	1.5	.97	.70
MIN	1.4	2.3	12	13	10	7.9	4.6	1.5	1.2	.72	.68	.22
AC-FT	119	1360	3920	1350	762	660	431	271	145	56	47	24
CAL YR 1983	TOTAL	22004.00	MEAN	60.3	MAX	1000	MIN	1.4	AC-FT	43640		
WTR YR 1984	TOTAL	4610.69	MEAN	12.6	MAX	250	MIN	.22	AC-FT	9150		

NOTE.--No gage-height record Dec. 15 to Jan. 5.  
e Estimated.

## SAN LORENZO RIVER BASIN

11160070 BOULDER CREEK AT BOULDER CREEK, CA

LOCATION.--Lat 37°07'36", long 122°07'18", in NW 1/4 NE 1/4 sec.30, T.9 S., R.2 W., Santa Cruz County, Hydrologic Unit 18060001, on right bank under bridge on State Highway 9 in town of Boulder Creek, and 750 ft upstream from mouth.

DRAINAGE AREA.--11.3 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1976 to current year.

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

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

AVERAGE DISCHARGE.--8 years, 23.1 ft<sup>3</sup>/s, 16,740 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,500 ft<sup>3</sup>/s (revised) Jan. 4, 1982, gage-height, 9.50 ft, from rating curve extended above 330 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 6.03 ft; minimum daily, 0.35 ft<sup>3</sup>/s Oct. 16, 17, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2045	341	3.16	Dec. 9	1545	477	3.52
Nov. 17	1030	422	3.38	Dec. 25	0215	*1,260	5.38
Nov. 24	1330	627	3.90				

Minimum daily, 1.1 ft<sup>3</sup>/s several days during September.

REVISIONS.--Peak discharges and annual maximum (\*) for water years 1980, 1982, and 1983 and daily water discharges have been revised as shown in the following table. They supersede figures published in the reports for 1980, 1982, and 1983.

Water Year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Water Year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
1980	Feb. 19	Unknown	*1,230	5.33	1983	Dec. 21	1515	968	4.77
						Jan. 24	0300	*1,870	6.53
1982	Jan. 4	2245	*3,500	9.50		Jan. 28	2230	606	3.85
	Feb. 16	0100	1,310	5.48		Feb. 8	0100	793	4.33
	Mar. 31	0800	1,440	5.71		Feb. 12	0600	488	3.55
						Feb. 25	1545	1,070	5.02
1983	Nov. 18	1030	751	4.22		Mar. 2	1000	1,610	6.00
						Mar. 13	0615	1,080	5.03

Daily value	Month	Total	Mean	Max	Min	Acre-feet
Jan. 4...1,190	January 1982	3806	123	1190	29	7550
Jan. 5... 700	WTR YR 1982	14388.36	39.4	1190	.61	28540

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.4	19	58	10	9.6	8.2	5.3	4.3	2.5	1.3	1.6
2	2.1	2.9	14	51	10	9.8	7.9	5.2	4.3	2.3	1.5	1.6
3	2.0	2.5	98	46	9.2	9.4	7.6	5.3	4.3	2.2	1.4	1.6
4	1.9	2.5	54	43	8.6	8.4	6.7	5.3	4.3	2.2	1.4	1.5
5	1.8	2.5	35	39	8.0	7.8	6.5	5.0	4.3	2.0	1.3	1.3
6	1.6	2.2	29	37	7.9	7.3	6.2	5.0	5.1	1.9	1.3	1.2
7	1.6	2.2	26	34	7.9	6.7	6.1	5.1	5.2	1.8	1.3	1.1
8	1.6	2.4	28	32	8.0	6.7	6.2	5.0	4.8	1.8	1.3	1.1
9	1.6	2.7	222	30	13	6.7	6.2	5.0	4.6	1.8	1.3	1.1
10	1.6	86	137	29	11	6.7	8.5	5.0	4.3	1.8	1.3	1.1
11	1.6	37	162	27	8.9	6.4	7.1	5.0	4.3	1.8	1.3	1.1
12	1.6	19	95	24	8.5	5.8	5.8	5.0	4.3	1.8	1.3	1.1
13	1.6	36	65	22	28	28	5.3	5.0	4.3	1.8	1.3	1.1
14	1.6	15	54	21	21	17	5.3	5.0	4.3	1.8	1.3	1.1
15	1.5	5.8	46	21	31	17	5.3	5.0	4.3	1.8	1.3	1.1
16	1.4	38	41	22	36	19	5.0	5.0	3.8	1.8	1.4	1.1
17	1.4	143	36	19	24	30	4.9	5.0	3.7	1.4	1.4	1.1
18	1.4	56	31	17	20	19	9.1	5.0	3.1	1.4	1.4	1.1
19	1.4	36	29	17	17	15	7.5	5.0	3.2	1.4	1.4	1.3
20	1.5	65	27	17	15	14	5.6	5.0	3.5	1.4	1.4	1.3
21	1.6	34	24	18	16	12	5.3	5.0	3.5	1.4	1.4	1.4
22	1.6	20	24	17	14	12	5.3	5.0	3.5	1.7	1.4	1.3
23	1.6	16	24	16	13	11	5.0	5.0	3.5	1.8	1.4	1.3
24	1.6	227	145	16	13	9.1	5.0	4.7	3.0	1.8	1.4	1.3
25	1.6	86	625	15	12	8.4	5.2	4.6	2.7	1.8	1.4	1.3
26	1.6	39	175	14	11	8.1	6.0	4.6	2.8	1.8	1.4	1.3
27	1.6	29	150	12	10	8.5	5.3	4.6	2.8	1.7	1.4	1.3
28	1.6	23	93	11	9.8	8.3	5.3	4.6	2.8	1.4	1.4	1.3
29	1.5	19	73	11	9.3	9.4	5.3	4.3	2.8	1.4	1.4	1.3
30	4.5	22	83	10	---	7.8	5.3	4.3	3.0	1.4	1.5	1.3
31	4.6	---	69	9.8	---	8.7	---	4.3	---	1.4	1.6	---
TOTAL	57.3	1075.1	2733	755.8	411.1	353.6	184.0	152.2	114.7	54.3	42.6	37.7
MEAN	1.85	35.8	88.2	24.4	14.2	11.4	6.13	4.91	3.82	1.75	1.37	1.26
MAX	4.6	227	625	58	36	30	9.1	5.3	5.2	2.5	1.6	1.6
MIN	1.4	2.2	14	9.8	7.9	5.8	4.9	4.3	2.7	1.4	1.3	1.1
AC-FT	114	2130	5420	1500	815	701	365	302	228	108	84	75
CAL YR 1983	TOTAL	19966.9	MEAN	54.7	MAX	740	MIN	1.4	AC-FT	39600		
WTR YR 1984	TOTAL	5971.4	MEAN	16.3	MAX	625	MIN	1.1	AC-FT	11840		

## 11160300 ZAYANTE CREEK AT ZAYANTE, CA

LOCATION.--Lat 37°05'10", long 122°02'45", in SE 1/4 sec.2, T.10 S., R.2 W., Santa Cruz County, Hydrologic Unit 18060001, on left bank at downstream side of bridge on Zayante Road in town of Zayante, 0.4 mi upstream from Lompico Creek, 2.0 mi east of Ben Lomond, and 3.2 mi upstream from mouth.

DRAINAGE AREA.--11.1 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Altitude of gage is 390 ft, from topographic map. Prior to Jan. 14, 1978, at datum 0.12 ft higher.

REMARKS.--Records good. No known regulation; only small diversion above station for individual use.

AVERAGE DISCHARGE.--27 years, 12.5 ft<sup>3</sup>/s, 9,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft<sup>3</sup>/s Jan. 14, 1978, gage height, 8.52 ft, from rating curve extended above 1,200 ft<sup>3</sup>/s on basis of slope-area measurement at gage-height 7.70 ft, maximum gage height, 8.86 ft Jan. 4, 1982; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,080 ft<sup>3</sup>/s Dec. 25 (0130 hrs), gage height, 4.93, no other peak above base of 450 ft<sup>3</sup>/s; minimum daily, 0.56 ft<sup>3</sup>/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.2	7.6	31	8.0	6.0	4.8	3.6	2.2	1.6	1.0	.70
2	2.8	1.9	6.9	27	8.0	5.9	4.7	3.6	2.1	1.5	1.0	.70
3	2.7	1.8	82	24	7.7	5.8	4.6	3.5	2.1	1.5	.99	.69
4	2.5	1.8	27	22	7.7	5.6	4.5	3.5	2.2	1.4	1.0	.65
5	2.7	1.7	17	20	7.6	5.4	4.5	3.4	2.2	1.5	1.0	.60
6	2.6	1.7	12	19	7.1	5.3	4.5	3.3	2.4	1.5	1.0	.71
7	2.7	1.6	11	18	6.8	5.3	4.4	3.3	2.2	1.4	.96	1.1
8	2.5	1.6	11	17	6.8	5.2	4.4	3.2	2.2	1.4	.95	1.1
9	2.5	1.7	91	16	8.6	5.2	4.2	3.1	2.1	2.1	.89	.99
10	2.4	68	48	11	7.1	5.2	4.6	3.1	2.1	2.9	1.1	.97
11	2.5	22	83	13	6.6	5.0	4.2	3.1	2.3	3.0	1.6	1.1
12	2.4	11	44	13	6.6	4.9	4.0	3.1	2.6	2.5	1.2	1.1
13	2.5	16	29	13	10	10	4.0	3.0	2.6	1.3	.88	1.0
14	2.8	8.1	23	12	8.1	8.4	3.9	3.0	2.7	1.3	.84	.97
15	2.9	5.4	20	12	11	9.7	3.7	3.0	2.8	1.2	1.3	1.0
16	3.0	17	17	12	12	8.7	3.7	2.9	2.7	1.1	2.3	1.1
17	3.0	48	16	11	9.0	11	3.6	2.9	2.6	1.2	1.9	1.0
18	2.4	13	13	11	8.1	7.9	5.0	2.8	2.0	1.1	.80	1.1
19	1.6	9.8	13	10	7.7	7.3	4.6	2.7	2.0	1.1	.76	1.1
20	1.6	13	12	10	7.4	6.9	3.9	2.7	1.9	1.1	.82	.79
21	1.6	9.3	11	11	8.1	6.2	3.7	2.6	1.9	1.1	.84	.69
22	1.6	7.3	11	9.8	7.2	6.0	3.6	2.5	1.9	1.1	.82	.66
23	1.6	7.1	11	7.8	6.9	5.8	3.5	2.5	1.8	1.1	.83	.64
24	1.6	83	100	9.4	6.8	5.6	3.6	2.4	2.0	1.2	.79	.62
25	1.5	26	457	8.9	6.6	5.5	3.6	2.5	1.8	1.1	.83	.58
26	1.5	14	101	9.0	6.5	5.3	3.7	2.4	1.7	1.1	.80	.57
27	1.5	10	77	8.7	6.3	5.2	3.6	2.4	1.7	1.1	.81	.56
28	1.4	8.9	50	8.7	6.2	5.1	3.6	2.3	1.6	1.1	.77	.58
29	1.5	8.0	39	8.7	6.1	4.9	3.5	2.3	1.6	1.0	.77	.58
30	3.3	8.5	46	8.5	---	4.9	3.6	2.3	1.6	1.0	.69	.57
31	3.0	---	36	8.0	---	5.0	---	2.2	---	1.1	.65	---
TOTAL	71.0	429.4	1522.5	420.5	222.6	194.2	121.8	89.2	63.6	43.7	30.89	24.52
MEAN	2.29	14.3	49.1	13.6	7.68	6.26	4.06	2.88	2.12	1.41	1.00	.82
MAX	3.3	83	457	31	12	11	5.0	3.6	2.8	3.0	2.3	1.1
MIN	1.4	1.6	6.9	7.8	6.1	4.9	3.5	2.2	1.6	1.0	.65	.56
AC-FT	141	852	3020	834	442	385	242	177	126	87	61	49
CAL YR 1983	TOTAL	16706.10	MEAN	45.8	MAX	920	MIN	1.2	AC-FT	33140		
WTR YR 1984	TOTAL	3233.91	MEAN	8.84	MAX	457	MIN	.56	AC-FT	6410		

## SAN LORENZO RIVER BASIN

11160500 SAN LORENZO RIVER AT BIG TREES, CA

LOCATION.--Lat 37°02'40", long 122°04'17", in Zayante Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank 20 ft upstream from bridge on Henry Cowell State Park Road, 200 ft upstream from Shingle Mill Creek, 0.3 mi downstream from Zayante Creek, 0.9 mi northwest of Big Trees station on Southern Pacific Railroad, and 5.3 mi northwest of Santa Cruz.

DRAINAGE AREA.--106 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1315-B: 1938(M). WSP 1715: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 227.00 ft Santa Cruz County datum. Prior to Oct. 6, 1972, at site 1.3 mi downstream at different datum.

REMARKS.--Records good. Flow regulated by Loch Lomond Reservoir since 1961, capacity, 8,820 acre-ft. Many small diversions above station for domestic supply.

AVERAGE DISCHARGE.--48 years, 140 ft<sup>3</sup>/s, 101,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,400 ft<sup>3</sup>/s Dec. 23, 1955, gage height, 22.55 ft site and datum then in use, from rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; maximum gage height, 28.85 ft Jan. 5, 1982; minimum, 0.8 ft<sup>3</sup>/s, regulated, June 25, 1939; minimum daily, 5.6 ft<sup>3</sup>/s July 27, 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2145	2,050	9.70
Nov. 24	1415	1,840	9.29
Dec. 25	0330	*6,290	15.12

Minimum daily, 11 ft<sup>3</sup>/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	38	124	362	113	95	73	54	33	28	21	17
2	42	35	102	326	112	94	71	57	34	29	21	17
3	36	34	593	301	111	91	69	54	34	28	21	18
4	34	34	412	276	107	87	68	52	35	28	21	18
5	33	32	278	258	106	83	67	51	36	28	21	17
6	32	31	228	245	105	80	66	51	43	27	21	17
7	32	30	201	229	103	79	63	50	42	27	20	16
8	31	29	204	218	103	78	67	48	39	28	19	16
9	32	31	787	208	136	77	63	46	35	27	20	16
10	31	432	664	199	116	77	76	45	33	26	19	16
11	30	386	782	190	102	75	67	46	34	25	20	16
12	30	196	574	181	100	71	61	44	33	25	21	19
13	29	252	422	175	178	163	59	44	35	26	20	16
14	30	169	358	168	165	148	58	44	35	25	19	15
15	29	103	315	168	187	142	56	44	36	25	19	15
16	30	230	282	176	229	137	55	44	35	24	20	15
17	30	575	260	158	171	175	52	44	34	24	24	15
18	30	292	235	151	147	127	80	42	33	24	18	14
19	30	216	220	147	136	113	81	43	33	23	19	19
20	29	362	207	144	129	105	63	41	33	23	20	15
21	28	242	192	154	135	98	58	40	34	22	19	15
22	28	168	195	144	123	94	57	40	32	23	19	14
23	28	149	194	140	116	89	55	35	31	23	20	14
24	28	817	607	136	114	85	54	36	30	24	18	14
25	28	437	2980	132	110	83	55	38	31	23	18	13
26	28	241	911	129	106	80	56	38	29	25	19	12
27	27	177	736	124	102	79	55	37	28	23	19	12
28	27	145	547	120	98	76	53	35	27	22	19	12
29	27	124	451	120	96	73	54	34	27	22	18	11
30	55	136	482	118	---	71	53	35	29	22	18	12
31	48	---	415	116	---	74	---	34	---	21	17	---
TOTAL	1006	6143	14958	5713	3656	2999	1865	1346	1003	770	608	456
MEAN	32.5	205	483	184	126	96.7	62.2	43.4	33.4	24.8	19.6	15.2
MAX	55	817	2980	362	229	175	81	57	43	29	24	19
MIN	27	29	102	116	96	71	52	34	27	21	17	11
AC-FT	2000	12180	29670	11330	7250	5950	3700	2670	1990	1530	1210	904
CAL YR 1983	TOTAL	150605	MEAN	413	MAX	6910	MIN	27	AC-FT	298700		
WTR YR 1984	TOTAL	40523	MEAN	111	MAX	2980	MIN	11	AC-FT	80380		

## 11161800 SAN VICENTE CREEK NEAR DAVENPORT, CA

LOCATION.--Lat 37°03'19", long 122°10'52", on east boundary of San Vicente Grant, Santa Cruz County, Hydrologic Unit 18060001, on right bank, 0.6 mi downstream from small right-bank tributary, 1.2 mi upstream from Mill Creek, and 3.1 mi north of Davenport.

DRAINAGE AREA.--6.07 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete dam. Altitude of gage is 740 ft, from topographic map.

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

AVERAGE DISCHARGE.--15 years, 9.71 ft<sup>3</sup>/s, 7,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 8.90 ft; no flow Sept. 9-18, 1977.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 17	1030	126	4.04
Dec. 25	0330	*160	4.24

Minimum daily, 1.2 ft<sup>3</sup>/s Sept. 24-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.7	11	24	6.9	11	7.6	6.0	3.9	3.1	2.7	1.5
2	2.9	2.6	10	21	6.8	11	7.3	6.4	3.9	2.9	2.7	1.5
3	2.9	2.5	21	19	6.5	10	7.3	5.8	3.9	2.9	2.7	1.5
4	2.9	2.3	18	17	6.2	10	7.3	5.7	3.9	3.1	2.5	1.4
5	2.9	2.2	15	16	6.2	10	7.3	5.6	4.2	3.1	2.5	1.4
6	2.9	2.2	14	15	6.1	9.8	7.0	5.4	5.0	3.1	2.4	1.4
7	2.9	2.0	13	15	5.8	9.7	7.1	5.1	4.6	3.1	2.2	1.4
8	2.7	2.0	14	14	5.9	9.4	7.5	5.0	4.2	3.1	2.1	1.4
9	2.7	2.0	28	14	7.7	9.4	6.9	4.8	4.1	3.1	2.0	1.4
10	2.5	13	30	13	6.9	9.2	8.2	4.8	3.9	3.1	2.0	1.4
11	2.5	15	33	13	6.3	9.1	7.2	4.8	3.9	2.9	2.0	1.4
12	2.4	9.8	27	12	6.2	9.1	6.8	4.9	3.9	2.9	2.0	1.4
13	2.2	10	23	12	12	13	6.5	5.0	3.9	2.9	2.0	1.3
14	2.2	8.3	21	11	15	13	6.4	4.8	4.1	2.9	2.0	1.3
15	2.2	6.3	19	11	20	13	6.2	5.0	4.2	2.7	2.0	1.3
16	2.2	11	18	11	21	15	6.1	4.7	4.1	2.7	2.0	1.3
17	2.2	40	17	11	17	18	5.9	4.8	3.9	2.7	2.0	1.3
18	2.2	17	16	10	16	15	7.2	4.8	3.9	2.7	1.8	1.3
19	2.2	17	15	10	15	13	7.0	4.7	3.9	2.7	1.8	1.3
20	2.2	23	15	9.7	14	12	6.6	4.5	3.9	2.7	1.8	1.3
21	2.0	16	14	9.7	14	11	6.5	4.4	3.9	2.7	1.8	1.3
22	2.0	13	14	9.4	13	9.8	6.2	4.4	3.6	2.7	1.8	1.3
23	2.0	11	14	9.0	13	9.0	6.1	4.3	3.6	2.7	1.8	1.3
24	2.0	38	29	8.5	13	8.5	6.2	4.2	3.4	2.7	1.8	1.2
25	2.0	25	97	8.4	13	8.5	6.1	4.2	3.4	2.7	1.8	1.2
26	2.0	17	62	8.0	12	8.2	6.2	4.2	3.4	2.6	1.8	1.2
27	2.0	15	63	7.7	12	8.2	6.1	4.1	3.4	2.5	1.7	1.2
28	2.0	13	40	7.6	12	8.0	5.9	3.9	3.3	2.7	1.7	1.2
29	2.0	12	32	7.3	11	7.7	5.8	4.1	3.1	2.7	1.6	1.2
30	3.7	12	31	6.9	---	7.6	5.8	3.9	3.1	2.7	1.5	1.2
31	4.1	---	27	6.9	---	7.8	---	3.9	---	2.7	1.5	---
TOTAL	76.9	362.9	801	368.1	320.5	324.0	200.3	148.2	115.5	87.8	62.0	39.8
MEAN	2.48	12.1	25.8	11.9	11.1	10.5	6.68	4.78	3.85	2.83	2.00	1.33
MAX	4.1	40	97	24	21	18	8.2	6.4	5.0	3.1	2.7	1.5
MIN	2.0	2.0	10	6.9	5.8	7.6	5.8	3.9	3.1	2.5	1.5	1.2
AC-FT	153	720	1590	730	636	643	397	294	229	174	123	79
CAL YR 1983	TOTAL	9537.7	MEAN	26.1	MAX	295	MIN	2.0	AC-FT	18920		
WTR YR 1984	TOTAL	2907.0	MEAN	7.94	MAX	97	MIN	1.2	AC-FT	5770		

## PESCADERO CREEK BASIN

11162500 PESCADERO CREEK NEAR PESCADERO, CA

LOCATION.--Lat 37°15'39", long 122°19'40", in SW 1/4 sec.5, T.8 S., R.4 W., San Mateo County, Hydrologic Unit 18050006, on left bank at downstream side of highway bridge, 3.0 mi east of Pescadero, and 5.3 mi upstream from mouth.

DRAINAGE AREA.--45.9 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1951 to current year.

REVISED RECORDS.--WSP 1445: 1952-53(M). WSP 1715: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 62.3 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Minor regulation from swimming pools in San Mateo County Memorial Park and Portola State Park during summer months. Small diversions above station by pumping.

AVERAGE DISCHARGE.--33 years, 45.3 ft<sup>3</sup>/s, 32,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,420 ft<sup>3</sup>/s Dec. 23, 1955, gage height, 21.27 ft, from rating curve extended above 2,700 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1515	1,390	7.97
Dec. 9	1930	880	6.42
Dec. 25	0730	*2,150e	Unknown

Minimum daily, 2.0 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	17	54	280	29	28	22	15	9.3	5.4	3.5	2.8
2	17	16	47	220	28	27	21	16	8.9	5.2	3.5	2.7
3	15	13	253	170	27	26	20	16	8.8	4.8	3.7	2.3
4	12	12	225	145	27	26	20	15	8.9	5.0	3.8	2.3
5	10	12	117	125	27	25	19	15	9.6	4.9	3.9	2.4
6	9.0	12	90	100	26	23	19	15	10	4.6	4.2	2.3
7	9.0	12	77	88	26	23	18	14	13	4.6	4.2	2.1
8	10	11	65	75	26	23	19	14	11	4.6	4.2	2.3
9	11	15	369	71	29	23	19	13	10	4.2	4.0	2.4
10	11	40	412	66	34	22	19	13	9.7	4.2	3.5	2.4
11	11	103	497	63	28	22	20	13	9.3	4.3	3.4	2.4
12	11	36	372	60	27	21	18	13	8.9	4.4	3.8	2.3
13	11	74	224	57	42	30	18	13	8.9	4.6	3.5	2.4
14	11	50	180	54	60	40	17	12	8.9	4.5	3.0	2.4
15	11	29	155	52	47	37	17	12	8.9	4.1	2.7	2.4
16	11	32	140	51	92	38	16	12	8.9	3.8	2.6	2.3
17	11	176	125	48	67	54	16	12	8.9	3.8	2.8	2.1
18	11	78	115	45	54	42	17	12	8.3	3.5	2.8	2.4
19	11	68	102	44	47	37	21	12	7.5	3.5	2.7	2.4
20	10	284	87	42	42	33	18	12	7.7	3.5	2.4	2.5
21	9.1	149	80	42	46	30	16	12	8.0	3.5	2.4	2.8
22	8.7	76	110	40	41	29	16	12	7.9	3.5	2.5	2.8
23	7.0	56	350	37	38	27	16	9.8	7.0	3.5	2.8	2.4
24	7.6	481	750	36	36	26	15	9.0	6.6	3.7	2.8	2.1
25	6.7	304	1250	35	34	25	15	10	6.5	3.8	2.8	2.1
26	5.8	140	870	33	32	25	15	10	6.2	3.8	2.8	2.1
27	7.1	94	700	32	31	24	15	10	6.0	3.5	3.0	2.1
28	6.4	72	450	31	30	23	16	10	6.3	3.5	3.1	2.1
29	6.3	60	280	30	29	22	15	10	6.1	3.5	3.1	2.1
30	7.0	56	680	30	---	21	15	9.4	5.8	3.5	2.8	2.0
31	12	---	350	29	---	22	---	9.4	---	3.5	2.8	---
TOTAL	322.7	2578	9576	2231	1102	874	528	380.6	251.8	126.8	99.1	70.3
MEAN	10.4	85.9	309	72.0	38.0	28.2	17.6	12.3	8.39	4.09	3.20	2.34
MAX	26	481	1250	280	92	54	22	16	13	5.4	4.2	2.8
MIN	5.8	11	47	29	26	21	15	9.0	5.8	3.5	2.4	2.0
AC-FT	640	5110	18990	4430	2190	1730	1050	755	499	252	197	139

CAL YR 1983 TOTAL 58191.3 MEAN 159 MAX 2400 MIN 5.8 AC-FT 115400  
WTR YR 1984 TOTAL 18140.2 MEAN 49.6 MAX 1250 MIN 2.0 AC-FT 35980

No gage-height record Oct. 1 to Nov. 18, Dec. 15 to Jan. 10.

## 11162570 SAN GREGORIO CREEK AT SAN GREGORIO, CA

LOCATION.--Lat 37°19'33", long 122°23'08", in San Gregorio Grant, San Mateo County, Hydrologic Unit 18050006, on right bank at downstream side of bridge on Old Coast Highway, 0.1 mi south of town of San Gregorio, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--50.9 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 11.40 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--15 years, 44.4 ft<sup>3</sup>/s, 32,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,910 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 21.28 ft; no flow many days in 1972 and 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1415	Unknown	Unknown
Dec. 9	1645	1,480	6.74
Dec. 25	0800	*1,600	7.01

Minimum daily, 0.90 ft<sup>3</sup>/s Sept. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	19	58	226	28	28	22	15	8.5	4.8	2.2	1.8
2	20	18	52	169	27	27	20	18	8.3	4.4	2.4	2.4
3	17	14	354	135	26	26	20	16	9.2	3.8	2.7	2.0
4	15	13	209	113	26	25	19	15	9.6	4.2	2.5	1.6
5	11	13	130	98	25	23	19	13	13	4.5	2.4	1.9
6	10	13	101	87	25	22	18	13	12	4.7	2.4	1.7
7	10	13	85	78	23	22	17	13	14	4.6	2.1	1.6
8	11	13	107	71	23	22	19	12	10	4.3	1.9	1.0
9	12	12	743	65	29	22	17	12	8.8	4.2	1.5	1.1
10	12	52	567	60	33	21	24	11	8.5	3.7	1.6	1.3
11	12	179	776	57	26	21	21	11	8.1	4.0	1.7	.90
12	12	60	452	52	26	20	19	11	7.6	3.7	1.8	1.0
13	12	123	280	51	84	47	18	11	7.8	2.9	2.9	1.5
14	12	94	182	48	66	44	18	11	8.2	2.6	2.7	1.8
15	12	49	103	46	53	47	17	10	8.0	2.8	2.9	1.7
16	12	51	83	45	97	47	17	9.9	7.7	2.3	2.6	1.4
17	12	308	91	43	62	73	17	9.9	8.2	2.2	2.2	1.2
18	12	83	81	40	50	45	23	9.9	7.4	2.2	2.1	2.0
19	12	212	80	40	44	40	27	9.9	6.7	2.3	2.5	2.1
20	12	538	78	39	40	35	21	9.7	7.0	2.3	2.2	2.1
21	10	232	78	39	62	31	19	9.5	6.9	2.4	2.6	2.3
22	8.7	135	113	37	44	30	19	9.5	6.2	2.8	1.8	2.1
23	7.7	103	149	36	39	29	18	9.5	5.5	3.0	2.0	2.0
24	8.4	540	520	34	37	27	18	9.4	5.5	2.7	2.3	1.9
25	7.4	266	1140	34	35	26	17	9.5	5.4	2.4	2.1	1.8
26	6.2	140	561	32	33	26	16	9.5	5.1	2.2	2.0	1.8
27	7.9	100	576	30	31	25	16	9.5	4.8	2.3	2.0	1.7
28	7.2	78	385	30	30	23	15	8.8	5.0	2.3	1.6	1.7
29	6.8	70	257	30	29	21	15	8.3	5.0	2.8	1.7	1.8
30	7.7	64	488	29	---	21	15	8.0	4.8	2.4	1.8	1.9
31	16	---	321	29	---	21	---	8.2	---	2.2	1.9	---
TOTAL	360.0	3605	9200	1923	1153	937	561	341.0	232.8	98.0	67.1	51.10
MEAN	11.6	120	297	62.0	39.8	30.2	18.7	11.0	7.76	3.16	2.16	1.70
MAX	28	540	1140	226	97	73	27	18	14	4.8	2.9	2.4
MIN	6.2	12	52	29	23	20	15	8.0	4.8	2.2	1.5	.90
AC-FT	714	7150	18250	3810	2290	1860	1110	676	462	194	133	101

CAL YR 1983	TOTAL	49264.00	MEAN	135	MAX	1400	MIN	3.4	AC-FT	97720
WTR YR 1984	TOTAL	18529.00	MEAN	50.6	MAX	1140	MIN	.90	AC-FT	36750

NOTE.--No gage-height record Nov. 24 to Dec. 2.

## PILARCITOS CREEK BASIN

11162630 PILARCITOS CREEK AT HALF MOON BAY, CA

LOCATION.--Lat 37°28'07", long 122°26'08", on north boundary of Miramontes Grant, San Mateo County, Hydrologic Unit 18050006, on left bank 0.2 mi downstream from State Highway 1, 0.5 mi northwest of town of Half Moon Bay, and 1.0 mi upstream from mouth.

DRAINAGE AREA.--27.2 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 23.59 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except those for period of no gage height record, which are poor. Flow slightly regulated by storage in Pilarcitos Lake 10 mi upstream, capacity, 3,100 acre-ft. Water is diverted to City of San Francisco Water System; small diversions for irrigation above station by pumping.

AVERAGE DISCHARGE (unadjusted).--18 years, 17.0 ft<sup>3</sup>/s, 12,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 13.08 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 345 ft<sup>3</sup>/s Dec. 25 (0745 hrs), gage height, 5.28 ft, no other peak above base of 200 ft<sup>3</sup>/s; no flow many days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	4.2	17	69	13	13	6.6	7.2	.56	.51	.22	.16
2	4.5	3.9	9.1	56	13	13	6.9	6.2	.56	.39	.30	.49
3	3.7	3.2	42	48	12	13	7.1	5.4	.63	.21	.33	.59
4	3.1	2.9	23	42	11	12	7.1	4.9	1.3	.16	.39	.36
5	2.7	3.0	15	38	10	12	8.5	4.3	1.5	.51	.35	.13
6	2.2	3.0	6.2	34	9.3	10	8.4	4.7	2.9	.52	.73	0
7	2.2	3.0	3.8	31	9.6	10	8.2	3.9	1.8	.15	.26	0
8	2.4	2.9	14	28	11	9.8	7.3	3.0	1.2	.58	.05	0
9	2.6	2.7	78	26	15	10	7.0	2.8	1.2	.51	.04	0
10	2.6	6.0	76	25	15	9.2	11	2.6	1.1	.43	.21	0
11	2.6	24	94	26	15	9.6	6.9	2.3	1.0	.42	.77	0
12	2.7	9.1	57	26	14	10	5.2	2.3	.58	.39	1.0	0
13	2.7	17	43	27	28	19	4.9	2.4	.66	.37	.52	0
14	2.7	12	36	27	24	17	5.4	2.0	.73	.21	.40	0
15	2.7	7.2	31	27	23	18	5.7	1.7	.68	.25	.36	0
16	2.7	7.4	27	28	28	20	5.8	.98	.82	.24	.32	0
17	2.7	41	25	26	22	24	5.6	1.1	.84	.17	.38	0
18	2.7	16	23	25	20	18	10	1.0	1.1	.34	.17	0
19	2.7	16	21	24	21	16	7.9	1.0	.59	.23	.21	0
20	2.6	37	18	23	20	15	6.4	1.3	.82	.13	.45	0
21	2.3	23	13	23	23	14	6.4	1.4	.69	.18	.41	.33
22	2.0	18	20	22	21	13	6.9	1.1	.49	.36	.40	.35
23	1.7	13	24	20	19	13	6.6	1.3	.35	.23	.58	.47
24	1.8	78	128	19	17	9.9	6.8	.93	.56	.14	.28	.52
25	1.6	54	233	18	16	8.9	6.9	.82	.60	.09	.37	.17
26	1.4	30	170	17	14	7.2	6.4	.58	.30	.10	.20	0
27	1.7	24	137	16	13	6.4	6.7	.75	.07	.12	.19	0
28	1.6	18	77	15	12	6.4	6.5	.63	.30	.10	.02	0
29	1.5	7.9	52	15	13	6.3	6.6	.52	.43	.34	.08	0
30	1.8	14	146	15	---	6.7	6.3	.48	.40	.47	.30	0
31	2.7	---	91	14	---	7.3	---	.35	---	.19	.43	---
TOTAL	78.2	501.4	1750.1	850	481.9	377.7	208.0	69.94	24.76	9.04	10.72	3.57
MEAN	2.52	16.7	56.5	27.4	16.6	12.2	6.93	2.26	.83	.29	.35	.12
MAX	5.3	78	233	69	28	24	11	7.2	2.9	.58	1.0	.59
MIN	1.4	2.7	3.8	14	9.3	6.3	4.9	.35	.07	.09	.02	0
AC-FT	155	995	3470	1690	956	749	413	139	49	18	21	7.1

CAL YR 1983 TOTAL 25746.81 MEAN 70.5 MAX 1100 MIN .95 AC-FT 51070  
WTR YR 1984 TOTAL 4365.33 MEAN 11.9 MAX 233 MIN 0 AC-FT 8660

NOTE.--No gage-height record Oct. 1 to Nov. 17.

## 11162720 COLMA CREEK AT SOUTH SAN FRANCISCO, CA

LOCATION.--Lat 37°39'14", long 122°25'31", in Buri Buri Grant, San Mateo County, Hydrologic Unit 18050004, on left bank in Orange Memorial Park, 1.0 mi southwest of South San Francisco Post Office.

DRAINAGE AREA.--10.8 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 12.53 ft National Geodetic Vertical Datum of 1929. Recording rain gages at Skyline College, altitude, 700 ft at site 2.9 mi southwest of gaging station and on San Bruno Mountain, altitude, 930 ft at site 2.7 mi northwest of gaging station.

REMARKS.--Records good. Low flow affected by return flow from urban irrigation.

AVERAGE DISCHARGE.--21 years, 7.71 ft<sup>3</sup>/s, 5,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,880 ft<sup>3</sup>/s Jan. 16, 1973, gage height, 11.80 ft; no flow Oct. 5, 26, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 12	1200	*1,990	10.30	Dec. 24	0900	1,050	7.49
Nov. 17	0850	977	7.30	Feb. 13	1115	1,000	7.37
Nov. 24	0850	1,500	8.77	Mar. 16	1900	1,040	7.46

Minimum daily, 0.59 ft<sup>3</sup>/s June 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	37	2.3	6.4	2.9	2.5	1.4	4.0	.96	.93	1.5	2.1
2	1.2	2.4	2.1	4.3	3.3	2.5	1.4	2.2	.70	.96	1.3	1.7
3	1.2	4.2	58	3.4	3.3	2.5	1.4	1.4	.92	.93	1.8	1.7
4	1.0	2.5	1.8	2.9	8.4	2.5	1.4	1.4	3.9	.93	1.1	1.7
5	.93	2.1	1.7	2.4	11	2.3	1.5	1.2	.59	.95	1.3	1.7
6	.93	4.0	8.3	2.1	13	2.3	1.4	1.2	4.1	.98	2.1	1.7
7	.93	2.5	1.8	1.9	13	2.5	1.4	1.0	1.4	1.3	2.8	1.7
8	.93	2.1	27	1.7	19	2.5	6.3	.93	1.4	1.3	2.8	1.7
9	2.6	29	67	1.7	33	2.3	1.4	1.1	1.4	1.4	1.1	1.7
10	6.4	71	72	1.7	1.8	2.1	9.8	1.4	1.4	1.6	1.2	1.7
11	5.1	4.4	52	1.7	5.0	2.3	1.4	1.4	1.4	2.0	.89	1.7
12	5.8	57	8.1	1.7	1.7	2.6	1.4	1.5	1.4	2.1	.98	1.7
13	8.4	52	9.1	1.7	49	47	1.4	1.7	1.4	2.0	1.6	1.7
14	9.6	1.7	4.9	1.7	3.2	21	1.4	3.0	1.4	1.6	1.9	1.7
15	10	2.4	3.6	15	28	15	1.4	2.8	1.4	1.8	1.5	1.7
16	9.4	31	3.4	5.5	13	38	1.6	1.5	1.4	1.9	1.5	1.7
17	5.8	109	5.6	2.1	2.1	2.1	1.7	.97	1.5	1.9	1.6	1.7
18	1.2	2.2	3.1	2.1	2.1	5.4	31	.99	1.5	2.0	1.4	1.7
19	1.7	43	3.0	1.9	2.1	7.5	7.0	.93	2.5	2.3	1.4	10
20	1.6	22	2.8	1.7	3.0	4.1	1.7	.74	3.9	2.2	1.6	2.3
21	1.5	2.0	4.3	9.1	18	11	1.7	.74	.93	1.5	1.5	2.1
22	1.5	11	16	1.7	2.1	12	1.7	.74	.93	1.9	1.2	2.1
23	3.0	51	15	1.7	2.1	13	1.7	.74	.93	2.4	1.2	2.1
24	2.1	139	248	1.7	6.9	12	1.4	.74	.93	2.2	1.1	2.1
25	1.9	10	104	1.7	2.1	9.5	1.2	.74	.93	1.5	.74	2.1
26	2.3	3.1	34	1.5	2.2	13	1.2	.71	3.8	1.1	.90	2.1
27	1.5	2.3	18	1.4	2.1	15	1.4	.83	3.4	1.1	1.0	2.1
28	1.5	2.1	17	1.4	3.6	16	1.4	1.3	9.5	1.3	.99	2.1
29	2.2	2.1	18	1.5	2.5	16	1.4	2.4	5.3	1.1	.90	2.1
30	14	15	64	3.1	---	27	1.6	.87	.93	1.8	13	5.8
31	7.3	---	8.9	4.8	---	6.0	---	1.1	---	1.3	2.8	---
TOTAL	114.72	719.1	884.8	93.2	259.5	319.5	92.1	42.27	62.15	48.28	56.70	68.0
MEAN	3.70	24.0	28.5	3.01	8.95	10.3	3.07	1.36	2.07	1.56	1.83	2.27
MAX	14	139	248	15	49	47	31	4.0	9.5	2.4	13	10
MIN	.93	1.7	1.7	1.4	1.7	2.1	1.2	.71	.59	.93	.74	1.7
AC-FT	228	1430	1760	185	515	634	183	84	123	96	112	135
a	.07	4.15	3.98	.51	1.28	.83	.35	.08	.02	.01	.19	.24
b	.25	7.95	7.05	.92	1.86	1.84	.47	.17	.14	0	.09	.16

CAL YR 1983	TOTAL	6603.92	MEAN	18.1	MAX	248	MIN	.74	AC-FT	13100
WTR YR 1984	TOTAL	2760.32	MEAN	7.54	MAX	248	MIN	.59	AC-FT	5480

a Precipitation, in inches, at San Bruno Mountain gage.

b Precipitation, in inches, at Skyline College gage.

## REDWOOD CREEK BASIN

11162800 REDWOOD CREEK AT REDWOOD CITY, CA

LOCATION.--Lat 37°26'58", long 122°13'57", in Pulgas Grant, San Mateo County, Hydrologic Unit 18050004, at Menlo Country Club, on right bank 200 ft upstream from Alameda de las Pulgas bridge, and 2.5 mi south of Redwood City Old Post Office.

DRAINAGE AREA.--1.82 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 83.92 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Low flow at times affected by return flow from urban irrigation.

AVERAGE DISCHARGE.--25 years, 1.21 ft<sup>3</sup>/s, 877 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft<sup>3</sup>/s Jan. 31, 1963, gage height, 9.36 ft, from rating curve extended above 180 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow and computation of maximum flow through culvert; maximum gage height, 11.55 ft Nov. 29, 1970 (backwater from culvert trash racks); no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 183 ft<sup>3</sup>/s Nov. 24 (1300 hrs), gage height 4.92 ft, no other peak above base of 130 ft<sup>3</sup>/s; minimum daily, 0.02 ft<sup>3</sup>/s on many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.08	.87	1.8	.55	.42	.34	.19	.05	.03	.02	.07
2	.08	.06	.80	1.5	.51	.40	.36	.18	.06	.03	.02	.07
3	.08	.06	1.4	1.4	.51	.40	.34	.19	.05	.03	.02	.07
4	.07	.08	2.2	1.3	.50	.37	.33	.21	.06	.03	.02	.06
5	.07	.07	1.3	1.2	.47	.36	.32	.21	.09	.03	.02	.06
6	.07	.06	1.1	1.1	.47	.35	.31	.17	.11	.03	.02	.06
7	.07	.06	.97	1.0	.45	.34	.29	.13	.08	.02	.02	.06
8	.07	.07	1.0	.97	.50	.34	.37	.13	.06	.02	.02	.06
9	.08	.18	2.0	.93	1.3	.34	.46	.13	.05	.02	.02	.06
10	.08	1.0	9.0	.87	.68	.37	.61	.13	.04	.03	.02	.07
11	.07	2.0	1.8	.85	.54	.34	.30	.14	.05	.02	.02	.06
12	.07	1.2	3.8	.80	.50	.32	.29	.14	.04	.02	.02	.06
13	.08	7.7	2.2	.79	7.2	5.9	.27	.12	.05	.02	.02	.07
14	.08	1.0	1.8	.72	1.4	1.4	.27	.11	.05	.02	.02	.07
15	.08	.79	1.5	1.4	2.7	1.6	.26	.12	.04	.02	.02	.07
16	.08	1.7	1.3	.97	3.0	2.4	.27	.13	.04	.02	.02	.07
17	.09	1.1	1.2	.76	1.1	1.3	.28	.11	.05	.02	.02	.06
18	.07	1.2	1.1	.67	.87	.69	1.1	.11	.04	.02	.03	.07
19	.10	2.8	1.1	.67	.74	.58	.78	.10	.03	.02	.04	.07
20	.06	8.1	.99	.63	.67	.53	.30	.09	.05	.02	.05	.03
21	.06	1.4	.94	1.2	.89	.47	.27	.09	.05	.02	.05	.03
22	.06	1.0	2.8	.70	.62	.45	.26	.08	.04	.02	.06	.09
23	.08	.96	1.9	.67	.59	.43	.24	.08	.04	.02	.06	.26
24	.06	37	23	.67	.58	.46	.20	.07	.04	.02	.06	.18
25	.06	4.0	36	.66	.52	.41	.19	.12	.04	.02	.08	.02
26	.06	1.6	6.1	.61	.51	.41	.21	.07	.04	.02	.08	.02
27	.06	1.2	4.5	.61	.50	.41	.19	.07	.03	.02	.08	1.8
28	.06	1.1	2.3	.61	.46	.40	.19	.07	.03	.02	.08	.02
29	.17	.94	1.8	.59	.43	.39	.18	.07	.04	.02	.08	.02
30	.06	1.1	8.4	.57	---	.33	.19	.11	.03	.02	.09	.02
31	.07	---	2.7	.56	---	.72	---	.07	---	.02	.09	---
TOTAL	2.48	98.51	174.67	27.78	29.76	23.63	9.97	3.74	1.47	0.69	1.27	3.73
MEAN	.080	3.28	5.63	.90	1.03	.76	.33	.12	.049	.022	.041	.12
MAX	.23	.37	.36	1.8	7.2	5.9	1.1	.21	.11	.03	.09	1.8
MIN	.06	.06	.80	.56	.43	.32	.18	.07	.03	.02	.02	.02
AC-FT	4.9	195	346	55	59	47	20	7.4	2.9	1.4	2.5	7.4
CAL YR 1983	TOTAL	1365.04	MEAN	3.74	MAX	68	MIN	.05	AC-FT	2710		
WTR YR 1984	TOTAL	377.70	MEAN	1.03	MAX	37	MIN	.02	AC-FT	749		

## 11164500 SAN FRANCISQUITO CREEK AT STANFORD UNIVERSITY, CA

LOCATION.--Lat 37°25'24", long 122°11'18", in San Francisquito Grant, Santa Clara County, Hydrologic Unit 18050003, at golf course, on right bank 1.1 mi downstream from Los Trancos Creek, and 1.1 mi west of Stanford University Post Office.

DRAINAGE AREA.--37.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1930 to September 1941, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 115.75 ft National Geodetic Vertical Datum of 1929. Recording rain gage at 345 Middlefield Road in Menlo Park 2.5 mi northeast of gage. Prior to December 20, 1983 at 855 Oak Grove Avenue in Menlo Park 1.9 mi north of gage.

REMARKS.--Records good. Flow regulated by Searsville Lake 5 mi upstream, capacity, 952 acre-ft. Diversions of about 800 acre-ft each year above station to Los Trancos and Lagunita Canals for irrigation on Stanford University campus below station. Low flow affected by waste water from Stanford Linear Accelerator.

AVERAGE DISCHARGE.--45 years, 20.4 ft<sup>3</sup>/s, 14,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 13.60 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1415	*1,700	6.11
Dec. 9	1615	816	4.22
Dec. 25	0900	1,020	4.69

Minimum daily, 0.22 ft<sup>3</sup>/s Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	1.3	12	97	9.6	11	11	5.6	1.7	.85	.39	.25
2	1.6	1.2	10	77	9.3	10	9.2	6.0	1.6	.76	.40	.29
3	1.4	1.2	178	62	9.2	10	8.4	6.3	1.5	.66	.60	.41
4	1.3	1.2	80	52	9.0	9.6	7.4	5.2	1.6	.72	.64	.43
5	1.1	1.3	32	45	8.8	9.3	6.8	5.0	1.5	.69	1.1	.38
6	1.2	1.1	22	40	8.8	9.0	6.5	4.8	1.6	.85	.51	.46
7	1.3	1.1	19	36	9.0	9.2	6.3	4.9	1.7	.74	.40	.47
8	1.3	1.2	20	33	9.4	9.9	6.0	4.5	1.7	.64	.39	.37
9	1.2	1.6	334	29	15	11	5.9	4.4	1.5	.62	.38	.35
10	1.2	36	255	28	21	11	7.0	4.2	1.5	.76	.44	.41
11	1.1	64	382	27	15	11	6.3	4.2	1.3	.54	.49	.30
12	1.1	14	176	26	13	11	6.0	4.4	1.8	.50	.57	.34
13	1.1	45	82	23	99	46	5.9	4.4	2.0	.71	.38	.45
14	1.1	20	55	21	82	31	5.7	4.2	1.8	.60	.32	1.0
15	1.2	8.1	42	25	65	48	6.4	3.9	1.2	.54	.33	1.3
16	1.3	11	34	27	93	40	5.8	3.9	1.4	1.1	.39	1.3
17	1.2	124	29	21	54	26	6.3	3.6	1.5	1.7	.35	.97
18	1.2	36	25	17	37	20	11	3.2	1.4	1.7	.42	.70
19	1.4	41	22	18	31	16	14	2.8	1.3	2.1	.32	.82
20	1.3	199	19	17	24	14	8.7	2.5	1.4	1.8	.36	.88
21	1.2	51	17	21	24	12	7.0	2.3	1.4	1.6	.40	.97
22	1.2	18	29	18	21	15	7.5	2.2	1.3	1.7	.31	.97
23	1.2	13	40	16	20	14	6.9	2.1	1.3	1.8	.33	.79
24	1.2	550	215	15	20	12	6.3	2.0	1.3	1.3	.33	.78
25	1.2	175	780	14	20	11	6.1	1.9	1.2	.45	.46	.43
26	1.0	47	333	12	18	10	5.9	2.0	1.2	.33	.31	.40
27	.96	27	313	13	15	10	5.9	2.2	1.2	.30	.32	.53
28	.98	20	152	13	12	9.8	5.7	2.1	1.1	.41	.35	.56
29	1.3	14	104	11	11	9.6	5.3	2.0	1.0	.35	.34	.45
30	1.1	14	188	9.2	---	9.5	5.3	2.1	1.1	.42	.22	.44
31	1.1	---	134	9.9	---	15	---	2.0	---	.44	.28	---
TOTAL	38.64	1538.3	4133	873.1	783.1	490.9	212.5	110.9	43.1	27.68	12.83	18.20
MEAN	1.25	51.3	133	28.2	27.0	15.8	7.08	3.58	1.44	.89	.41	.61
MAX	2.6	550	780	97	99	48	14	6.3	2.0	2.1	1.1	1.3
MIN	.96	1.1	10	9.2	8.8	9.0	5.3	1.9	1.0	.30	.22	.25
AC-FT	77	3050	8200	1730	1550	974	421	220	85	55	25	36
a	.01	5.1	4.37	.26	1.31	1.04	.39	0	0	0	.01	.01
CAL YR 1983	TOTAL	32521.03	MEAN	89.1	MAX	1340	MIN	.95	AC-FT	64510		
WTR YR 1984	TOTAL	8282.25	MEAN	22.7	MAX	780	MIN	.22	AC-FT	16430		

a Precipitation, in inches.

## MATADERO CREEK BASIN

11166000 MATADERO CREEK AT PALO ALTO, CA

LOCATION.--Lat 37°25'18", long 122°08'04", in Rincon de San Francisquito Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank on Ash Street 150 ft upstream from Lambert Avenue Bridge, and 2.1 mi southeast of Palo Alto Post Office.

DRAINAGE AREA.--7.26 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1952 to current year.

REVISED RECORDS.--WDR CA-80-2: 1971-74, 1978, 1971-72(P), WDR CA-82-2: 1973-74, 1978(P).

GAGE.--Water-stage recorder. Datum of gage is 22.07 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 25, 1958, at site 150 ft downstream at different datum.

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

AVERAGE DISCHARGE.--32 years, 2.39 ft<sup>3</sup>/s, 1,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,500 ft<sup>3</sup>/s Jan. 24, 1983, gage height, 6.51 ft, from rating curve extended above 600 ft<sup>3</sup>/s on basis of step-backwater computation at gage heights 7.63 ft and 8.00 ft and slope-conveyance computations at 5.97 ft and 6.87 ft; maximum gage height, 9.88 ft Dec. 23, 1955, site and datum then in use (backwater from culvert); no flow at times.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2100	258	2.34	Dec. 11	0930	*286	2.45
Nov. 24	1300	248	2.30	Dec. 25	0215	255	2.33
Dec. 3	1315	243	2.28				

Minimum daily, 0.14 ft<sup>3</sup>/s Aug. 6, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.1	1.7	4.8	1.6	1.3	1.3	1.2	.34	.25	.30	.60
2	.43	.44	1.4	4.1	1.6	1.4	1.2	1.2	.43	.23	.26	.39
3	1.0	.43	66	3.7	1.6	1.5	1.2	1.1	.39	.38	.25	.29
4	.95	.56	8.4	3.3	1.6	1.5	1.2	1.1	.36	.42	.27	.30
5	.81	.77	3.4	3.2	1.4	1.5	1.3	.91	.52	.36	.18	.34
6	.41	.70	2.4	3.0	1.4	1.4	1.4	.84	.52	.26	.14	.35
7	.37	.59	1.9	2.9	1.5	1.6	.99	.81	.47	.23	.25	.33
8	.36	.57	1.8	2.5	1.4	1.6	1.2	.83	.41	.21	.19	.37
9	.98	1.1	69	2.5	4.4	1.4	1.2	.90	.28	.21	.28	.37
10	.97	56	17	2.5	2.3	1.4	1.7	.71	.36	.29	.15	.34
11	.47	12	71	2.5	1.6	1.4	1.1	.70	.31	.37	.22	.45
12	.46	4.1	13	2.5	1.6	1.4	1.1	.71	.31	.29	.20	.47
13	.49	17	6.5	2.3	15	7.9	1.1	.65	.43	.25	.15	.33
14	.53	2.6	4.6	2.1	3.2	3.1	.98	.52	.54	.22	.27	.44
15	.52	1.4	3.7	4.2	6.3	4.1	.86	.56	.51	.27	.26	.52
16	.63	2.3	2.9	2.6	5.2	6.5	.79	.63	.57	.18	.34	.49
17	.57	23	2.9	2.3	2.2	2.9	.74	.60	.37	.26	.20	.52
18	.68	2.4	2.3	2.1	1.9	1.6	6.1	.62	.28	.32	.84	.50
19	.64	4.6	2.3	2.1	1.7	1.5	4.0	.57	.41	.39	.26	1.3
20	.63	15	2.3	1.9	1.7	1.5	1.0	.50	.61	.24	.14	.35
21	.58	3.5	2.3	4.7	3.3	1.8	.85	.45	.45	.25	.19	.34
22	.46	1.9	11	2.6	1.7	1.3	.97	.51	.38	.23	.32	.30
23	.41	1.8	4.7	2.2	1.6	1.5	.84	.46	.32	.21	.15	.34
24	.37	60	57	1.7	1.7	1.4	1.0	.46	.33	.28	.18	.32
25	.38	12	91	1.6	1.4	1.7	.98	.43	.29	.26	.26	.33
26	.40	4.3	14	1.5	1.4	1.4	1.1	.49	.46	.22	.36	.38
27	.34	2.6	11	1.5	1.6	1.4	1.4	.37	.49	.23	.23	.28
28	.34	2.0	6.2	1.6	1.5	1.4	1.1	.38	.37	.20	.53	.24
29	.35	1.9	4.8	1.6	1.5	1.3	1.1	.35	.23	.15	.66	.21
30	.35	2.0	25	1.6	---	1.3	1.2	.45	.28	.17	.57	.38
31	.36	---	7.2	1.6	---	3.3	---	.37	---	.21	.65	---
TOTAL	17.74	238.66	518.7	79.3	74.9	64.3	41.00	20.38	12.02	8.04	9.25	12.17
MEAN	.57	7.96	16.7	2.56	2.58	2.07	1.37	.66	.40	.26	.30	.41
MAX	1.5	60	91	4.8	15	7.9	6.1	1.2	.61	.42	.84	1.3
MIN	.34	.43	1.4	1.5	1.4	1.3	.74	.35	.23	.15	.14	.21
AC-FT	35	473	1030	157	149	128	81	40	24	16	18	24
CAL YR 1983	TOTAL	4238.86	MEAN	11.6	MAX	324	MIN	.29	AC-FT	8410		
WTR YR 1984	TOTAL	1096.46	MEAN	3.00	MAX	91	MIN	.14	AC-FT	2170		

## RESERVOIRS IN GUADALUPE RIVER BASIN, CA

11166670 ALMADEN RESERVOIR.--Lat 37°09'54", long 121°49'39", in San Vicente Grant, Santa Clara County, Hydrologic Unit 18050003, at center of dam on Alamitos Creek, 0.7 mi southwest of New Almaden, and 7 mi south of Edenvale. DRAINAGE AREA, 12.0 mi<sup>2</sup>. PERIOD OF RECORD, January 1936 to current year. Monthly contents prior to October 1959, published in WSP 1735. REVISED RECORDS, WDR CA-79-2: Drainage area. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Santa Clara Valley Water District).

Reservoir is formed by earthfill dam completed in 1936. Capacity, 1,780 acre-ft between elevations 533.1 ft, invert of outlet tunnel and 606.9 ft, crest of spillway. Water released down Alamitos Creek for ground-water recharge by percolation and minor irrigation. Up to 100 ft<sup>3</sup>/s diverted to Calero Reservoir at times.

Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 2,150 acre-ft Jan. 31, 1963, elevation, 610.24 ft, from floodmarks; no contents at times in most years.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 1,530 acre-ft Dec. 31, elevation, 602.7 ft; minimum observed, no contents July 31 to Sept. 30, elevation 533.2 ft.

11166740 CALERO RESERVOIR.--Lat 37°11'00", long 121°47'28", in San Vicente Grant, Santa Clara County, Hydrologic Unit 18050003, at center of dam on Arroyo Calero, 1.7 mi northeast of New Almaden, and 6 mi southeast of Edenvale. DRAINAGE AREA, 6.93 mi<sup>2</sup>. PERIOD OF RECORD, January 1936 to current year. Monthly contents prior to October 1959, published in WSP 1735. REVISED RECORDS, WDR CA-79-2: Drainage area. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Santa Clara Valley Water District).

Reservoir is formed by earthfill dam completed to crest elevation 482.55 ft in 1936 and raised to 483.5 ft in 1962. Capacity, 10,160 acre-ft between elevations 393.7 ft, center of outlet tunnel and 483.5 ft, crest of spillway. Water released down Arroyo Calero for ground-water recharge by percolation and minor irrigation. Up to 100 ft<sup>3</sup>/s diverted from Almaden Reservoir to Calero Reservoir at times. For WATER-QUALITY RECORDS, see following page. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 10,520 acre-ft Apr. 7, 1967, elevation, 485.21 ft; no contents at times in some years.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 9,490 acre-ft Feb. 17, elevation, 481.7 ft; minimum observed, 3,320 acre-ft Sept. 30, elevation, 456.9 ft.

11167370 GUADALUPE RESERVOIR.--Lat 37°11'57", long 121°52'42", in Los Capitancillos Grant, Santa Clara County, Hydrologic Unit 18050003, at center of dam on Guadalupe Creek, 3.6 mi northwest of New Almaden, and 5.0 mi southeast of Los Gatos. DRAINAGE AREA, 5.99 mi<sup>2</sup>. PERIOD OF RECORD, January 1936 to current year. Monthly contents prior to October 1959, published in WSP 1735. REVISED RECORDS, WDR CA-79-2: Drainage area. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Santa Clara Valley Water District).

Reservoir is formed by earthfill dam completed in 1936. Capacity, 3,740 acre-ft between elevations 506.8 ft, invert of outlet tunnel and 617.3 ft, crest of spillway. Water released down Guadalupe Creek for irrigation and ground-water recharge by percolation. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents 3,790 acre-ft Feb. 19, 1980, elevation, 617.8 ft; maximum elevation, 619.26 ft Feb. 1, 1963, from floodmarks; no contents at times in most years.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 3,730 acre-ft Apr. 20-24, elevation, 617.0 ft; minimum observed, no contents July 27 to Sept. 30, elevation, 530.0 ft.

11167950 LAKE ELSMAN.--Lat 37°07'51", long 121°55'47", in SE 1/4 sec.23, T.9 S., R.1 W., Santa Clara County, Hydrologic Unit 18050003, at center of Austrian Dam on Los Gatos Creek, and 7.3 mi southeast of Los Gatos. DRAINAGE AREA, 9.78 mi<sup>2</sup>. PERIOD OF RECORD, February 1951 to current year. Monthly contents prior to October 1959, published in WSP 1735. REVISED RECORDS, WDR CA-79-2: Drainage area. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by San Jose Water Works).

Reservoir is formed by earthfill dam completed in 1951; topped by a 2-foot inflatable surcharge dam since 1956. Usable capacity, 6,280 acre-ft between elevations 944 ft, elevation of outlet gates and 1,112 ft, top of 2-foot inflatable surcharge dam. Dead storage, 60 acre-ft. Water released down Los Gatos Creek for domestic and industrial use. Record of contents furnished by San Jose Water Works.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 6,640 acre-ft Jan. 31, 1963, elevation, 1,115.1 ft; no contents at times in some years.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 6,150 acre-ft Jan. 31 to Feb. 29, elevation, 1,110.6 ft; minimum observed, 6.1 acre-ft Sept. 30, elevation, 986.0 ft.

11167980 LEXINGTON RESERVOIR.--Lat 37°12'06", long 121°59'17", in SE 1/4 sec.29, T.8 S., R.1 W., Santa Clara County, Hydrologic Unit 18050003, at center of dam on Los Gatos Creek, and 1.7 mi south of Los Gatos. DRAINAGE AREA, 36.9 mi<sup>2</sup>. PERIOD OF RECORD, December 1952 to current year. Monthly contents prior to October 1959, published in WSP 1735. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Santa Clara Valley Water District).

Reservoir is formed by earthfill dam completed in 1952. Capacity, 20,210 acre-ft between elevations 519 ft, invert at outlet tunnel and 649.9 ft, crest of spillway. Dead storage, 31 acre-ft. Water released down Los Gatos Creek for irrigation and ground-water recharge by percolation. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 23,190 acre-ft Mar. 16, 1967, elevation, 654.00 ft; no contents at times in most years.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 17,030 acre-ft Feb. 17-20, elevation, 541.5 ft; minimum observed, 6,700 acre-ft Sept. 30, elevation, 604.6 ft.

MONTHEND CONTENTS, IN ACRE-FEET (INCLUDING MOMENTARY  
STORAGE ABOVE SPILLWAY CREST) AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Almaden Reservoir	Calero Reservoir	Guadalupe Reservoir	Lake Elzman	Lexington Reservoir
Sept. 30, 1983.....	407	6,200	1,860	2,680	11,110
Oct. 31.....	443	5,340	1,460	1,600	9,980
Nov. 30.....	941	5,390	2,030	2,080	11,760
Dec. 31.....	1,530	8,520	3,520	4,810	16,550
Jan. 31, 1984.....	1,320	9,080	3,260	6,150	16,870
Feb. 29.....	629	9,330	3,420	6,150	16,870
Mar. 31.....	780	8,760	3,630	6,120	16,550
Apr. 30.....	676	8,080	3,490	5,440	15,730
May 31.....	316	7,170	2,260	4,410	14,840
June 30.....	226	6,470	725	3,360	13,630
July 31.....	0	5,100	0	2,000	11,840
Aug. 31.....	0	4,270	0	703	9,410
Sept. 30.....	0	3,320	0	6.1	6,700

11166740 CALERO RESERVOIR NEAR NEW ALMADEN, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water year 1981 to current year.

BIOLOGICAL DATA: Water year 1981 to current year.

AT CENTER (Lat 37°10'57", long 121°46'57", T.9 S., R.2 E., Santa Clara County,  
Hydrologic Unit 18050003)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984										OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)				
MAR , 1984											
21...	1100	.50	313	8.8	15.0	750	--		--		
21...	1101	1.0	313	8.7	15.0	750	--		--		
21...	1102	2.0	314	8.6	15.0	750	--		--		
21...	1103	3.0	315	8.6	15.0	750	--		--		
21...	1104	4.0	315	8.5	15.0	750	--		--		
21...	1105	5.0	315	8.5	14.5	750	--		--		
21...	1106	6.0	315	8.5	14.5	750	--		--		
21...	1107	7.0	318	8.5	14.5	750	--		--		
21...	1108	8.0	319	8.3	13.5	750	--		--		
21...	1109	9.0	319	8.2	13.5	750	--		--		
21...	1110	10.0	319	8.1	13.0	750	--		--		
21...	1111	11.0	319	7.8	12.0	750	--		--		
21...	1112	12.0	317	7.7	11.5	750	--		--		
21...	1113	13.0	316	7.7	11.5	750	--		--		
AUG											
29...	1344	.50	400	8.5	24.0	755	8.3		100		
29...	1345	1.0	399	8.5	24.0	755	8.4		101		
29...	1346	2.0	398	8.5	24.0	755	8.5		102		
29...	1347	3.0	403	8.3	23.0	755	7.4		87		
29...	1348	4.0	401	8.3	23.0	755	7.3		86		
29...	1349	5.0	400	8.2	22.5	755	6.8		80		
29...	1350	6.0	398	8.2	22.5	755	6.4		75		
29...	1351	7.0	398	8.1	22.5	755	5.9		69		
29...	1352	8.0	397	8.0	22.5	755	5.7		67		
29...	1353	9.0	396	8.0	22.5	755	5.6		65		
29...	1354	10.0	398	7.5	22.5	755	4.4		51		
DATE	TIME	SAM- PLING DEPTH (M)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	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)	
MAR , 1984											
21...	1350	1.0	--	--	--	150	0	30	19	10	
21...	1400	6 & 11	--	--	--	160	3	32	20	10	
AUG											
29...	1455	1.0	8.5	24.0	8.4	190	7	38	23	12	
29...	1500	3.0	8.3	23.0	7.4	190	4	37	23	12	
29...	1515	9.0	8.0	22.5	5.6	190	7	38	23	12	
DATE	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAR , 1984											
21...	12	.4	1.3	15	9.7	.1	10	190	.26	<.01	<.10
21...	12	.4	1.3	14	9.6	.1	11	190	.26	<.01	<.10
AUG											
29...	12	.4	1.5	19	11	.1	13	230	.31	<.01	<.10
29...	12	.4	1.5	18	11	.1	13	230	.31	<.01	<.10
29...	12	.4	1.5	17	11	.1	13	230	.31	<.01	<.10
DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	
MAR , 1984											
21...	<.10	.04	.01	.36	.19	.40	.20	.01	<.01	.02	
21...	<.10	.03	<.01	.47	--	.50	.50	.01	<.01	.02	
AUG											
29...	<.10	<.01	.02	--	.18	.80	.20	.02	.01	<.01	
29...	<.10	<.01	.01	--	.29	.40	.30	.02	.01	<.01	
29...	<.10	.03	.04	.57	.16	.60	.20	.01	<.01	<.01	

See footnote at end of table.

11166740 CALERO RESERVOIR NEAR NEW ALMADEN, CA--Continued

AT CENTER--Continued

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)
------	------	---	--	--	--	---	--

AUG , 1984							
29...	1515	<10	1	110	<1	<10	<3

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
------	---	---	---	---	--	---	--	---

AUG , 1984								
29...	1	<3	4	<.1	1	<1	<1	12

DATE	TIME	SAM- PLING DEPTH (M)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
MAR				
21...	1352	1.0	3.7	<.1
21...	1354	3.0	4.2	<.1
21...	1356	6.0	5.2	<.1
AUG				
29...	1455	1.0	3.8	<.1
29...	1457	2.0	4.8	<.1
29...	1459	3.0	4.4	<.1

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

## GUADALUPE RIVER BASIN

11166740 CALERO RESERVOIR NEAR NEW ALMADEN, CA--Continued

AT CENTER--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

## PHYTOPLANKTON

DATE TIME	MAR 21, 84			AUG 29, 84		
DEPTH (M)	1.0	3.0	6.0	1.0	2.0	3.0
TOTAL CELLS/ML	32718	26601	46267	17745	73187	26273
TAXA	CELLS/ML	CELLS/ML	CELLS/ML	CELLS/ML	CELLS/ML	CELLS/ML
CHLOROPHYTA (GREEN ALGAE)						
DICTYOSPHAERIUM sp.	--	--	--	--	--	2784
ELAKOTOPHRIX VIRIDIS	--	--	--	85	--	114
GLOEOCYSTIS sp.	--	--	--	142	--	28
KIRCHNERIELLA SUBSOLITARIA	--	--	--	170	--	114
NEPHROCYTIUM AGARDHIANUM	1053	--	2105	--	--	--
OOCYSTIS BORGEI	2500	--	1579	--	--	--
OOCYSTIS LACUSTRIS	--	658	1053	--	--	--
OOCYSTIS PARVA	--	--	--	966	710	1193
OOCYSTIS sp.	329	--	--	--	--	--
PANDORINA CHARKOWIENSIS	--	526	--	--	--	--
PEDIASTRUM DUPLEX	--	--	--	--	--	682
SCENEDESMUS ARMATUS	--	--	--	--	170	--
SCHROEDERIA SETIGERA	--	66	1579	57	142	--
SELENASTRUM MINUTUM	--	--	--	--	28	--
SPHAEROCYSTIS SCHROETERI	--	--	--	966	455	455
STAUROSTRUM sp.	--	--	--	28	--	--
TETRAEDRON MINIMUM	--	--	--	57	28	57
CHRYSPHYTA (GOLDEN-BROWN ALGAE)						
DINOBRYON DIVERGENS	1382	263	--	--	--	--
MALLOMONAS ACAROIDES	--	--	--	--	--	227
OCHROMONAS REPTANS	5724	1974	658	--	--	--
CYANOPHYTA (BLUE-GREEN ALGAE)						
ANABAENA sp.	--	--	--	--	--	682
APHANIZOMENON FLOS-AQUAE	--	--	--	1193	6534	2159
APHANOCAPSA DELICATISSIMA	--	--	--	6222	21819	8125
APHANOCAPSA ELACHISTA	--	--	--	568	684	57
APHANOCAPSA sp. 1	10855	15789	28816	--	--	--
APHANOCAPSA sp. 2	724	789	458	--	--	--
APHANOCAPSA sp. 3	921	--	263	--	--	--
APHANOTHECE SAXICOLA	--	--	--	--	--	2330
APHANOTHECE sp.	921	1776	921	--	--	--
CHROOCOCCUS sp.	--	--	--	28	3068	57
MERISMOPEDIA MINIMUM	--	--	--	256	2840	--
MICROCYSTIS sp.	--	--	--	--	1193	1250
SYNECHOCOCCUS AERUGINOSA	--	--	--	--	28	199
SYNECHOCOCCUS sp.	--	--	--	4432	30455	3523
SYNECHOCYSTIS sp.	--	--	--	--	1307	341
EUGLENOPHYTA (EUGLENOIDS)						
EUGLENA sp.	--	66	--	--	--	--
PYRROPHYTA (DINOFLLAGELLATES)						
CERATIUM HIRUNDINELLA	--	--	132	28	--	--
CRYPTOPHYTA (CRYPTOMONADES)						
CHROOMONAS sp.	--	--	--	28	114	85
CRYPTOMONAS OVATA	--	66	--	--	--	--
CRYPTOMONAS sp.	66	--	132	--	--	--
CYANOMONAS sp.	--	--	--	85	51	28
RHODOMONAS MINUTA	2434	2303	3947	--	--	--
NUMBER OF SPECIES	18	40	23	35	39	28
DRY WEIGHT (MG/L)	0.6	1.2	0.9	2.1	2.7	2.5

Phytoplankton analyzed by Chadwick &amp; Associates.

11166740 CALERO RESERVOIR NEAR NEW ALMADEN, CA--Continued

AT CENTER--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

## PHYTOPLANKTON

DATE TIME	MAR 21, 84			AUG 29, 84		
DEPTH (M)	1.0	3.0	6.0	1.0	2.0	3.0
TOTAL CELLS/ML	32718	26601	46267	17745	73187	26273
TAXA	CELLS/ML	CELLS/ML	CELLS/ML	CELLS/ML	CELLS/ML	CELLS/ML
BACILLARIOPHYTA (DIATOMS)						
ORDER CENTRALES						
<u>CYCLOTELLA</u> <u>OCCELLATA</u>	--	--	--	--	57	--
<u>CYCLOTELLA</u> sp.	132	329	--	57	114	142
<u>MELOSIRA</u> <u>GRANULATA</u>	--	17	--	63	462	--
<u>MELOSIRA</u> <u>GRANULATA</u>						
var. <u>ANGUSTISSIMA</u>	4211	592	2632	51	107	--
<u>MELOSIRA</u> <u>LIRATA</u>	--	--	--	114	--	--
<u>STEPHANODISCUS</u> sp.	--	--	--	682	1136	--
ORDER PENNALES						
<u>ACHNANTHES</u> <u>DEFLEXA</u>	--	--	--	30	--	--
<u>ACHNANTHES</u> <u>LANCEOLATA</u>	--	--	--	--	--	--
var. <u>DUBIA</u>	--	--	20	--	--	--
<u>ACHNANTHES</u> <u>LINEARIS</u> f. <u>CURTA</u>	--	--	--	--	5	--
<u>ACHNANTHES</u> <u>MICROCEPHALA</u>	--	32	--	--	--	--
<u>ACHNANTHES</u> <u>MINUTISSIMA</u>	--	5	61	--	--	--
<u>ACHNANTHES</u> sp.	--	5	--	15	--	--
<u>ASTERIONELLA</u> <u>FORMOSA</u>	461	161	40	--	5	--
<u>BACILLARIA</u> <u>PARADOXA</u>	--	--	--	15	--	--
<u>CYMBELLA</u> <u>ANGUSTATA</u>	--	--	--	15	--	--
<u>DENTICULA</u> sp.	--	9	--	--	--	--
<u>DIPLONEIS</u> sp.	--	5	20	--	5	--
<u>FRAGILARIA</u> <u>CAPUCINA</u>	--	46	--	--	--	--
<u>FRAGILARIA</u> <u>CROTONENSIS</u>	--	9	--	--	10	--
<u>FRAGILARIA</u> <u>VAUCHERIAE</u>						
var. <u>CAPITELLATA</u>	147	249	81	--	--	--
<u>GOMPHONEMA</u> sp.	--	9	--	--	--	--
<u>GYROSIGMA</u> <u>ACUMINATUM</u>	--	--	--	15	--	--
<u>NAVICULA</u> <u>CANALIS</u>	--	5	--	--	--	--
<u>NAVICULA</u> <u>CAPITATA</u>	--	9	--	--	--	--
<u>NAVICULA</u> <u>MENISCULUS</u>						
var. <u>UPSALIENSIS</u>	--	9	--	--	--	--
<u>NAVICULA</u> <u>RHYNCOCEPHALA</u>	--	--	20	--	--	--
<u>NAVICULA</u> <u>SECRETA</u>						
var. <u>APICULATA</u>	--	9	20	--	--	--
<u>NAVICULA</u> sp.	--	5	--	62	--	--
<u>NITZSCHIA</u> <u>ACICULARIS</u>	--	9	--	--	10	--
<u>NITZSCHIA</u> <u>AMPHIBIA</u>	--	9	--	--	--	--
<u>NITZSCHIA</u> <u>COMMUNIS</u>	--	9	--	--	--	--
<u>NITZSCHIA</u> <u>INCONSPICUA</u>	--	9	--	--	--	--
<u>NITZSCHIA</u> <u>LATENS</u>	--	18	--	--	5	--
<u>NITZSCHIA</u> <u>LINEARIS</u>	660	5	--	--	--	--
<u>NITZSCHIA</u> <u>MICROCEPHALA</u>	--	--	--	77	15	--
<u>NITZSCHIA</u> <u>PALEA</u>	132	--	--	--	--	--
<u>NITZSCHIA</u> <u>THERMALIS</u>	--	--	--	15	--	--
<u>NITZSCHIA</u> sp.	--	9	20	30	20	--
<u>SURIELLA</u> <u>OVATA</u>	66	--	--	--	--	--
<u>SYNEDRA</u> <u>RUMPENS</u>						
var. <u>SCOTIA</u>	--	--	--	--	20	57
<u>SYNEDRA</u> <u>ULNA</u>	--	5	--	--	--	--
<u>SYNEDRA</u> <u>ULNA</u> var. <u>CHASEANA</u>	--	23	--	--	--	--
CHLOROPHYTA (GREEN ALGAE)						
<u>ANKISTRODESMUS</u> <u>BRAUNII</u>	--	--	--	--	114	85
<u>ANKISTRODESMUS</u> <u>CONVOLUTUS</u>	--	--	--	--	28	--
<u>ANKISTRODESMUS</u> <u>NANNOSELENE</u>	--	--	--	142	57	--
<u>BOTRYOCOCCUS</u> sp.	--	--	--	824	909	511
<u>CARTERIA</u> sp.	--	--	132	--	57	--
<u>CHLAMYDOMONAS</u> sp.	--	461	--	199	369	--
<u>CHLOROGONIUM</u> sp.	--	--	--	--	28	51
<u>CLOSTERIUM</u> <u>GRACILE</u>	--	--	--	28	28	28
<u>COELASTRUM</u> sp.	--	--	1578	--	--	909
<u>CRUCIGENIA</u> <u>TETRAPEDIA</u>	--	263	--	--	--	--

Phytoplankton analyzed by Chadwick &amp; Associates.

## GUADALUPE RIVER BASIN

11167980 LEXINGTON RESERVOIR NEAR LOS GATOS, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--

CHEMICAL ANALYSES: October 1983 to September 1984.

BIOLOGICAL DATA: October 1983 to September 1984.

AT CENTER (Lat 37°11'08", long 121°59'17", T.9 S., R.9 W., Santa Clara County,  
Hydrologic Unit 18050003)

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)
MAR , 1984						
22...	1000	.50	316	9.0	14.5	755
22...	1001	1.0	316	8.8	14.5	755
22...	1002	2.0	317	8.8	14.5	755
22...	1003	3.0	317	8.7	14.5	755
22...	1004	4.0	318	8.6	14.0	755
22...	1005	5.0	318	8.6	14.0	755
22...	1006	6.0	318	8.5	13.5	755
22...	1007	7.0	318	8.4	13.5	755
22...	1008	8.0	316	8.3	13.0	755
22...	1009	9.0	319	8.3	13.0	755
22...	1010	10.0	320	8.2	12.5	755
22...	1011	11.0	319	8.1	12.5	755
22...	1012	12.0	317	8.0	12.0	755
22...	1013	13.0	318	8.0	12.0	755
22...	1014	14.0	318	7.9	12.0	755
22...	1015	15.0	317	7.8	12.0	755
22...	1016	15.5	317	7.8	12.0	755

DATE	TIME	SAM- PLING DEPTH (M)	BARO- METRIC PRES- SURE (MM OF HG)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM
MAR , 1984									
22...	1045	1.0	755	140	18	35	13	12	15
22...	1050	7.0	755	140	21	36	13	12	15
22...	1055	14.0	755	140	21	36	13	12	15

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	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 SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAR , 1984										
22...	.5	1.5	43	9.1	.2	13	200	.27	<.01	<.10
22...	.5	1.5	42	9.1	.2	13	200	.27	<.01	<.10
22...	.5	1.4	43	9.0	.2	14	200	.28	.01	<.10

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,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)
MAR , 1984									
22...	<.10	<.01	<.01	--	--	.60	.20	.04	.01
22...	<.10	.07	.01	.43	.19	.50	.20	.01	<.01
22...	<.10	.04	.01	.26	.29	.30	.30	.02	.01

See footnote at end of table.

AT CENTER--Continued

DATE	TIME	SAMPLING DEPTH (M)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)
MAR				
22...	1332	1.0	5.2	<.1
22...	1334	3.0	6.4	<.1
22...	1336	6.0	3.0	<.1

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

## PHYTOPLANKTON

DATE	TIME	DEPTH (M)	TOTAL CELLS/ML	TAXA	CELLS/ML	CELLS/ML	CELLS/ML
MAR 22, 84		1.0	3.0	6.0	56053	17961	38472
BACILLARIOPHYTA (DIATOMS)							
ORDER CENTRALES							
				CYCLOTELLA MENECHINIANA	--	987	--
				MELOSIRA GRANULATA	526	--	--
				MELOSIRA GRANULATA var. ANGUSTISSIMA	--	--	526
				MELOSIRA ITALICA	--	263	2368
				MELOSIRA LIRATA	15789	7237	17632
				MELOSIRA sp.	263	--	--
				RHIZOSOLENIA ERIENSIS	526	--	--
				STEPHANODISCUS DUBIUS	1184	593	132
				STEPHANODISCUS NIAGARAE	132	--	--
ORDER PENNALES							
				ASTERIONELLA FORMOSA	6316	526	2105
				EUNOTIA sp.	132	--	--
				FRAGILARIA CROTONENSIS	--	987	--
				NITZSCHIA PALEA	--	--	263
				NITZSCHIA sp.	132	--	--
				SYNEDRA DELICATISSIMA	658	394	2632
				SYNEDRA sp.	526	--	--
CHLOROPHYTA (GREEN ALGAE)							
				ACTINASTRUM HANTZSCHII	1316	--	--
				CHLAMYDOMONAS sp. 1	2237	263	263
				CLOSTERIOFUSIS LONGISSIMA	132	--	132
				CLOSTERIUM GRACILE var. ELONGATUM	263	--	132
				CRUCIGENIA TETRAPEDIA	--	--	526
				QUADRIGULA sp.	263	--	--
				SCENEDESMUS SERRATUS	--	--	526
				ZOOPORES	--	724	658
CHRYSTOPHYTA (GOLDEN-BROWN ALGAE)							
				CHROMULINA sp.	8158	--	--
				MALLOMONAS CAUDATA	--	--	263
CYANOPHYTA (BLUE-GREEN ALGAE)							
				APHANIZOMENON sp.	3947	--	--
				APHANOCAPSA sp. 1	2895	855	1316
				APHANOCAPSA sp. 2	3026	--	132
				APHANOCAPSA sp. 3	789	--	--
				CHROOCOCCUS sp.	--	3026	526
				DACTYLOCOCCOPSIS ACICULARIS	132	--	--
				DACTYLOCOCCOPSIS RAPHIIDIODES	2632	396	526
				GLOBOTHECE LINEARIS	--	--	263
				MERISMOPEDIA MINIMA	--	--	2368
CRYPTOPHYTA (CRYPTOMONADS)							
				CHILOMONAS PARAMACIUM	1053	658	1711
				CHROMONAS sp.	--	--	2237
				CRYPTOMONAS sp. 1	263	66	--
				CRYPTOMONAS sp. 2	658	197	182
				RHODOMONAS sp.	2105	789	1053
NUMBER OF SPECIES							
DRY WEIGHT (MG/L)							
				27	16	24	
				1.4	1.1	0.2	

Phytoplankton analyzed by Chadwick &amp; Associates.

## GUADALUPE RIVER BASIN

11167980 LEXINGTON RESERVOIR NEAR LOS GATOS, CA--Continued

AT DAM (Lat 37°11'57", long 121°59'12", T.9 S., R.9 W., Santa Clara County,  
Hydrologic Unit 18050003)

		TIME		SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)			
DATE											
MAR , 1984											
22...	1300			.50	314	8.6	14.0	755			
22...	1301			1.0	314	8.6	14.0	755			
22...	1302			2.0	315	8.6	13.5	755			
22...	1303			3.0	315	8.6	13.5	755			
22...	1304			4.0	315	8.6	13.5	755			
22...	1305			5.0	316	8.6	13.5	755			
22...	1306			6.0	316	8.6	13.5	755			
22...	1307			7.0	316	8.5	13.5	755			
22...	1308			8.0	318	8.4	13.0	755			
22...	1309			9.0	319	8.3	12.5	755			
22...	1310			10.0	318	8.2	12.5	755			
22...	1311			11.0	317	8.2	12.0	755			
22...	1312			12.0	315	8.1	12.0	755			
22...	1313			13.0	317	8.1	12.0	755			
22...	1314			14.0	317	8.1	11.5	755			
22...	1315			15.0	317	8.0	11.5	755			
22...	1316			16.0	316	8.0	11.5	755			
22...	1317			17.0	314	7.9	11.5	755			
22...	1318			18.0	316	7.9	11.5	755			
22...	1319			19.0	316	7.9	11.5	755			
DATE		TIME	SAM- PLING DEPTH (M)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	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)
MAR , 1984											
22...	1330		1.0	315	7.6	11.0	755	140	25	35	13
22...	1340		9.0	--	--	--	755	140	18	35	13
22...	1345		20.0	--	--	--	755	140	17	36	13
DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)
MAR , 1984											
22...	12	15	.5	1.5	43	9.1	.2	13	200	.27	<.01
22...	12	15	.5	1.4	42	9.0	.2	13	200	.27	<.01
22...	12	15	.5	1.5	43	9.0	.2	14	200	.28	<.01
DATE	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	
MAR , 1984											
22...	<.10	<.10	.06	<.01	.34	.40	<.20	.01	.01	.02	
22...	<.10	<.10	.07	<.01	.33	.40	.20	.01	.01	.01	
22...	<.10	<.10	<.01	<.01	--	.30	.30	.01	<.01	.02	
DATE		TIME	SAM- PLING DEPTH (M)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)	CHLOR-B PHYTO- PLANK- TON CHROMO FLUOROM (UG/L)						
MAR											
22...	1332	1.0	5.2	<.1							
22...	1334	3.0	6.4	<.1							
22...	1336	6.0	3.0	<.1							

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

## 11167980 LEXINGTON RESERVOIR NEAR LOS GATOS, CA--Continued

## AT DAM--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

## PHYTOPLANKTON

DATE	MAR 22, 84		
TIME			
DEPTH (M)	1.0	3.0	6.0
TOTAL CELLS/ML	45000	41971	11189
TAXA	CELLS/ML	CELLS/ML	CELLS/ML
BACILLARIOPHYTA (DIATOMS)			
ORDER CENTRALES			
<u>CYCLOTELLA MENEGHINIANA</u>	--	--	197
<u>CYCLOTELLA STELLIGERA</u>	--	394	--
<u>MELOSIRA GRANULATA</u>	2105	--	1711
<u>MELOSIRA LIRATA</u>	11842	11842	1711
<u>RHIZOSOLENIA ERIENSIS</u>	263	263	--
<u>STEPHANODISCUS DUBIUS</u>	--	--	132
<u>STEPHANODISCUS NIAGARAE</u>	--	132	66
ORDER PENNALES			
<u>ASTERIONELLA FORMOSA</u>	1053	4474	1974
<u>FRAGILARIA CROTONENSIS</u>	--	--	329
<u>NAVICULA</u> sp.	395	--	132
<u>NITZSCHIA ACICULARIS</u>	--	--	66
<u>SYNEDRA DELICATISSIMA</u>	789	1447	658
<u>SYNEDRA</u> sp.	263	--	--
CHLOROPHYTA (GREEN ALGAE)			
<u>ANKISTRODESMUS FALCATUS</u>	--	--	66
<u>CARTERIA</u> sp.	--	132	--
<u>CHLAMYDOMONAS</u> sp. 1	132	263	66
<u>CHLAMYDOMONAS</u> sp. 2	--	--	66
<u>CLOSTERIOPSIS LONGISSIMA</u>	--	--	66
<u>CLOSTERIUM GRACILE</u> var. <u>ELONGATUM</u>	--	263	66
<u>COELASTRUM</u> sp.	--	--	P
<u>CRUCIGENIA TETRAPEDIA</u>	526	--	--
<u>ELAKOTOTRIX</u> sp.	263	--	--
<u>QUADRIGULA</u> sp.	--	263	--
<u>SCENEDESMUS SERRATUS</u>	1053	--	--
<u>ZOOSPORES</u>	132	--	--
CHRYSOPHYTA (GOLDEN-BROWN ALGAE)			
<u>CHROMULINA</u> sp.	2368	2763	395
<u>MALLOMONAS CAUDATA</u>	263	1184	132
CYANOPHYTA (BLUE-GREEN ALGAE)			
<u>APHANOCAPSA</u> sp. 1	13684	5395	1842
<u>APHANOCAPSA</u> sp. 2	6316	656	--
<u>APHANOCAPSA</u> sp. 3	263	3816	--
<u>APHANOTHECE</u> sp.	395	--	--
<u>CHROOCOCCUS</u> sp.	--	--	526
<u>DACTYLOCOCCOPSIS ACICULARIS</u>	--	--	132
<u>DACTYLOCOCCOPSIS RAPIDIOTIDES</u>	1711	2237	--
EUGLENOPHYTA (EUGLENOIDS)			
<u>TRACHELONAS</u> sp.	--	--	66
PYRROPHYTA (DINOFAGELLATES)			
<u>DINOFAGELLATE</u>	--	132	--
CRYPTOPHYTA (CRYPTOMONADS)			
<u>CHILOMONAS PARAMAECIUM</u>	--	921	132
<u>CHROOMONAS</u> sp.	--	--	395
<u>CRYPTOMONAS GRACILIS</u>	--	--	66
<u>CRYPTOMONAS</u> sp. 1	132	--	--
<u>CRYPTOMONAS</u> sp. 2	526	3947	--
<u>RHODOMONAS</u> sp.	526	1447	197
NUMBER OF SPECIES	22	20	26
DRY WEIGHT (MG/L)	0.3	2.6	0.2

P Present.

Phytoplankton analyzed by Chadwick &amp; Associates

## GUADALUPE RIVER BASIN

11169000 GUADALUPE RIVER AT SAN JOSE, CA

LOCATION (REVISED).--Lat 37°20'00", long 121°51'00", Santa Clara County, Hydrologic Unit 18050003, on right bank 150 ft upstream of St. John street bridge, one block below Santa Clara Avenue, and 100 ft downstream from Los Gatos Creek.

DRAINAGE AREA.--146 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to 1945, published as Guadalupe Creek at San Jose.

REVISED RECORDS.--WSP 1315-B: 1943(M), 1945(M), 1949(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 72.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Lexington Reservoir 12 mi upstream and Calero, Almaden, Guadalupe Reservoirs, and Lake Elsan given elsewhere in this report, with water released during summer for percolation in spreading basins on tributaries. During current year, 13,870 acre-ft was diverted by San Jose Water Works for urban use and zero acre-ft was diverted by Santa Clara Valley Water District into Alamitos percolation ponds from Coyote Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,150 ft<sup>3</sup>/s Apr. 2, 1958, gage height, 16.55 ft; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,320 ft<sup>3</sup>/s Nov. 11, gage height, 6.44 ft; minimum daily, 13 ft<sup>3</sup>/s Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	26	35	87	26	29	24	27	27	24	23	24
2	22	21	32	81	24	29	24	26	28	24	23	23
3	17	17	408	80	25	29	19	27	25	24	24	23
4	20	22	108	76	22	26	21	27	23	23	25	24
5	14	22	71	73	21	33	23	27	24	22	24	23
6	14	19	70	93	22	29	22	27	23	24	24	23
7	15	20	60	105	25	26	23	27	23	24	24	23
8	16	20	53	108	24	28	24	26	22	24	24	22
9	14	22	505	105	68	26	23	26	22	24	25	21
10	13	639	198	91	41	28	26	27	23	24	23	21
11	14	443	420	83	29	29	25	27	24	24	22	21
12	17	167	154	75	28	27	25	27	23	24	21	24
13	15	297	100	67	126	107	25	25	23	24	22	23
14	15	144	86	66	84	73	26	25	23	23	23	23
15	17	34	75	69	82	142	27	26	22	24	23	24
16	17	56	58	68	75	80	25	27	25	23	22	23
17	17	304	52	63	28	55	23	27	25	24	22	23
18	18	79	46	49	28	29	77	26	24	22	22	21
19	19	108	44	39	27	31	44	27	23	21	22	23
20	16	234	39	38	29	28	20	27	22	23	21	23
21	15	54	35	52	85	29	19	26	23	23	22	23
22	22	49	97	45	28	39	20	27	23	23	21	23
23	21	53	70	44	31	33	21	27	23	24	22	23
24	16	433	301	33	29	30	23	26	23	24	21	23
25	24	178	979	30	29	29	22	26	23	24	21	22
26	26	60	304	28	28	30	23	26	23	24	21	22
27	21	53	142	28	29	28	23	26	24	22	21	23
28	16	46	155	28	28	30	23	24	23	21	20	24
29	19	42	139	27	29	28	23	25	23	23	20	23
30	25	37	257	27	---	28	25	26	24	24	21	23
31	16	---	118	30	---	48	---	27	---	24	23	---
TOTAL	615	3699	5211	1888	1150	1236	768	817	706	725	692	684
MEAN	19.8	123	168	60.9	39.7	39.9	25.6	26.4	23.5	23.4	22.3	22.8
MAX	84	639	979	108	126	142	77	27	28	24	25	24
MIN	13	17	32	27	21	26	19	24	22	21	20	21
AC-FT	1220	7340	10340	3740	2280	2450	1520	1620	1400	1440	1370	1360
CAL YR 1983	TOTAL	102974	MEAN	282	MAX	4250	MIN	13	AC-FT	204200		
WTR YR 1984	TOTAL	18191	MEAN	49.7	MAX	979	MIN	13	AC-FT	36080		

11169500 SARATOGA CREEK AT SARATOGA, CA

LOCATION.--Lat 37°15'16", long 122°02'18", in Quito Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank on upstream side of private road bridge, 0.5 mi southwest of Saratoga, and 0.7 mi downstream from diversion dam.

DRAINAGE AREA.--9.22 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1933 to current year. Prior to October 1951, published as Campbell Creek at Saratoga.

REVISED RECORDS.--WSP 1445: 1940, 1952(M). WSP 1929: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 500 ft, from topographic map. Prior to Dec. 6, 1968, at site 40 ft downstream at different datum.

REMARKS.--Records fair. Water is diverted for municipal use by San Jose Water Works at diversion dam above station.

AVERAGE DISCHARGE (adjusted for diversion).--51 years, 10.7 ft<sup>3</sup>/s, 7,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,730 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 6.40 ft site and datum then in use, from rating curve extended above 510 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; maximum gage height, 7.03 ft Jan. 24, 1983; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 110 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1745	147	3.84	Dec. 9	1500	205	4.08
Nov. 24	1245	179	3.98	Dec. 25	0530	*426	4.74
Dec. 3	1230	169	3.94				

Minimum daily, 0.31 ft<sup>3</sup>/s Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.68	15	34	8.3	7.1	6.0	1.4	.65	.71	.58	3.8
2	.39	.58	13	30	7.8	6.8	5.9	2.0	.60	.85	.66	.98
3	.32	.54	80	27	7.6	6.6	5.6	2.8	.63	.92	.59	.98
4	.32	.56	41	25	7.6	6.6	5.6	2.5	.74	.90	.55	.87
5	.31	.54	26	24	7.4	6.5	5.7	1.2	.88	.86	.56	.76
6	.33	.50	20	22	7.4	6.3	5.5	1.2	.81	1.0	.57	.78
7	.38	.54	17	21	7.2	6.2	5.2	2.7	.74	.94	.46	.74
8	.32	.52	15	20	7.2	6.2	5.3	2.8	.70	.90	.50	.69
9	.34	.54	95	19	8.5	6.0	5.2	1.8	.73	1.2	.72	.70
10	.41	43	75	18	8.2	6.0	5.7	1.7	.77	.86	.78	.69
11	.39	21	95	17	7.5	5.8	5.3	1.6	.72	.76	.73	.74
12	.35	9.9	70	17	7.3	5.8	5.0	1.8	.71	.73	.83	.74
13	.35	16	48	17	13	13	4.0	1.5	.75	.78	1.0	.67
14	.37	8.3	38	15	10	10	1.9	1.2	.74	.71	.96	.66
15	.37	3.3	32	14	14	12	2.0	1.1	.66	.73	1.0	.69
16	.42	9.1	29	14	17	10	2.2	.84	.71	.71	1.0	.70
17	.37	38	26	14	13	11	2.1	.80	.67	.67	1.0	.64
18	.37	16	24	13	12	9.5	3.2	.78	.63	.69	.99	.66
19	.41	16	22	13	11	9.0	3.2	.76	.76	.67	.97	.76
20	.36	31	20	12	9.9	8.4	2.2	.71	.71	.70	1.0	.75
21	.37	20	17	12	10	8.0	2.0	.86	.78	.70	1.0	.73
22	.39	14	17	11	9.3	7.5	1.9	.69	.90	.76	.99	.66
23	.39	11	17	11	8.8	7.2	1.9	.73	.94	.81	1.0	.65
24	.45	68	48	10	8.5	7.0	1.8	.76	1.1	.86	1.1	.64
25	.43	38	256	10	8.2	6.9	2.0	.66	1.2	.73	1.1	.62
26	.51	22	110	9.9	7.9	6.8	1.8	.82	.93	.51	1.1	.65
27	.43	17	80	9.6	7.7	6.6	2.7	.76	.93	.54	1.1	.63
28	.45	14	60	9.2	7.5	6.3	1.6	.66	.87	.51	2.1	.56
29	.52	13	49	9.2	7.4	6.1	1.5	.64	.87	.57	4.3	.59
30	.74	18	47	8.9	---	6.0	1.5	.71	.75	.62	4.5	.60
31	.78	---	39	8.8	---	6.1	---	.72	---	.62	5.0	---
TOTAL	13.74	451.60	1541	495.6	267.2	233.3	105.5	39.20	23.58	23.52	38.74	24.33
MEAN	.44	15.1	49.7	16.0	9.21	7.53	3.52	1.26	.79	.76	1.25	.81
MAX	1.4	68	256	34	17	13	6.0	2.8	1.2	1.2	5.0	3.8
MIN	.31	.50	13	8.8	7.2	5.8	1.5	.64	.60	.51	.46	.56
AC-FT	27	896	3060	983	530	463	209	78	47	47	77	48
a	102	31	0	0	0	0	113	170	81	41	9.7	0
CAL YR 1983	TOTAL	12809.38	MEAN	35.1	MAX	491	MIN	.31	AC-FT	25410		
WTR YR 1984	TOTAL	3257.31	MEAN	8.90	MAX	256	MIN	.31	AC-FT	6460		

a Diversion, in acre-feet, furnished by San Jose Water Works.

## COYOTE CREEK BASIN

## RESERVOIRS IN COYOTE CREEK BASIN, CA

11169850 COYOTE LAKE.--Lat 37°07'06", long 121°32'55", in SE 1/4 sec.29, T.9 S., R.4 E., Santa Clara County, Hydrologic Unit 18050003, at center of dam on Coyote Creek, 3.8 mi northeast of San Martin. DRAINAGE AREA, 120 mi<sup>2</sup>. PERIOD OF RECORD, February 1936 to current year. Monthly contents prior to October 1959, published in WSP 1735. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Santa Clara Valley Water District).

Reservoir is formed by rockfill and earthfill dam completed in 1936. Capacity, 23,700 acre-ft between elevations 693.3 ft, invert of outlet tunnel and 777.2 ft, crest of spillway. Water released down Coyote Creek for storage in Anderson Lake. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 28,120 acre-ft Dec. 8, 1950, elevation, 782.5 ft; no contents at times.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 23,680 acre-ft Mar. 24 to Apr. 3, elevation, 777.20 ft; minimum observed; no contents Oct. 1 to Nov. 20, elevation 692.13 ft.

11169920 ANDERSON LAKE.--Lat 37°09'56", long 121°37'42", in southeast corner of La Laguna Seca Grant, Santa Clara County, Hydrologic Unit 18050003, at center of dam on Coyote Creek, 2.5 mi northeast of Madrone. DRAINAGE AREA, 195 mi<sup>2</sup>. PERIOD OF RECORD, December 1950 to current year. Monthly contents prior to October 1959, published in WSP 1735. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Santa Clara Valley Water District).

Reservoir is formed by earthfill and rockfill dam completed in 1950. Capacity, 91,280 acre-ft between elevations 439 ft, invert of outlet tunnel and 625.0 ft, crest of spillway. Water released down Coyote Creek for irrigation and ground-water recharge by percolation. Record of contents furnished by Santa Clara Valley Water District.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 95,990 acre-ft Apr. 3, 1958, elevation, 628.67 ft, from floodmarks; no contents at times in 1960-62.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 81,100 acre-ft Oct. 1, elevation, 616.67 ft; minimum observed, 50,040 acre-ft Sept. 30, elevation, 584.68 ft.

MONTHEND CONTENTS, IN ACRE-FT (INCLUDING MOMENTARY  
STORAGE ABOVE SPILLWAY CREST), AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Coyote Lake	Anderson Lake
Sept. 30, 1983.....	0	81,100
Oct. 31.....	0	77,530
Nov. 30.....	5,100	70,400
Dec. 31.....	20,030	61,070
Jan. 31, 1984.....	19,870	60,500
Feb. 29.....	21,900	60,750
Mar. 31.....	23,680	60,500
Apr. 30.....	19,710	62,770
May 31.....	15,330	63,580
June 30.....	13,140	60,830
July 31.....	12,730	55,880
Aug. 31.....	12,250	51,180
Sept. 30.....	11,840	50,040

## 11170000 COYOTE CREEK NEAR MADRONE, CA

LOCATION.--Lat 37°10'06", long 121°38'55", near southeast corner of La Laguna Seca Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank 1.2 mi downstream from Anderson Dam, and 1.8 mi northeast of Madrone.

DRAINAGE AREA.--196 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1902 to September 1912, December 1916 to current year. Records for water years 1917-19 incomplete, yearly estimates published in WSP 1315-B. Published as Coyote River near Madrone 1902-12, 1916-26.

REVISED RECORDS.--WSP 1345: 1932, 1935(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 375 ft, from topographic map. Prior to Mar. 1, 1950, nonrecording gage and water-stage recorders at various sites within 1.4 mi upstream at different datums.

REMARKS.--Records good. Flow regulated by Coyote and Anderson Lakes (stations 11169850 and 11169920); water released during summer. Water is diverted to Main Avenue percolation ponds by Santa Clara Valley Water District.

AVERAGE DISCHARGE (unadjusted).--78 years, 66.3 ft<sup>3</sup>/s, 48,030 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft<sup>3</sup>/s probably Mar. 7, 1911 (record furnished by Duryea, Haehl, and Gilman); no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 352 ft<sup>3</sup>/s Dec. 3, gage height, 3.36 ft; no flow several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	51	342	339	13	13	24	39	61	73	73	43
2	50	51	343	339	13	16	24	39	61	73	73	42
3	49	54	341	339	13	18	24	38	62	73	72	43
4	49	57	234	210	13	18	25	37	63	72	72	43
5	49	57	157	124	13	17	25	38	62	72	72	43
6	49	57	92	171	13	18	35	38	61	72	73	43
7	49	57	55	208	13	18	41	47	61	73	71	41
8	49	57	55	191	13	18	41	62	62	74	71	36
9	49	57	108	96	13	19	41	61	63	73	71	36
10	49	59	246	96	13	25	41	61	63	73	71	15
11	49	75	342	96	13	25	45	61	62	73	72	.16
12	49	87	343	62	13	24	49	62	61	73	73	.04
13	49	87	344	20	14	25	49	63	61	72	73	0
14	49	87	344	20	13	25	49	62	62	72	72	0
15	49	87	343	13	13	25	49	62	62	72	71	0
16	49	87	343	6.7	13	25	49	62	62	71	71	0
17	49	87	340	6.7	13	25	49	61	61	71	71	0
18	49	106	170	6.7	13	25	50	62	68	72	71	0
19	49	140	51	6.7	13	25	50	62	72	71	72	0
20	49	169	49	6.7	13	25	49	61	72	72	73	0
21	49	181	49	6.7	13	24	50	61	72	72	72	0
22	49	207	49	6.7	13	25	49	61	72	72	72	0
23	49	269	112	6.7	13	24	49	61	72	72	72	0
24	49	277	147	6.5	13	25	40	62	73	72	71	0
25	50	321	250	15	13	24	5.7	61	72	72	72	0
26	52	343	339	20	13	25	18	62	72	72	72	0
27	52	342	339	10	13	24	38	63	72	72	71	0
28	51	342	339	13	13	25	38	62	73	71	70	0
29	51	342	338	13	13	24	39	62	73	72	58	0
30	51	342	338	13	---	24	39	62	73	72	46	0
31	52	---	339	13	---	25	---	62	---	72	44	---
TOTAL	1538	4535	7281	2481.1	378	698	1174.7	1757	1986	2238	2158	385.20
MEAN	49.6	151	235	80.0	13.0	22.5	39.2	56.7	66.2	72.2	69.6	12.8
MAX	52	343	344	339	14	25	50	63	73	74	73	43
MIN	49	51	49	6.5	13	13	5.7	37	61	71	44	0
AC-FT	3050	9000	14440	4920	750	1380	2330	3490	3940	4440	4280	764
a	799	442	125	139	415	469	708	765	672	694	538	200
CAL YR 1983	TOTAL	109586	MEAN	300	MAX	4170	MIN	12	AC-FT	217400		
WTR YR 1984	TOTAL	26610	MEAN	72.7	MAX	344	MIN	0	AC-FT	52780		

a Diversion, in acre-feet, furnished by Santa Clara Valley Water District.

## COYOTE CREEK BASIN

11172100 UPPER PENITENCIA CREEK AT SAN JOSE, CA

LOCATION.--Lat 37°23'43", long 121°49'38", on north boundary of San Jose Pala Grant, Santa Clara County, Hydrologic Unit 18050003, on left bank at downstream side of Dorel Drive bridge, and 0.1 mi upstream from Dutard Creek near northeast limits of San Jose.

DRAINAGE AREA.--21.5 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Concrete control since Sept. 12, 1963. Datum of gage is 265.30 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 3, 1962, at site 0.4 mi downstream at different datum.

REMARKS.--Records good. Flow slightly regulated by Cherry Flat Reservoir 5 mi upstream, capacity, 500 acre-ft.

AVERAGE DISCHARGE.--23 years, 6.47 ft<sup>3</sup>/s, 4,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,970 ft<sup>3</sup>/s Mar. 31, 1982, gage height, 8.71 ft in gage well, 9.71 ft from outside gage, from rating curve extended above 360 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge known since at least 1935, 2,100 ft<sup>3</sup>/s Apr. 2, 1958, from information furnished by Santa Clara Valley Water District.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 20	1200	222	4.44
Nov. 24	1415	*407	4.93
Dec. 9	1815	153	4.19

Minimum daily, 0.20 ft<sup>3</sup>/s Sept. 9, 10, 25, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.1	6.1	29	6.3	7.5	5.6	2.9	1.3	.51	.37	.34
2	1.2	1.0	5.2	25	6.2	7.2	5.2	3.0	1.2	.46	.37	.30
3	.95	1.0	14	21	6.0	6.8	5.1	2.9	1.3	.46	.37	.28
4	.84	.94	20	18	6.0	6.4	4.9	2.8	1.4	.45	.36	.25
5	.75	.89	12	15	5.9	7.0	4.7	2.9	1.5	.47	.35	.23
6	.76	.87	9.7	14	5.8	7.2	4.7	2.7	1.6	.49	.35	.23
7	.77	.85	8.5	13	6.2	7.2	4.6	2.6	1.6	.46	.36	.23
8	.76	.88	8.5	12	6.5	7.1	4.8	2.5	1.5	.42	.31	.21
9	.73	1.0	53	11	7.2	6.9	4.6	2.6	1.3	.41	.34	.20
10	.74	1.6	64	10	8.8	6.8	4.8	2.6	1.2	.53	.35	.20
11	.77	2.9	70	9.5	7.0	6.9	4.7	2.4	1.1	.53	.37	.21
12	.75	2.6	66	9.0	7.1	6.7	4.4	2.4	1.1	.57	.36	.21
13	.77	5.2	41	8.7	19	11	4.3	2.3	1.1	.40	.33	.22
14	.79	3.9	32	8.3	21	10	4.2	2.2	1.1	.38	.33	.22
15	.78	2.0	25	7.8	23	10	4.1	2.3	1.1	.33	.37	.23
16	.75	2.0	20	8.9	63	8.7	4.0	2.3	1.1	.30	.33	.23
17	.77	27	19	8.1	34	11	4.0	2.2	.99	.32	.31	.22
18	.76	9.9	14	7.4	25	8.2	4.7	2.2	.94	.34	.29	.22
19	.79	16	13	7.1	19	8.0	5.7	2.1	.92	.34	.27	.22
20	.82	118	11	6.9	15	7.4	4.7	2.1	1.0	.35	.28	.25
21	.84	41	9.8	7.1	37	6.8	4.2	2.0	.93	.36	.30	.28
22	.80	15	16	6.9	25	6.5	4.2	2.0	.87	.38	.30	.27
23	.81	10	25	6.6	19	6.0	4.0	2.0	.83	.38	.30	.26
24	.84	110	39	6.3	15	5.7	4.0	1.9	.74	.42	.35	.22
25	.79	74	102	6.4	13	5.7	3.6	1.9	.66	.44	.31	.20
26	.77	30	85	6.1	11	5.7	2.9	1.9	.63	.43	.32	.20
27	.75	17	75	5.9	9.8	5.7	2.9	1.7	.59	.42	.32	.21
28	.74	11	53	5.7	9.1	5.3	2.8	1.6	.60	.42	.35	.22
29	.80	8.8	38	5.7	8.0	5.1	2.8	1.5	.56	.40	.34	.22
30	1.0	7.2	45	5.7	---	5.0	2.9	1.4	.56	.38	.33	.26
31	1.2	---	36	6.0	---	6.0	---	1.4	---	.36	.34	---
TOTAL	26.39	523.63	1035.8	318.1	444.9	221.5	128.1	69.3	31.32	12.91	10.33	7.04
MEAN	.85	17.5	33.4	10.3	15.3	7.15	4.27	2.24	1.04	.42	.33	.23
MAX	1.8	118	102	29	63	11	5.7	3.0	1.6	.57	.37	.34
MIN	.73	.85	5.2	5.7	5.8	5.0	2.8	1.4	.56	.30	.27	.20
AC-FT	52	1040	2050	631	882	439	254	137	62	26	20	14
CAL YR 1983	TOTAL	11407.12	MEAN	31.3	MAX	364	MIN	.73	AC-FT	22630		
WTR YR 1984	TOTAL	2829.32	MEAN	7.73	MAX	118	MIN	.20	AC-FT	5610		

11176000 ARROYO MOCHO NEAR LIVERMORE, CA

LOCATION.--Lat 37°37'35", long 121°42'13", in NW 1/4 SE 1/4 sec.36, T.3 S., R.2 E., Alameda County, Hydrologic Unit 18050004, on right bank 40 ft downstream from Mines Road bridge, 2.4 mi upstream from small right-bank tributary, and 5.2 mi southeast of Livermore.

DRAINAGE AREA.--38.2 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1912 to September 1930, October 1963 to current year. Records for water year 1914 incomplete, yearly estimate and monthly discharge only for some months, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 746.49 ft National Geodetic Vertical Datum of 1929. January 1912 to October 1914 at present site at different datum. November 1914 to Sept. 30, 1930, at site 1 mi upstream at different datum.

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

AVERAGE DISCHARGE.--39 years, 5.35 ft<sup>3</sup>/s, 3,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 2,250 ft<sup>3</sup>/s Jan. 24, 1983, gage height, 8.80 ft, from flood marks; from rating curve extended above 600 ft<sup>3</sup>/s; no flow for parts of most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 23, 1955, discharge 1,880 ft<sup>3</sup>/s, by slope-area measurement of maximum flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1715	246	7.36	Dec. 9	1945	362	7.76
Dec. 3	1830	169	7.06	Dec. 25	1030	*396	7.86

Minimum, no flow several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	1.2	4.1	18	6.0	6.5	4.9	2.9	2.0	.54	.10	.08
2	3.1	1.2	12	16	6.0	6.2	4.8	2.9	1.9	.32	.10	.06
3	2.4	1.1	61	15	5.9	6.2	4.8	2.7	1.7	.09	.10	.04
4	2.0	1.1	36	14	5.7	6.1	4.7	2.6	1.6	.09	.10	.04
5	2.0	1.1	21	13	5.7	5.9	4.6	2.4	1.8	.10	.10	.03
6	2.0	1.1	12	13	5.3	5.7	4.6	2.5	2.4	.10	.10	.02
7	1.9	1.1	9.4	13	5.2	5.6	4.5	2.5	2.5	.10	.10	.01
8	1.8	1.1	25	12	5.0	5.4	4.4	2.4	2.5	.16	.10	.01
9	1.7	1.0	102	12	5.8	5.3	4.4	2.2	2.4	.25	.10	.01
10	1.6	4.5	66	9.6	7.6	5.3	4.3	2.2	2.1	.25	.10	.01
11	1.3	16	51	9.3	6.7	5.2	4.2	2.2	1.5	.14	.10	.01
12	1.3	5.0	38	8.9	6.5	5.0	4.0	2.2	1.1	.18	.30	.01
13	1.3	3.8	28	7.7	8.6	5.8	3.8	2.2	.72	.10	.38	.01
14	1.3	7.4	21	7.2	13	7.4	3.6	2.1	.86	.10	.10	.01
15	1.3	4.5	16	6.8	12	6.8	3.4	2.1	1.1	.09	.10	.01
16	1.3	3.0	12	6.7	24	6.7	3.2	2.0	1.1	.09	.24	.01
17	1.3	22	11	6.9	16	6.8	3.0	1.7	.98	.09	.23	.01
18	1.3	19	8.4	6.9	12	6.2	3.5	1.6	.95	.09	.21	.01
19	1.2	7.0	7.5	6.8	9.9	5.5	4.1	1.5	.95	.09	.18	.01
20	1.3	28	7.2	6.6	8.9	5.3	4.2	1.3	.90	.08	.14	.01
21	1.2	15	6.7	7.2	13	5.3	3.6	1.1	.80	.09	.12	0
22	1.2	11	8.3	7.2	11	5.3	3.5	1.3	.70	.16	.10	0
23	1.2	9.9	13	6.7	9.0	5.1	3.3	1.0	.60	.11	.10	0
24	1.2	76	39	6.5	8.5	5.1	3.2	1.3	.50	.19	.10	0
25	1.2	43	196	6.4	8.1	5.4	2.8	1.3	.40	.25	.12	0
26	1.2	24	70	6.2	7.5	5.3	2.7	1.5	.33	.16	.16	0
27	1.2	14	47	6.1	7.3	5.3	2.9	1.7	.25	.31	.14	0
28	1.1	11	32	6.0	7.0	5.3	3.0	1.7	.25	.27	.12	0
29	1.1	7.8	23	6.0	6.8	5.0	2.9	1.5	.40	.22	.10	0
30	1.2	5.7	24	6.0	---	4.8	2.9	1.6	.50	.10	.11	0
31	1.3	---	21	6.0	---	5.0	---	1.7	---	.10	.09	---
TOTAL	47.9	347.6	1028.6	279.7	254.0	175.8	113.8	59.9	35.79	5.01	4.24	0.41
MEAN	1.55	11.6	33.2	9.02	8.76	5.67	3.79	1.93	1.19	.16	.14	.014
MAX	3.4	76	196	18	24	7.4	4.9	2.9	2.5	.54	.38	.08
MIN	1.1	1.0	4.1	6.0	5.0	4.8	2.7	1.0	.25	.08	.09	0
AC-FT	95	689	2040	555	504	349	226	119	71	9.9	8.4	.8
CAL YR 1983	TOTAL	14567.2	MEAN	39.9	MAX	1510	MIN	1.0	AC-FT	28890		
WTR YR 1984	TOTAL	2352.75	MEAN	6.43	MAX	196	MIN	0	AC-FT	4670		

## ALAMEDA CREEK BASIN

11176090 ARROYO MOCHO AT LIVERMORE, CA

LOCATION.--Lat 37°40'37", long 121°48'48" in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on left bank 5 ft upstream of unnamed road, 3.1 mi from confluence of Arroyo Las Positas, and 2.6 mi west of Livermore.

DRAINAGE AREA.--50.8 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 390 ft from topographic map.

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

COOPERATION.--Gage-height record and twelve discharge measurements were furnished by Alameda County Flood Control and Water Conservation District, Zone 7.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1945	288	5.04
Dec. 25	1130	549	5.58

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	0	19	.24	.72	0					
2		0	0	15	.17	.43	0					
3		0	32	12	.01	.32	0					
4		0	40	9.4	.02	.11	0					
5		0	11	7.7	0	.01	0					
6		0	5.6	6.9	0	.01	0					
7		0	3.5	6.1	0	0	0					
8		0	2.0	5.7	0	0	0					
9		0	45	5.0	3.1	0	0					
10		37	73	4.7	2.4	0	0					
11		26	108	4.7	1.2	0	0					
12		2.2	77	4.1	1.3	0	0					
13		11	34	4.1	.14	8.8	0					
14		2.7	20	3.6	11	3.4	0					
15		.04	13	4.8	39	8.1	0					
16		8.6	9.7	6.3	48	6.6	0					
17		30	7.5	3.8	23	2.3	0					
18		13	5.2	3.1	13	.88	3.1					
19		2.7	3.5	2.4	8.3	.22	1.1					
20		34	2.8	2.3	7.4	0	0					
21		31	2.4	4.4	26	0	0					
22		7.6	24	2.9	11	0	0					
23		3.0	26	2.1	6.2	0	0					
24		115	90	1.7	4.1	0	0					
25		57	298	1.1	3.5	0	0					
26		15	132	.96	2.6	0	0					
27		6.9	72	.76	2.1	0	0					
28		3.3	41	.60	1.6	0	0					
29		1.6	26	.45	1.2	0	0					
30		.49	40	.39	---	0	0					
31		---	27	.29	---	0	---					
TOTAL	0	408.13	1271.2	146.35	230.44	31.90	4.2	0	0	0	0	0
MEAN	0	13.6	41.0	4.72	7.95	1.03	.14	0	0	0	0	0
MAX	0	115	298	19	48	8.8	3.1	0	0	0	0	0
MIN	0	0	0	.29	0	0	0	0	0	0	0	0
AC-FT	0	810	2520	290	457	63	8.3	0	0	0	0	0
WTR YR 1984	TOTAL	2092.22	MEAN	5.72	MAX	298	MIN	0	AC-FT	4150		

## 11176145 ARROYO LAS POSITAS AT LIVERMORE, CA

LOCATION.--Lat 37°42'00", long 121°46'22" in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on left bank 5 ft upstream from North Livermore Avenue bridge, 0.6 mi upstream from Cayetano Creek, and 1.3 mi north of Livermore.

DRAINAGE AREA.--53.3 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1980 to current year.

GAGE.--Water-stage recorder with concrete control. Altitude of gage is 465 ft from topographic map.

REMARKS.--Records good. Water from South Bay Aqueduct enters stream about 5 mi upstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft<sup>3</sup>/s Jan. 5, 1982, gage height, 5.87 ft; minimum daily discharge, 0.17 ft<sup>3</sup>/s Aug. 30, 1980, and Sept. 1-8, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 337 ft<sup>3</sup>/s Nov. 24 (1515 hrs), gage height 3.69 ft o other peak above base of 300 ft<sup>3</sup>/s; minimum daily, 1.3 ft<sup>3</sup>/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	3.0	4.2	8.3	3.7	4.1	3.2	2.7	1.8	1.7	1.7	1.4
2	4.1	2.8	4.4	6.7	3.5	3.9	3.2	2.9	2.6	1.6	1.9	1.4
3	5.4	2.5	14	6.1	3.4	3.9	3.0	2.6	2.0	1.9	1.5	1.4
4	4.6	2.6	7.7	5.5	3.4	3.9	2.9	2.6	1.8	1.7	1.9	1.4
5	4.3	2.7	5.4	5.4	3.4	3.6	2.9	2.7	1.8	1.7	1.4	1.4
6	4.8	2.6	4.0	5.3	3.3	3.4	2.8	2.7	1.8	1.9	1.3	1.4
7	2.7	2.5	3.9	5.1	3.2	3.4	2.7	2.4	2.0	2.2	2.0	1.4
8	2.6	2.5	3.8	5.0	3.2	3.4	3.0	2.2	2.1	1.7	1.6	1.4
9	2.8	3.0	14	5.1	4.5	3.4	2.8	2.1	2.4	1.6	2.2	1.4
10	2.7	26	15	4.9	5.4	3.4	3.0	2.0	1.8	2.0	1.5	1.4
11	2.7	62	42	4.8	4.4	3.4	3.1	1.9	1.9	1.8	1.8	1.5
12	2.9	6.0	20	4.8	4.3	3.4	2.7	1.9	2.2	2.1	1.8	1.5
13	2.8	15	8.7	4.7	17	6.8	2.6	2.2	1.9	2.0	1.5	1.5
14	2.5	7.7	6.3	4.6	13	6.3	2.6	2.2	2.1	2.5	2.1	1.5
15	2.8	4.5	5.5	4.6	42	9.5	2.5	2.1	1.9	1.9	1.7	1.5
16	2.6	14	5.2	6.9	54	5.1	2.5	2.0	2.2	1.8	2.1	1.4
17	2.8	55	4.9	5.7	16	6.2	2.4	1.9	1.8	1.9	1.8	1.4
18	3.2	13	4.6	4.8	7.6	4.4	5.2	1.9	1.8	2.0	2.2	1.4
19	2.5	6.4	4.3	4.6	5.6	4.1	5.3	1.8	2.2	2.9	1.7	1.5
20	2.3	35	4.1	4.6	5.0	3.6	3.6	2.0	1.9	2.1	1.5	3.6
21	2.7	13	4.0	4.6	21	3.5	2.6	2.5	2.3	2.9	2.2	2.6
22	2.6	5.9	17	4.6	8.9	3.3	2.5	2.4	1.9	2.1	1.8	1.6
23	3.3	5.1	29	4.6	5.8	3.2	2.4	2.3	2.1	2.1	2.1	1.5
24	2.9	97	94	4.5	5.0	3.4	2.5	2.3	1.7	2.7	1.7	1.5
25	2.2	30	84	4.9	4.7	3.4	2.5	2.0	1.6	2.7	2.3	1.6
26	2.6	9.5	37	4.2	4.6	3.3	2.5	2.1	2.1	3.4	1.7	1.7
27	2.9	5.6	23	4.0	4.6	3.4	2.7	1.7	1.9	2.7	1.4	1.6
28	3.2	5.9	14	4.0	4.5	3.5	3.7	1.7	2.3	3.6	2.0	1.6
29	3.5	4.6	8.9	3.9	4.3	3.3	3.5	2.0	1.9	2.1	1.4	1.6
30	4.2	4.3	17	3.8	---	3.0	2.7	1.9	2.2	1.7	1.4	1.5
31	3.2	---	13	3.7	---	3.1	---	2.3	---	2.6	1.4	---
TOTAL	101.6	449.7	522.9	154.3	269.3	125.6	89.6	68.0	60.0	67.6	54.6	47.6
MEAN	3.28	15.0	16.9	4.98	9.29	4.05	2.99	2.19	2.00	2.18	1.76	1.59
MAX	7.2	97	94	8.3	54	9.5	5.3	2.9	2.6	3.6	2.3	3.6
MIN	2.2	2.5	3.8	3.7	3.2	3.0	2.4	1.7	1.6	1.6	1.3	1.4
AC-FT	202	892	1040	306	534	249	178	135	119	134	108	94

CAL YR 1983 TOTAL 10309.4 MEAN 28.2 MAX 532 MIN 1.9 AC-FT 20450  
WTR YR 1984 TOTAL 2010.8 MEAN 5.49 MAX 97 MIN 1.3 AC-FT 3990

## ALAMEDA CREEK BASIN

11176200 ARROYO MOCHO NEAR PLEASANTON, CA

LOCATION.--Lat 37°41'26", long 121°52'20", in Santa Rita Grant, Alameda County, Hydrologic Unit 18050004, on right bank 0.3 mi upstream from Santa Rita Road, 0.8 mi downstream from Arroyo Las Positas, and 2 mi north of Pleasanton.

DRAINAGE AREA.--142 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 319.51 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 30, 1967, at site 0.4 mi downstream at different datum. Dec. 8, 1967, to July 7, 1968, nonrecording gage at bridge 0.3 mi downstream at different datum.

REMARKS.--Records good. No regulation. Waste water from Livermore sewage disposal plant and gravel operations enters stream about 4 mi upstream from gage.

AVERAGE DISCHARGE.--22 years, 19.3 ft<sup>3</sup>/s, 13,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,330 ft<sup>3</sup>/s Jan. 5, 1982, gage height, 13.97 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 11	0145	577	10.15	Dec. 11	1900	491	9.97
Nov. 17	1330	418	9.80	Dec. 24	1415	*917	10.73
Nov. 24	1830	819	10.58	Feb. 15	1815	414	9.79

Minimum, no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	4.7	8.3	37	7.8	9.1	7.2	7.5	4.7		0	0
2	6.8	4.4	8.2	30	7.7	7.8	7.5	7.5	4.9		0	0
3	7.0	3.2	55	31	7.2	8.2	5.8	7.2	5.1		0	0
4	6.1	4.4	64	29	7.2	13	5.7	5.3	4.9		.01	0
5	5.3	5.6	31	27	7.1	9.7	5.6	4.5	5.1		.32	0
6	5.5	12	19	23	7.2	6.8	5.6	4.2	5.0		0	0
7	5.0	6.9	9.7	26	6.9	6.6	4.5	.67	4.9		0	0
8	4.6	3.9	7.7	24	7.4	6.5	5.9	.24	4.9		0	0
9	5.0	4.9	81	21	9.9	6.7	5.6	.17	5.1		0	0
10	5.0	73	144	21	13	6.2	5.7	.14	4.8		0	0
11	5.0	214	265	17	7.9	12	7.0	.08	3.1		0	0
12	4.9	23	170	14	9.0	7.3	7.9	.51	.17		0	0
13	5.0	41	55	12	45	23	7.7	1.3	.06		0	0
14	5.0	25	37	12	44	15	6.2	1.2	0		0	0
15	4.8	9.6	31	16	151	23	7.5	1.3	.02		0	0
16	5.0	29	27	25	204	13	7.3	1.0	.21		0	0
17	4.8	170	19	14	48	15	7.3	.08	.41		0	0
18	4.8	51	14	12	24	7.9	14	.02	.26		0	0
19	4.7	27	15	21	16	7.1	12	0	.30		0	0
20	4.6	91	8.6	13	12	6.7	8.8	0	.38		0	0
21	4.5	67	8.4	15	47	6.4	7.2	.05	.36		0	0
22	4.6	25	46	10	22	6.3	7.5	.27	.60		0	0
23	4.7	15	84	9.2	13	6.2	7.5	.04	1.5		0	0
24	4.7	345	384	11	10	7.1	7.3	.20	1.3		0	0
25	4.6	175	652	9.6	12	10	7.2	.18	1.1		0	0
26	4.3	42	294	8.4	13	7.4	7.2	.26	.04		0	0
27	4.4	29	130	7.7	9.2	6.1	7.3	.74	0		0	0
28	4.7	22	65	7.2	7.5	6.0	7.8	.83	0		0	0
29	4.7	13	46	10	6.9	5.0	8.2	1.7	0		0	0
30	6.1	8.6	68	8.0	---	5.8	7.6	4.7	0		0	.35
31	5.3	---	53	7.7	---	6.0	---	4.7	---		0	---
TOTAL	168.5	1545.2	2899.9	528.8	782.9	282.9	219.6	56.58	59.21	0	0.33	0.35
MEAN	5.44	51.5	93.5	17.1	27.0	9.13	7.32	1.83	1.97	0	.011	.012
MAX	17	345	652	37	204	23	14	7.5	5.1	0	.32	.35
MIN	4.3	3.2	7.7	7.2	6.9	5.0	4.5	0	0	0	0	0
AC-FT	334	3060	5750	1050	1550	561	436	112	117	0	.7	.7
CAL YR 1983	TOTAL	39734.00	MEAN	109	MAX	2160	MIN	2.2	AC-FT	78810		
WTR YR 1984	TOTAL	6544.27	MEAN	17.9	MAX	652	MIN	0	AC-FT	12980		

11176400 ARROYO VALLE BELOW LANG CANYON, NEAR LIVERMORE, CA

LOCATION.--Lat 37°33'41", long 121°40'58", in NE 1/4 NE 1/4 sec.30, T.4 S., R.3 E., Alameda County, Hydrologic Unit 18050004, on left bank 100 ft upstream from small left-bank tributary, 1.2 mi downstream from Lang Canyon, and 9.5 mi southeast of Livermore.

DRAINAGE AREA.--130 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1963 to current year. Prior to October 1974, published as "above Lang Canyon, near Livermore."

GAGE.--Water-stage recorder. Concrete control since June 19, 1975. Altitude of gage is 750 ft from topographic map. Prior to June 19, 1975, at site 1.4 mi upstream at different datum.

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

AVERAGE DISCHARGE.--21 years, 38.7 ft<sup>3</sup>/s, 28,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,030 ft<sup>3</sup>/s Jan. 5, 1982, gage height, 6.22 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft<sup>3</sup>/s and maximum (\*) based on rating extended above 970 ft<sup>3</sup>/s on basis of slope-area measurement:

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1500	1,490	2.95	Dec. 9	2300	1,200	2.72
Dec. 3	2245	640	2.20	Dec. 25	1000	*1,940	3.26

Minimum, no flow Sept. 14-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	3.6	24	98	27	27	14	9.5	3.1	1.2	.75	.52
2	5.4	3.4	21	86	27	26	13	9.7	3.1	1.0	.38	.41
3	4.3	3.1	219	78	27	25	13	9.2	3.0	.92	.41	.37
4	3.8	3.1	323	72	27	22	13	8.5	3.0	.84	.46	.34
5	3.5	3.1	113	68	27	21	13	9.2	3.7	.87	.47	.32
6	3.1	3.3	68	61	27	21	12	9.6	3.8	.82	.57	.34
7	3.1	3.1	49	56	27	20	11	9.2	3.8	.76	.60	.29
8	3.1	3.1	42	53	27	19	11	8.5	3.8	.68	.60	.19
9	3.1	3.5	404	49	31	19	11	8.4	3.3	.53	.60	.15
10	3.1	7.3	536	49	37	19	12	7.9	3.0	.53	.60	.14
11	3.1	39	451	46	34	19	12	7.9	2.6	.50	.60	.11
12	2.9	12	410	44	34	18	11	8.0	2.6	.45	.78	.08
13	2.6	23	219	43	54	25	11	7.4	2.6	.58	.87	.04
14	2.6	28	153	41	70	44	9.7	7.4	2.6	.70	.83	0
15	2.6	11	114	40	76	43	9.7	7.4	2.6	.68	.87	0
16	2.6	9.3	89	45	175	37	9.6	7.2	2.6	.59	.87	0
17	2.6	96	73	41	115	40	8.6	6.8	2.7	.50	.87	0
18	2.7	39	60	37	81	30	11	6.4	2.6	.50	.85	0
19	2.6	39	52	36	64	26	16	6.1	2.6	.52	.84	0
20	2.6	245	46	34	53	24	13	5.8	2.6	.53	.87	0
21	2.6	115	41	36	63	22	11	5.4	2.5	.64	.86	0
22	2.6	46	46	34	53	19	11	5.1	2.3	.57	.79	0
23	2.6	29	75	32	44	18	10	4.9	2.0	.60	.75	0
24	2.6	556	164	31	41	17	9.7	4.6	2.0	.68	.61	0
25	2.6	368	1370	29	38	16	9.7	4.6	1.8	.60	.82	0
26	2.6	118	595	29	32	16	9.7	4.3	1.6	.51	.87	0
27	2.6	63	337	27	31	15	9.7	3.9	1.5	.45	.87	0
28	2.6	43	200	27	29	14	9.7	3.6	1.4	.38	.72	0
29	2.7	33	144	27	28	13	9.4	3.2	1.3	.46	.60	0
30	3.4	27	132	27	---	13	9.1	3.5	1.4	.38	.49	0
31	3.8	---	126	27	---	13	---	3.4	---	.34	.52	---
TOTAL	96.8	1975.9	6696	1403	1399	701	333.6	206.6	77.5	19.31	21.19	3.30
MEAN	3.12	65.9	216	45.3	48.2	22.6	11.1	6.66	2.58	.62	.68	.11
MAX	6.7	556	1370	98	175	44	16	9.7	3.8	1.2	.87	.52
MIN	2.6	3.1	21	27	27	13	8.6	3.2	1.3	.34	.35	0
AC-FT	192	3920	13280	2780	2770	1390	662	410	154	38	42	6.5

CAL YR 1983	TOTAL	64606.80	MEAN	177	MAX	3720	MIN	0	AC-FT	128154
WTR YR 1984	TOTAL	12933.20	MEAN	35.3	MAX	1370	MIN	0	AC-FT	25650

## ALAMEDA CREEK BASIN

11176500 ARROYO VALLE NEAR LIVERMORE, CA

LOCATION.--Lat 37°37'24", long 121°45'28", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank 900 ft downstream from highway bridge, 1.1 mi upstream from Dry Creek, 1.3 mi downstream from Del Valle Dam, 4.1 mi south of Livermore, and 6.9 mi southeast of Pleasanton.

DRAINAGE AREA.--147 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1912 to September 1930, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Published as Arroyo del Valle near Livermore, 1912-29.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 510.44 ft National Geodetic Vertical Datum of 1929. Prior to November 1914, at site 900 ft upstream at different datum. Nov. 1, 1914, to Sept. 30, 1930, at site 300 ft upstream at different datum.

REMARKS.--Records good. Flow regulated by Del Valle Reservoir 1.3 mi upstream beginning in September 1968, capacity, 77,100 acre-ft. Water from Sacramento-San Joaquin Delta imported through South Bay Aqueduct can be pumped into Del Valle Reservoir for storage and later released into the channel for downstream percolation or returned to the South Bay Aqueduct.

AVERAGE DISCHARGE.--29 years (1912-30, 1957-68), 29.6 ft<sup>3</sup>/s, 21,450 acre-ft/yr. 16 years (1969-84), 30.4 ft<sup>3</sup>/s, 22,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft<sup>3</sup>/s Apr. 2, 1958, gage height, 10.91 ft; no flow at times. Maximum discharge since construction of Del Valle Dam in 1968, 2,160 ft<sup>3</sup>/s Feb. 20, 1980, gage height, 7.89 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 23, 1955, reached a stage of 13.9 ft from floodmarks, discharge, 18,200 ft<sup>3</sup>/s, on basis of contracted-opening and slope area measurement of maximum flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 254 ft<sup>3</sup>/s Dec. 27-29, gage height, 3.95 ft; minimum daily, 0.09 ft<sup>3</sup>/s Aug. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.40	1.3	2.6	1.8	1.7	2.1	1.7	.99	.40	.18	.14
2	.20	.28	1.7	2.4	1.8	1.6	2.2	1.7	.99	.37	.30	.13
3	.19	.30	4.4	2.4	1.8	1.6	2.3	1.8	1.1	.46	.31	.14
4	.18	.33	4.3	2.1	1.6	1.7	2.3	1.9	1.0	.47	.26	.13
5	.19	.29	3.9	2.1	1.8	1.8	2.4	2.0	1.1	.51	.29	.13
6	.27	.21	3.9	2.1	1.8	1.7	2.3	2.0	1.1	.50	.28	.19
7	.31	.21	4.2	2.1	1.8	1.6	2.4	2.0	1.1	.51	.21	.19
8	.32	.16	4.2	2.0	1.8	1.6	2.5	2.2	1.1	.54	.11	.17
9	.26	.19	4.9	1.8	2.0	1.6	2.3	2.1	1.3	.45	.11	.17
10	.26	.47	2.1	1.9	2.0	1.8	2.1	2.2	1.3	.36	.09	.20
11	.27	1.3	3.7	2.0	1.8	2.1	2.1	2.2	1.3	.33	.09	.19
12	.31	.24	1.7	2.1	2.0	1.8	2.1	2.1	1.3	.25	.13	.17
13	.35	.43	1.0	2.1	2.3	1.9	2.1	2.1	1.3	.20	.14	.16
14	.45	.37	.77	2.1	1.8	1.8	2.1	1.9	1.4	.14	.15	.14
15	.46	.23	.70	2.1	2.2	1.9	2.1	1.9	1.4	.16	.14	.15
16	.53	.28	.52	2.1	2.0	2.0	2.1	1.7	1.4	.13	.10	.16
17	.71	1.2	.52	2.1	2.0	2.3	2.1	1.5	1.3	.14	.10	.16
18	.73	.38	.50	2.1	1.9	2.3	2.4	1.4	1.5	.12	.10	.14
19	.70	.28	.48	2.1	1.6	2.3	2.3	1.4	1.6	.12	.15	.13
20	.76	.61	.40	2.1	1.6	2.3	2.2	1.3	1.5	.18	.15	.17
21	.65	.47	.34	1.8	1.8	2.3	2.1	1.2	1.6	.17	.20	.17
22	.66	.42	.48	1.6	1.7	2.1	2.1	1.2	1.7	.17	.11	.16
23	1.1	.53	.52	1.6	1.8	2.0	2.0	1.1	1.8	.24	.11	.16
24	1.2	2.2	1.4	1.6	1.8	2.0	2.1	1.2	2.0	.36	.13	.16
25	1.2	.87	1.1	1.6	1.8	2.1	2.1	1.1	1.4	.28	.20	.14
26	.79	.64	.81	1.7	1.6	2.1	2.2	1.1	1.3	.60	.16	.13
27	.59	.61	.83	1.8	1.6	2.1	1.8	1.1	1.2	.36	.12	.13
28	.68	.53	.253	1.6	1.8	2.1	1.7	1.0	.43	.31	.15	.14
29	.70	.61	.251	1.6	1.8	2.2	1.7	1.0	.50	.12	.14	.14
30	.62	.71	122	1.6	---	2.3	1.7	1.0	.52	.12	.21	.19
31	.41	---	3.2	1.6	---	2.3	---	1.0	---	.14	.23	---
TOTAL	16.35	15.75	762.04	60.5	53.1	61.0	64.0	49.1	37.53	9.21	5.15	4.68
MEAN	.53	.52	24.6	1.95	1.83	1.97	2.13	1.58	1.25	.30	.17	.16
MAX	1.2	2.2	253	2.6	2.3	2.3	2.5	2.2	2.0	.60	.31	.20
MIN	.18	.16	.34	1.6	1.6	1.6	1.7	1.0	.43	.12	.09	.13
AC-FT	32	31	1510	120	105	121	127	97	74	18	10	9.3

CAL YR 1983 TOTAL 48097.13 MEAN 131.4 MAX 2370 MIN 0 AC-FT 95390  
WTR YR 1984 TOTAL 1138.41 MEAN 3.11 MAX 253 MIN .09 AC-FT 2260

## 11176600 ARROYO VALLE AT PLEASANTON, CA

LOCATION.--Lat 37°40'02", long 121°52'54", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank 0.6 mi northwest of Pleasanton City Hall, and 400 ft upstream from Hopyard Road bridge. Prior to Sept. 30, 1983 at site 600 ft downstream.

DRAINAGE AREA.--171 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 312.46 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1983 at site 600 ft downstream at datum 0.66 ft lower.

REMARKS.--Records good. Flow regulated by Del Valle Reservoir 10 mi upstream beginning in September 1968, capacity, 77,100 acre-ft. Water imported from Sacramento-San Joaquin Delta (see REMARKS for station 11176500). Flow affected by pumping and gravel operations above station.

AVERAGE DISCHARGE.--11 years (1958-68), 27.7 ft<sup>3</sup>/s, 20,050 acre-ft/yr; 16 years (1969-84), 27.5 ft<sup>3</sup>/s, 19,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft<sup>3</sup>/s Apr. 3, 1958, site and datum then in use; no flow at times in most years. Maximum discharge since construction of Del Valle Dam in 1968, 2,590 ft<sup>3</sup>/s Mar. 3, 1983, gage height, 13.86 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 471 ft<sup>3</sup>/s Dec. 28, gage height, 8.04 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	1.7	4.7	54	5.3	3.2	9.3	2.5	0			
2	0	.83	4.1	34	5.0	3.1	6.8	2.2	0			
3	0	.28	22	21	5.7	5.0	4.5	1.2	0			
4	0	.12	20	13	9.4	6.1	4.5	1.6	0			
5	0	.05	17	11	10	3.7	4.5	2.7	0			
6	0	3.4	7.5	11	8.0	2.4	5.1	3.6	0			
7	0	4.4	7.1	10	5.9	6.2	8.4	2.3	0			
8	0	.68	9.8	4.3	6.0	6.9	9.9	1.0	0			
9	0	.46	24	4.9	6.7	9.6	6.0	.19	0			
10	0	46	34	7.8	7.7	11	3.8	.08	0			
11	0	15	55	8.1	10	9.5	3.0	.04	0			
12	0	11	49	11	12	7.7	3.1	.02	0			
13	0	29	19	12	18	15	2.7	.01	0			
14	0	9.8	12	11	11	10	4.6	0	2.7			
15	0	4.4	12	9.2	16	11	7.5	.09	1.9			
16	0	5.1	12	4.3	25	8.6	7.5	.05	12			
17	0	26	16	5.9	15	10	2.1	.02	14			
18	0	9.5	21	5.8	11	11	2.2	.01	8.1			
19	0	9.2	17	5.4	8.2	7.8	3.2	0	.39			
20	0	13	11	5.1	7.1	3.7	2.1	0	.08			
21	0	6.3	9.8	7.0	5.5	6.2	3.8	0	.05			
22	0	6.2	14	7.9	4.0	6.3	6.1	0	.01			
23	0	6.7	19	5.9	3.0	5.3	4.8	0	0			
24	.72	80	79	3.6	1.9	7.9	3.8	0	0			
25	.62	47	98	4.2	1.2	7.4	2.9	0	0			
26	.39	23	59	4.4	2.2	4.6	1.8	0	0			
27	.22	16	44	5.3	2.2	4.1	2.1	0	0			
28	.10	12	373	6.1	1.5	4.4	3.5	0	0			
29	.05	8.9	370	6.8	2.4	4.1	5.6	0	0			
30	7.9	6.0	333	4.2	---	4.8	4.8	0	0			
31	7.5	---	145	5.1	---	8.0	---	0	---			
TOTAL	17.56	402.02	1918.0	309.3	226.9	214.6	140.0	17.61	39.23	0	0	0
MEAN	.57	13.4	61.9	9.98	7.82	6.92	4.67	.57	1.31	0	0	0
MAX	7.9	80	373	54	25	15	9.9	3.6	14	0	0	0
MIN	0	.05	4.1	3.6	1.2	2.4	1.8	0	0	0	0	0
AC-FT	35	797	3800	613	450	426	278	35	78	0	0	0
CAL YR 1983	TOTAL	55483.97	MEAN	152	MAX	2360	MIN	0	AC-FT	110100		
WTR YR 1984	TOTAL	3285.22	MEAN	8.98	MAX	373	MIN	0	AC-FT	6520		

## ALAMEDA CREEK BASIN

11177200 VALLECITOS CREEK AT SUNOL, CA

LOCATION.--Lat 37°35'42", long 121°52'51", in Valle de San Jose Grant, Alameda County, Hydrologic unit 18050004, on right bank at culvert on Sunol Road, 700 ft upstream from mouth, and 0.3 mi east of Sunol.

DRAINAGE AREA.--7.48 mi<sup>2</sup>.

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

CHEMICAL ANALYSES: Water years 1975-79.

SPECIFIC CONDUCTANCE: Water years 1975 to current year.

WATER TEMPERATURES: Water years 1975-78.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1974 to current year.

WATER TEMPERATURES: November 1974 to September 1978.

INSTRUMENTATION.--Water-quality monitor since November 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,400 micromhos Nov. 22, 1977; minimum recorded, 98 micromhos Apr. 28, 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 855 micromhos Apr. 26; minimum recorded, 175 micromhos Aug. 10.

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	464	400	426	488	464	474	714	673	700	572	531	552
2	476	442	460	505	488	498	723	712	718	606	572	588
3	506	462	480	518	505	512	725	449	585	623	605	609
4	530	484	504	533	516	521	545	490	520	640	608	617
5	562	520	538	544	533	539	616	537	588	635	619	628
6	580	562	568	548	534	541	663	616	636	646	632	638
7	582	572	578	570	541	556	687	663	672	656	639	647
8	586	574	581	582	568	573	686	672	679	676	655	664
9	584	568	578	582	575	578	695	281	528	675	661	667
10	586	570	580	586	256	514	396	334	365	683	658	669
11	588	570	580	431	310	376	415	209	312	686	658	673
12	596	584	591	534	410	463	392	257	337	691	669	680
13	604	570	590	563	307	441	467	386	428	700	668	684
14	623	597	609	366	317	335	522	467	491	713	673	690
15	620	538	589	483	345	401	551	520	530	710	674	692
16	620	537	590	552	473	520	570	545	554	709	656	690
17	625	600	614	556	284	422	587	570	578	746	700	719
18	630	601	620	480	323	357	606	585	596	740	679	710
19	643	618	630	580	344	416	622	606	613	717	664	692
20	648	627	636	591	425	501	650	619	630	712	657	685
21	666	384	595	678	462	596	650	638	643	689	645	681
22	392	361	372	720	673	698	690	540	631	710	690	701
23	361	353	358	746	624	677	541	491	514	719	685	706
24	358	350	354	729	211	453	548	182	335	746	706	722
25	357	343	351	492	324	419	293	229	254	739	685	712
26	354	338	348	581	486	538	402	293	362	---	---	---
27	353	337	346	634	581	610	423	352	380	768	740	757
28	347	334	342	675	634	652	498	423	466	766	727	754
29	361	339	345	698	675	683	543	498	521	760	716	745
30	438	361	401	717	684	703	557	421	473	779	708	745
31	465	438	452	---	---	---	531	454	489	773	698	738
MONTH	666	334	503	746	211	519	725	182	520	---	---	---

11177200 VALLECITOS CREEK AT SUNOL, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	698	661	677	703	645	679	715	627	674	704	658	678
2	712	672	692	704	642	678	717	680	700	678	650	669
3	725	662	700	706	646	682	718	684	703	680	660	669
4	720	665	701	711	651	685	722	699	709	694	667	681
5	728	674	710	715	655	692	717	693	705	689	673	682
6	725	670	706	726	670	703	723	688	706	695	683	691
7	735	671	708	726	650	692	724	696	710	713	685	696
8	732	653	698	709	663	693	728	659	700	719	689	702
9	699	564	660	711	661	692	729	691	713	719	703	710
10	753	603	695	706	656	685	725	672	700	720	328	583
11	728	681	705	700	658	681	724	688	710	534	408	474
12	754	705	730	694	669	684	728	689	713	632	534	586
13	765	314	622	691	303	594	729	687	710	684	632	661
14	638	576	605	634	562	590	731	698	715	712	680	693
15	664	356	537	708	458	630	738	708	725	726	696	710
16	460	375	404	695	387	636	738	719	731	737	703	726
17	576	465	511	656	485	613	739	729	734	741	723	732
18	613	577	587	708	658	677	742	638	702	741	717	730
19	651	608	628	718	670	694	720	568	666	741	715	728
20	663	639	650	735	683	712	740	720	728	739	721	730
21	671	618	646	741	691	719	748	732	741	744	724	735
22	671	632	652	738	696	719	755	743	748	746	724	737
23	701	642	674	734	690	715	767	753	762	762	736	747
24	687	655	676	727	695	714	773	763	768	766	750	758
25	701	660	683	723	689	708	781	759	770	402	350	766
26	693	650	679	722	712	717	855	769	790	---	---	---
27	717	649	686	725	702	715	851	702	769	---	---	---
28	714	653	686	729	697	714	714	674	692	---	---	---
29	710	650	682	721	687	707	704	670	688	---	---	---
30	---	---	---	718	692	706	710	656	680	---	---	---
31	---	---	---	704	611	672	---	---	---	---	---	---
MONTH	765	314	655	741	303	684	855	568	719	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	299	265	283	461	410	429	592	555	575
2	---	---	---	289	252	273	471	323	426	597	512	557
3	---	---	---	284	252	267	319	258	281	573	535	554
4	---	---	---	276	251	265	278	248	263	592	532	562
5	---	---	---	275	251	263	260	237	252	595	552	573
6	352	323	342	265	246	256	263	245	254	614	555	586
7	321	299	309	260	242	251	255	206	231	616	538	578
8	372	306	323	264	246	256	212	182	202	613	543	592
9	424	302	339	259	235	250	216	181	201	606	562	589
10	326	299	312	259	236	250	212	175	205	626	589	608
11	315	297	309	262	238	252	217	201	210	640	593	624
12	307	292	301	262	236	250	214	195	206	651	578	622
13	292	270	282	261	231	246	215	194	206	663	575	627
14	278	261	272	255	234	245	219	199	210	652	584	625
15	293	273	282	266	230	246	220	200	212	645	572	613
16	301	274	290	267	235	249	217	197	208	636	555	599
17	300	272	289	291	251	271	212	190	204	636	584	617
18	306	287	298	269	250	260	234	190	207	641	605	625
19	339	299	309	270	252	262	347	234	278	649	596	628
20	365	326	352	270	253	261	389	351	372	649	572	629
21	324	296	311	259	249	255	430	393	410	644	563	608
22	308	287	298	257	244	253	461	434	446	642	566	616
23	301	279	291	260	250	255	490	460	470	647	579	624
24	297	276	287	271	249	264	499	481	491	658	576	625
25	302	270	288	311	269	282	523	496	508	650	580	624
26	302	288	296	320	280	294	535	501	521	662	597	636
27	303	283	293	340	284	303	558	503	531	664	596	640
28	298	284	292	339	280	301	547	512	531	668	615	649
29	300	286	294	317	285	298	559	511	538	684	596	655
30	306	275	292	350	314	326	568	520	548	685	634	668
31	---	---	---	406	354	372	578	544	561	---	---	---
MONTH	---	---	---	406	230	270	578	175	342	685	512	611

## ALAMEDA CREEK BASIN

11179000 ALAMEDA CREEK NEAR NILES, CA

LOCATION.--Lat 37°35'14", long 121°57'35", in NW 1/4 sec.15, T.4 S., R.1 W., Alameda County, Hydrologic Unit 18050004, on right bank 0.3 mi downstream from railroad bridge, and 1.2 mi northeast of Niles.

DRAINAGE AREA.--633 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1891 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Published as "at Niles Dam" 1891-1900, and as "at Sunol Glen" 1901-21.

REVISED RECORDS.--WSP 1315-B: 1921. WSP 1515: 1951-52, 1956. WSP 1565: 1945.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 85.65 ft National Geodetic Vertical Datum of 1929. Prior to 1901, nonrecording gage at site 1 mi upstream at different datum. 1901 to Sept. 30, 1914, nonrecording gage and Oct. 1, 1914, to Sept. 30, 1916, water-stage recorder at site 4.5 mi upstream at different datum. Oct. 1, 1916, to Dec. 17, 1923, water-stage recorder at site 800 ft upstream at different datum.

REMARKS.--Records good. Flow regulated since 1916 by Calaveras Reservoir, although dam not completed until 1925, usable capacity, 96,800 acre-ft, most of which is diverted for San Francisco water supply; since February 1965 by San Antonio Reservoir, capacity, 51,000 acre-ft; and since September 1968 by Del Valle Reservoir, 23 mi upstream, capacity, 77,100 acre-ft. Natural flow of stream affected by water imported from Delta-Mendota Canal beginning in 1962. Other diversions from ground-water basin for irrigation of 9,000 acres above station.

AVERAGE DISCHARGE.--71 years (water years 1892-1962), 123 ft<sup>3</sup>/s, 89,050 acre-ft/yr; 22 years (water years 1963-84), 127 ft<sup>3</sup>/s, 92,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,000 ft<sup>3</sup>/s Dec. 23, 1955, gage height, 14.9 ft; minimum (water years 1892-1962), no flow at times; minimum daily (water years 1963-84), 0.70 ft<sup>3</sup>/s Sept. 29, 30, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,528 ft<sup>3</sup>/s Nov. 24, gage height, 8.64 ft; minimum daily, 0.70 ft<sup>3</sup>/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	25	84	256	64	73	68	41	41	46	10	6.0
2	35	19	74	210	63	72	68	46	24	44	11	6.0
3	27	16	409	183	62	71	59	41	28	43	57	5.4
4	26	14	380	162	63	71	59	37	39	43	58	4.7
5	23	15	170	150	64	70	57	34	37	43	58	4.0
6	21	18	127	143	63	62	56	35	35	43	46	3.9
7	32	32	99	141	59	66	55	32	42	42	56	4.3
8	25	25	96	130	60	67	61	27	41	44	56	4.5
9	22	18	758	124	73	65	58	26	29	46	56	4.1
10	24	117	743	121	92	66	58	31	39	43	54	3.6
11	21	521	939	118	68	66	55	26	41	44	50	3.0
12	20	95	696	110	74	66	54	27	46	43	49	2.6
13	19	211	351	111	282	188	51	29	41	44	48	2.4
14	19	153	257	102	275	201	48	30	35	45	47	2.1
15	20	56	200	100	447	179	49	28	42	45	46	1.8
16	19	91	170	129	793	130	50	23	35	44	47	1.6
17	18	715	152	107	309	211	46	22	39	52	47	1.5
18	18	271	134	90	192	116	69	20	39	60	46	1.4
19	17	161	125	97	156	100	76	18	36	57	29	1.3
20	15	891	100	87	139	86	49	17	29	46	12	1.3
21	16	409	91	101	197	82	43	15	32	48	9.4	1.3
22	33	176	154	87	157	79	43	14	31	49	8.1	1.2
23	34	131	308	81	122	76	42	13	33	51	7.3	1.2
24	34	1610	1180	75	109	73	40	13	34	59	6.6	1.1
25	33	788	1740	72	99	77	39	28	34	59	6.3	1.0
26	33	287	963	70	93	75	37	43	45	58	7.2	.90
27	32	181	853	65	89	68	46	41	44	58	8.3	.83
28	33	139	600	65	81	65	59	41	39	61	7.9	.75
29	33	116	542	67	76	62	48	42	45	60	6.8	.70
30	29	96	591	65	---	61	45	35	44	38	6.3	.70
31	29	---	367	62	---	73	---	42	---	13	6.1	---
TOTAL	893	7397	13453	3481	4421	2817	1588	917	1119	1471	963.3	75.18
MEAN	28.8	247	434	112	152	90.9	52.9	29.6	37.3	47.5	31.1	2.51
MAX	133	1610	1740	256	793	211	76	46	46	61	58	6.0
MIN	15	14	74	62	59	61	37	13	24	13	6.1	.70
AC-FT	1770	14670	26680	6900	8770	5590	3150	1820	2220	2920	1910	149
CAL YR 1983	TOTAL	234608	MEAN	643	MAX	7780	MIN	14	AC-FT	465300		
WTR YR 1984	TOTAL	38595.48	MEAN	105	MAX	1740	MIN	.70	AC-FT	76550		

11179000 ALAMEDA CREEK NEAR NILES, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1906, 1952-73, 1975 to current year.

CHEMICAL ANALYSES: Water years 1906, 1952-67, 1969, 1975-79.

SPECIFIC CONDUCTANCE: Water years 1956-57, 1959-62, 1976 to current year.

WATER TEMPERATURES: Water years 1956-73, 1976-78.

SEDIMENT RECORDS: Water years 1957-73.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1956 to July 1957, August 1959 to September 1962, October 1975 to current year.

WATER TEMPERATURES: July 1956 to September 1973, October 1975 to September 1978.

INSTRUMENTATION.--Water-quality monitor since October 1975.

REMARKS.--Unpublished records of daily specific conductance are included in extremes and are available in files of district office. Differences between specific conductance recorder values before adjustment and field measurement values exceeded  $\pm 10$  percent at times during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,530 micromhos Nov. 19, 1977; minimum recorded, 122 micromhos Jan. 22, 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,180 micromhos Nov. 1; minimum recorded, 266 micromhos Dec. 24.

## SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	820	572	647	1180	1060	1130	897	848	873	689	651	669
2	984	820	910	1060	1010	1040	930	896	912	717	689	703
3	1080	984	1040	1080	1050	1070	952	554	842	767	713	743
4	1100	1080	1090	1090	1070	1080	604	519	560	791	767	783
5	1120	1080	1090	1090	1070	1080	691	603	648	821	791	806
6	1140	1120	1130	1110	1090	1100	754	690	725	827	811	821
7	1150	914	1120	1160	1100	1140	781	754	768	849	809	827
8	1080	884	1010	1100	1010	1060	836	781	806	858	830	844
9	1090	1080	1080	1010	983	993	841	364	725	872	858	864
10	1090	1060	1080	1130	945	1100	502	387	452	897	856	871
11	1060	1050	1060	945	577	659	543	502	523	909	854	881
12	1070	1060	1060	899	692	804	536	507	521	928	868	889
13	1090	1060	1080	901	716	834	579	536	556	947	872	896
14	1100	1020	1080	763	696	719	656	579	613	902	865	886
15	1110	1070	1100	872	763	823	711	656	690	920	901	912
16	1090	1070	1080	956	872	915	744	711	728	932	918	922
17	1100	1080	1090	974	956	964	773	744	758	918	895	906
18	1100	1080	1090	983	891	932	792	773	782	926	905	914
19	1100	1080	1090	959	924	941	825	792	808	946	921	932
20	1100	1070	1080	963	956	961	848	825	837	942	921	932
21	1070	1060	1060	956	724	799	873	848	861	942	927	935
22	1140	879	1030	760	727	742	960	745	867	934	929	931
23	879	840	856	811	760	783	745	595	680	950	932	941
24	861	844	852	843	275	640	751	266	524	976	949	958
25	862	839	850	539	402	488	419	291	332	987	959	973
26	854	839	846	634	538	590	439	339	390	---	---	---
27	850	819	834	711	633	673	471	400	427	1040	950	1020
28	839	810	826	768	710	738	543	471	515	964	924	943
29	821	812	818	813	767	790	573	543	558	963	908	938
30	1070	769	839	848	812	826	582	573	578	1010	899	951
31	1120	1060	1090	---	---	---	651	581	615	989	954	966
MONTH	1150	572	997	1180	275	880	960	266	660	---	---	---

11179000 ALAMEDA CREEK NEAR NILES, CA--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

FEBRUARY				MARCH			APRIL			MAY		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1000	910	953	914	854	888	---	---	---	947	911	927
2	970	924	946	934	878	906	---	---	---	921	871	904
3	951	909	932	916	854	882	---	---	---	924	903	915
4	946	909	927	928	884	903	---	---	---	962	910	943
5	925	896	914	896	852	881	---	---	---	---	---	---
6	923	881	903	924	836	883	---	---	---	---	---	---
7	927	896	914	920	874	896	---	---	---	---	---	---
8	929	887	914	880	850	862	---	---	---	---	---	---
9	901	834	860	896	864	879	---	---	---	---	---	---
10	---	---	---	890	852	874	---	---	---	---	---	---
11	---	---	---	920	844	882	---	---	---	---	---	---
12	---	---	---	876	508	765	---	---	---	---	---	---
13	---	---	---	686	534	607	---	---	---	---	---	---
14	---	---	---	751	685	729	---	---	---	---	---	---
15	---	---	---	783	699	750	---	---	---	---	---	---
16	---	---	---	719	673	705	---	---	---	---	---	---
17	---	---	---	805	719	783	---	---	---	---	---	---
18	---	---	---	817	801	810	---	---	---	---	---	---
19	---	---	---	827	801	811	838	676	765	---	---	---
20	---	---	---	---	---	---	913	684	807	---	---	---
21	---	---	---	---	---	---	943	857	895	---	---	---
22	---	---	---	---	---	---	939	891	912	---	---	---
23	---	---	---	---	---	---	926	896	910	---	---	---
24	---	---	---	---	---	---	940	884	917	---	---	---
25	---	---	---	---	---	---	953	884	923	---	---	---
26	---	---	---	---	---	---	961	895	926	---	---	---
27	---	---	---	---	---	---	969	736	819	---	---	---
28	---	---	---	---	---	---	828	752	800	---	---	---
29	---	---	---	---	---	---	882	827	868	---	---	---
30	---	---	---	---	---	---	917	882	904	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	814	764	790									
2	971	764	804									
3	1140	971	1060									
4	1140	829	921									
5	829	785	808									
6	943	785	856									
7	902	854	878									
8	854	708	775									
9	768	708	721									
10	774	766	769									
11	766	753	761									
12	753	645	718									
13	645	607	626									
14	637	607	613									
15	662	637	643									
16	682	660	665									
17	828	682	776									
18	818	786	806									
19	786	682	743									
20	787	682	716									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	---	---	---									

## 11180500 DRY CREEK AT UNION CITY, CA

LOCATION.--Lat 37°36'22", long 122°01'22", in Arroyo de la Alameda Grant, Alameda County, Hydrologic Unit 18050004, on right bank 900 ft downstream from bridge on State Highway 238 in Decoto District in Union City, and 1.7 mi upstream from mouth.

DRAINAGE AREA.--9.39 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1916 to September 1919 (published as "near Decoto"), April 1959 to current year.

REVISED RECORDS.--WSP 2129: 1962(M), 1968(P). WDR CA-76-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 85.12 ft National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1959, at site 1.4 mi downstream at different datum.

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

AVERAGE DISCHARGE.--28 years, 2.68 ft<sup>3</sup>/s, 1,940 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1330 ft<sup>3</sup>/s Jan. 26, 1983, gage height, 5.14 ft from rating curve extended above 600 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; maximum gage height, 5.27 ft Oct. 13, 1962 from high-water marks past gage; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 17	1000	132	2.72	Nov. 24	1215	*380	3.43
Nov. 19	2045	157	2.81	Dec. 24	1215	200	2.95

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.62	.14	3.8	12	2.8	3.5	1.5	1.1	.43	.02		
2	.24	.14	3.4	10	2.7	3.4	1.4	1.2	.42	.01		
3	.19	.15	8.2	9.0	2.6	3.3	1.4	1.1	.44	0		
4	.16	.17	4.6	8.0	2.5	3.1	1.3	1.1	.50	0		
5	.14	.17	3.7	7.3	2.5	2.9	1.3	1.1	.57	0		
6	.14	.20	3.6	6.6	2.5	2.8	1.3	1.0	.60	0		
7	.16	.17	3.4	6.2	2.5	2.8	1.2	.91	.55	0		
8	.17	.17	3.7	5.9	2.5	2.8	1.4	.84	.49	0		
9	.21	.19	19	5.4	3.3	2.7	1.2	.84	.44	0		
10	.16	3.2	14	5.2	3.4	2.7	1.6	.85	.39	0		
11	.16	5.5	30	4.9	2.7	2.6	1.9	.87	.37	0		
12	.16	2.7	17	4.6	2.8	2.6	1.8	.93	.32	0		
13	.16	5.9	12	4.5	12	8.8	1.7	.80	.32	0		
14	.16	3.0	10	4.2	5.8	4.9	1.6	.74	.30	0		
15	.17	1.5	8.2	4.1	23	8.4	1.7	.71	.27	0		
16	.16	2.6	6.9	4.3	16	11	1.6	.71	.26	0		
17	.16	39	6.7	4.0	8.6	12	1.6	.74	.24	0		
18	.16	10	5.5	3.7	6.6	4.5	2.2	.85	.21	0		
19	.17	35	5.1	3.7	5.5	3.6	2.0	.83	.22	0		
20	.16	45	4.6	3.6	4.9	3.0	1.6	.82	.23	0		
21	.15	15	4.1	3.9	8.7	2.6	1.4	.77	.21	0		
22	.14	8.4	8.7	3.6	5.3	2.3	1.4	.75	.17	0		
23	.15	8.3	9.5	3.5	4.9	2.1	1.3	.71	.15	0		
24	.14	84	60	3.4	4.7	1.9	1.3	.69	.13	0		
25	.13	28	73	3.3	4.4	1.9	1.2	.68	.13	0		
26	.11	12	40	2.8	4.0	1.8	1.2	.68	.12	0		
27	.10	8.0	41	2.9	3.9	1.7	1.2	.63	.11	0		
28	.10	6.1	21	2.9	3.7	1.6	1.1	.53	.10	0		
29	.13	5.0	15	2.9	3.7	1.5	1.1	.49	.10	0		
30	.12	4.5	24	2.8	---	1.4	1.1	.47	.11	0		
31	.14	---	15	2.8	---	1.8	---	.45	---	0		
TOTAL	5.22	334.20	484.7	152.0	158.5	112.0	43.6	24.89	8.90	0.03	0	0
MEAN	.17	11.1	15.6	4.90	5.47	3.61	1.45	.80	.30	.001	0	0
MAX	.62	84	73	12	23	12	2.2	1.2	.60	.02	0	0
MIN	.10	.14	3.4	2.8	2.5	1.4	1.1	.45	.10	0	0	0
AC-FT	10	663	961	301	314	222	86	49	18	.06	0	0
CAL YR 1983	TOTAL	5204.81	MEAN	14.2	MAX	84	MIN	0	AC-FT	10315		
WTR YR 1984	TOTAL	1324.04	MEAN	3.62	MAX	84	MIN	0	AC-FT	2630		

## ALAMEDA CREEK BASIN

111807000 PATTERSON CREEK AT UNION CITY, CA

LOCATION.--Lat. 37°55'09", long 122°02'50", in Potrero de Los Cerritos Grant, Alameda County, Hydrologic Unit 18050004, on right bank 0.1 mi downstream from effluence from Alameda Creek, 0.2 mi upstream from bridge on State Highway 17 (Nimitz Freeway), and 2.0 mi southwest of Decoto District in Union City.

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

GAGE.--Water-stage recorder. Datum of gage is 4.13 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 26, 1966, at site 0.2 mi downstream at same datum.

REMARKS.--Records poor. This stream is a distributary of Alameda Creek. (See REMARKS for Alameda Creek near Niles). Diversion by Alameda County Water District to percolation ponds between station near Niles and this station; additional percolation to ground water by placing check dams in channel. Channel cleaned in 1980.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft<sup>3</sup>/s Jan. 24, 1983, gage height, 16.70 ft; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,920 ft<sup>3</sup>/s Nov. 24, gage height, 13.53 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	130	10	52	244	37	56	24	10	0	0	.02	.02
2	90	7.1	46	190	40	30	26	11	0	0	.02	.03
3	60	7.3	608	161	45	25	19	9.7	0	0	.02	.03
4	40	5.9	510	141	34	35	12	1.5	0	0	.02	.03
5	30	.43	162	125	34	30	11	.26	0	0	.04	.01
6	15	0	109	117	36	39	8.1	0	.01	0	.04	.01
7	35	.46	71	103	34	42	6.3	0	0	0	.02	.02
8	30	2.1	56	95	38	43	18	0	0	0	0	.01
9	40	86	1060	88	67	43	20	0	0	0	.05	.01
10	28	119	1040	82	72	41	18	0	0	0	.05	.01
11	28	1270	1550	78	45	33	12	0	0	0	.05	0
12	28	187	1010	73	44	52	6.9	0	0	0	.03	0
13	28	364	558	70	326	291	8.0	0	0	0	.03	0
14	28	347	297	67	430	178	15	0	0	0	.01	0
15	31	72	195	65	402	134	10	0	0	.01	0	0
16	29	57	144	77	1120	100	7.9	0	0	.01	.02	0
17	29	1360	115	69	429	180	13	0	0	0	.03	0
18	28	625	95	62	246	74	43	0	0	.02	.03	0
19	31	266	81	68	166	33	58	0	0	0	.02	.19
20	4.0	1510	71	62	183	31	17	0	0	0	.02	.01
21	.60	823	65	69	228	10	.85	0	0	0	0	0
22	0	210	271	64	204	5.3	2.9	0	0	.01	0	0
23	0	4.3	409	61	149	11	.10	0	0	.03	0	.01
24	0	2590	1640	57	97	14	5.8	0	0	.01	0	.01
25	0	1080	2700	55	71	14	7.4	0	0	.03	0	.01
26	0	530	1250	45	72	18	3.0	0	0	.02	.03	.01
27	0	278	920	41	76	14	.56	0	0	.01	.02	0
28	0	152	681	36	69	12	16	0	0	.02	.03	0
29	0	96	477	36	68	16	9.3	0	0	.03	.02	.01
30	0	64	618	38	---	12	8.3	0	0	.02	.05	.06
31	.05	---	405	38	---	39	---	0	---	.02	.06	---
TOTAL	762.65	12123.59	17266	2577	4862	1655.3	407.41	32.46	0.01	0.24	0.73	0.49
MEAN	24.6	404	557	83.1	168	53.4	13.6	1.05	.000	.008	.024	.016
MAX	130	2590	2700	244	1120	291	58	11	.01	.03	.06	.19
MIN	0	0	46	36	34	5.3	.10	0	0	0	0	0
AC-FT	1510	24050	34250	5110	9640	3280	808	64	.02	.5	1.4	1.0
CAL YR 1983	TOTAL	265694.70	MEAN	728	MAX	9530	MIN	0	AC-FT	527000		
WTR YR 1984	TOTAL	39687.88	MEAN	108	MAX	2700	MIN	0	AC-FT	78720		

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR NEAR CASTRO VALLEY, CA

LOCATION.--Lat 37°41'42", long 122°02'38", in San Lorenzo Grant, Alameda County, Hydrologic Unit 18050004, on left bank, 250 ft south of Interstate 580, 0.4 mi southeast of Independent School, and 2.2 mi east of Castro Valley.

DRAINAGE AREA.--18.0 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to current year.

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

REMARKS.--Records fair. Some regulation of low flow by ponds above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,280 ft<sup>3</sup>/s Jan. 24, 1983, gage height, 9.50 ft; minimum daily, no flow for several days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 417 ft<sup>3</sup>/s Nov. 24, gage height, 4.05 ft; minimum daily, 0.18 ft<sup>3</sup>/s Aug. 19, Sept. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.81	11	25	7.0	7.3	4.4	3.0	1.4	.74	.37	.27
2	.93	.75	9.9	23	6.8	7.0	3.8	3.3	1.3	.69	.42	.28
3	.87	.75	28	21	6.6	6.6	3.8	2.8	.99	.58	.33	.23
4	.75	.75	14	19	6.4	6.5	3.8	2.8	1.2	.66	.26	.44
5	3.0	.75	13	18	6.2	6.3	3.8	2.6	1.4	.57	.24	.18
6	2.3	.79	11	17	6.1	6.2	3.8	2.6	1.6	.57	.23	.43
7	.72	.75	11	17	6.1	6.1	3.6	2.6	1.3	.60	.43	.20
8	.61	.75	11	16	6.4	5.9	3.9	2.4	.99	.58	.57	.21
9	.65	1.1	48	15	7.2	5.8	3.3	2.4	.93	.62	.20	.19
10	.65	17	37	14	6.5	5.9	4.0	2.4	.89	.58	.20	.21
11	.67	11	57	13	5.8	5.7	3.5	2.5	.83	.57	.21	.23
12	.65	5.9	36	13	5.8	5.4	3.2	2.5	.77	.56	.32	.24
13	.65	15	28	12	43	18	3.1	2.5	.91	.46	.19	.46
14	.65	3.2	24	12	14	21	3.2	2.4	.83	.43	.54	.20
15	.65	1.5	20	11	74	11	3.0	2.3	.84	.41	.20	.22
16	1.1	12	18	12	37	22	3.2	2.4	.93	.37	.23	.23
17	.78	38	16	11	19	18	3.2	2.1	.82	.38	.60	.37
18	.65	8.3	15	10	15	11	4.3	2.1	.83	.45	.20	.68
19	.65	26	14	9.3	13	9.8	3.9	2.2	.89	.32	.18	.36
20	.65	46	12	8.6	12	8.9	3.0	2.2	1.0	.57	.19	.69
21	.63	22	11	9.4	15	8.0	3.0	2.0	1.1	.36	.37	.74
22	.61	13	19	8.6	11	7.2	3.2	2.0	.94	.44	.19	1.3
23	.60	16	19	8.6	9.7	6.9	3.0	1.9	1.2	.59	1.4	.83
24	.65	122	81	8.6	9.4	6.6	3.0	1.9	.97	.49	.53	.28
25	.61	46	99	8.4	8.9	6.2	3.0	2.2	.89	.55	.21	1.3
26	.59	26	62	8.1	8.2	6.2	3.0	2.0	.89	.56	.23	.26
27	.57	19	64	8.0	7.8	5.4	3.0	1.8	.96	.31	.41	.72
28	.49	16	42	8.0	7.7	5.1	3.0	1.6	.83	.28	.24	.26
29	.78	14	33	8.0	7.4	5.0	2.7	1.6	.89	.32	.37	.25
30	.91	13	39	7.7	---	4.7	2.7	1.5	.82	.55	.29	.74
31	1.7	---	29	7.3	---	4.9	---	1.6	---	.31	.33	---
TOTAL	27.32	498.10	931.9	387.6	389.0	260.6	101.4	70.2	30.14	15.47	10.68	13.00
MEAN	.88	16.6	30.1	12.5	13.4	8.41	3.38	2.26	1.00	.50	.34	.43
MAX	3.0	122	99	25	74	22	4.4	3.3	1.6	.74	1.4	1.3
MIN	.49	.75	9.9	7.3	5.8	4.7	2.7	1.5	.77	.28	.18	.18
AC-FT	54	988	1850	769	772	517	201	139	60	31	21	26
CAL YR 1983	TOTAL	8944.8	MEAN	24.5	MAX	315	MIN	.12	AC-FT	17740		
WTR YR 1984	TOTAL	2735.41	MEAN	7.47	MAX	122	MIN	.18	AC-FT	5430		

## SAN LORENZO CREEK BASIN

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR NEAR CASTRO VALLEY, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1980 to current year (storm season only).

WATER TEMPERATURES: December 1980 to current year.

SEDIMENT RECORDS: December 1980 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1980 to current year.

SEDIMENT RECORDS: December 1980 to current year.

REMARKS.--Sediment discharge values were estimated for those days that have no daily concentration values.

Zero bedload discharge observed for flows less than 23 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS (storm season only): Maximum daily mean, 10,000 mg/L Jan. 4, 1982; minimum daily mean, 2 mg/L Jan. 2, 3, 5, Mar. 3, 4, 1981.

SEDIMENT DISCHARGE (storm season only): Maximum daily, 19,800 tons Jan. 4, 1982; minimum daily, 0 ton several days in most years.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS (storm season only): Maximum daily mean, 6,920 mg/L Nov. 24; minimum daily mean, 3 mg/L Apr. 17.

SEDIMENT DISCHARGE (storm season only): Maximum daily, 4,510 tons Nov. 24; minimum daily, 0.01 ton many days in October and November.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	10.0	12.5	---					
2	---	---	---	---	11.0	14.5	---					
3	---	---	---	---	12.0	13.0	14.5					
4	---	---	---	---	10.0	12.5	12.0					
5	---	---	---	---	11.0	14.5	11.5					
6	---	---	---	---	11.0	12.0	13.0					
7	---	---	---	---	10.0	12.5	13.0					
8	---	---	---	---	11.0	13.0	14.0					
9	---	---	12.0	---	12.0	14.0	11.5					
10	---	---	---	---	11.0	14.5	---					
11	---	---	---	---	8.5	13.5	---					
12	---	---	---	---	10.5	16.0	---					
13	---	---	---	---	12.0	14.0	---					
14	---	---	14.0	---	10.0	13.5	---					
15	---	---	---	---	10.5	13.5	---					
16	---	---	---	9.5	12.0	13.0	---					
17	---	14.0	---	---	10.5	12.5	---					
18	---	---	---	---	10.0	11.5	---					
19	---	---	---	9.5	---	10.5	---					
20	---	---	---	9.5	---	16.0	---					
21	---	---	---	9.5	---	13.0	---					
22	---	---	---	9.0	11.5	12.5	---					
23	---	---	---	10.5	10.5	13.5	---					
24	---	---	---	10.5	12.0	13.5	---					
25	---	---	---	11.0	---	14.0	---					
26	15.5	---	---	---	9.5	13.0	11.5					
27	---	---	---	11.0	12.5	---	---					
28	---	---	---	10.0	11.0	12.5	---					
29	---	---	---	10.0	12.5	12.0	---					
30	---	---	---	11.0	---	11.0	---					
31	---	---	---	12.0	---	---	---					
MONTH	---	---	---	---	11.0	13.0	---					

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

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	1.6	96	.41	.81	80	.17	11	36	1.1
2	.93	20	.05	.75	25	.05	9.9	28	.75
3	.87	7	.02	.75	13	.03	28	1840	205
4	.75	5	.01	.75	5	.01	14	300	11
5	3.0	149	1.9	.75	5	.01	13	76	2.7
6	2.3	98	.61	.79	5	.01	11	60	1.8
7	.72	22	.04	.75	5	.01	11	49	1.5
8	.61	15	.02	.75	5	.01	11	42	1.2
9	.65	10	.02	1.1	5	.01	48	1510	285
10	.65	5	.01	17	2110	228	37	866	89
11	.67	5	.01	11	970	66	57	1470	300
12	.65	5	.01	5.9	600	20	36	1150	112
13	.65	5	.01	15	2260	221	28	181	14
14	.65	5	.01	3.2	442	3.8	24	90	5.8
15	.65	5	.01	1.5	80	.32	20	60	3.2
16	1.1	16	.07	12	904	73	18	44	2.1
17	.78	16	.03	38	2740	437	16	36	1.6
18	.65	6	.01	8.3	480	11	15	29	1.2
19	.65	5	.01	26	1550	306	14	23	.87
20	.65	5	.01	46	3290	457	12	19	.62
21	.63	5	.01	22	1000	59	11	17	.50
22	.61	5	.01	13	122	4.3	19	126	7.7
23	.60	5	.01	16	25	1.1	19	162	8.3
24	.65	5	.01	122	6920	4510	81	2600	920
25	.61	5	.01	46	1400	174	99	4180	1200
26	.59	5	.01	26	252	18	62	1310	233
27	.57	5	.01	19	122	6.3	64	1470	265
28	.49	5	.01	16	95	4.1	42	510	58
29	.78	29	.10	14	73	2.8	33	206	18
30	.91	33	.08	13	52	1.8	39	601	74
31	1.7	209	1.6	---	---	---	29	200	16
TOTAL	27.32	---	5.13	498.10	---	6604.83	931.9	---	3840.94

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	25	112	7.6	7.0	13	.25	7.3	76	1.5
2	23	82	5.1	6.8	14	.26	7.0	40	.76
3	21	65	3.7	6.6	16	.29	6.6	34	.61
4	19	55	2.8	6.4	14	.24	6.5	24	.42
5	18	47	2.3	6.2	8	.13	6.3	26	.44
6	17	43	2.0	6.1	9	.15	6.2	22	.37
7	17	40	1.8	6.1	14	.23	6.1	43	.71
8	16	38	1.6	6.4	11	.19	5.9	29	.46
9	15	36	1.5	7.2	59	1.1	5.8	19	.30
10	14	34	1.3	6.5	31	.54	5.9	27	.43
11	13	32	1.1	5.8	22	.34	5.7	26	.40
12	13	30	1.1	5.8	27	.42	5.4	11	.16
13	12	28	.91	43	27	150	18	567	58
14	12	26	.84	14	27	8.0	21	927	64
15	11	24	.71	74	27	750	11	427	15
16	12	182	5.9	37	758	88	22	623	106
17	11	95	2.8	19	126	6.5	18	323	24
18	10	42	1.1	15	39	1.6	11	42	1.2
19	9.3	24	.60	13	34	1.2	9.8	28	.74
20	8.6	31	.72	12	27	.87	8.9	26	.62
21	9.4	101	2.6	15	137	6.7	8.0	66	1.4
22	8.6	34	.79	11	33	.98	7.2	68	1.3
23	8.6	30	.70	9.7	26	.68	6.9	28	.52
24	8.6	24	.56	9.4	27	.69	6.6	13	.23
25	8.4	17	.39	8.9	15	.36	6.2	13	.22
26	8.1	32	.70	8.2	12	.27	6.2	15	.25
27	8.0	22	.48	7.8	16	.34	5.4	23	.34
28	8.0	13	.28	7.7	11	.23	5.1	16	.22
29	8.0	16	.35	7.4	70	1.4	5.0	11	.15
30	7.7	11	.23	---	---	---	4.7	8	.10
31	7.3	11	.22	---	---	---	4.9	27	.38
TOTAL	387.6	---	52.78	389.0	---	1021.96	260.6	---	281.23

11180825 SAN LORENZO CREEK ABOVE DON CASTRO RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

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	4.4	12	.14						
2	3.8	13	.13						
3	3.8	36	.37						
4	3.8	17	.17						
5	3.8	8	.08						
6	3.8	6	.06						
7	3.6	8	.08						
8	3.9	14	.16						
9	3.3	5	.04						
10	4.0	7	.08						
11	3.5	7	.07						
12	3.2	6	.05						
13	3.1	6	.05						
14	3.2	6	.05						
15	3.0	10	.08						
16	3.2	7	.06						
17	3.2	3	.03						
18	4.3	23	.30						
19	3.9	17	.19						
20	3.0	9	.07						
21	3.0	7	.06						
22	3.2	8	.07						
23	3.0	14	.11						
24	3.0	13	.11						
25	3.0	21	.17						
26	3.0	7	.06						
27	3.0	14	.11						
28	3.0	11	.09						
29	2.7	10	.07						
30	2.7	10	.07						
31	---	---	---						
TOTAL	101.4	---	3.18						

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO APRIL 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	27.32	5.13	0	5
NOVEMBER ...	498.10	6494.03	38	6530
DECEMBER ...	931.90	3679.94	68	3750
JANUARY 1984	387.60	52.78	2	55
FEBRUARY ...	389.00	847.96	15	863
MARCH .....	260.60	281.23	4	285
APRIL .....	101.40	3.18	0	3
TOTAL .....	2595.92	11364.25	127	11491

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SED. SUSP. DIAM. % FINER THAN .031 MM	SED. SUSP. DIAM. % FINER THAN .062 MM	SED. SUSP. DIAM. % FINER THAN .062 MM	SED. SUSP. DIAM. % FINER THAN .125 MM	SED. SUSP. DIAM. % FINER THAN .125 MM	SED. SUSP. DIAM. % FINER THAN .250 MM	SED. SUSP. DIAM. % FINER THAN .250 MM	SED. SUSP. DIAM. % FINER THAN .500 MM
DEC 14...	--	--	98	--	99	--	100	--
JAN 19...	--	--	93	--	96	--	100	--
FEB 15...	78	87	--	96	--	99	--	100
MAR 13...	88	93	--	96	--	99	--	100
13...	79	90	--	97	--	100	--	--
17...	90	--	94	--	98	--	100	--

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAH WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM
FEB 15...	1435	10.5	17	115	34.0	8.5	1	4
		SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM
FEB 15...	22	46	62	73	82	92	100	

## SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA

LOCATION.--Lat 37°42'55", long 122°03'12", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank 0.9 mi upstream from Cull Creek Dam and 1.1 mi northeast of Castro Valley Post Office.

DRAINAGE AREA.--5.79 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 450 ft from topographic map. Recording rain gage 2.6 mi north of gage.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--6 years, 5.23 ft<sup>3</sup>/s, 3,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,690 ft<sup>3</sup>/s Jan. 5, 1982, gage height, 8.71 ft; no flow many days each year.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1130	*373	4.32
Dec. 25	1245	358	3.82

Minimum, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	.25	4.3	11	2.4	3.3	2.0	.97	.27	.04	.02	
2	.25	.17	3.9	9.6	2.4	3.3	1.8	1.1	.27	.03	0	
3	.17	.13	12	8.5	2.4	3.3	1.8	.93	.27	.02	0	
4	.13	.13	3.7	7.7	2.2	3.2	1.8	.89	.32	.01	0	
5	.07	.13	2.9	7.1	2.2	3.0	1.8	.84	.43	.01	0	
6	.06	.13	2.8	6.5	2.2	3.0	1.6	.79	.52	.02	0	
7	.06	.13	2.6	6.1	2.2	3.0	1.5	.77	.55	.02	0	
8	.06	.13	3.0	5.7	2.2	3.0	1.5	.73	.41	.02	0	
9	.06	.13	22	5.4	2.7	3.0	1.5	.69	.31	.02	0	
10	.06	2.0	18	5.0	2.3	2.8	1.9	.69	.27	.02	0	
11	.06	2.9	26	4.8	2.0	2.8	1.4	.69	.20	.06	0	
12	.05	1.2	14	4.6	2.0	2.6	1.3	.67	.20	.07	0	
13	.04	3.8	11	4.3	14	7.0	1.3	.61	.20	.05	0	
14	.04	1.1	8.1	4.1	3.9	7.6	1.2	.60	.24	.01	0	
15	.04	.51	6.4	3.8	22	4.3	1.2	.59	.27	.01	0	
16	.04	2.6	5.4	4.3	15	8.9	1.2	.59	.20	.29	0	
17	.04	13	5.0	3.7	6.8	7.4	1.1	.55	.17	.09	0	
18	.04	2.4	4.3	3.6	5.2	4.1	1.2	.52	.20	.01	0	
19	.04	10	4.0	3.6	4.7	3.2	1.4	.52	.15	.01	0	
20	.04	9.9	3.5	3.3	4.4	2.8	1.3	.50	.18	.08	0	
21	.05	3.9	3.1	3.4	4.6	2.6	1.2	.51	.20	.01	0	
22	.06	2.4	5.2	3.3	4.1	2.6	1.2	.46	.15	.01	0	
23	.06	2.3	5.9	3.2	4.1	2.6	1.2	.42	.11	.13	0	
24	.06	72	44	3.0	4.1	2.6	1.1	.37	.09	.01	0	
25	.06	17	66	3.0	3.8	2.2	1.0	.37	.08	.01	0	
26	.06	9.8	34	2.8	3.6	2.2	1.0	.37	.13	.01	0	
27	.06	7.0	37	2.8	3.6	2.2	.95	.37	.10	.01	0	
28	.06	5.7	25	2.8	3.6	2.1	.91	.35	.06	.01	0	
29	.07	4.8	18	2.8	3.4	2.0	.89	.28	.06	.01	0	
30	.15	4.5	19	2.6	---	2.0	.92	.27	.06	.01	0	
31	.25	---	14	2.6	---	2.0	---	.27	---	0	0	
TOTAL	2.89	180.14	434.1	145.0	138.1	106.7	40.17	18.28	6.67	1.11	0.02	0
MEAN	.093	6.00	14.0	4.68	4.76	3.44	1.34	.59	.22	.036	.000	0
MAX	.60	72	66	11	22	8.9	2.0	1.1	.55	.29	.02	0
MIN	.04	.13	2.6	2.6	2.0	2.0	.89	.27	.06	0	0	0
AC-FT	5.7	357	861	288	274	212	80	36	13	2.2	.04	0
a	.70	10.26	6.27	.41	3.44	2.17	.73	.22	.41	0	0	0

CAL YR 1983	TOTAL	3962.05	MEAN	10.9	MAX	275	MIN	.04	AC-FT	7860
WTR YR 1984	TOTAL	1073.18	MEAN	2.93	MAX	72	MIN	0	AC-FT	2130

a Precipitation, in inches.

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR NEAR CASTRO VALLEY, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year (storm season only).

WATER TEMPERATURES: Water years 1979 to current year.

SEDIMENT RECORDS: Water years 1979 to current year.

PERIOD OF DAILY RECORD.--

SEDIMENT RECORDS: October 1978 to current year.

REMARKS.--Zero bedload discharge observed at flows less than 12.0 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 17,200 mg/L Feb. 15, 1982; minimum daily mean, no flow many days.

SEDIMENT DISCHARGE: Maximum daily 23,500 tons Feb. 15, 1982; minimum daily, 0 tons many days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS (storm season only): Maximum daily mean, 15,600 mg/L Nov. 24; minimum daily mean, no flow many days.

SEDIMENT DISCHARGE (storm season only): Maximum daily 7,790 tons Nov. 24; minimum daily, 0 tons many days.

REVISION.--The particle-size distribution table of suspended sediment for the water year 1982 has been revised as listed below, superseding the previously published table.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
NOV											
13...	1720	130	15.0	5190	1820	--	60	71	80	85	--
DEC											
29...	1620	307	11.5	21700	18000	--	30	37	48	61	72
JAN											
05...	1150	214	11.5	9720	5620	--	32	38	50	62	87
07...	1615	19	8.0	1280	66	--	51	64	78	88	--
20...	1450	67	--	17700	3200	--	27	33	43	57	--
FEB											
18...	1035	23	10.0	1310	81	--	41	51	64	75	--
MAR											
02...	0935	153	10.5	17600	7270	--	34	41	52	63	--
APR											
05...	1510	25	11.5	853	58	36	45	54	64	73	--

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV										
13...	90	--	94	--	97	--	99	--	100	--
DEC										
29...	--	88	--	96	--	100	--	--	--	--
JAN										
05...	--	96	--	96	--	99	--	100	--	--
07...	95	--	98	--	100	--	--	--	--	--
20...	71	--	85	--	98	--	100	--	--	--
FEB										
18...	85	--	92	--	98	--	100	--	--	--
MAR										
02...	73	--	83	--	92	--	96	--	98	99
APR										
05...	78	--	87	--	92	--	98	--	100	--

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	10.0	12.0	12.0	---	---			
2	---	---	---	---	10.5	14.0	11.5	---	---			
3	---	---	---	---	11.0	13.0	14.0	---	---			
4	---	---	---	---	10.0	11.5	12.0	---	---			
5	---	---	---	---	10.0	13.0	11.0	---	---			
6	---	---	---	---	11.0	11.0	12.5	---	---			
7	---	---	---	---	10.0	11.5	13.0	---	---			
8	---	---	---	---	11.0	12.5	14.0	---	---			
9	---	---	---	---	11.0	13.5	12.0	---	---			
10	---	---	---	---	10.0	14.0	---	---	---			
11	---	---	---	---	8.5	13.0	---	---	---			
12	---	---	---	---	10.5	13.5	---	---	---			
13	---	---	---	---	10.5	13.0	---	---	---			
14	---	---	13.0	---	9.0	12.0	---	---	---			
15	---	---	---	---	10.0	13.0	---	---	---			
16	---	---	---	9.5	10.5	13.0	---	---	---			
17	---	8.0	---	---	10.0	12.0	---	---	---			
18	---	---	---	6.5	10.0	11.0	---	---	---			
19	---	---	---	---	9.5	10.5	12.0	---	---			
20	---	---	---	9.0	12.0	16.0	---	---	---			
21	11.0	---	---	9.5	11.5	14.0	---	---	---			
22	---	---	---	9.0	10.0	12.0	---	---	---			
23	---	---	---	10.5	9.5	13.0	---	13.0	---			
24	---	---	---	10.0	11.5	13.5	---	---	---			
25	---	---	---	10.5	---	14.0	---	---	---			
26	---	---	---	---	8.5	13.0	---	---	---			
27	---	---	---	---	12.0	10.0	---	---	16.0			
28	---	---	---	---	10.0	12.5	---	---	---			
29	---	---	---	---	12.0	12.0	---	---	---			
30	---	---	---	---	---	10.5	---	---	---			
31	---	---	---	10.5	---	11.0	---	---	---			
MONTH	---	---	---	---	10.5	12.5	---	---	---			

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

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	.60		.10	.25	---	.02	4.3	21	.24
2	.25		.02	.17	---	.01	3.9	15	.16
3	.17		.01	.13	---	0	12	2190	211
4	.13		0	.13	---	0	3.7	123	1.2
5	.07		0	.13	---	0	2.9	90	.70
6	.06		0	.13	---	0	2.8	80	.60
7	.06		0	.13	---	0	2.6	70	.49
8	.06		0	.13	---	0	3.0	65	.53
9	.06		0	.13	---	0	22	3780	482
10	.06		0	2.0	397	7.6	18	3100	220
11	.06		0	2.9	527	6.6	26	4860	648
12	.05		0	1.2	142	.43	14	983	39
13	.04		0	3.8	800	16	11	226	6.7
14	.04		0	1.1	262	.78	8.1	133	2.9
15	.04		0	.51	68	.09	6.4	101	1.7
16	.04		0	2.6	289	3.5	5.4	73	1.1
17	.04		0	13	3420	306	5.0	52	.70
18	.04		0	2.4	162	1.0	4.3	30	.35
19	.04		0	10	2670	214	4.0	18	.19
20	.04		0	9.9	636	20	3.5	13	.12
21	.05		0	3.9	209	2.2	3.1	11	.09
22	.06		0	2.4	110	.71	5.2	90	1.5
23	.06		0	2.3	110	.71	5.9	128	2.2
24	.06		0	72	15600	7790	44	9020	1800
25	.06		0	17	2700	124	66	---	4500
26	.06		0	9.8	400	11	34	---	1200
27	.06		0	7.0	165	3.1	37	---	1450
28	.06		0	5.7	98	1.5	25	---	570
29	.07		0	4.8	58	.75	18	---	220
30	.15	.01	4.5	37	.45	.45	19	---	270
31	.25	.03	---	---	---	---	14	---	99
TOTAL	2.89		.17	180.14	---	8510.45	434.1	---	11730.47

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

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	11	---	42	2.4	32	.21	3.3	56	.50
2	9.6	---	26	2.4	16	.10	3.3	30	.27
3	8.5	---	16	2.4	20	.13	3.3	33	.29
4	7.7	---	11	2.2	20	.12	3.2	32	.28
5	7.1	---	8.0	2.2	21	.12	3.0	32	.26
6	6.5	---	5.7	2.2	18	.11	3.0	23	.19
7	6.1	---	4.4	2.2	20	.12	3.0	33	.27
8	5.7	---	3.2	2.2	19	.11	3.0	32	.26
9	5.4	---	2.6	2.7	37	.28	3.0	20	.16
10	5.0	---	1.9	2.3	21	.13	2.8	29	.22
11	4.8	---	1.6	2.0	22	.12	2.8	20	.15
12	4.6	---	1.3	2.0	17	.09	2.6	26	.18
13	4.3	---	.95	14	3730	371	7.0	854	43
14	4.1	---	.76	3.9	413	6.0	7.6	825	22
15	3.8	---	.54	22	3600	477	4.3	253	3.1
16	4.3	---	.95	15	1260	67	8.9	1290	99
17	3.7	---	.68	6.8	180	3.3	7.4	612	19
18	3.6	---	.41	5.2	96	1.3	4.1	79	.87
19	3.6	14	.14	4.7	90	1.1	3.2	62	.54
20	3.3	49	.44	4.4	76	.90	2.8	39	.29
21	3.4	67	.62	4.6	184	2.3	2.6	26	.18
22	3.3	40	.36	4.1	78	.86	2.6	25	.18
23	3.2	28	.24	4.1	48	.53	2.6	29	.20
24	3.0	23	.19	4.1	41	.45	2.6	26	.18
25	3.0	24	.19	3.8	44	.45	2.2	22	.13
26	2.8	43	.33	3.6	49	.48	2.2	19	.11
27	2.8	28	.21	3.6	40	.39	2.2	20	.12
28	2.8	26	.20	3.6	42	.41	2.1	21	.12
29	2.8	18	.14	3.4	62	.57	2.0	22	.12
30	2.6	16	.11	---	---	---	2.0	23	.12
31	2.6	22	.15	---	---	---	2.0	23	.12
TOTAL	145.0	---	131.31	138.1	---	935.68	106.7	---	192.41

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	2.0	24	.13						
2	1.8	24	.12						
3	1.8	25	.12						
4	1.8	25	.12						
5	1.8	26	.13						
6	1.6	26	.11						
7	1.5	27	.11						
8	1.5	27	.11						
9	1.5	27	.11						
10	1.9	28	.14						
11	1.4	28	.11						
12	1.3	29	.10						
13	1.3	29	.10						
14	1.2	30	.10						
15	1.2	30	.10						
16	1.2	31	.10						
17	1.1	32	.10						
18	1.2	33	.11						
19	1.4	34	.13						
20	1.3	30	.11						
21	1.2	26	.07						
22	1.2	24	.07						
23	1.2	22	.07						
24	1.1	20	.06						
25	1.0	18	.05						
26	1.0	16	.04						
27	.95	14	.04						
28	.91	13	.03						
29	.89	12	.03						
30	.92	12	.03						
31	---	---	---						
TOTAL	40.17	---	2.75						

## SAN LORENZO CREEK BASIN

11180960 CULL CREEK ABOVE CULL CREEK RESERVOIR, NEAR CASTRO VALLEY, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, OCTOBER 1983 TO APRIL 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	2.89	0.17	0	0
NOVEMBER ...	180.14	8510.45	70	8580
DECEMBER ...	434.10	11730.47	89	11800
JANUARY 1984	145.00	131.31	0	131
FEBRUARY ...	138.10	935.68	12	947
MARCH .....	106.70	192.41	1	193
APRIL .....	40.17	2.75	0	3
PERIOD .....	1047.10	21503.24	172	21654

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
FEB									
15...	1230	21	10.0	3350	190	23	28	32	42
MAR									
13...	1210	4.2	13.0	120	1.4	--	--	--	--
14...	1135	9.7	12.0	841	22	71	83	92	97
14...	1355	7.7	13.0	586	12	70	82	91	96
APR									
19...	1305	1.5	12.0	34	.14	--	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
FEB								
15...	52	64	--	83	--	97	--	100
MAR								
13...	--	--	96	--	99	--	100	--
14...	98	--	99	--	100	--	--	--
14...	98	--	99	--	100	--	--	--
APR								
19...	--	--	99	--	--	--	--	--

## 11181008 CASTRO VALLEY CREEK AT HAYWARD, CA

LOCATION.--Lat 37°40'48", long 122°04'46", in San Lorenzo (Castro) Grant, Alameda County, Hydrologic Unit 18050004, on left bank 500 ft east of Hayward City Hall, 700 ft upstream from mouth, and 700 ft downstream from small leftbank tributary.

DRAINAGE AREA.--5.51 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to current year (seasonal records only, water years 1975-77).

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

REMARKS.--Records fair. No gage height record Dec. 29 to Feb. 16. No regulation or diversion above station.

AVERAGE DISCHARGE.--10 years (water years 1972-74, 1978-84), 4.84 ft<sup>3</sup>/s, 3,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft<sup>3</sup>/s Jan. 23, 1983, gage height, 8.51 ft, from rating curve extended above 61 ft<sup>3</sup>/s on basis of slope-area measurements at gage height 3.92 ft and step backwater computation to gage height 10.40 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft<sup>3</sup>/s and minimum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2035	551	5.48
Nov. 24	1050	790	6.52
Feb. 15	Unknown	*934	7.08

Minimum daily, 0.15 ft<sup>3</sup>/s several days in August.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	.63	1.0	2.9	.48	.94	.98	1.6	.27	.29	.18	.22
2	.48	.32	.94	2.4	.47	.91	.86	.74	.29	.38	.18	.22
3	.43	.30	25	2.1	.45	.90	.84	.70	.28	.32	.19	.22
4	.38	.32	1.8	1.8	.44	.82	.97	.65	3.3	.27	.15	.22
5	.37	.30	1.2	1.6	.43	.82	.86	.55	.36	.27	.34	.22
6	.35	.29	1.2	1.4	.42	.80	.81	.54	5.5	.26	.20	.20
7	.34	.30	1.9	1.3	.41	.77	.78	.54	.33	.38	.18	.28
8	.34	.29	2.4	1.2	.41	.76	3.1	.64	.29	.30	.19	.25
9	.32	2.2	32	1.1	1.5	.77	.69	.48	.30	.29	.19	.25
10	.32	71	16	.98	.82	.76	4.7	.44	.27	.29	.18	.28
11	2.8	12	29	.92	.65	.79	.80	.44	.28	.30	.15	.20
12	1.1	16	4.7	.85	.58	.76	.77	.45	.25	.28	.18	.19
13	.34	26	3.5	.78	50	33	.80	.44	.27	.33	.19	.20
14	.34	8.0	2.6	.74	13	29	.77	.37	.29	.32	.17	.19
15	.34	2.0	1.9	.70	114	4.8	.73	.38	.25	.25	.15	.21
16	.34	11	1.7	2.2	13	38	.73	.38	.26	.25	.15	.23
17	.35	36	1.6	1.2	3.1	6.1	.71	.37	.26	.22	.20	.22
18	.34	3.0	1.3	.97	2.2	2.5	6.3	.32	.28	.43	.20	.23
19	.35	61	1.2	.88	1.8	1.9	3.6	.31	.29	.28	.18	4.8
20	.37	28	1.1	.82	1.5	1.6	.68	.29	.31	.28	.22	.23
21	.32	3.6	1.2	.77	8.7	1.4	.69	.27	.31	.25	.19	.22
22	.32	1.8	17	.74	1.6	1.3	.73	.25	.29	.23	.15	.20
23	.32	6.0	5.6	.70	1.8	1.2	.72	.81	.29	.37	.15	.18
24	.34	84	90	.66	1.5	1.1	.68	.35	.29	.21	.20	.17
25	.30	6.6	81	.63	1.2	1.1	.67	.29	.30	.19	.24	.17
26	.32	2.6	23	.60	1.2	1.0	.66	.28	.33	.26	.21	.18
27	.31	1.7	12	.57	1.0	1.0	.69	.30	.31	.23	.19	.18
28	.29	1.4	5.2	.55	1.0	.99	.70	.30	.32	.20	.21	.19
29	2.4	1.3	4.4	.53	.98	.95	.70	.39	.29	.18	.20	.19
30	1.1	1.2	22	.51	---	1.4	.74	.25	.29	.20	.29	1.2
31	1.9	---	4.3	.49	---	7.7	---	.23	---	.20	.21	---
TOTAL	19.82	389.15	397.74	33.59	224.64	145.84	37.46	14.35	16.95	8.51	6.01	11.94
MEAN	.64	13.0	12.8	1.08	7.75	4.70	1.25	.46	.56	.27	.19	.40
MAX	2.8	84	90	2.9	114	38	6.3	1.6	5.5	.43	.34	4.8
MIN	.29	.29	.94	.49	.41	.76	.66	.23	.25	.18	.15	.17
AC-FT	39	772	789	67	446	289	74	28	34	17	12	24
CAL YR 1983	TOTAL	3363.60	MEAN	9.22	MAX	189	MIN	.29	AC-FT	6670		
WTR YR 1984	TOTAL	1306.00	MEAN	3.57	MAX	114	MIN	.15	AC-FT	2590		

## SAN LORENZO CREEK BASIN

11181008 CASTRO VALLEY CREEK AT HAYWARD, CA--Continued

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1972-73, 1975-77, 1980 to current year.

SEDIMENT RECORDS: Water years 1972, 1973, (partial-record station).

INSTRUMENTATION.--Water-quality sampler since March 1980.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	SOLIDS, NON- VOLATILE, SUS- PENDED (MG/L)	SOLIDS, VOLATILE, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
NOV , 1983										
28-28	--	7.0	75	368	E600	296	72	2.3	.09	3.4
DEC										
12-12	304	--	62	162	347	129	33	1.6	.20	1.7
JAN , 1984										
01-01	234	6.9	490	75	210	19	56	.90	.03	1.3
FEB										
11-11	266	7.0	260	460	--	357	103	1.1	.11	5.4
14-14	166	7.3	110	480	538	418	62	1.1	.10	2.4
17-17	188	6.9	72	272	443	230	42	1.4	.16	1.8
21...	132	6.4	--	--	--	--	--	--	--	--
MAR										
14-14	118	7.0	94	262	366	225	37	.70	.26	1.6
16-19	145	7.3	34	61	148	39	22	1.1	.07	.53
30-30	--	6.9	--	--	498	--	--	--	--	--
APR										
11-11	210	7.2	--	--	368	--	--	--	--	--

DATE	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
NOV , 1983										
28-28	3.5	5.8	.65	.27	5	1	40	100	.4	160
DEC										
12-12	1.9	3.5	.38	.17	3	2	31	100	.6	130
JAN , 1984										
01-01	1.3	2.2	.23	.11	3	3	8	66	.2	90
FEB										
11-11	5.5	6.6	1.2	.03	4	1	45	540	.6	720
14-14	2.5	3.6	.69	.07	4	<1	44	--	.4	300
17-17	2.0	3.4	.58	.16	3	<1	33	97	.5	170
21...	--	--	--	--	--	--	--	<100	--	100
MAR										
14-14	1.9	2.6	.43	.11	4	2	21	110	1.3	200
16-19	.60	1.7	.25	.08	3	2	12	17	1.6	50
30-30	--	--	--	--	--	--	--	200	--	300
APR										
11-11	--	--	--	--	--	--	--	100	--	160

E Estimated.

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

## 11181390 WILDCAT CREEK AT VALE ROAD, AT RICHMOND, CA

LOCATION.--Lat 37°57'12", long 122°20'14", in San Pablo Grant, Contra Costa County, Hydrologic Unit 18050002, on left bank at upstream side of Vale Road bridge at Richmond, 3.6 mi upstream from mouth.

DRAINAGE AREA.--7.79 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR CA-81-2: 1979-80(M).

GAGE.--Waterstage recorder. Datum of gage is 65.56 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Minor storage in Lake Anza and Jewel Lake 5 mi upstream. No diversion above station.

AVERAGE DISCHARGE.--9 years, 6.02 ft<sup>3</sup>/s, 4,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft<sup>3</sup>/s Jan. 4, 1982, gage-height, 15.80 ft; no flow Aug. 31, Sept. 6, 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 289 ft<sup>3</sup>/s Dec. 25 (0700 hrs), gage height, 4.64 ft, no other peak above base of 200 ft<sup>3</sup>/s (revised); minimum daily, 0.05 ft<sup>3</sup>/s Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	4.2	2.1	14	2.3	3.0	2.6	1.0	.44	.09	.06	.06
2	.61	1.7	1.8	10	2.3	3.0	2.2	1.2	.29	.08	.06	.07
3	.35	1.0	32	7.8	2.3	3.0	2.2	1.1	.26	.08	.06	.08
4	.26	.90	7.9	6.6	2.3	2.8	2.1	1.0	.22	.09	.07	.08
5	.20	.85	4.2	5.7	2.3	2.7	2.1	.90	.24	.08	.06	.07
6	.18	.73	3.4	5.0	2.2	2.7	2.1	.84	.32	.08	.06	.07
7	.21	1.1	3.0	4.6	2.2	2.6	2.0	.79	.34	.09	.06	.05
8	.21	4.3	7.9	4.0	2.2	2.5	2.4	.74	.29	.09	.06	.08
9	.21	4.3	92	3.6	4.8	2.5	2.1	.68	.24	.09	.06	.08
10	.15	24	53	3.4	4.2	2.5	3.5	.66	.20	.09	.10	.07
11	.16	11	56	3.2	3.4	2.6	2.6	.66	.16	.08	.25	.07
12	.17	5.2	26	2.8	3.3	2.7	2.1	.73	.17	.08	.31	.07
13	.17	7.0	12	2.7	12	11	1.9	.74	.20	.09	.28	.08
14	.18	5.2	8.8	2.5	7.5	8.2	1.7	.69	.12	.08	.29	.08
15	.19	7.5	6.5	2.8	27	11	1.7	.66	.17	.09	.29	.09
16	.19	7.0	5.8	5.3	18	13	1.5	.53	.18	.09	.31	.10
17	.19	27	5.5	2.9	7.8	17	1.5	.57	.19	.08	.33	.09
18	.19	8.5	4.1	2.5	5.8	6.6	2.9	.51	.15	.07	.38	.08
19	.19	8.4	3.8	2.4	5.0	5.2	2.8	.41	.13	.07	.36	.09
20	.16	17	3.8	2.2	4.3	4.4	1.9	.43	.14	.07	.32	.09
21	.17	6.1	3.6	2.4	5.8	3.7	1.5	.40	.15	.07	.36	.07
22	.16	3.8	4.6	2.2	4.5	3.4	1.6	.36	.13	.08	.32	.08
23	.14	4.1	9.2	2.3	4.0	3.2	1.5	.29	.11	.07	.31	.07
24	.14	60	106	2.3	4.0	3.0	1.4	.29	.13	.06	.30	.06
25	.20	18	134	2.3	3.7	3.0	1.2	.30	.11	.06	.32	.06
26	.18	7.3	42	2.4	3.4	2.8	1.2	.33	.10	.06	.40	.06
27	.18	3.9	34	2.8	3.2	2.8	1.1	.33	.09	.06	.30	.07
28	.16	2.8	19	2.8	3.2	2.5	1.1	.31	.08	.06	.23	.07
29	.23	2.3	14	2.6	3.1	2.5	1.1	.33	.08	.06	.24	.07
30	.51	2.3	33	2.5	---	2.4	1.0	1.4	.09	.06	.29	.07
31	.58	---	21	2.5	---	2.7	---	.68	---	.06	.06	---
TOTAL	7.82	257.48	760.0	121.1	156.1	141.0	56.6	19.86	5.52	2.36	6.90	2.23
MEAN	.25	8.58	24.5	3.91	5.38	4.55	1.89	.64	.18	.076	.22	.074
MAX	1.0	60	134	14	27	17	3.5	1.4	.44	.09	.40	.10
MIN	.14	.73	1.8	2.2	2.2	2.4	1.0	.29	.08	.06	.06	.05
AC-FT	16	511	1510	240	310	280	112	39	11	4.7	14	4.4
CAL YR 1983	TOTAL	5727.42	MEAN	15.7	MAX	243	MIN	.14	AC-FT	11360		
WTR YR 1984	TOTAL	1536.97	MEAN	4.20	MAX	134	MIN	.05	AC-FT	3050		

## RHEEM CREEK BASIN

11182030 RHEEM CREEK AT SAN PABLO, CA

LOCATION.--Lat 37°58'38", long 122°21'10", in San Pablo Grant, Contra Costa County, Hydrologic Unit 18050002, on left bank 50 ft downstream from Santa Fe Railway bridge at San Pablo, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--1.49 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 13.63 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Aug. 13, 1965, at site 0.2 mi upstream at datum 7.74 ft higher.

REMARKS.--Records good. Low flow affected by return flow from industrial waste, leakage, and infrequent releases from off-stream North Reservoir.

AVERAGE DISCHARGE.--23 years (water years 1962-84), 1.54 ft<sup>3</sup>/s, 1.120 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 477 ft<sup>3</sup>/s Dec. 20, 1969, gage height, 6.95 ft, from rating curve extended above 150 ft<sup>3</sup>/s; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge	Gage height
Nov. 10	1845	*289	5.93
Dec. 25	0615	194	4.94
Dec. 30	0515	191	4.91

No flow several days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	6.2	.25	1.1	.12	.12	.29	.04	.08	.09	0	.06
2	.08	.19	.19	.89	.11	.13	.49	.06	.20	.03	0	.03
3	.06	.12	24	.76	.11	.18	.27	.08	.16	.02	0	.02
4	.05	.08	.95	.66	.14	.13	.13	.14	.07	.02	.01	.03
5	2.5	.04	.48	.66	.14	.10	.58	.09	.07	.02	.02	.02
6	9.7	.06	.44	.57	.11	.11	.14	.12	.28	.03	.02	.02
7	12	.03	.44	.55	.12	.12	.17	.06	.06	.02	.02	.04
8	12	.02	14	.53	.13	.10	.61	.11	.07	.07	.02	.25
9	12	5.6	25	.51	2.5	.09	.24	.10	.15	.02	.01	.46
10	11	44	19	.46	.18	.13	1.7	.09	.06	.04	0	.31
11	11	2.1	15	.46	1.1	.13	.13	.11	.05	.06	.01	.11
12	13	5.9	1.9	.45	.25	.12	1.1	.09	.07	.02	.01	.08
13	14	11	1.1	.46	8.6	11	.22	.11	.03	.02	.02	.08
14	.16	.60	.83	.39	.35	2.4	.20	.04	.06	.01	.01	.03
15	.08	.58	.58	1.2	19	2.1	.44	.05	.04	.02	.02	.02
16	.13	6.6	.41	2.9	2.2	7.7	.53	.07	.03	.01	.01	.01
17	.06	18	.35	.38	.47	.77	.18	.04	.05	0	.03	.06
18	.15	.71	.31	.27	.31	.28	5.4	.07	.06	.01	.03	.06
19	.14	8.4	.26	.20	.26	.21	1.8	.07	.27	.01	.03	.46
20	.13	4.2	.25	.16	.22	.20	.14	.08	.12	.01	.02	.06
21	.21	.53	.44	.27	1.4	.20	.18	.04	.05	.01	.02	.02
22	.12	.42	3.4	.19	.25	.18	.16	.05	.05	.02	.02	.01
23	.13	5.3	4.7	.16	.25	.14	.06	.08	.04	.01	.02	0
24	.17	34	61	.15	1.2	.16	.09	.11	.14	.01	.02	.01
25	.46	1.4	47	.15	.15	.18	.08	.07	.09	.01	.02	.01
26	.59	.57	10	.13	.15	.13	.06	.05	.05	.01	.04	.01
27	.13	.35	3.4	.12	.12	.12	.10	.10	.04	.02	.02	0
28	.08	.28	1.5	.12	.11	.23	.11	.04	.06	.01	.02	0
29	.08	.25	1.0	.15	.11	.60	.10	.03	.02	.01	.04	0
30	1.0	.92	19	.13	---	.25	.03	.05	.03	.01	1.9	0
31	.63	---	1.7	.11	---	1.1	---	.07	---	.01	.08	---
TOTAL	102.72	158.45	258.88	15.24	40.16	29.41	15.73	2.31	2.55	0.66	2.49	2.27
MEAN	3.31	5.28	8.35	.49	1.38	.95	.52	.075	.085	.021	.080	.076
MAX	14	44	61	2.9	19	11	5.4	.14	.28	.09	1.9	.46
MIN	.05	.02	.19	.11	.11	.09	.03	.03	.02	0	0	0
AC-FT	204	314	513	30	80	58	31	4.6	5.1	1.3	4.9	4.5

CAL YR 1983	TOTAL	1573.38	MEAN	4.31	MAX	61	MIN	.02	AC-FT	3120
WTR YR 1984	TOTAL	630.87	MEAN	1.72	MAX	61	MIN	0	AC-FT	1250

11182500 SAN RAMON CREEK AT SAN RAMON, CA

LOCATION.--Lat 37°46'23", long 121°59'37", in sec.8, T.2 S., R.1 W., Contra Costa County, Hydrologic Unit 18050001, on right bank 0.2 mi downstream from Bollinger Creek, and 1.0 mi southwest of San Ramon.

DRAINAGE AREA.--5.89 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1445: 1953-54(P).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 530 ft, from topographic map.

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

AVERAGE DISCHARGE.--32 years, 3.36 ft<sup>3</sup>/s, 2,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,600 ft<sup>3</sup>/s Oct. 13, 1962, gage height, 16.98 ft; no flow for parts of most years.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1100	*411	5.08
Dec. 25	0900	237	3.97

Minimum daily, 0.01 ft<sup>3</sup>/s several days in September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.41	2.5	13	3.4	3.0	2.4	1.6	.61	.28	.10	.09
2	.54	.37	2.3	12	3.4	3.0	2.4	2.0	.65	.24	.15	.05
3	.46	.38	15	11	3.2	2.9	2.3	1.6	.71	.19	.18	.03
4	.39	.39	4.2	9.9	3.2	2.8	2.3	1.5	.73	.20	.14	.03
5	.37	.39	3.4	9.2	3.1	2.6	2.3	1.4	.76	.20	.13	.04
6	.39	.39	3.3	8.5	3.0	2.5	2.2	1.4	.97	.20	.13	.04
7	.38	.36	3.0	8.0	3.0	2.4	2.1	1.3	.82	.17	.11	.04
8	.38	.36	3.8	7.6	3.0	2.4	2.3	1.3	.65	.17	.07	.04
9	.38	.46	35	7.1	4.2	2.4	2.1	1.2	.62	.18	.03	.04
10	.37	4.4	23	6.8	3.4	2.4	2.7	1.2	.59	.17	.02	.05
11	.37	2.4	36	6.5	3.1	2.3	2.1	1.2	.56	.15	.06	.04
12	.36	1.3	16	6.2	3.3	2.2	2.0	1.2	.60	.12	.06	.04
13	.38	4.8	11	5.9	19	6.1	1.9	1.0	.57	.13	.04	.01
14	.38	1.0	9.4	5.6	5.8	6.9	1.8	1.0	.52	.11	.04	.01
15	.38	.65	7.8	5.5	31	5.2	1.8	1.0	.53	.09	.04	.01
16	.38	2.9	6.9	6.4	15	7.0	1.6	1.0	.47	.07	.08	.01
17	.39	19	6.4	5.3	6.8	7.1	1.6	.97	.44	.08	.10	.01
18	.38	2.2	5.7	5.0	5.6	4.3	2.0	.92	.42	.09	.06	.01
19	.36	12	5.4	4.8	5.0	4.0	1.9	.91	.45	.12	.06	.01
20	.35	7.4	5.1	4.6	4.8	3.8	1.6	.90	.47	.16	.08	.03
21	.33	2.6	4.9	4.7	5.3	3.6	1.5	.87	.46	.19	.11	.04
22	.31	1.7	7.5	4.5	4.5	3.4	1.4	.81	.37	.26	.10	.02
23	.33	2.3	8.8	4.3	3.9	3.3	1.4	.75	.34	.24	.08	.03
24	.35	69	52	4.1	4.0	3.2	1.4	.80	.31	.19	.07	.03
25	.31	9.8	99	4.1	3.8	3.2	1.3	.77	.31	.17	.10	.02
26	.31	5.0	50	3.8	3.6	2.9	1.4	.65	.32	.15	.13	.01
27	.30	3.8	52	3.6	3.6	2.6	1.4	.56	.31	.13	.10	.01
28	.29	3.3	26	3.6	3.4	2.6	1.4	.52	.31	.14	.07	.02
29	.34	2.9	20	3.6	3.2	2.6	1.4	.49	.33	.16	.06	.02
30	.43	2.8	20	3.6	---	2.4	1.4	.62	.32	.12	.07	.02
31	.47	---	16	3.5	---	2.5	---	.96	---	.09	.11	---
TOTAL	12.16	164.76	561.4	192.3	167.6	107.6	55.4	32.40	15.52	4.96	2.68	0.85
MEAN	.39	5.49	18.1	6.20	5.78	3.47	1.85	1.05	.52	.16	.086	.028
MAX	1.0	.69	.99	.13	.31	.7.1	2.7	2.0	.97	.28	.18	.09
MIN	.29	.36	2.3	3.5	3.0	2.2	1.3	.49	.31	.07	.02	.01
AC-FT	24	327	1110	381	332	213	110	64	31	9.8	5.3	1.7
CAL YR 1983	TOTAL	4800.15	MEAN	13.20	MAX	.81	MIN	.10	AC-FT	9520		
WTR YR 1984	TOTAL	1317.63	MEAN	3.60	MAX	99	MIN	.01	AC-FT	2610		

## PACHECO CREEK BASIN

11183000 SAN RAMON CREEK AT WALNUT CREEK, CA

LOCATION.--Lat 37°52'38", long 122°02'52", in San Ramon Grant, Contra Costa County, Hydrologic Unit 18050001, on left bank 600 ft upstream from Rudgear Road, near south city limits of town of Walnut Creek.

DRAINAGE AREA.--47.9 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1395: 1953(M). WDR CA-79-2: 1978.

GAGE.--Water-stage recorder. Concrete control since Dec. 4, 1962. Datum of gage is 169.98 ft, National Geodetic Vertical Datum of 1929. Prior to Dec. 8, 1971, at site 0.6 mi downstream at different datum.

REMARKS.--Records fair. No regulation; pumping for irrigation above station during periods of low flow.

AVERAGE DISCHARGE.--32 years, 20.2 ft<sup>3</sup>/s, 14,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,980 ft<sup>3</sup>/s Jan. 31, 1963, gage height, 14.40 ft site and datum then in use, from rating curve extended above 2,200 ft<sup>3</sup>/s on basis of computed discharge at gage height 13.16 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1315	*1,700	5.99
Dec. 24	1315	1,510	5.61

Minimum daily, 3.4 ft<sup>3</sup>/s Sept. 26, 28.

REVISIONS.--The peak discharges and annual maximums (\*) for water years 1974-75, and 1978-80 have been revised as shown in the following table. They supersede figures published in the reports for 1974-75, and 1978-80.

Water year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
1974	Dec. 1, 1973	0115	1,870	6.30	1978	Feb. 7, 1978	1145	1,740	6.02
	Dec. 26, 1973	2245	952	4.45		Feb. 12, 1978	Unknown	840	4.19
	Mar. 1, 1974	2200	2,270	7.05		Mar. 8, 1978	Unknown	1,220	5.00
	Mar. 28, 1974	0230	1,440	5.45	1979	Jan. 11, 1979	1245	*1,440	5.45
	Mar. 30, 1974	0500	1,140	4.84		Jan. 15, 1979	0200	1,290	5.14
	Apr. 1, 1974	1400	*2,450	7.40		Feb. 21, 1979	0415	1,250	5.06
1975	Mar. 21, 1975	2030	*2,440	7.37	1980	Dec. 24, 1979	1715	1,010	4.58
	Mar. 25, 1975	0400	1,540	5.66		Jan. 13, 1980	1930	*2,950	8.32
1978	Jan. 4, 1978	1830	900	4.34		Feb. 16, 1980	2015	1,690	5.97
	Jan. 14, 1978	2030	1,410	5.40		Feb. 19, 1980	0545	2,030	6.61
	Jan. 16, 1978	1145	*2,040	6.62		Feb. 21, 1980	0545	1,320	5.22
	Jan. 19, 1978	0715	1,160	4.88					

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	7.6	15	46	23	19	16	12	7.3	6.7	5.5	7.6
2	15	6.0	12	35	23	19	16	20	7.2	6.8	5.3	7.1
3	8.0	3.8	140	37	23	20	17	12	7.2	6.5	5.3	6.8
4	7.4	4.8	25	34	19	19	16	11	7.6	6.4	5.3	6.6
5	8.4	5.8	14	33	20	17	17	10	7.9	6.3	5.3	6.4
6	6.6	5.8	14	31	20	17	17	11	9.3	6.3	5.3	6.3
7	7.4	5.8	13	30	20	17	17	11	9.2	6.0	5.6	6.3
8	9.0	5.8	18	30	20	18	22	9.3	8.1	6.0	5.8	6.3
9	9.5	6.8	188	27	34	17	14	8.4	7.9	6.4	5.8	6.4
10	11	143	134	27	24	16	23	8.2	7.6	5.7	5.8	6.3
11	8.0	99	239	27	22	18	15	7.7	7.3	6.0	5.8	6.3
12	5.6	28	73	21	24	19	14	9.1	7.0	6.0	6.2	6.6
13	7.0	109	42	17	123	104	14	9.1	7.0	5.5	6.5	6.6
14	8.2	19	38	16	28	102	15	9.1	7.2	5.3	6.3	6.3
15	6.0	12	38	21	200	62	15	7.4	7.3	5.4	6.3	6.3
16	5.8	70	38	37	100	61	15	7.4	7.3	5.3	6.3	6.4
17	5.7	224	32	20	28	68	15	6.5	7.0	5.0	6.7	6.5
18	5.6	27	27	15	33	29	32	6.1	6.9	4.8	7.0	6.6
19	5.5	66	24	21	32	26	26	6.0	6.6	4.8	7.0	12
20	5.4	94	18	20	25	23	17	5.8	7.6	4.8	7.0	5.6
21	5.3	21	21	27	38	18	16	5.9	7.9	4.8	7.0	4.3
22	5.2	13	51	30	22	17	15	6.4	7.5	4.8	7.2	4.0
23	5.2	24	81	28	19	17	13	8.5	7.0	5.6	7.3	3.8
24	5.1	473	483	27	21	17	13	8.3	6.6	6.3	7.3	3.8
25	5.0	68	644	25	19	17	11	7.9	6.3	5.4	7.1	3.7
26	4.8	26	194	25	28	18	12	7.9	6.3	4.9	7.2	3.4
27	4.4	19	221	25	23	18	12	7.9	6.4	5.9	7.3	3.6
28	4.0	17	103	23	22	17	11	7.7	6.8	5.5	7.3	3.4
29	4.7	16	84	24	21	16	11	7.3	6.8	5.3	7.3	3.6
30	8.6	15	75	22	---	17	11	7.0	6.6	5.3	6.9	3.8
31	7.6	---	58	22	---	23	---	7.2	---	5.6	7.6	---
TOTAL	233.0	1635.2	3157	823	1054	886	478	269.1	218.7	175.4	199.6	172.7
MEAN	7.52	54.5	102	26.5	36.3	28.6	15.9	8.68	7.29	5.66	6.44	5.76
MAX	28	473	644	46	200	104	32	20	9.3	6.8	7.6	12
MIN	4.0	3.8	12	15	19	16	11	5.8	6.3	4.8	5.3	3.4
AC-FT	462	3240	6260	1630	2090	1760	948	534	434	348	396	343

CAL YR 1983	TOTAL	37517.1	MEAN	103	MAX	1130	MIN	3.8	AC-FT	74420
WTR YR 1984	TOTAL	9301.7	MEAN	25.4	MAX	644	MIN	3.4	AC-FT	18450

## 11183600 WALNUT CREEK AT CONCORD, CA

LOCATION.--Lat 37°56'43", long 122°02'55", in Arroyo de las Nueces y Bolbones Grant, Contra Costa County, Hydrologic Unit 18050001, on right bank at southwest city limits of Concord, 0.2 mi upstream from Southern Pacific Railroad bridge, and 3.8 mi downstream from confluence of San Ramon and Las Trampas Creeks.

DRAINAGE AREA.--85.2 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CA-79-2: Drainage area. WDR CA-82-2: 1969(M), 1970(M), 1973(P), 1975(M), 1978(M), 1980(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 35.44 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records poor including those for period of no gage height record, Dec. 13 to Jan. 16. Flow slightly regulated by Lafayette Reservoir 10 mi upstream, capacity, 4,240 acre-ft. Some small diversions for irrigation above station.

AVERAGE DISCHARGE.--16 years, 55.0 ft<sup>3</sup>/s, 39,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft<sup>3</sup>/s Jan. 5, 1982, gage height, 19.1 ft from rating curve extended above 3,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily, 0.70 ft<sup>3</sup>/s Oct. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,700 (revised) ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1330	*3,690	8.21
Dec. 25	Unknown	3,620	8.14

Minimum daily, 8.1 ft<sup>3</sup>/s Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	24	91	78	33	29	28	29	22	13	12	23
2	37	16	88	66	34	29	27	42	19	13	12	12
3	25	12	301	60	34	28	27	30	18	13	12	12
4	25	12	96	56	33	28	27	29	19	12	13	12
5	27	11	88	52	33	26	27	28	24	12	13	11
6	21	11	89	48	32	26	27	28	26	15	12	11
7	24	11	91	45	32	27	27	28	23	13	13	11
8	34	11	95	42	32	26	35	28	20	13	14	12
9	36	19	354	40	60	26	29	28	19	14	13	12
10	37	210	233	37	42	26	42	28	19	14	13	11
11	23	147	407	35	35	26	31	27	18	14	12	9.7
12	15	66	138	33	42	26	28	26	18	14	12	11
13	18	195	103	31	196	148	27	25	19	14	12	12
14	26	55	82	28	78	136	26	23	21	14	13	11
15	15	32	70	37	375	143	26	22	17	12	12	10
16	15	122	61	66	172	110	40	24	19	13	12	11
17	15	428	54	51	86	108	41	20	25	12	15	12
18	15	77	48	44	50	55	61	23	20	12	23	12
19	14	132	43	42	56	48	57	20	13	12	12	18
20	15	161	38	37	45	42	32	19	19	12	11	12
21	14	79	33	44	66	36	27	19	18	12	11	17
22	14	61	46	51	45	31	27	18	14	20	15	13
23	13	83	90	62	35	30	27	18	13	21	27	9.1
24	14	864	720	43	33	29	26	18	12	15	12	8.5
25	13	128	880	37	32	28	25	17	12	15	15	8.6
26	13	91	350	35	30	29	33	18	12	13	28	8.1
27	12	84	400	33	30	28	32	19	15	14	30	9.2
28	12	88	195	34	30	27	27	19	13	14	19	9.1
29	14	91	140	34	29	27	27	19	12	19	16	9.0
30	28	93	115	34	---	26	29	21	12	15	28	8.9
31	24	---	92	34	---	40	---	21	---	13	33	---
TOTAL	684	3414	5631	1369	1830	1444	945	734	531	432	495	346.2
MEAN	22.1	114	182	44.2	63.1	46.6	31.5	23.7	17.7	13.9	16.0	11.5
MAX	76	864	880	78	375	148	61	42	26	21	33	23
MIN	12	11	33	28	29	26	25	17	12	12	11	8.1
AC-FT	1360	6770	11170	2720	3630	2860	1870	1460	1050	857	982	687
CAL YR 1983	TOTAL	62598	MEAN	172	MAX	2460	MIN	11	AC-FT	124200		
WTR YR 1984	TOTAL	17855.2	MEAN	48.8	MAX	880	MIN	8.1	AC-FT	35420		

## PACHECO CREEK BASIN

11183700 LITTLE PINE CREEK NEAR ALAMO, CA

LOCATION.--Lat 37°53'06", long 121°58'36", in Arroyo de las Nueces y Bolbones Grant, Contra Costa County, Hydrologic Unit 18050001, on right bank 200 ft downstream from road ford, 1.2 mi upstream from mouth, and 3.8 mi northeast of Alamo.

DRAINAGE AREA.--1.22 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 520 ft from topographic map.

REMARKS.--Records good except for those periods of no gage height record, Dec. 13 to Jan. 16, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--10 years, 0.38 ft<sup>3</sup>/s, 275 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 138 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 2.41 ft, from rating curve extended above 12 ft<sup>3</sup>/s on basis of critical depth computation; no flow for long periods in each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17 ft<sup>3</sup>/s Dec. 25, gage height 1.64 ft, no peak above base of 30 ft<sup>3</sup>/s; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		0	.35	1.8	.52	.32	.17	.08				
2		0	.31	1.6	.49	.32	.16	.08				
3		0	1.9	1.4	.49	.30	.16	.07				
4		0	.72	1.3	.47	.28	.16	.07				
5		0	.55	1.2	.45	.26	.16	.06				
6		0	.46	1.1	.44	.27	.15	.06				
7		0	.43	1.0	.43	.28	.14	.04				
8		0	.46	.96	.43	.25	.15	.04				
9		0	2.3	.92	.53	.23	.14	.04				
10		.66	1.8	.86	.44	.22	.16	.04				
11		.27	3.9	.82	.43	.22	.15	.04				
12		.11	2.4	.78	.43	.21	.13	.04				
13		.62	1.6	.75	.75	.47	.12	.03				
14		.12	1.2	.72	.45	.34	.11	.03				
15		.07	1.0	.69	1.6	.30	.10	.04				
16		.35	.88	.86	1.2	.31	.10	.04				
17		2.1	.77	.71	.64	.27	.10	.04				
18		.44	.71	.68	.52	.22	.16	.04				
19		.78	.68	.68	.47	.22	.14	.03				
20		1.1	.63	.67	.44	.21	.10	.02				
21		.52	.61	.66	.59	.19	.09	.02				
22		.36	1.3	.61	.43	.19	.08	.02				
23		.46	4.3	.61	.41	.19	.08	.01				
24		4.3	7.5	.57	.40	.19	.08	.01				
25		2.0	12	.55	.37	.19	.07	0				
26		1.0	6.5	.54	.36	.19	.07	0				
27		.61	6.4	.54	.34	.18	.07	0				
28		.54	3.5	.55	.33	.16	.06	0				
29		.45	2.6	.54	.34	.16	.06	0				
30		.41	2.2	.54	---	.16	.08	0				
31		---	2.0	.53	---	.18	---	0				
TOTAL	0	17.27	71.96	25.74	15.19	7.48	3.50	0.99	0	0	0	0
MEAN	0	.58	2.32	.83	.52	.24	.12	.032	0	0	0	0
MAX	0	4.3	12	1.8	1.6	.47	.17	.08	0	0	0	0
MIN	0	0	.31	.53	.33	.16	.06	0	0	0	0	0
AC-FT	0	34	143	51	30	15	6.9	2.0	0	0	0	0
CAL YR 1983	TOTAL	414.05	MEAN	1.13	MAX	14	MIN	0	AC-FT	821		
WTR YR 1984	TOTAL	142.13	MEAN	.39	MAX	12	MIN	0	AC-FT	282		

## 11456000 NAPA RIVER NEAR ST. HELENA, CA

LOCATION.--Lat 38°29'52", long 122°25'37", in Carne Humana Grant, Napa County, Hydrologic Unit 18050002, on right bank 0.2 mi upstream from highway bridge, 1.3 mi northeast of Zinfandel, and 2.5 mi east of St. Helena.

DRAINAGE AREA.--81.4 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1929 to September 1932, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1929: Drainage area. WDR CA-78-2: 1977(M).

GAGE.--Water-stage recorder. Datum of gage is 170.12 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1958, at datum 3.00 ft higher. Nov. 22, 1958 to July 22, 1976, at datum 2.00 ft higher.

REMARKS.--Records good. Some regulation by Bell Canyon Reservoir since 1959, capacity, 2,530 acre-ft. Small diversions above station for irrigation of about 1,500 acres.

AVERAGE DISCHARGE.--48 years, 99.4 ft<sup>3</sup>/s, 72,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,600 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 18.17 ft present datum; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,060 ft<sup>3</sup>/s Dec. 25 (1545 hrs), gage height 15.46 ft, no other peak above base of 4,200 ft<sup>3</sup>/s; minimum daily, 0.31 ft<sup>3</sup>/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	15	112	477	41	58	46	21	7.1	4.6	2.0	4.7
2	3.3	13	97	374	40	55	44	22	5.6	3.0	1.5	2.9
3	3.4	6.9	701	309	39	52	43	20	5.5	2.5	2.4	1.3
4	3.3	5.2	413	259	38	50	42	20	6.2	1.7	1.7	1.0
5	2.7	4.9	275	222	38	48	41	19	5.8	1.3	1.6	1.1
6	2.8	4.9	274	191	37	47	40	19	7.6	5.1	1.8	.85
7	2.8	4.9	264	164	37	44	39	18	8.4	5.9	2.7	.76
8	2.8	4.9	453	145	35	43	39	17	8.5	6.0	2.5	.76
9	3.1	13	1810	125	38	42	36	16	7.0	5.3	2.3	.65
10	3.6	547	1290	112	39	43	43	16	6.0	4.5	2.0	.49
11	3.5	225	1950	106	38	43	37	15	7.3	4.1	2.3	.86
12	3.3	191	912	98	42	42	35	15	8.1	3.4	2.0	.84
13	3.2	513	590	90	210	105	34	14	7.8	2.6	1.2	.61
14	2.8	176	450	82	156	115	33	13	8.4	2.3	1.9	.70
15	3.4	83	347	82	243	235	32	13	9.3	1.8	1.8	.64
16	3.6	225	283	106	258	192	31	13	9.4	1.6	3.8	.32
17	3.9	1660	260	80	158	275	30	13	9.5	2.1	4.2	.47
18	3.9	354	218	71	124	160	34	13	8.8	1.5	2.8	.67
19	3.3	335	190	66	107	126	40	13	8.6	1.9	3.4	1.2
20	2.4	407	169	62	96	108	31	12	8.4	2.0	4.4	1.6
21	2.3	263	149	62	99	94	29	10	7.4	2.8	5.7	1.4
22	2.2	170	133	60	88	85	27	9.3	5.2	3.9	5.7	.39
23	2.5	167	205	57	81	79	26	7.9	7.9	2.2	5.8	.31
24	2.6	1700	1690	53	80	73	25	8.9	6.3	1.5	5.6	1.4
25	2.4	723	4590	50	73	69	23	9.2	7.5	2.6	5.9	1.5
26	2.4	384	1690	48	68	66	23	9.0	7.3	2.1	4.5	1.2
27	2.4	263	1180	47	65	61	23	8.9	6.2	1.7	5.6	1.2
28	2.4	193	704	46	63	58	20	8.3	6.7	1.6	5.3	.92
29	2.6	151	501	44	60	55	20	7.9	5.8	1.9	3.4	.98
30	7.1	132	931	43	---	53	20	7.4	5.1	1.9	4.6	.80
31	13	---	663	42	---	52	---	7.4	---	2.4	6.6	---
TOTAL	106.4	8934.7	23494	3773	2491	2628	986	416.2	218.7	87.8	107.0	32.52
MEAN	3.43	298	758	122	85.9	84.8	32.9	13.4	7.29	2.83	3.45	1.08
MAX	13	1700	4590	477	258	275	46	22	9.5	6.0	6.6	4.7
MIN	2.2	4.9	97	42	35	42	20	7.4	5.1	1.3	1.2	.31
AC-FT	211	17720	46600	7480	4940	5210	1960	826	434	174	212	65
CAL YR 1983	TOTAL	117287.40	MEAN	321	MAX	5480	MIN	1.6	AC-FT	232600		
WTR YR 1984	TOTAL	43275.32	MEAN	118	MAX	4590	MIN	.31	AC-FT	85840		

## NAPA RIVER BASIN

11458000 NAPA RIVER NEAR NAPA, CA  
(National stream-quality accounting network station)

LOCATION.--Lat 38°22'06", long 122°18'08", in Yajome Grant, Napa County, Hydrologic Unit 18050002, on left bank at downstream side of Oak Knoll Avenue bridge, 0.4 mi downstream from Dry Creek, and 5 mi north of Napa.

DRAINAGE AREA.--218 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to September 1932, October 1959 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1315-B: 1930 (M).

GAGE.--Water-stage recorder. Datum of gage is 24.74 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage height record, Oct. 1 to Nov. 10 which are fair. Flow slightly regulated by Bell Canyon Reservoir beginning in 1959, capacity, 2,530 acre-ft and Lake Hennessey beginning in December 1945, capacity, 31,000 acre-ft. Diversions for irrigation of about 10,000 acres above station.

AVERAGE DISCHARGE.--28 years, 214 ft<sup>3</sup>/s, 155,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 25.65 ft; maximum gage height, 27.59 ft Jan. 31, 1963; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 5,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 17	1400	6,130	14.73	Dec. 11	1500	5,310	13.80
Nov. 24	1815	5,840	14.41	Dec. 25	2130	*14,200	21.79

Minimum daily, 2.7 ft<sup>3</sup>/s Sept. 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	38	211	1380	107	115	77	37	15	7.9	6.1	4.7
2	12	35	183	1130	99	103	73	42	12	7.0	5.9	4.3
3	12	32	1310	948	92	97	73	40	9.8	5.6	4.4	4.4
4	10	9.8	960	815	86	95	71	47	16	5.6	4.4	4.2
5	9.6	9.6	569	715	83	92	72	47	19	5.7	5.0	4.0
6	9.7	9.6	511	629	79	84	72	47	19	4.7	5.4	3.8
7	9.8	9.4	492	546	80	78	68	46	22	5.2	4.7	3.8
8	10	9.3	586	482	75	77	69	39	20	6.3	4.0	3.9
9	11	150	3510	429	75	76	62	38	20	5.9	4.1	3.9
10	12	1900	2750	370	77	75	73	37	17	6.0	5.1	3.6
11	12	931	4630	332	74	75	73	38	22	4.8	4.7	3.9
12	11	147	2690	300	80	73	66	39	16	5.5	4.3	4.3
13	11	814	1670	269	309	156	65	38	14	4.0	4.6	4.0
14	10	1670	1260	242	378	213	60	36	17	4.3	4.3	4.0
15	12	840	993	230	400	356	56	35	11	4.7	4.2	4.2
16	13	262	802	304	624	349	53	36	13	5.3	4.0	4.1
17	13	2780	708	247	366	631	53	34	14	4.2	4.0	4.1
18	13	896	594	218	276	348	57	35	15	5.3	3.9	3.5
19	10	536	519	200	231	257	78	33	14	5.3	3.9	3.9
20	8.4	827	466	189	208	201	61	33	12	5.1	4.1	3.6
21	8.2	509	413	184	204	178	56	32	12	4.9	4.3	3.8
22	7.8	289	375	177	190	161	53	28	11	5.6	4.9	3.6
23	8.6	265	521	169	176	147	49	23	10	5.7	4.7	3.6
24	9.0	2750	3670	162	170	138	44	23	9.0	5.8	4.3	2.7
25	8.1	1570	10800	156	160	131	40	24	9.2	5.6	4.4	2.7
26	8.2	756	6540	150	150	123	38	23	8.3	5.9	4.9	3.2
27	8.4	493	3860	147	139	113	40	23	6.7	5.4	4.6	2.9
28	8.7	352	2420	137	131	104	36	23	6.8	5.8	3.9	2.9
29	11	274	1730	134	122	98	34	21	6.9	5.8	3.9	2.8
30	31	241	2070	128	---	93	35	21	6.5	6.5	5.2	3.1
31	33	---	1800	120	---	89	---	21	---	6.4	5.3	---
TOTAL	363.5	19404.7	59613	11639	5241	4926	1757	1039	404.2	171.8	141.5	111.5
MEAN	11.7	647	1923	375	181	159	58.6	33.5	13.5	5.54	4.56	3.72
MAX	33	2780	10800	1380	624	631	78	47	22	7.9	6.1	4.7
MIN	7.8	9.3	183	120	74	73	34	21	6.5	4.0	3.9	2.7
AC-FT	721	38490	118200	23090	10400	9770	3490	2060	802	341	281	221
CAL YR 1983	TOTAL	303045.0	MEAN	830	MAX	14400	MIN	6.2	AC-FT	601100		
WTR YR 1984	TOTAL	104812.2	MEAN	286	MAX	10800	MIN	2.7	AC-FT	207900		

11458000 NAPA RIVER NEAR NAPA, CA--Continued

## WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1973 to current year.  
 CHEMICAL ANALYSES: Water years 1973 to current year.  
 BIOLOGICAL DATA: Water years 1978-81.  
 SPECIFIC CONDUCTANCE: Water years 1978-81.  
 WATER TEMPERATURES: Water years 1977-81.  
 SEDIMENT RECORDS: Water years 1971, 1977 to current year.

PERIOD OF DAILY RECORD.--  
 SPECIFIC CONDUCTANCE: June 1978 to September 1981.  
 WATER TEMPERATURES: October 1976 to September 1981.  
 SEDIMENT RECORDS: October 1976 to September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--  
 SPECIFIC CONDUCTANCE: Maximum recorded, 500 micromhos Sept. 1, 1981; minimum recorded, 81 micromhos Mar. 1, 1979.  
 WATER TEMPERATURES: Maximum recorded, 28.0°C July 13, 1979; minimum recorded, 3.0°C Dec. 31, 1978, Jan. 1, 1979.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC , 1983											
01...	1315	208	226	7.5	12.5	760	6.2	9.3	88	220	330
JAN , 1984											
19...	1330	197	279	7.9	10.0	770	3.9	10.3	90	K70	87
MAR											
14...	1330	185	226	7.1	14.0	765	36	9.7	94	1200	1000
MAY											
18...	1015	36	358	7.7	18.0	770	1.7	9.2	96	K60	68
JUL											
02...	1220	7.6	413	7.9	24.5	760	2.1	8.1	98	120	71
SEP											
12...	1155	4.3	409	7.7	19.5	760	.90	8.8	96	47	210

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC , 1983											
01...	92	8	17	12	13	23	.6	2.1	84	19	9.5
JAN , 1984											
19...	120	9	20	16	13	19	.5	1.7	107	23	9.3
MAR											
14...	99	15	20	12	12	20	.5	2.1	84	19	8.8
MAY											
18...	150	6	25	21	19	21	.7	1.9	143	26	13
JUL											
02...	170	6	28	25	20	20	.7	2.4	167	32	15
SEP											
12...	180	9	29	25	18	18	.6	2.1	167	27	13

See footnotes at end of table.

## NAPA RIVER BASIN

11458000 NAPA RIVER NEAR NAPA, CA--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC , 1983											
01...	.1	36	167	160	.23	1.8	.14	1.0	.12	.09	.08
JAN , 1984											
19...	.1	33	177	180	.24	1.4	<.01	.50	.06	.05	.05
MAR											
14...	.2	28	167	150	.23	.80	.05	.50	.12	.06	.04
MAY											
18...	.2	34	214	230	.29	.57	.04	.50	.07	.06	.04
JUL											
02...	.2	30	244	250	.33	<.10	.02	.30	.03	.02	.02
SEP											
12...	.2	33	247	250	.34	.12	.03	<.20	.04	.03	.03

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
DEC , 1983										
01...	1315	130	1	48	<.5	<1	<1	<3	3	62
JAN , 1984										
19...	1330	50	1	54	<.5	<1	<1	<3	<1	46
MAY										
18...	1015	<10	1	61	<1	<1	<1	<3	3	17
SEP										
12...	1155	10	2	74	<1	<1	1	<3	1	14

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC , 1983											
01...	2	16	10	.1	<10	2	<1	<1	120	<6	7
JAN , 1984											
19...	<1	17	14	<.1	<10	3	<1	<1	140	<6	11
MAY											
18...	<1	34	14	<.1	<10	<1	<1	<1	170	<6	8
SEP											
12...	1	30	14	.2	<10	2	<1	<1	190	<6	25

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

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

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM
DEC								
01...	1300	208	12.5	12	6.7	--	--	--
JAN								
19...	1345	197	10.0	6	3.2	92	--	--
MAR								
14...	1340	185	14.0	44	22	98	99	100
MAY								
18...	1225	36	18.0	12	1.2	95	--	--
JUL								
02...	1210	7.6	24.5	5	.10	--	--	--
SEP								
12...	1145	4.3	19.5	6	.07	--	--	--

## 11459500 NOVATO CREEK AT NOVATO, CA

LOCATION.--Lat 38°06'28", long 122°34'44", in Novato Grant, Marin County, Hydrologic Unit 18050002, on left bank in Novato, 100 ft upstream from 7th Street Bridge.

DRAINAGE AREA.--17.6 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1946 to current year. Records of diversions for water years 1952-53, estimated. Prior to October 1966 published as "near Novato."

GAGE.--Water-stage recorder. Datum of gage is 14.76 National Geodetic Vertical Datum of 1929. Prior to Aug. 23, 1967, at site 0.6 mi upstream at different datum.

REMARKS.--Records good. No gage height record Dec. 14-28. Flow regulated by Stafford Lake beginning Dec. 1, 1951, capacity, 4,500 acre-ft since Oct. 18, 1954; contents, 2,420 acre-ft Sept. 30, 1983, and zero acre-ft Sept. 30, 1984 (lake drained for dam rehabilitation). Diversion from Stafford Lake for municipal water supply began Apr. 25, 1952, and amounted to 1,986 acre-ft for the current year. No diversion from Russian River into Stafford Lake during current year.

COOPERATION.--Record of diversions furnished by North Marin County Water District.

AVERAGE DISCHARGE (adjusted for diversions).--38 years, 14.8 ft<sup>3</sup>/s, 10,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,000 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 14.46 ft; no flow many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 937 ft<sup>3</sup>/s Dec. 25, gage height, 8.04 ft; minimum daily, 0.17 ft<sup>3</sup>/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.9	9.0	121	3.0	2.7	1.1	1.1	.60	.66	2.4	.46
2	.63	.94	7.6	116	2.8	2.7	1.5	1.0	.57	.64	7.5	.46
3	.54	.71	21	110	2.8	2.5	1.1	.95	.60	.67	7.3	.34
4	.56	.62	15	104	2.6	2.5	1.2	.92	.61	.69	7.0	.34
5	.53	.57	8.4	83	2.5	2.3	1.2	1.0	.76	.69	7.1	.39
6	.51	.57	7.2	101	2.5	2.3	1.2	1.0	1.4	3.0	7.2	.38
7	.52	.58	8.5	97	2.5	2.3	1.2	.96	.97	5.1	7.0	.31
8	.55	.51	20	92	2.5	2.3	1.3	.98	.92	10	6.6	.32
9	.54	8.1	100	88	3.0	2.3	1.2	.99	.91	1.7	4.1	.30
10	.57	24	90	82	2.4	2.3	2.4	.99	.92	1.1	4.6	.30
11	.77	6.9	127	76	2.8	2.4	1.2	1.0	.90	1.0	.89	.27
12	.63	7.8	101	70	3.0	2.4	1.2	1.1	.92	.94	.72	.26
13	.64	12	88	65	18	9.5	1.2	1.0	.85	36	.53	.26
14	.96	4.6	79	62	4.2	3.2	1.2	1.1	.79	93	.90	.23
15	.78	3.5	65	62	12	4.4	1.2	1.1	1.1	62	2.8	.30
16	.63	10	56	62	7.7	4.2	1.1	1.1	.75	1.4	3.5	.37
17	.77	19	52	55	4.5	3.1	1.3	1.0	.66	1.6	.71	.31
18	.82	5.9	41	29	4.0	2.5	2.9	1.0	.66	1.6	.41	.25
19	.65	19	34	5.5	3.8	2.4	2.5	1.0	.64	1.3	.31	.39
20	.69	26	27	5.1	3.8	2.3	1.1	.94	.66	1.5	1.8	.23
21	.77	12	22	5.0	27	5.8	1.1	.93	.63	1.6	1.3	.26
22	1.3	7.6	29	4.7	61	21	1.1	.94	.70	1.6	.97	.30
23	1.9	11	110	4.4	58	18	1.1	.95	.64	1.7	.77	.26
24	1.9	28	510	4.1	27	2.2	1.1	.93	.60	1.6	.76	.23
25	1.6	29	540	3.9	3.3	1.9	1.1	.85	.62	1.7	.83	.20
26	1.8	23	290	3.7	3.0	1.8	1.1	1.1	.63	1.6	.75	.19
27	1.8	16	280	3.5	2.9	2.0	1.1	.81	.64	1.7	.54	.17
28	1.8	13	180	3.5	2.9	1.8	1.0	.78	.65	1.6	.48	.21
29	2.2	11	133	3.4	2.8	4.0	.98	.74	.64	1.6	.86	.35
30	4.8	12	150	3.3	---	7.9	.99	.58	.71	1.5	1.5	.32
31	1.2	---	128	3.2	---	1.5	---	.59	---	1.5	.73	---
TOTAL	34.56	317.80	3328.7	1528.3	278.3	128.5	38.97	29.43	22.65	242.29	82.86	8.96
MEAN	1.11	10.6	107	49.3	9.60	4.15	1.30	.95	.76	7.82	2.67	.30
MAX	4.8	29	540	121	61	21	2.9	1.1	1.4	93	7.5	.46
MIN	.51	.51	7.2	3.2	2.4	1.5	.98	.58	.57	.64	.31	.17
AC-FT	69	630	6600	3030	552	255	77	58	45	481	164	18

CAL YR 1983 TOTAL 20109.75 MEAN 55.1 MAX 950 MIN .49 AC-FT 39890  
WTR YR 1984 TOTAL 6041.32 MEAN 16.5 MAX 540 MIN .17 AC-FT 11980

## 11460000 CORTE MADERA CREEK AT ROSS, CA

LOCATION.--Lat 37°57'45", long 122°33'20", in Punta de Quentin Grant, Marin County, Hydrologic Unit 18050002, on left bank behind fire station at Ross, 1.7 mi southwest of San Rafael, and 4 mi upstream from mouth.

DRAINAGE AREA.--18.1 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7.97 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Records fair. Flow regulated by Phoenix Lake 1.7 mi upstream, capacity, 612 acre-ft. Diversion on tributary above station by Marin Municipal Water District.

AVERAGE DISCHARGE.--33 years, 29.3 ft<sup>3</sup>/s, 21,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 19.81 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1145	1,180	11.16
Dec. 10	2215	1,140	11.02
Dec. 25	1200	*2,300	14.35

Minimum, no flow Nov. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	7.2	14	96	1.8	2.6	4.4	8.7	1.3	.83	.49	.06
2	.16	.57	12	79	1.5	2.3	3.8	8.7	.71	.81	.44	.06
3	.11	.45	115	62	1.4	2.0	3.8	8.4	1.0	.57	.46	.05
4	.14	0	55	45	1.3	1.7	7.2	8.0	1.5	.59	.44	.08
5	.15	0	46	41	1.2	1.4	9.5	8.4	1.3	.67	.40	.31
6	.21	0	42	37	1.0	1.3	12	8.4	6.4	.65	.34	.69
7	.28	.01	32	30	1.0	1.7	11	8.2	5.1	.62	.47	.85
8	.35	.04	94	18	1.0	1.6	9.7	7.5	1.1	.50	.17	1.2
9	.48	2.0	372	15	1.9	1.7	5.2	6.1	1.6	.59	.19	1.2
10	.60	100	490	14	1.1	1.7	9.5	5.9	1.3	.53	.14	1.3
11	.62	14	556	12	1.8	1.7	4.6	6.4	1.3	.53	.15	1.5
12	.95	21	201	11	2.7	1.7	2.9	6.1	2.0	.59	.08	1.9
13	1.1	23	91	11	50	51	2.7	4.6	2.7	.38	.06	1.7
14	1.5	2.1	71	9.2	29	24	2.6	4.7	2.2	.41	.07	1.6
15	1.7	5.5	63	16	70	47	2.4	4.8	1.9	.43	.07	2.0
16	1.6	33	60	20	53	58	2.3	4.7	2.0	.39	.08	2.1
17	1.7	136	56	12	35	66	12	2.0	1.6	.43	.09	1.6
18	2.1	22	53	9.9	29	42	29	.77	2.0	.33	.06	1.5
19	2.7	45	44	11	24	35	14	3.6	2.2	.36	.06	2.0
20	2.8	61	35	12	21	31	6.0	6.3	1.6	.30	.06	2.0
21	3.5	49	31	13	20	27	16	6.2	1.5	.41	.08	2.0
22	5.2	40	35	11	17	16	15	6.0	3.7	.59	.13	1.8
23	3.4	39	79	11	16	14	12	5.7	4.3	.66	.16	1.3
24	2.7	441	792	10	15	12	2.0	5.3	1.3	.69	.17	1.1
25	3.0	118	1390	9.8	12	12	2.4	5.0	1.0	.53	.28	.96
26	3.1	85	341	8.2	8.2	10	6.7	4.4	.74	.49	.30	.98
27	2.6	52	182	3.8	4.1	6.3	14	4.2	1.6	.49	.30	.73
28	2.8	21	120	3.3	3.4	5.7	17	3.9	1.1	.48	.32	.73
29	4.1	16	94	3.3	3.0	5.2	9.2	3.8	.74	.48	.23	.66
30	6.3	20	215	2.7	---	4.6	8.4	3.3	1.0	.48	3.7	.61
31	1.4	---	125	2.1	---	5.6	---	2.9	---	.53	.68	---
TOTAL	60.85	1353.87	5906	639.3	427.4	493.8	257.2	172.97	57.79	16.34	10.67	34.57
MEAN	1.96	45.1	191	20.6	14.7	15.9	8.58	5.58	1.93	.53	.34	1.15
MAX	6.3	441	1390	96	70	66	29	8.7	6.4	.83	3.7	2.1
MIN	.11	0	12	2.1	1.0	1.3	2.0	.77	.71	.30	.06	.05
AC-FT	121	2690	11710	1270	848	979	510	343	115	32	21	69
CAL YR 1983	TOTAL	30604.12	MEAN	83.8	MAX	1390	MIN	0	AC-FT	60700		
WTR YR 1984	TOTAL	9430.86	MEAN	25.8	MAX	1390	MIN	0	AC-FT	18710		

11460100 ARROYO CORTE MADERA DEL PRESIDIO AT MILL VALLEY, CA

LOCATION.--Lat 37°53'50", long 122°32'06", in Sausalito Grant, Marin County, Hydrologic Unit 18050002, on right bank near south boundary of town of Mill Valley, 1 mi upstream from mouth.

DRAINAGE AREA.--4.69 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to September 1973, May 1975 to current year.

REVISED RECORDS.--WDR CA-82-2; 1978-81(P).

GAGE.--Water-stage recorder. Datum of gage is 1.85 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--17 years, 7.72 ft<sup>3</sup>/s, 5,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,180 ft<sup>3</sup>/s Jan. 21, 1970, maximum gage height, 8.11 ft Jan. 4, 1982 (backwater); no flow for many days in 1968, 1975-79.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 220 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	1315	*323	5.58
Dec. 10	2100	303	5.49
Dec. 24	1230	301	5.48

Minimum daily, 0.16 ft<sup>3</sup>/s Sept. 25-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.71	2.9	4.2	32	2.6	3.3	2.3	9.3	1.2	.65	.37	.31
2	.50	.80	3.3	21	2.4	3.2	2.2	5.4	1.1	.60	.36	.26
3	.48	.63	17	16	2.3	3.0	2.2	4.1	1.1	.56	.38	.26
4	.45	.59	6.2	12	2.2	2.8	2.1	3.5	1.4	.63	.35	.25
5	.41	.54	5.7	11	2.2	2.7	2.1	3.1	1.3	.67	.32	.24
6	.41	.65	5.3	8.9	2.2	2.6	2.0	2.8	5.2	.67	.32	.24
7	.41	.59	6.1	7.8	2.1	2.5	1.8	2.6	2.0	.58	.32	.28
8	.47	.54	40	7.1	2.1	2.4	2.8	2.4	1.4	.53	.32	.26
9	.42	2.5	80	6.8	2.8	2.4	1.9	2.2	1.3	.51	.32	.25
10	.43	11	133	6.3	2.3	2.3	16	2.1	1.2	.46	.30	.24
11	.44	3.0	131	6.0	2.3	2.2	5.6	2.0	1.1	.44	.35	.26
12	.42	5.5	49	5.6	2.6	2.2	4.2	1.9	1.1	.39	.39	.29
13	.39	8.8	26	5.4	15	8.3	3.5	1.8	1.1	.36	.37	.27
14	.39	2.6	17	5.1	8.7	3.8	3.1	1.7	1.2	.30	.33	.28
15	.39	2.4	13	5.8	55	7.0	2.8	1.7	1.2	.28	.35	.25
16	.42	4.2	11	5.7	37	9.3	2.6	1.7	1.2	.27	.35	.26
17	.40	23	11	4.9	18	10	2.3	1.6	1.1	.30	.32	.30
18	.45	5.6	9.2	4.6	13	7.6	8.0	1.8	1.5	.31	.29	.32
19	.46	89	8.4	4.4	9.4	6.1	6.0	1.5	1.2	.37	.28	.41
20	.48	25	7.6	3.9	7.7	5.2	4.4	1.4	1.1	.46	.30	.31
21	.60	9.7	6.8	4.2	7.0	4.6	3.8	1.5	.96	.49	.32	.31
22	.49	6.3	7.6	3.5	5.8	4.2	3.2	1.5	.95	.56	.36	.40
23	.39	9.3	16	3.4	5.2	4.0	3.0	1.5	.98	.51	.37	.25
24	.42	110	189	3.3	5.3	3.9	2.8	1.5	1.0	.51	.33	.18
25	.36	31	221	3.2	4.6	3.2	2.5	1.4	1.0	.47	.28	.16
26	.32	13	132	3.0	4.4	2.8	2.4	1.3	1.0	.42	.26	.16
27	.32	8.2	107	2.8	4.0	2.6	2.2	1.3	.88	.40	.24	.16
28	.31	6.3	45	2.7	3.6	2.5	2.1	1.2	.79	.37	.23	.17
29	.36	5.1	26	2.7	3.4	2.5	2.0	1.2	.76	.39	.22	.17
30	1.2	5.2	97	2.6	---	2.4	2.0	1.2	.74	.39	.80	.19
31	1.0	---	58	2.5	---	2.7	---	1.2	---	.40	.37	---
TOTAL	14.70	393.94	1489.4	214.2	235.2	124.3	103.9	69.4	38.06	14.25	10.47	7.69
MEAN	.47	13.1	48.0	6.91	8.11	4.01	3.46	2.24	1.27	.46	.34	.26
MAX	1.2	110	221	32	55	10	16	9.3	5.2	.67	.80	.41
MIN	.31	.54	3.3	2.5	2.1	2.2	1.8	1.2	.74	.27	.22	.16
AC-FT	29	781	2950	425	467	247	206	138	75	28	21	15
CAL YR 1983	TOTAL	7091.68	MEAN	19.4	MAX	381	MIN	.03	AC-FT	14070		
WTR YR 1984	TOTAL	2715.51	MEAN	7.42	MAX	221	MIN	.16	AC-FT	5390		


## LAGUNITAS CREEK BASIN

11460400 LAGUNITAS CREEK AT SAMUEL P. TAYLOR STATE PARK, CA

LOCATION.--Lat 38°01'37", long 122°44'07", in Samuel P. Taylor State Park, Marin County, Hydrologic Unit 18050005, on left bank 300 ft upstream of Deadmans Gulch, 0.9 mi downstream of park entrance and 2.1 mi northwest of Lagunitas.

DRAINAGE AREA.--34.3 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 102.89 ft National Geodetic Vertical Datum of 1929. 

REMARKS.--Records good. Flow regulated by Kent Lake, capacity 16,680 acre-ft, and Alpine Lake, capacity, 8,890 acre-ft, both of which divert water for domestic and industrial use in the county of Marin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,620 ft<sup>3</sup>/s Mar. 13, 1983, gage height, 7.65 ft; minimum daily, 4.2 ft<sup>3</sup>/s several days during September 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,840 ft<sup>3</sup>/s Dec. 25, gage height 6.86 ft; minimum daily, 4.2 ft<sup>3</sup>/s several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	11	21	294	11	13	13	12	9.4	5.9	4.4	4.4
2	6.2	7.3	18	193	11	13	13	13	9.4	5.9	4.4	4.4
3	5.8	6.3	106	137	11	14	14	12	9.7	5.7	4.4	4.3
4	5.7	5.9	56	101	11	14	15	11	11	8.5	4.5	4.3
5	5.7	5.7	40	76	11	13	15	11	11	7.7	4.6	4.3
6	5.6	5.6	37	63	11	13	15	11	12	5.7	4.5	4.3
7	5.6	5.7	30	52	11	13	15	10	11	5.6	4.5	4.3
8	5.6	4.6	114	47	11	13	15	10	10	5.5	4.5	4.3
9	5.7	5.3	405	43	11	13	14	9.9	10	5.6	4.5	4.2
10	5.6	68	387	40	12	13	16	9.9	9.7	5.6	4.5	4.3
11	5.6	35	437	38	12	13	12	9.9	9.7	5.5	4.5	4.3
12	5.7	39	160	34	13	13	11	9.6	9.2	5.5	4.6	4.3
13	5.6	51	90	31	40	47	11	9.9	9.1	5.4	4.5	4.3
14	5.5	25	62	28	29	30	11	9.8	9.0	5.3	4.5	4.2
15	5.4	16	49	27	39	45	11	9.9	8.8	5.3	4.4	4.2
16	5.4	78	40	35	39	47	11	9.9	8.7	5.3	4.5	4.2
17	5.4	179	35	28	26	62	11	9.8	8.5	5.1	4.4	4.2
18	5.4	47	30	25	27	37	15	9.9	8.3	4.5	4.4	4.2
19	5.3	77	27	23	26	28	15	9.6	7.9	4.5	4.4	4.3
20	5.3	93	25	21	24	22	13	9.6	8.0	4.6	4.4	4.3
21	5.2	47	22	21	27	18	12	9.6	6.9	4.6	4.4	4.3
22	5.3	29	22	20	23	17	12	9.5	6.2	4.6	4.4	4.3
23	5.3	25	38	18	19	19	12	9.3	5.1	4.5	4.3	4.3
24	5.6	328	453	16	18	19	11	9.1	5.1	4.6	4.4	4.3
25	6.2	100	920	15	17	18	11	9.3	5.0	4.4	4.4	4.3
26	5.8	60	276	13	14	17	11	9.6	5.3	4.4	4.3	4.4
27	6.0	43	176	13	13	17	11	9.2	5.2	4.4	4.4	4.4
28	5.8	33	133	13	13	17	11	10	6.5	4.5	4.4	4.3
29	6.0	26	173	12	13	15	11	9.4	6.8	4.4	4.3	4.3
30	8.5	24	497	12	---	14	11	9.1	6.2	4.4	4.5	4.2
31	8.8	---	483	12	---	14	---	9.1	---	4.4	4.5	---
TOTAL	181.2	1480.4	5362	1501	543	661	379	310.9	248.7	161.9	137.7	128.7
MEAN	5.85	49.3	173	48.4	18.7	21.3	12.6	10.0	8.29	5.22	4.44	4.29
MAX	8.8	328	920	294	40	62	16	13	12	8.5	4.6	4.4
MIN	5.2	4.6	18	12	11	13	11	9.1	5.0	4.4	4.3	4.2
AC-FT	359	2940	10640	2980	1080	1310	752	617	493	321	273	255
CAL YR 1983	TOTAL	42611.8	MEAN	117	MAX	1460	MIN	4.6	AC-FT	84520		
WTR YR 1984	TOTAL	11095.5	MEAN	30.3	MAX	920	MIN	4.2	AC-FT	22010		

## 11460600 LAGUNITAS CREEK NEAR POINT REYES STATION, CA

LOCATION.--Lat 39°04'49", long 122°47'00", in Nicasio (Black) Grant, Marin County, Hydrologic Unit 18050005, on right bank at upstream side of road bridge, 300 ft downstream from small right-bank tributary, and 1.4 mi northeast of town of Point Reyes Station.

DRAINAGE AREA.--81.7 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CA-79-2: 1975, 1978. WDR CA-82-2: 1975 (M), 1978 (M), and 1980 (M).

GAGE.--Water-stage recorder. Altitude of gage is 50 ft from topographic map. *above NGVD*

REMARKS.--Records good. Flow regulated by Nicasio Reservoir, capacity, 22,450 acre-ft, Kent Lake, capacity, 16,680 acre-ft, and Alpine Lake, capacity, 8,890 acre-ft, all of which divert water for domestic and industrial use in the county of Marin.

AVERAGE DISCHARGE.--10 years, 97.2 ft<sup>3</sup>/s, 70,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,100 ft<sup>3</sup>/s Jan. 4, 1982, gage height, 26.96 ft from rating curve extended above 3,100 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily, 0.01 ft<sup>3</sup>/s Sept. 26, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,880 ft<sup>3</sup>/s Dec. 25, gage height, 17.57 ft; minimum daily, 4.0 ft<sup>3</sup>/s Sept. 5, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	32	74	460	23	29	24	14	9.9	6.7	4.3	4.5
2	7.0	14	63	328	23	27	23	15	9.8	6.3	4.3	4.3
3	6.5	12	285	250	22	28	22	14	9.8	6.2	4.2	4.2
4	6.1	11	267	200	22	29	24	13	10	7.3	4.3	4.1
5	6.0	8.0	178	163	21	26	24	12	10	8.5	4.4	4.0
6	6.0	7.3	151	138	21	24	22	12	11	6.4	4.5	4.2
7	6.0	7.2	121	118	21	22	21	12	11	5.8	4.7	4.2
8	6.0	7.2	205	107	20	21	21	12	10	5.6	4.5	4.0
9	6.0	6.5	1090	97	21	21	19	11	10	5.9	4.3	4.4
10	5.9	60	978	90	22	22	29	11	10	5.8	4.1	4.2
11	5.8	63	1730	82	22	22	21	11	9.6	6.1	4.1	4.2
12	5.9	45	741	75	27	23	18	11	9.3	5.7	4.2	4.1
13	19	62	405	69	78	88	17	11	9.0	5.5	4.4	4.1
14	24	38	284	64	93	93	16	11	9.0	5.4	4.2	4.1
15	8.4	19	209	62	87	111	16	11	9.0	5.2	4.3	4.1
16	8.1	89	164	78	114	106	15	11	9.0	5.2	4.4	4.2
17	7.9	252	143	65	82	171	15	11	9.0	5.2	4.4	4.2
18	7.9	104	117	58	68	108	18	11	8.7	4.7	4.5	4.1
19	7.9	149	99	52	61	83	25	11	8.3	4.5	4.3	4.3
20	15	249	85	44	57	65	19	11	8.2	4.4	4.1	4.7
21	36	216	74	48	68	55	17	11	7.7	4.5	4.1	4.6
22	32	141	69	46	60	48	16	11	7.2	4.6	4.3	4.5
23	38	105	101	43	48	45	15	11	6.1	4.6	4.3	4.2
24	39	947	1180	39	45	41	14	10	5.6	4.6	4.3	4.4
25	39	582	3910	37	43	38	14	10	5.6	4.4	4.2	4.2
26	39	267	1280	38	37	37	13	10	5.5	4.2	4.2	4.2
27	39	172	670	31	33	38	13	10	5.9	4.3	4.2	4.3
28	39	125	419	29	31	33	13	11	5.8	4.2	4.1	4.4
29	39	97	359	28	30	27	13	11	8.1	4.3	4.4	4.3
30	41	84	676	26	---	24	13	9.8	7.1	4.4	4.5	4.4
31	43	---	665	24	---	25	---	9.8	---	4.4	4.7	---
TOTAL	596.5	3971.2	16792	2989	1300	1530	550	350.6	255.2	164.9	133.8	127.7
MEAN	19.2	132	542	96.4	44.8	49.4	18.3	11.3	8.51	5.32	4.32	4.26
MAX	43	947	3910	460	114	171	29	15	11	8.5	4.7	4.7
MIN	5.8	6.5	63	24	20	21	13	9.8	5.5	4.2	4.1	4.0
AC-FT	1180	7880	33310	5930	2580	3030	1090	695	506	327	265	253
CAL YR 1983	TOTAL	105531.4	MEAN	289	MAX	4730	MIN	5.3	AC-FT	209300		
WTR YR 1984	TOTAL	28760.9	MEAN	78.6	MAX	3910	MIN	4.0	AC-FT	57050		

## WALKER CREEK BASIN

11460750 WALKER CREEK NEAR MARSHALL, CA

LOCATION.--Lat 38°10'33", long 122°49'02", in Soulaajule (Vasquez) Grant, Marin County, Hydrologic Unit 18050005, on right bank 0.8 mi downstream of Verde Canyon, 2.8 mi below confluence of Arroyo Sausal and Salmon Creek, and 4.0 mi east of Marshall.

DRAINAGE AREA.--31.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 140 ft, from topographic map.

REMARKS.--Records fair. Flow affected by regulation and diversions and by releases from Soulaajule Reservoir on Arroyo Sausal, a tributary to Walker Creek. Reservoir capacity 10,570 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,880 ft<sup>3</sup>/s Dec. 25, gage height, 8.14 ft; minimum daily, 4.4 ft<sup>3</sup>/s Oct. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	10	29	135	11	14	8.9	7.3	5.3	5.8	5.8	5.8
2	5.3	6.3	24	95	11	12	8.9	8.8	5.3	5.8	5.8	5.8
3	5.3	5.9	143	73	10	11	7.6	8.4	5.3	5.8	5.8	5.8
4	5.1	5.8	113	64	11	10	7.0	8.4	5.3	5.8	5.8	5.8
5	4.4	5.8	70	52	11	9.3	9.6	7.9	5.3	5.8	5.8	5.8
6	4.4	5.8	66	40	11	9.9	12	7.9	5.7	5.8	5.8	5.8
7	4.7	5.8	56	36	9.7	11	11	7.9	5.4	5.8	5.8	5.8
8	4.9	5.8	144	34	9.4	11	12	7.9	5.3	5.8	5.8	5.8
9	4.9	7.2	453	29	9.4	11	12	7.9	5.7	5.8	5.8	5.8
10	5.1	46	415	29	9.4	12	17	7.9	5.8	5.8	5.8	5.8
11	5.3	14	581	26	9.4	12	13	7.9	5.8	5.8	5.8	5.8
12	4.9	18	300	23	9.4	12	8.9	7.9	5.8	5.8	5.8	5.8
13	4.9	34	163	20	28	22	8.4	8.4	5.8	5.8	5.8	5.8
14	5.2	20	108	19	21	18	8.4	7.4	5.8	5.8	5.8	5.8
15	6.3	15	72	18	48	27	8.4	6.3	5.8	5.8	5.8	5.8
16	6.3	48	54	25	64	39	7.9	6.3	5.8	5.8	5.8	5.8
17	6.3	174	48	22	42	59	7.9	6.3	5.8	5.8	5.8	5.8
18	5.8	53	37	20	32	39	8.2	5.9	5.8	5.8	5.8	5.8
19	5.3	136	29	17	28	31	9.3	5.8	5.4	5.8	5.8	5.8
20	5.3	120	24	18	26	25	8.3	5.8	5.3	5.8	5.8	5.8
21	5.3	52	19	20	30	21	7.9	5.8	5.3	5.8	5.8	5.8
22	5.3	31	16	16	26	18	7.8	5.8	5.3	5.8	5.8	5.8
23	5.3	28	26	15	23	17	6.8	5.8	5.3	5.8	5.8	5.8
24	5.3	217	685	15	22	15	6.1	5.8	5.3	5.8	5.8	5.8
25	5.3	95	2290	13	20	14	5.8	5.8	5.3	5.8	5.8	5.8
26	5.3	55	618	11	17	13	6.0	5.8	5.5	5.8	5.8	5.8
27	5.3	51	320	10	15	13	6.3	5.4	5.8	5.8	5.8	5.8
28	5.3	50	196	10	15	12	6.3	5.3	5.8	5.8	5.8	5.8
29	5.6	41	130	12	14	12	6.3	5.3	5.8	5.8	5.8	5.8
30	6.8	34	250	11	---	9.9	6.3	5.3	5.8	5.8	5.8	5.8
31	6.8	---	174	11	---	8.9	---	5.3	---	5.8	5.8	---
TOTAL	166.6	1390.4	7653	939	592.7	549.0	260.3	209.7	166.7	179.8	179.8	174.0
MEAN	5.37	46.3	247	30.3	20.4	17.7	8.68	6.76	5.56	5.80	5.80	5.80
MAX	6.8	217	2290	135	64	59	17	8.8	5.8	5.8	5.8	5.8
MIN	4.4	5.8	16	10	9.4	8.9	5.8	5.3	5.3	5.8	5.8	5.8
AC-FT	330	2760	15180	1860	1180	1090	516	416	331	357	357	345

WTR YR 1984 TOTAL 12461.0 MEAN 34.0 MAX 2290 MIN 4.4 AC-FT 24720

## 11460800 WALKER CREEK NEAR TOMALES, CA

LOCATION.--Lat 38°12'35", long 122°51'35", in Nicasio Grant, Marin County, Hydrologic Unit 18050005, on left bank 1,300 ft upstream from Chileno Creek, and 3.5 mi southeast of Tomales.

DRAINAGE AREA.--40.1 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1959 to September 1984 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 56.74 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow affected by regulation and diversions, beginning February 1979, by Soulaajule Reservoir on Arroyo Sausal, a tributary to Walker Creek. Reservoir capacity 10,570 acre ft. There are small diversions above station for irrigation of about 50 acres and stock watering.

EXTREMES FOR PERIOD OF RECORD (Prior to regulation by Soulaajule Reservoir).--Maximum discharge, 7,460 ft<sup>3</sup>/s Jan. 5, 1966, gage height, 22.23 ft; maximum gage height, 22.91 ft Jan. 16, 1973; no flow at times each year. 1979-84: Maximum discharge, 2,880 ft<sup>3</sup>/s Jan. 11, 1980, gage height 17.52 ft; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,650 ft<sup>3</sup>/s Dec. 25, gage height, 20.00 ft; minimum daily, 4.8 ft<sup>3</sup>/s Oct. 5.

REVISIONS.--The maximum discharges for water years 1961-62, 1964-66, and 1979 have been revised, as shown in the following table. They supersede figures published in WSP 1929 and 2129, and the reports for 1961-62, 1964-66, and 1979.

Water year	Date	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Water year	Date	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
1961	Jan. 31, 1961	4,400	18.18	1966	Jan. 5, 1966	7,460	22.23
1962	Feb. 13, 1962	4,120	17.72	1972	Feb. 5, 1972	1,760	13.03
1964	Jan. 20, 1964	4,620	18.52	1979	Jan. 15, 1979	1,900	13.38
1965	Jan. 5, 1965	5,550	19.86				

The peak discharges and annual maximums (\*) for water years 1963, 1967-71, 1973-75, 1978, 1980 have been revised as shown in the following table. They supersede figures published in the reports for 1963, 1967-71, 1973-75, 1978, 1980.

Water year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Water year	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
1963	Oct. 13, 1962	1600	2,740	15.23	1970	Jan. 27, 1970	Unknown	2,110	13.92
	Jan. 31, 1963	2000	*4,220	17.89	1971	Nov. 28, 1970	0045	3,420	16.49
	Mar. 27, 1963	2100	1,540	12.36		Dec. 4, 1970	0030	*4,710	18.65
1967	Dec. 2, 1966	Unknown	4,710	18.65		Dec. 20, 1970	2030	2,690	15.12
	Jan. 21, 1967	0100	*6,580	21.18	1973	Jan. 12, 1973	1130	7,310	22.05
	Jan. 24, 1967	0400	3,740	17.06		Jan. 16, 1973	0815	*8,070	22.91
	Jan. 30, 1967	0815	3,600	16.82		Feb. 7, 1973	0230	2,350	14.44
1968	Jan. 29, 1968	2345	*5,270	19.47	1974	Jan. 16, 1974	1045	2,090	13.87
	Feb. 21, 1968	0500	2,480	14.70		Feb. 28, 1974	2015	2,150	14.01
1969	Dec. 28, 1968	0530	2,880	15.49		Apr. 1, 1974	1200	*4,420	18.21
	Jan. 13, 1969	0945	*6,010	20.47	1975	Feb. 12, 1975	2315	*5,240	19.42
	Jan. 20, 1969	0830	2,480	14.70		Mar. 21, 1975	2030	4,600	18.49
	Jan. 26, 1969	0115	2,720	15.19	1978	Jan. 9, 1978	Unknown	2,810	15.35
1970	Dec. 20, 1969	0715	4,000	17.52		Jan. 16, 1978	Unknown	*5,410	19.67
	Jan. 16, 1970	1545	5,100	19.22		Feb. 7, 1978	0945	3,770	17.11
	Jan. 21, 1970	1030	*6,890	21.56	1980	Jan. 11, 1980	2315	*4,000	17.52

Revised daily discharges, in cubic feet per second, for water years 1967-75 are given below. These figures supersede those published in the reports for 1967-75.

Jan. 20, 1967...	1,650	Feb. 24, 1968...	478	Feb. 4, 1972...	177
21.....	5,350	25.....	142	5.....	1,130
22.....	1,340	Mar. 12.....	358	6.....	470
23.....	397	13.....	372	7.....	216
24.....	1,520	14.....	193	8.....	133
25.....	526	15.....	143		
26.....	628	16.....	633	Jan. 9, 1973...	849
27.....	601	17.....	311	10.....	358
28.....	524	18.....	190	11.....	2,560
29.....	1,690	19.....	139	12.....	4,460
30.....	2,040			13.....	910
31.....	855	Jan. 12, 1969...	982	14.....	326
		13.....	3,500	15.....	393
Jan. 10, 1968...	309	18.....	431	16.....	3,820
14.....	142	19.....	1,220	17.....	855
15.....	348	20.....	1,800	18.....	2,510
16.....	144	21.....	1,530	19.....	651
29.....	897	26.....	1,300		
30.....	1,260			Apr. 1, 1974...	2,760
31.....	346	Jan. 20, 1970...	1,010	Feb. 8, 1975...	2,760
Feb. 1.....	181	21.....	4,490	9.....	784
2.....	170	22.....	1,180	12.....	1,340
3.....	142	23.....	1,670	13.....	2,380
17.....	332	24.....	1,710	Mar. 21.....	1,590
18.....	161	27.....	749	22.....	990
19.....	710			25.....	890
20.....	782	Nov. 28, 1970...	1,300		
21.....	1,110	Dec. 3.....	1,420		
22.....	478	4.....	2,120		
23.....	282	20.....	743		

## WALKER CREEK BASIN

## 11460800 WALKER CREEK NEAR TOMALES, CA--Continued

Month	Total	Mean	Max	Min	Acre-feet
January 1967	17253	556	5350	3.6	34212
WTR YR 1967	31841.45	87.2	5350	0	63200
January 1968	3985.8	128.6	1260	1.0	7910
February....	5521	190.4	1110	13.0	10950
March.....	3171	102.3	633	17.0	6290
CAL YR 1967	25523.14	69.9	6580	0	50620
WTR YR 1968	13167.45	36.0	1260	0	26120
January 1969	15971	515	3500	18	31680
CAL YR 1968	18462	50.4	1260	0	36610
WTR YR 1969	32808.1	89.9	3500	0	65070
January 1970	20049	647	4490	16	39770
CAL YR 1969	32635.98	89.4	3500	0	64770
WTR YR 1970	30436.78	83.4	4490	0	60370
November 1970	2256.18	75.2	1300	0	4473
December.....	9827	317	2120	47	19487
CAL YR 1970	46262.48	127	4490	0	92010
WTR YR 1971	18031.46	49.4	2120	0	35790
February 1972	2817	97.1	1130	15	5590
WTR YR 1972	5496.35	15.0	1130	0	10870
January 1973	19585.60	632	4460	8.2	38850
CAL YR 1972	9779.85	26.7	1130	0	19340
WTR YR 1973	36455.25	99.9	4460	0	72380
April 1974	4788	160	2760	9	9500
CAL YR 1973	41599.14	114	4460	0	82590
WTR YR 1974	31885.82	87.4	2760	0	63320
February 1975	9354	334	2380	30	18550
March.....	7395	238	1590	24	14670
CAL YR 1974	21252.98	58.2	2760	0	42160
WTR YR 1975	17969.65	49.2	2380	0	35640

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	18	41	148	16	22	12	9.5	6.0	5.0	6.5	6.8
2	5.0	9.6	33	118	16	20	11	10	5.9	5.0	6.5	6.8
3	4.9	7.8	152	95	15	18	10	10	5.9	5.0	6.2	6.8
4	4.9	7.2	134	76	14	16	10	9.2	6.6	5.3	6.0	6.8
5	4.8	6.8	91	63	13	15	11	8.8	6.1	5.4	6.3	6.8
6	5.2	6.8	87	51	13	16	15	8.6	7.3	5.2	6.5	6.8
7	5.5	6.4	75	44	11	17	15	8.5	6.2	5.1	6.4	6.8
8	5.6	6.2	214	38	11	16	16	8.4	5.7	5.0	6.5	6.8
9	5.9	10	780	31	11	17	15	8.2	5.7	5.0	6.6	6.8
10	6.1	61	676	30	11	18	21	8.2	5.6	5.1	6.7	6.8
11	5.5	30	925	31	11	20	15	8.3	5.6	5.0	6.6	6.8
12	5.4	21	498	30	12	22	11	8.2	5.7	5.0	6.6	6.8
13	5.1	51	274	29	36	28	10	7.8	5.7	5.0	6.8	6.8
14	5.0	34	191	29	31	28	9.4	7.5	5.6	5.1	6.8	6.8
15	5.4	18	141	27	58	31	8.9	6.0	5.6	4.9	6.8	6.8
16	5.3	71	114	30	82	42	8.8	6.0	5.5	5.0	6.8	6.8
17	5.5	249	103	29	52	73	8.5	6.0	5.4	5.1	6.8	6.8
18	5.9	93	81	28	35	42	11	6.1	5.4	5.1	6.8	6.8
19	6.2	190	66	26	30	26	12	6.1	5.4	5.3	6.8	7.1
20	6.5	197	53	26	29	23	9.4	6.3	5.4	5.4	6.8	7.3
21	6.4	109	44	28	33	23	8.6	6.3	5.3	5.3	6.8	7.1
22	6.7	68	38	26	30	23	8.1	6.3	5.1	5.7	6.8	6.8
23	6.0	57	63	25	29	23	7.6	6.5	5.1	5.7	6.8	6.8
24	6.2	343	1080	23	29	22	7.4	6.5	5.1	5.7	6.8	6.8
25	6.4	158	3330	21	29	19	7.2	6.5	5.2	6.0	6.8	6.8
26	6.0	97	932	20	28	18	7.4	6.6	5.0	6.1	6.8	6.8
27	5.7	82	448	17	26	16	8.7	6.6	5.0	6.3	6.8	6.8
28	5.8	77	267	16	24	16	8.5	6.5	5.2	6.4	6.8	6.8
29	6.7	65	176	17	23	15	8.2	6.5	5.1	6.4	6.8	6.8
30	8.7	52	295	17	---	14	8.6	6.5	5.1	6.4	7.1	7.0
31	8.7	---	211	16	---	14	---	6.3	---	6.5	6.8	---
TOTAL	183.2	2201.8	11613	1205	758	713	320.3	228.8	167.5	168.5	206.9	205.3
MEAN	5.91	73.4	375	38.9	26.1	23.0	10.7	7.38	5.58	5.44	6.67	6.84
MAX	8.7	343	3330	148	82	73	21	10	7.3	6.5	7.1	7.3
MIN	4.8	6.2	33	16	11	14	7.2	6.0	5.0	4.9	6.0	6.8
AC-FT	363	4370	23030	2390	1500	1410	635	454	332	334	410	407
CAL YR 1983	TOTAL	59343.2	MEAN	163	MAX	3330	MIN	3.8	AC-FT	117700		
WTR YR 1984	TOTAL	17971.3	MEAN	49.1	MAX	3330	MIN	4.8	AC-FT	35650		

11461000 RUSSIAN RIVER NEAR UKIAH, CA

LOCATION.--Lat 39°11'44", long 123°11'38", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, on right bank 20 ft downstream from bridge on Lake Mendocino Drive, 0.4 mi upstream from East Fork, 0.6 mi downstream from York Creek, and 3.2 mi north of Ukiah.

DRAINAGE AREA.--100 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1911 to September 1913, October 1952 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 599.22 ft National Geodetic Vertical Datum of 1929. Prior to October 1952, nonrecording gage at bridge 20 ft upstream at different datum. Oct. 1, 1952, to Nov. 8, 1971, water-stage recorder at site 0.6 mi upstream at different datum.

REMARKS.--Records fair. No regulation. Diversions above station for irrigation of about 1,000 acres.

AVERAGE DISCHARGE.--34 years, 185 ft<sup>3</sup>/s, 134,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft<sup>3</sup>/s Dec. 21, 1955, gage height, 19.0 ft site and datum then in use; no flow at times in 1911, 1952-53, 1960-61, 1964-65, 1970-73, 1975-81.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1700	4,530	12.69	Dec. 9	0745	4,940	13.13
Nov. 17	0515	*9,390	16.92	Dec. 24	0830	5,150	13.34
Nov. 24	1115	5,250	13.43				

Minimum daily, 0.10 ft<sup>3</sup>/s Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	23	165	617	50	141	90	61	11	2.7	.84	.28
2	3.0	14	150	460	48	133	78	80	11	2.6	1.0	.22
3	2.0	7.1	416	370	48	118	75	61	11	2.5	1.2	.28
4	1.5	6.0	277	312	54	108	74	56	12	2.4	1.1	.25
5	1.2	6.0	305	267	50	98	73	49	17	2.3	1.1	.23
6	1.4	8.2	1230	228	47	90	64	44	23	2.2	.98	.10
7	1.0	13	2010	194	45	85	59	42	25	2.2	.87	.17
8	1.0	9.8	1390	182	43	79	111	38	19	2.1	1.0	.27
9	1.3	152	3670	162	62	73	88	33	15	2.0	.67	.44
10	1.7	1710	2230	149	101	69	500	33	13	2.3	.42	.41
11	1.7	667	2380	136	61	65	234	32	12	2.1	.74	.38
12	1.7	573	1230	123	211	64	166	34	11	2.0	.78	.42
13	1.7	932	935	111	740	234	137	32	10	1.9	.87	.44
14	1.7	427	707	101	560	346	117	29	8.8	1.8	.96	.42
15	1.7	237	536	100	820	421	102	25	7.7	1.7	.69	.36
16	6.9	730	475	108	1300	612	92	25	6.8	1.5	.81	.34
17	17	3280	479	93	520	591	83	24	6.1	1.8	.54	.40
18	16	576	369	84	420	354	117	24	5.2	1.7	.36	.40
19	1.9	1940	313	79	350	268	164	23	5.1	1.5	.54	.44
20	2.5	1500	266	75	320	219	124	20	6.2	1.1	.82	.38
21	2.1	604	228	91	290	179	102	21	5.2	.77	.94	.31
22	1.8	348	195	81	270	157	91	20	4.8	.88	.46	.25
23	2.7	630	798	74	221	139	83	20	4.6	1.0	.45	.33
24	8.8	2880	2770	70	275	124	76	19	4.0	1.7	.44	.44
25	2.1	1140	2970	67	286	113	68	19	3.9	1.5	.37	.24
26	2.1	542	1860	63	221	107	57	18	3.4	1.3	.35	.18
27	1.8	362	1470	60	189	95	54	18	3.2	1.1	.35	.42
28	1.7	273	786	57	169	87	49	16	3.0	.92	.34	.42
29	2.2	220	623	56	154	91	48	14	3.2	.80	.35	.40
30	4.7	187	2240	55	---	87	45	12	2.8	.80	.44	.47
31	6.1	---	955	52	---	96	---	11	---	.90	.41	---
TOTAL	106.7	19997.1	34428	4677	7925	5443	3221	953	274.0	52.07	21.19	10.09
MEAN	3.44	667	1111	151	273	176	107	30.7	9.13	1.68	.68	.34
MAX	17	3280	3670	617	1300	612	500	80	25	2.7	1.2	.47
MIN	1.0	6.0	150	52	43	64	45	11	2.8	.77	.34	.10
AC-FT	212	39660	68290	9280	15720	10800	6390	1890	543	103	42	20
CAL YR 1983	TOTAL	175945.42	MEAN	482	MAX	5710	MIN	.53	AC-FT	349000		
WTR YR 1984	TOTAL	77108.15	MEAN	211	MAX	3670	MIN	.10	AC-FT	152900		

## RUSSIAN RIVER BASIN

11461500 EAST FORK RUSSIAN RIVER NEAR CALPELLA, CA

LOCATION.--Lat 39°14'48", long 123°07'45", in NW 1/4 NW 1/4 sec.18, T.16 N., R.11 W., Mendocino County, Hydrologic Unit 18010110, on left bank 0.1 mi downstream from Cold Creek, and 3.9 mi east of Calpella.

DRAINAGE AREA.--92.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1941 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Datum of gage is 787.87 ft National Geodetic Vertical Datum of 1929. Prior to May 28, 1957, at site 1.3 mi downstream at different datum. May 28, 1957, to Apr. 5, 1966, at site 0.4 mi downstream at same datum.

REMARKS.--Records fair. Flow greatly affected by diversion from Eel River through Potter Valley powerhouse (station 11471000). Diversion for irrigation of about 8,000 acres above station.

AVERAGE DISCHARGE.--43 years, 343 ft<sup>3</sup>/s, 248,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,700 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 20.21 ft site then in use; minimum daily, 2.0 ft<sup>3</sup>/s July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 17	0445	*7,880	17.46	Dec. 24	0815	6,810	16.40
Nov. 24	1030	4,670	14.02	Feb. 13	1330	3,850	13.02

Minimum daily, 31 ft<sup>3</sup>/s July 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	106	294	796	391	428	379	193	81	35	168	122
2	86	98	293	698	386	420	389	199	72	37	173	133
3	84	85	734	626	377	414	376	194	59	37	173	123
4	83	94	409	550	387	410	379	192	75	35	176	119
5	78	93	410	495	391	400	382	185	81	32	173	78
6	78	95	1060	520	391	388	369	179	94	31	176	60
7	78	99	1430	496	391	386	373	183	97	31	176	70
8	78	97	1130	475	391	380	421	149	89	35	175	71
9	81	246	2930	455	403	361	387	129	70	44	171	72
10	82	1220	1700	438	401	384	633	111	81	40	166	62
11	84	630	2010	437	401	385	449	123	63	47	175	73
12	84	601	1030	424	606	383	417	126	52	46	178	65
13	81	832	815	418	1580	532	401	116	54	48	179	70
14	82	406	692	402	700	626	388	113	59	47	174	74
15	82	230	576	396	1670	744	380	116	60	46	177	68
16	84	461	606	404	1240	803	370	106	52	46	174	80
17	82	2730	656	387	709	706	373	98	48	42	175	79
18	77	497	543	377	593	542	387	94	48	46	181	70
19	81	1550	520	403	536	506	417	95	45	42	179	76
20	80	1250	496	410	506	476	371	93	46	37	177	89
21	74	531	477	409	640	446	217	92	41	37	176	88
22	75	387	474	384	524	438	218	85	45	40	144	80
23	82	471	1070	373	498	433	207	89	39	49	135	85
24	80	2030	3240	373	566	420	201	90	44	159	128	92
25	83	765	2420	378	523	407	200	86	51	176	125	285
26	81	472	1680	374	478	400	181	97	49	135	124	279
27	76	385	1350	380	459	392	178	96	44	174	130	288
28	86	340	883	392	455	387	179	94	43	169	130	288
29	86	315	774	398	439	389	186	83	34	182	124	285
30	87	299	1890	395	---	378	185	67	36	182	123	285
31	89	---	968	391	---	399	---	72	---	180	127	---
TOTAL	2520	17415	33560	13854	17032	14163	9993	3745	1752	2287	4962	3709
MEAN	81.3	580	1083	447	587	457	333	121	58.4	73.8	160	124
MAX	89	2730	3240	796	1670	803	633	199	97	182	181	288
MIN	74	85	293	373	377	361	178	67	34	31	123	60
AC-FT	5000	34540	66570	27480	33780	28090	19820	7430	3480	4540	9840	7360
CAL YR 1983	TOTAL	223227	MEAN	612	MAX	5140	MIN	46	AC-FT	442800		
WTR YR 1984	TOTAL	124992	MEAN	342	MAX	3240	MIN	31	AC-FT	247900		

## 11461800 LAKE MENDOCINO NEAR UKIAH, CA

LOCATION.--Lat 39°11'53", long 123°10'50", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, in intake tower 30 ft upstream from Coyote Dam on East Fork Russian River, and 3.6 mi northeast of Ukiah.

DRAINAGE AREA.--105 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to current year. Records prior to October 1965 in files of Corps of Engineers.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam; storage began in November 1958. Capacity based on 1975 resurvey, new capacity table put into use July 1, 1977, 122,100 acre-ft between elevations 637.0 ft, invert of outlet tunnel and 764.8 ft, spillway crest, NGVD. Storage affected by diversions from Eel River through Potter Valley powerhouse (station 11471000). Water is released down East Fork Russian River for irrigation and recreation use. Records, including current year extremes, represent contents at 2400 hours.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 114,800 acre-ft Jan. 24, 1970, elevation, 760.86 ft; minimum, 12,070 acre-ft Nov. 4, 1977, elevation, 687.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 89,954 acre-ft Apr. 10, elevation, 747.41 ft; minimum, 59,932 acre-ft Sept. 24, elevation, 730.21 ft.

## Capacity table (elevation, in feet NGVD, and contents, in acre-feet)

637	0	665	2810	690	13800	730	59500
645	152	670	4290	695	17300	740	76400
650	432	675	6110	700	21200	750	94400
655	914	680	8280	710	31300	760	113000
660	1700	685	10800	720	44300	764.8	122100

 CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
 INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79762	71892	72449	78535	72066	73496	88410	89209	89572	84345	70644	66477
2	79424	71788	72815	76659	72397	74056	88846	89354	89518	83788	70385	66324
3	79139	71702	74073	74634	72571	74617	89354	89481	89463	83195	70195	66121
4	78837	71615	73130	73409	72693	75091	89518	89572	89463	82621	70057	65883
5	78517	71545	72519	73251	72763	75583	89518	89645	89463	82048	69936	65613
6	78198	71493	74249	73130	72850	76041	89481	89718	89518	81439	69867	65325
7	77844	71372	75478	73391	72833	76588	89463	89863	89481	80832	69850	65089
8	77472	71354	75161	73618	72798	77136	89536	89845	89445	80279	69815	64954
9	77136	71962	80493	73304	72780	77649	89627	89863	89191	79691	69781	64718
10	76835	74372	82352	72990	72745	78216	89954	89699	89009	79139	69694	64381
11	76465	73829	84886	72693	72815	78713	89681	89699	88918	78677	69540	63945
12	76270	73811	83644	72659	73286	79442	89409	89699	88828	78376	69436	63760
13	76130	74459	81368	73077	75777	80243	89336	89645	88737	77897	69333	63476
14	75795	74266	78784	73444	75443	80707	89372	89645	88683	77366	69230	63141
15	75495	73723	75953	73531	76800	81189	89354	89591	88592	76835	69092	62758
16	75161	73671	74038	73199	77118	81833	89336	89572	88501	76217	68989	62541
17	74828	75407	73060	72833	76341	82209	89354	89554	88392	75724	68903	62258
18	74529	76676	72362	72380	75337	82334	89427	89554	88229	75161	68800	61893
19	74196	78748	72188	72449	74196	82639	89536	89572	88066	74547	68697	61562
20	73881	80243	71927	72833	73025	83141	89500	89627	87921	73969	68594	61264
21	73514	78731	71979	73216	72119	83554	89209	89609	87722	73356	68491	60951
22	73199	75601	72449	73234	71840	83986	88737	89518	87577	72745	68320	60605
23	72868	72728	74301	72815	72049	84399	88755	89518	87396	72241	68097	60243
24	72624	75249	80921	72397	72414	84759	88791	89500	87161	71945	67875	59932
25	72449	73549	85156	72223	72624	85174	88755	89481	86871	71754	67704	60046
26	72275	72380	86040	72536	72833	85481	88809	89572	86546	71458	67533	60128
27	72136	72101	85066	72868	72955	85968	88846	89627	86166	71354	67363	60178
28	72014	72049	82711	73130	73042	86527	88918	89627	85715	71233	67260	60210
29	71927	72101	80350	73130	73112	87106	89009	89627	85264	71111	67056	60243
30	71858	72206	81546	72710	---	87504	89027	89572	84831	71007	66766	60276
31	71788	---	80261	72241	---	88066	---	89591	---	70835	66613	---
MAX	79762	80243	86040	78535	77118	88066	89954	89863	89572	84345	70644	66477
MIN	71788	71354	71927	72223	71840	73496	88410	89209	84831	70835	66613	59932
a	737.22	737.46	742.03	737.48	737.98	746.37	746.90	747.21	744.58	736.67	734.21	730.42
b	-8259	+418	+8055	-8020	+871	+15954	+961	+564	-4760	-13996	-4222	-6337

CAL YR 1983 b -19771

WTR YR 1984 b +6904

a Elevation, in feet NGVD, at end of month.

b Change in contents, in acre-feet.

## RUSSIAN RIVER BASIN

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA

LOCATION.--Lat 39°11'51", long 123°11'11", in Yokaya Grant, Mendocino County, Hydrologic Unit 18010110, on right bank of outlet channel, 500 ft downstream from Coyote Dam, 1,300 ft upstream from mouth, and 3.2 mi northeast of Ukiah.

DRAINAGE AREA.--105 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1911 to September 1913, October 1951 to June 1956, October 1957 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 614.41 ft National Geodetic Vertical Datum of 1929. Prior to October 1951, nonrecording gage at site 0.5 mi upstream at different datum. October 1951 to June 1956, water-stage recorder at site 1.0 mi upstream at different datum.

REMARKS.--Records good. Flow affected by diversion from Eel River through Potter Valley powerhouse (station 11471000) and since November 1958 by storage in Lake Mendocino (station 11461800) 500 ft upstream. Diversions above station for irrigation of about 8,000 acres.

AVERAGE DISCHARGE (unadjusted).--7 years (water years 1912-13, 1952-55, 1958), 356 ft<sup>3</sup>/s, 257,900 acre-ft/yr; 25 years (water years 1960-84), 361 ft<sup>3</sup>/s, 261,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (Prior to regulation by Lake Mendocino).--Maximum discharge, 13,300 ft<sup>3</sup>/s Dec. 21, 1955, gage height, 16.86 ft site and datum then in use, from rating curve extended above 1,700 ft<sup>3</sup>/s on basis of maximum flow at station upstream which was defined to 8,600 ft<sup>3</sup>/s; no flow Aug. 13-15, 1913. 1957 to current year: Maximum discharge, 7,350 ft<sup>3</sup>/s Jan. 24, 1970, gage height, 10.84 ft; minimum daily, 0.02 ft<sup>3</sup>/s Apr. 17, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,090 ft<sup>3</sup>/s Dec. 8, gage height, 4.59 ft; minimum daily, 61 ft<sup>3</sup>/s June 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	242	134	212	1660	452	256	153	154	70	242	244	210
2	241	134	163	1650	247	163	150	154	70	273	244	210
3	238	134	165	1640	267	166	150	156	69	294	231	210
4	238	134	958	1200	301	166	298	156	67	289	212	187
5	238	134	770	561	324	167	379	157	66	289	212	165
6	238	134	263	559	326	170	379	160	61	292	196	166
7	238	134	825	326	376	145	379	160	82	289	175	169
8	238	113	1410	366	400	131	379	160	64	289	188	174
9	238	131	415	591	400	134	379	163	160	285	175	177
10	238	130	873	591	400	134	448	151	160	280	184	175
11	240	936	818	591	400	134	555	137	143	285	207	173
12	156	701	1680	449	401	134	555	153	177	285	207	192
13	129	568	2000	222	403	134	445	143	209	285	205	202
14	242	563	2000	223	906	373	384	116	209	285	204	202
15	238	561	1980	367	1180	520	384	116	213	289	205	202
16	238	561	1620	592	1180	520	384	117	207	289	205	202
17	234	659	1130	596	1180	520	384	113	217	289	205	211
18	234	1150	916	604	1180	520	385	101	204	284	203	216
19	238	710	596	357	1170	369	389	99	201	277	202	210
20	238	629	593	230	1160	234	388	99	226	283	202	210
21	238	1350	432	230	1160	234	389	96	269	285	202	214
22	238	1970	210	379	667	234	389	87	295	285	202	218
23	238	2010	212	604	405	238	288	85	322	288	202	218
24	204	965	92	604	405	238	203	87	319	285	202	217
25	170	1720	328	459	408	238	176	88	409	260	198	233
26	160	1130	1290	226	410	238	154	88	350	237	210	254
27	145	561	1760	227	410	166	156	87	305	208	210	254
28	136	416	2050	230	410	131	156	85	246	238	210	254
29	134	295	2030	369	410	131	156	85	242	237	210	254
30	134	276	1390	591	---	145	156	74	242	241	210	254
31	134	---	1670	591	---	153	---	68	---	249	210	---
TOTAL	6505	19043	30851	17885	17338	7236	9570	3695	5874	8486	6372	6233
MEAN	210	635	995	577	598	233	319	119	196	274	206	208
MAX	242	2010	2050	1660	1180	520	555	163	409	294	244	254
MIN	129	113	92	222	247	131	150	68	61	208	175	165
AC-FT	12900	37770	61190	35470	34390	14350	18980	7330	11650	16830	12640	12360
CAL YR 1983	TOTAL	229227	MEAN	628	MAX	4270	MIN	40	AC-FT	454700		
WTR YR 1984	TOTAL	139088	MEAN	380	MAX	2050	MIN	61	AC-FT	275900		

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1953-55, 1964-68, 1973 to current year.

CHEMICAL ANALYSIS: Water years 1953-55, 1973-82.

BIOLOGICAL DATA: Water year 1977-78.

WATER TEMPERATURES: Water years 1953-55, 1965-68, 1973 to current year.

SEDIMENT RECORDS: Water years 1953-55, 1964-68.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1952 to March 1955, October 1964 to September 1968, October 1972 to current year.

SEDIMENT RECORDS: December 1952 to March 1955, January 1964 to September 1968.

INSTRUMENTATION.--Temperature recorder since October 1972.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 23.5°C on several days in 1977; minimum recorded, 7.0°C Jan. 14, 1973.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 22.0°C Aug. 25; minimum recorded, 8.5°C on Jan. 27, 28.

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.5	17.5	18.5	18.5	12.0	11.5	10.0	10.0	9.0	9.0	9.5	9.5
2	17.5	17.5	18.5	18.5	11.5	11.5	10.0	10.0	9.0	9.0	9.5	9.5
3	17.5	17.5	18.5	18.5	11.5	11.5	10.0	10.0	9.0	9.0	9.5	9.5
4	17.5	17.5	18.5	18.0	12.0	11.5	10.0	10.0	9.0	9.0	9.5	9.5
5	18.0	17.5	18.0	18.0	12.0	11.5	10.0	10.0	9.0	9.0	---	---
6	18.0	18.0	18.0	18.0	11.5	11.0	10.0	10.0	9.0	9.0	---	---
7	18.0	18.0	18.0	18.0	11.5	11.0	10.0	10.0	9.0	9.0	---	---
8	18.0	18.0	18.0	17.5	11.5	11.5	10.0	10.0	9.0	9.0	---	---
9	18.0	18.0	17.5	17.5	11.0	11.0	10.0	10.0	9.0	9.0	---	---
10	18.0	18.0	17.5	16.5	11.0	11.0	10.0	10.0	9.0	9.0	---	---
11	18.0	18.0	15.0	15.0	11.0	11.0	10.0	10.0	9.0	9.0	---	---
12	18.0	17.0	15.0	15.0	11.0	11.0	10.0	10.0	9.0	9.0	---	---
13	18.0	14.5	14.5	14.5	11.0	11.0	10.0	10.0	9.0	9.0	---	---
14	18.0	18.0	14.5	14.5	11.0	11.0	10.0	9.5	9.0	9.0	---	---
15	18.5	18.0	14.5	14.5	11.0	11.0	9.5	9.5	9.0	9.0	---	---
16	18.5	18.5	14.5	14.5	11.0	11.0	9.5	9.5	9.0	9.0	---	---
17	18.5	18.5	14.5	14.5	11.0	11.0	9.5	9.5	9.0	9.0	---	---
18	18.5	18.5	14.5	14.5	11.0	11.0	9.5	9.5	9.0	9.0	---	---
19	19.0	18.5	14.5	14.0	11.0	11.0	9.5	9.0	9.0	9.0	---	---
20	19.0	19.0	14.0	13.5	11.0	11.0	9.0	9.0	9.0	9.0	---	---
21	19.0	19.0	14.0	14.0	11.0	11.0	9.0	9.0	---	---	---	---
22	19.0	19.0	14.0	14.0	11.0	10.5	9.0	9.0	9.0	9.0	---	---
23	19.0	19.0	14.0	13.5	10.5	10.0	---	---	9.0	9.0	---	---
24	19.0	19.0	13.5	12.0	10.0	9.0	9.0	9.0	9.0	9.0	---	---
25	19.0	19.0	13.0	12.5	9.0	9.0	9.0	9.0	9.5	9.0	---	---
26	19.0	19.0	13.0	12.0	9.5	9.0	9.0	9.0	9.5	9.5	---	---
27	19.0	19.0	12.0	12.0	9.5	9.5	9.0	8.5	9.5	9.5	---	---
28	19.0	19.0	12.0	12.0	9.5	9.5	9.0	8.5	9.5	9.5	---	---
29	19.0	19.0	12.0	12.0	10.0	9.5	9.0	9.0	9.5	9.5	9.5	9.5
30	19.0	18.5	12.0	11.5	10.0	10.0	9.0	9.0	---	---	9.5	9.5
31	18.5	18.5	---	---	10.0	10.0	9.0	9.0	---	---	9.5	9.5
MONTH	19.0	14.5	18.5	11.5	12.0	9.0	10.0	8.5	9.5	9.0	---	---

## RUSSIAN RIVER BASIN

11462000 EAST FORK RUSSIAN RIVER NEAR UKIAH, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	9.5	9.5	10.5	10.5	11.0	11.0	11.5	11.5	19.5	13.0	14.5	14.0
2	9.5	9.5	10.5	10.5	11.0	11.0	11.5	11.5	19.0	13.0	15.0	14.0
3	9.5	9.5	10.5	10.5	11.0	11.0	12.0	11.5	19.5	18.5	15.0	14.5
4	9.5	9.5	10.5	10.5	11.0	11.0	12.0	11.5	19.5	18.5	21.0	14.5
5	9.5	9.5	10.5	10.5	11.0	11.0	12.0	11.5	19.5	19.0	21.0	20.0
6	9.5	9.5	10.5	10.5	12.0	11.0	12.0	11.5	19.5	19.0	20.5	20.0
7	9.5	9.5	---	---	15.0	11.0	12.0	12.0	20.0	18.5	20.5	20.0
8	10.0	9.5	---	---	13.5	11.0	12.0	12.0	20.0	19.0	20.5	14.5
9	10.0	10.0	---	---	15.0	14.5	12.0	11.5	---	---	15.5	15.0
10	10.0	10.0	---	---	15.0	14.0	12.0	12.0	---	---	15.5	15.0
11	10.5	10.0	10.5	10.5	16.0	11.0	12.5	12.0	---	---	16.0	15.5
12	10.5	10.5	10.5	10.5	15.5	11.0	12.0	12.0	---	---	16.0	15.0
13	10.5	10.5	10.5	10.5	15.5	11.5	12.5	12.0	---	---	16.0	15.5
14	10.5	10.5	12.5	10.5	15.0	14.5	12.0	12.0	---	---	16.5	16.0
15	10.5	10.5	10.5	10.5	16.5	14.5	12.5	12.0	21.0	19.0	16.5	16.0
16	10.5	10.5	10.5	10.5	16.5	15.0	13.0	12.0	20.0	18.5	17.0	16.5
17	10.5	10.5	10.5	10.5	17.0	15.0	12.5	12.0	19.5	19.0	17.0	16.5
18	10.5	10.5	10.5	10.5	17.0	15.0	12.5	12.0	20.0	18.5	17.5	17.0
19	10.5	10.5	10.5	10.5	16.5	13.0	14.5	12.0	20.5	19.0	18.0	17.0
20	10.5	10.5	10.5	10.5	16.5	15.0	12.5	12.0	20.5	19.0	18.0	17.0
21	10.5	10.5	11.0	10.5	16.5	14.0	12.5	12.5	19.5	19.0	18.5	17.5
22	---	---	11.0	11.0	17.5	13.0	12.5	12.5	20.0	19.0	18.5	18.0
23	---	---	11.0	10.5	18.0	15.5	13.0	12.5	19.5	18.5	18.5	18.0
24	---	---	11.0	10.5	18.0	16.0	13.0	12.5	19.5	19.0	19.0	18.5
25	---	---	11.0	11.0	17.5	16.0	13.0	12.5	22.0	19.0	19.0	18.5
26	---	---	11.0	11.0	17.5	11.5	18.5	13.0	14.0	13.5	19.5	19.0
27	---	---	11.0	11.0	13.0	11.5	20.5	12.0	14.5	13.5	19.5	19.0
28	---	---	11.0	11.0	11.5	11.5	13.5	13.0	14.5	13.5	20.0	19.5
29	---	---	11.0	11.0	12.0	11.5	13.5	13.0	14.5	14.0	20.0	19.5
30	---	---	11.0	11.0	11.5	11.5	13.5	13.0	14.5	14.0	20.0	19.5
31	---	---	11.0	11.0	---	---	13.5	13.0	14.5	14.0	---	---
MONTH	---	---	---	---	18.0	11.0	20.5	11.5	22.0	13.0	21.0	14.0

## 11462500 RUSSIAN RIVER NEAR HOPLAND, CA

LOCATION.--Lat 39°01'36", long 123°07'46", in Rancho de Sanel Grant, Mendocino County, Hydrologic Unit 18010110, on right bank at abandoned highway bridge, 0.2 mi downstream from McNab Creek, 4 mi north of Hopland.

DRAINAGE AREA.--362 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1041: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 497.61 ft National Geodetic Vertical Datum of 1929. Prior to Sept. 9, 1943, nonrecording gage at same site and datum.

REMARKS.--Records good. Diversions for irrigation of about 11,800 acres above station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino (station 11461800) 15 mi upstream.

AVERAGE DISCHARGE.--45 years, 742 ft<sup>3</sup>/s, 537,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,000 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 27.00 ft; minimum daily, 9.1 ft<sup>3</sup>/s Apr. 20, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1937 reached a stage of 30.0 ft from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,600 ft<sup>3</sup>/s Nov. 17, gage height, 15.68 ft; minimum daily, 65 ft<sup>3</sup>/s June 2, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	235	153	685	2700	605	716	351	241	72	224	215	170
2	235	144	571	2420	423	539	331	277	65	231	216	170
3	235	133	1180	2250	390	499	325	260	66	250	240	170
4	235	128	1270	1980	385	472	386	252	65	253	202	169
5	235	125	1330	1380	400	449	499	236	70	255	196	149
6	235	128	1500	1260	403	429	499	237	81	261	192	149
7	235	130	2870	994	423	398	495	225	108	262	158	148
8	233	138	2930	809	435	365	543	218	97	261	158	145
9	231	285	8070	1040	476	352	513	204	158	260	149	143
10	231	2810	5450	1000	560	341	1190	193	168	260	145	143
11	233	1770	6240	963	518	334	969	185	155	256	175	143
12	234	1520	4420	869	1330	326	832	185	91	252	178	146
13	83	1780	3820	547	3320	658	711	187	94	250	182	162
14	202	1210	3320	505	2610	1180	582	164	91	248	184	166
15	226	904	2960	559	2990	1820	555	155	91	243	184	168
16	229	1240	2600	877	3500	1680	538	154	84	237	184	168
17	237	5590	2160	837	2680	1870	526	150	78	237	184	168
18	241	2060	1890	820	2320	1410	553	134	77	243	184	179
19	242	3570	1530	654	2130	1140	645	122	74	245	182	177
20	242	2950	1430	433	2000	807	588	115	68	255	184	178
21	242	2130	1260	448	2090	702	546	113	85	243	185	179
22	242	2180	902	486	2140	637	527	111	95	238	187	185
23	238	2450	1520	751	1550	587	468	103	104	250	184	188
24	231	6010	5260	753	1140	548	355	99	107	248	184	187
25	185	3660	7330	673	1170	521	328	97	115	234	170	190
26	161	2290	4890	542	1030	503	295	93	158	211	162	219
27	151	1400	4330	470	952	441	264	86	153	204	167	223
28	129	1130	3480	402	884	370	252	86	217	186	168	225
29	126	880	3070	403	849	350	243	85	227	199	168	225
30	125	776	4800	572	---	338	241	77	224	201	168	222
31	125	---	3300	600	---	356	---	69	---	206	168	---
TOTAL	6464	49674	96368	28997	39703	21138	15150	4913	3338	7403	5603	5254
MEAN	209	1656	3109	935	1369	682	505	158	111	239	181	175
MAX	242	6010	8070	2700	3500	1870	1190	277	227	262	240	225
MIN	83	125	571	402	385	326	241	69	65	186	145	143
AC-FT	12820	98530	191100	57520	78750	41930	30050	9740	6620	14680	11110	10420
CAL YR 1983	TOTAL	622259	MEAN	1705	MAX	15400	MIN	83	AC-FT	1234000		
WTR YR 1984	TOTAL	284005	MEAN	776	MAX	8070	MIN	65	AC-FT	563300		

## RUSSIAN RIVER BASIN

11463000 RUSSIAN RIVER NEAR CLOVERDALE, CA

LOCATION.--Lat 38°52'46", long 123°03'09", in NW 1/4 NW 1/4 sec.23, T.12 N., R.11 W., Mendocino County, Hydrologic Unit 18010110, on left bank 0.3 mi downstream from Cummysky Creek, and 5.5 mi northwest of Cloverdale.

DRAINAGE AREA.--503 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 350 ft from topographic map. Prior to July 30, 1970, at site 0.2 mi upstream at different datum.

REMARKS.--Records fair. Diversions for irrigation of about 15,300 acres above station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino (station 11461800) 28 mi upstream.

AVERAGE DISCHARGE.--33 years, 1,024 ft<sup>3</sup>/s, 741,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,200 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 31.60 ft site and datum then in use; minimum daily, 12 ft<sup>3</sup>/s Apr. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,200 ft<sup>3</sup>/s Dec. 9, gage height, 15.86 ft; minimum daily, 60 ft<sup>3</sup>/s June 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	228	213	878	4150	868	916	526	291	64	226	204	185
2	223	188	746	3570	585	733	488	334	62	229	202	178
3	224	175	2370	3200	550	681	471	312	60	260	237	186
4	224	169	1790	2840	549	657	485	308	66	269	233	193
5	230	166	1900	1840	571	617	626	285	93	273	221	163
6	231	170	2070	1640	571	594	637	284	93	276	223	160
7	231	174	4160	1430	578	555	633	273	97	284	186	156
8	238	179	4940	1170	625	524	670	263	109	278	165	146
9	235	297	14000	1340	691	501	642	246	123	287	171	148
10	234	6130	9430	1310	800	489	1140	238	167	284	150	153
11	245	3370	11700	1260	733	478	1110	227	172	273	174	148
12	246	3010	7070	1210	1580	462	966	226	119	263	199	144
13	173	3490	5440	897	4980	1020	881	229	101	265	203	166
14	168	2170	4690	821	3690	1480	729	204	96	273	204	175
15	230	1430	4100	820	4480	2550	684	189	95	269	202	173
16	237	1950	3640	1170	4810	2170	656	187	90	269	201	169
17	245	9440	2970	1110	3300	2540	638	180	83	249	204	182
18	252	3480	2480	1090	2670	1740	662	166	79	255	204	192
19	249	4350	1860	988	2310	1480	781	145	73	254	199	194
20	246	5190	1660	711	2120	1160	738	138	68	270	202	200
21	247	3260	1500	711	2250	1030	673	128	73	267	208	202
22	249	3050	1120	684	1940	932	632	122	87	250	212	208
23	252	3330	2070	954	1360	866	601	118	87	290	200	214
24	254	8910	9150	977	1310	783	447	110	93	300	204	216
25	221	5690	14200	974	1320	730	417	111	99	283	195	219
26	193	3450	7780	656	1190	699	351	106	127	245	178	252
27	178	1960	6450	594	1100	654	316	93	145	212	187	262
28	168	1540	5070	571	1040	561	302	92	184	180	184	266
29	161	1160	4470	558	999	529	294	84	222	191	188	262
30	170	992	7560	827	---	512	288	78	222	199	179	251
31	164	---	5360	869	---	530	---	68	---	210	187	---
TOTAL	6846	79083	152624	40942	49570	29173	18484	5835	3249	7933	6106	5763
MEAN	221	2636	4923	1321	1709	941	616	188	108	256	197	192
MAX	254	9440	14200	4150	4980	2550	1140	334	222	300	237	266
MIN	161	166	746	558	549	462	288	68	60	180	150	144
AC-FT	13580	156900	302700	81210	98320	57860	36660	11570	6440	15740	12110	11430
CAL YR 1983	TOTAL	865635	MEAN	2372	MAX	21000	MIN	161	AC-FT	1717000		
WTR YR 1984	TOTAL	405608	MEAN	1108	MAX	14200	MIN	60	AC-FT	804500		

## 11463170 BIG SULPHUR CREEK AT GEYSERS RESORT, NEAR CLOVERDALE, CA

LOCATION.--Lat 38°47'52", long 122°48'05", in NW 1/4 NW 1/4 sec.19, T.11 N., R.8 W., Sonoma County, Hydrologic Unit 18010110, on left bank 400 ft downstream from unnamed tributary and 12 mi east of Cloverdale.

DRAINAGE AREA.--13.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 1,420 ft from topographic map.

REMARKS.--Records poor. Diversion for industrial use 150 ft above station when flows are above 10 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,750 ft<sup>3</sup>/s Dec. 3, 1980, gage height, 6.38 ft; maximum gage height 8.90 ft Jan. 26, 1983; minimum discharge, 0.08 Aug. 31, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1615	2,620	7.77	Dec. 9	1230	1,010	5.87
Nov. 17	0500	1,250	6.24	Dec. 25	1115	*2,860	7.99

Minimum daily, 0.18 ft<sup>3</sup>/s Oct. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	19	43	167	13	17	15	12	4.5	.59	.85	.90
2	.45	11	30	135	12	17	15	11	4.2	.50	.79	.54
3	.35	7.3	205	110	11	16	13	10	4.3	.47	.90	.51
4	.44	6.4	131	90	11	15	14	9.9	4.5	.42	.83	.78
5	.56	6.6	96	75	12	15	13	9.7	4.8	.34	.86	.80
6	.84	8.9	154	60	12	17	13	9.6	5.4	.49	.82	.65
7	.54	8.1	178	44	12	16	12	9.5	5.7	.87	.88	.59
8	.35	30	350	34	11	16	16	9.2	4.7	1.0	.85	.92
9	.32	140	690	29	19	16	12	8.5	4.5	.83	.61	1.0
10	.26	659	621	25	18	15	37	8.4	4.5	.90	.34	.92
11	.35	204	661	21	15	16	14	8.3	5.2	.90	.77	.66
12	.33	230	314	18	21	16	13	8.1	5.3	1.0	.82	.64
13	.22	232	217	21	161	182	13	7.6	5.3	1.0	.83	.95
14	.18	150	164	19	104	186	12	7.3	5.3	1.2	.66	1.0
15	.22	86	131	21	101	290	12	6.9	4.5	1.2	.74	.83
16	.25	153	107	19	96	206	12	6.8	3.1	.82	.76	1.0
17	.24	458	90	20	63	177	12	5.9	2.3	.75	.64	1.0
18	.28	195	72	19	43	132	15	5.9	1.8	.81	.49	.92
19	.29	168	58	19	33	103	14	5.9	1.5	.80	.74	.92
20	.32	167	47	18	28	79	12	5.9	1.2	.96	.75	1.0
21	.28	124	37	19	46	60	11	5.8	.99	.98	.50	.94
22	.36	92	31	20	28	45	11	5.8	.95	.84	.79	1.0
23	.32	93	70	19	24	37	11	5.8	.87	1.0	.87	1.1
24	.29	402	432	18	28	32	11	5.8	.75	1.1	.59	.99
25	.24	246	972	17	25	26	10	5.8	.73	1.0	.82	1.1
26	.28	162	411	16	23	23	10	5.5	.78	1.1	.88	1.3
27	.35	119	286	15	23	20	10	5.2	.71	1.0	.71	1.3
28	.46	94	202	15	21	18	10	5.4	.62	1.0	.76	1.1
29	2.0	68	172	15	17	16	9.8	5.0	.65	1.0	.79	1.2
30	14	55	344	14	---	16	9.6	4.9	.64	.96	1.0	1.1
31	9.6	---	219	14	---	16	---	4.8	---	.85	1.0	---
TOTAL	35.37	4394.3	7535	1146	1031	1856	392.4	226.2	90.29	26.68	23.64	27.66
MEAN	1.14	146	243	37.0	35.6	59.9	13.1	7.30	3.01	.86	.76	.92
MAX	14	659	972	167	161	290	37	12	5.7	1.2	1.0	1.3
MIN	.18	6.4	30	14	11	15	9.6	4.8	.62	.34	.34	.51
AC-FT	70	8720	14950	2270	2040	3680	778	449	179	53	47	55

CAL YR 1983	TOTAL	37256.79	MEAN	102	MAX	1540	MIN	.08	AC-FT	73900
WTR YR 1984	TOTAL	16784.54	MEAN	45.9	MAX	972	MIN	.18	AC-FT	33290

## RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA

LOCATION.--Lat 38°36'48", long 122°50'07", in Sotoyome Grant, Sonoma County, Hydrologic Unit 18010110, on left bank 2 mi east of Healdsburg, and 3.5 mi upstream from Dry Creek.

DRAINAGE AREA.--793 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 981: 1942. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 77.01 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Several diversions for irrigation of about 17,800 acres above station. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations) and since November 1958 by storage in Lake Mendocino (station 11461800) 63 mi upstream.

AVERAGE DISCHARGE.--45 years, 1,486 ft<sup>3</sup>/s, 1,077,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 71,300 ft<sup>3</sup>/s Dec. 23, 1964, gage height, 27.00 ft; maximum gage height, 30.0 ft Feb. 28, 1940; minimum daily discharge, 17 ft<sup>3</sup>/s Apr. 25, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 30.8 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,800 ft<sup>3</sup>/s Dec. 25, gage height, 17.10 ft; minimum daily, 80 ft<sup>3</sup>/s June 14-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	261	1590	6580	1040	1260	755	436	121	183	192	194
2	263	329	1380	5490	960	1110	715	461	114	178	191	194
3	259	257	3880	4800	808	988	683	468	109	129	190	168
4	255	222	3360	4320	782	921	664	444	107	166	205	164
5	253	203	2850	3440	779	866	723	426	109	198	208	163
6	252	196	2590	2830	781	826	783	407	111	208	185	133
7	253	200	4230	2500	770	795	765	393	121	217	175	113
8	251	207	6200	2070	790	755	776	378	121	227	155	115
9	252	232	20500	1960	842	715	797	363	129	256	146	100
10	255	7150	18000	1960	958	690	957	352	135	276	141	100
11	255	7980	20600	1860	928	667	1300	339	162	268	128	120
12	255	4610	13200	1770	1220	646	1100	326	170	254	133	125
13	256	5130	9030	1580	4250	1370	1010	318	151	242	187	124
14	204	3840	7390	1350	6180	2520	902	310	80	225	197	129
15	197	2190	6110	1280	4430	4450	825	290	80	212	205	134
16	233	3220	5310	1580	6310	3720	797	277	80	206	205	136
17	243	13300	4650	1530	4490	4550	771	270	90	205	201	180
18	248	6320	3870	1460	3600	3070	786	259	108	195	190	141
19	254	4380	3250	1420	3120	2440	879	249	104	198	200	150
20	253	7320	2790	1210	2820	1970	881	233	100	201	202	155
21	247	4810	2460	1100	2770	1630	807	221	95	239	205	156
22	248	3530	2080	1070	2740	1430	775	210	90	232	206	157
23	250	3580	2270	1110	1990	1300	743	202	94	205	212	160
24	253	10400	12400	1220	1730	1190	689	175	98	256	212	164
25	251	9120	26800	1220	1740	1110	606	185	100	272	217	170
26	225	5510	15900	1100	1610	1050	561	180	100	263	232	167
27	203	3310	11400	920	1480	994	510	170	100	218	202	178
28	191	2600	8360	870	1390	902	474	166	110	206	199	189
29	177	2080	6880	842	1320	824	453	151	110	185	198	200
30	196	1780	11200	897	---	775	440	137	150	186	202	207
31	208	---	8840	1040	---	759	---	132	---	191	202	---
TOTAL	7403	114267	249370	62379	62628	46293	22927	8928	3349	6697	5923	4586
MEAN	239	3809	8044	2012	2160	1493	764	288	112	216	191	153
MAX	263	13300	26800	6580	6310	4550	1300	468	170	276	232	207
MIN	177	196	1380	842	770	646	440	132	80	129	128	100
AC-FT	14680	226600	494600	123700	124200	91820	45480	17710	6640	13280	11750	9100
CAL YR 1983	TOTAL	1354284	MEAN	3710	MAX	40800	MIN	177	AC-FT	2686000		
WTR YR 1984	TOTAL	594750	MEAN	1625	MAX	26800	MIN	80	AC-FT	1180000		

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

CHEMICAL ANALYSIS: Water years 1951-66, 1980.

WATER TEMPERATURES: Water years 1966 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1965 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 28.0°C July 13, 14, 1972, June 21, 1981, and July 13, 1983; minimum recorded, 5.0°C Dec. 10, 11, 1972.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 26.5°C July 13-15; minimum recorded, 8.0°C Jan. 14.

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.0	17.5	18.0	16.5	12.0	11.5	11.0	10.0	11.0	9.5	13.5	10.5
2	21.0	18.5	18.0	16.5	13.0	11.5	11.0	10.0	11.0	10.0	13.5	11.5
3	21.0	17.0	18.0	16.0	12.5	10.0	11.0	10.5	11.5	9.5	14.0	11.5
4	22.0	17.5	18.0	15.5	10.0	9.0	11.5	11.0	11.5	10.0	14.0	12.0
5	21.5	17.5	16.5	14.0	10.0	8.5	11.5	11.0	11.0	10.5	14.0	11.5
6	22.0	19.0	16.5	14.0	11.0	10.0	11.5	11.5	12.0	10.5	13.5	11.5
7	21.5	18.0	14.5	12.5	11.0	10.5	12.0	11.0	12.0	10.5	13.5	12.0
8	20.5	18.0	14.0	11.0	12.5	11.0	12.0	11.0	12.5	11.0	13.5	11.5
9	20.0	18.0	13.0	12.0	12.5	12.0	12.0	11.0	12.5	11.5	14.5	12.0
10	20.5	16.5	14.0	13.0	12.0	12.0	11.5	10.5	11.0	10.0	15.0	13.0
11	21.5	17.5	14.5	13.5	12.0	11.0	11.0	9.5	10.5	9.5	14.5	13.0
12	21.0	18.0	15.0	13.5	11.5	10.5	10.5	9.0	10.5	9.5	16.0	13.5
13	19.0	16.5	13.5	12.5	12.5	11.5	10.0	9.0	11.0	10.0	14.5	13.5
14	19.0	15.0	13.5	12.0	13.0	12.0	9.5	8.0	10.0	9.0	13.5	12.5
15	19.0	14.5	13.5	12.0	13.0	12.5	10.0	9.5	10.0	9.0	13.0	11.5
16	18.5	14.5	13.5	13.0	12.5	12.5	10.5	9.5	10.0	9.0	11.5	11.0
17	18.5	14.5	13.5	12.5	13.0	12.5	10.0	9.0	10.0	8.5	12.0	10.0
18	18.5	15.0	13.0	12.0	12.0	11.5	9.5	8.5	10.5	8.5	13.5	10.5
19	18.5	15.0	13.5	13.0	12.5	11.5	10.0	8.5	12.0	10.0	15.5	12.0
20	19.0	15.0	13.0	11.0	11.5	10.0	10.0	8.5	11.5	11.0	16.0	13.0
21	18.5	15.0	12.0	10.5	10.0	9.0	11.0	10.0	11.5	10.5	15.0	12.5
22	18.5	15.0	11.5	10.5	10.0	9.5	11.0	9.5	10.5	9.0	15.0	11.5
23	19.5	16.5	12.0	11.5	10.0	9.0	11.0	9.5	11.0	8.5	15.5	12.5
24	19.0	15.5	12.0	11.0	10.0	8.5	11.5	9.5	11.0	9.5	16.0	13.0
25	19.0	15.5	11.0	10.5	12.0	10.0	12.0	10.5	12.0	9.5	15.0	13.0
26	19.0	15.0	11.5	10.5	12.0	11.0	11.5	10.0	12.0	9.5	15.5	13.0
27	18.5	15.5	12.0	10.5	11.5	11.0	11.5	10.5	12.5	10.0	16.0	12.5
28	18.0	15.0	12.0	10.5	11.0	10.5	12.0	10.5	12.0	10.0	16.5	13.5
29	17.5	16.0	11.5	10.5	11.0	11.0	11.5	10.0	12.0	10.5	15.5	12.5
30	17.5	17.0	12.0	11.0	12.0	11.0	11.0	10.0	---	---	15.0	12.5
31	18.0	17.0	---	---	11.5	10.5	11.0	10.0	---	---	14.0	12.5
MONTH	22.0	14.5	18.0	10.5	13.0	8.5	12.0	8.0	12.5	8.5	16.5	10.0

## RUSSIAN RIVER BASIN

11464000 RUSSIAN RIVER NEAR HEALDSBURG, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	14.0	11.5	16.0	15.5	24.5	19.5	26.0	23.5	24.0	22.5	23.0	21.5
2	15.5	12.0	19.0	15.0	24.0	18.5	26.0	24.5	24.0	22.5	23.0	22.5
3	16.0	12.5	20.5	17.0	24.0	19.0	26.0	24.5	24.0	22.5	23.0	22.0
4	16.0	14.0	20.0	16.5	21.0	18.5	25.5	24.0	24.5	22.5	23.0	22.0
5	15.5	13.0	19.0	15.0	21.5	16.5	25.5	23.5	24.0	22.5	23.0	22.0
6	15.0	12.5	20.0	14.5	20.5	17.0	24.5	22.5	24.5	22.5	23.5	22.0
7	15.5	12.5	21.5	16.0	22.5	16.5	24.5	22.5	25.5	23.5	23.5	21.5
8	16.0	14.0	23.0	17.5	23.0	17.5	25.0	22.5	26.0	24.5	24.5	23.0
9	14.0	12.0	22.0	17.5	23.0	18.5	25.0	22.5	25.5	24.0	25.0	24.0
10	15.5	13.0	21.5	16.5	22.5	16.5	25.0	22.5	25.0	24.0	24.5	23.0
11	14.5	11.5	23.5	18.0	23.0	18.5	25.5	23.0	24.0	23.0	23.0	20.5
12	16.0	12.5	24.5	18.5	23.0	17.5	26.0	23.5	24.0	22.5	23.0	19.0
13	17.0	13.5	24.0	19.0	23.5	18.0	26.5	24.0	24.0	23.0	23.0	19.0
14	18.5	14.5	21.0	16.5	23.5	18.0	26.5	24.5	24.0	22.5	23.5	20.0
15	18.5	15.5	20.0	14.5	22.5	20.0	26.5	24.5	23.5	22.5	23.0	20.0
16	17.0	15.0	20.0	15.0	23.0	20.5	26.0	24.5	24.0	22.5	23.0	19.5
17	16.5	13.0	22.0	16.0	24.0	22.5	25.5	23.5	25.0	23.5	24.0	20.5
18	15.5	14.0	22.5	16.0	24.0	23.0	25.5	24.0	25.0	23.5	25.5	21.5
19	15.5	13.5	24.0	17.0	24.0	22.5	25.0	23.0	24.0	23.0	25.5	21.5
20	16.5	12.5	24.0	18.0	23.5	22.0	24.5	22.5	23.5	22.5	23.5	20.5
21	17.5	13.5	23.0	17.0	22.5	20.5	24.0	22.0	22.5	22.0	23.5	18.5
22	19.0	15.5	24.0	16.5	24.0	22.0	23.5	20.5	23.0	21.5	22.5	17.5
23	18.5	16.0	23.5	19.0	24.0	22.5	21.5	20.0	23.0	22.0	21.5	17.0
24	17.0	14.5	22.0	17.0	24.0	22.5	22.5	21.0	23.0	22.0	20.5	15.5
25	16.0	13.0	22.5	16.5	24.0	22.5	23.0	21.0	22.5	21.5	20.5	15.0
26	16.0	12.5	24.5	18.5	24.5	23.0	23.5	21.5	22.0	21.5	21.0	16.0
27	17.5	12.5	25.5	19.5	26.0	23.5	24.0	22.5	23.0	21.5	21.5	16.5
28	18.5	14.0	26.0	21.0	25.5	24.5	24.0	22.5	23.5	22.5	22.0	17.0
29	18.5	14.5	25.5	20.5	24.5	23.5	24.0	22.5	24.0	23.0	21.5	16.5
30	17.5	14.5	24.5	19.5	24.5	22.5	24.5	22.5	23.5	21.5	20.5	18.0
31	---	---	24.5	19.0	---	---	24.0	22.5	22.0	20.5	---	---
MONTH	19.0	11.5	26.0	14.5	26.0	16.5	26.5	20.0	26.0	20.5	25.5	15.0

## 11464900 LAKE SONOMA NEAR GEYSERVILLE, CA

LOCATION.--Lat 38°43'21", long 123°00'36", in SW 1/4 SE 1/4 sec.7, T.10 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, in reservoir control tower 400 ft upstream of Warm Springs Dam, and 6.0 mi west of Geyserville.

DRAINAGE AREA.--130 mi<sup>2</sup>

PERIOD OF RECORD.--October 1983 to September 1984.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers).

REMARKS.--Reservoir is formed by earthfill dam, storage began in October 1983. Usable capacity 380,673 acre-ft between elevations 221.00 ft invert of lowest outlet tunnel and 495.00 ft spillway crest. Dead storage, 327 acre-ft. Water is released down Dry Creek for domestic use and fisheries. Records including current year extremes, represent contents at 2400 hrs.

COOPERATION.--Records furnished by Corps of Engineers, not rounded to Geological Survey standards.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 51,020 acre-ft Dec. 26, elevation 336.98 ft.

## Capacity table (elevation, in feet NGVD, and contents, in acre-feet)

221	111	280	14,286	360	75,150	440	217,014
230	1,151	300	24,025	380	101,566	460	269,406
240	2,621	320	37,003	400	133,654	480	329,768
260	7,265	340	53,833	420	171,956	500	398,783

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	547	22534	33153	19172	29570	32184	22539	14377	12346	10744	7772
2	---	547	22713	28757	19172	29570	31961	22151	14315	12266	10673	7689
3	---	633	24890	24353	19172	29538	31666	21477	14257	12186	10610	7599
4	---	678	25017	21614	19172	29499	31405	21043	14203	12110	10543	7511
5	---	633	23739	21472	19172	29448	31120	20686	14165	12027	10483	7420
6	---	633	23140	21424	19172	29333	30810	20369	14132	11966	10427	7297
7	---	589	23013	21424	19172	29238	30502	20059	14087	11929	10375	7150
8	---	696	24467	21335	19172	29149	30195	19703	14038	11888	10309	7001
9	---	2120	34267	21183	19172	29060	29936	19315	13980	11857	10236	6851
10	---	11175	37174	21085	19172	28940	29898	18961	13927	11854	10129	6698
11	---	12102	42658	21027	19172	28807	29563	18684	13837	11854	9995	6546
12	---	13469	41819	20924	20034	28713	29276	18448	13784	11820	9869	6393
13	---	18065	39668	20836	23068	28813	28997	18180	13727	11786	9730	6247
14	---	18544	36686	20619	23555	29943	28662	17895	13662	11753	9599	6121
15	---	19773	34064	20537	25610	31193	28362	17618	13601	11719	9472	6010
16	---	25167	29289	20481	25822	32143	28001	17361	13549	11693	9353	5900
17	---	28921	24833	20252	26702	32912	27662	17126	13465	11660	9241	5796
18	---	26188	20353	20074	27356	33312	27441	16874	13392	11623	9146	5693
19	---	24194	18549	19933	27841	33610	27179	16601	13312	11586	9042	5586
20	---	21837	19074	19843	28225	33798	26889	16353	13221	11549	8936	5483
21	---	21932	19464	19753	28543	33854	26522	16081	13137	11516	8839	5373
22	---	23024	19763	19633	28795	33882	26123	15829	13062	11475	8734	5266
23	---	23460	23711	19493	28997	33861	25727	15584	12983	11438	8626	5158
24	---	29111	29859	19335	29187	33784	25301	15328	12908	11409	8519	5049
25	---	31385	46443	19266	29352	33638	24867	15147	12826	11368	8412	4946
26	---	28268	51020	19266	29442	33499	24450	14967	12748	11328	8312	4841
27	---	24884	49867	19266	29506	33325	24059	14785	12694	11277	8213	4738
28	---	22318	45938	19256	29544	33098	23610	14641	12593	11179	8127	4656
29	547	21986	41547	19236	29563	32926	23278	14557	12508	11034	8042	4612
30	589	22447	40494	19197	---	32652	22871	14490	12427	10901	7950	4566
31	633	---	36392	19172	---	32448	---	14448	---	10808	7863	---
MAX	---	31385	51020	33153	29563	33882	32184	22539	14377	12346	10744	7772
MIN	---	547	18549	19172	19172	28713	22871	14448	12427	10808	7863	4566
a	225.00	297.14	319.17	290.79	309.21	313.58	297.92	280.39	275.35	270.98	262.02	249.60
b	---	+21814	+13945	-17,220	+10391	+2885	-9577	-8423	-2021	-1619	-2945	-3297

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

## RUSSIAN RIVER BASIN

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA

LOCATION.--Lat 38°43'11", long 122°59'58", in Tzabaco Grant, Sonoma County, Hydrologic Unit 18010110, on right bank of outlet channel, 500 ft downstream from Warm Springs Dam, 500 ft from county road bridge and 5.0 mi west of Geyserville.

DRAINAGE AREA.--131 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to September 1942 (published as "Dry Creek near Healdsburg"), October 1981 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 188 ft from topographic map. Prior to Sept. 30, 1942, nonrecording gage at site 500 ft downstream at different datum.

REMARKS.--Records good. Flow slightly regulated by Warm Springs Dam since 1981, 500 ft upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,500 ft<sup>3</sup>/s Feb. 28, 1940, gage height, 16.9 ft, datum then in use; minimum daily, no flow Oct. 1 to Dec. 8, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 21.8 ft from floodmarks, discharge about 25,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,580 ft<sup>3</sup>/s Dec. 27, gage height, 8.37 ft; minimum daily, 6.1 ft<sup>3</sup>/s Oct. 21, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	16	196	2650	84	151	275	274	41	45	33	51
2	10	13	258	2610	88	151	272	271	42	46	33	51
3	9.9	20	266	2550	88	152	269	265	42	46	32	50
4	9.5	30	530	1670	88	152	269	239	42	47	29	51
5	8.9	35	859	500	88	153	268	215	41	47	29	51
6	8.3	32	854	428	88	153	268	212	41	36	29	66
7	7.8	29	850	376	88	153	266	211	41	28	30	78
8	7.4	25	853	376	88	154	265	209	40	29	30	81
9	6.9	33	1530	376	88	154	263	207	41	22	36	80
10	7.6	93	2390	335	89	155	262	206	40	6.3	56	79
11	7.8	119	2450	310	89	155	262	171	40	11	67	79
12	8.1	127	2580	311	89	155	260	154	39	25	67	79
13	7.2	125	2360	310	93	160	259	156	42	26	68	78
14	6.6	105	2320	310	440	161	255	155	45	27	68	67
15	6.4	77	2210	310	462	168	255	154	43	28	66	59
16	6.4	80	2660	310	161	249	255	154	45	28	63	59
17	6.5	343	2550	310	164	293	254	153	45	27	57	59
18	6.5	1640	2410	310	167	292	254	153	45	27	54	59
19	6.5	2110	1150	272	168	290	251	153	45	26	55	58
20	6.4	2120	102	251	170	287	251	153	46	25	57	58
21	6.1	1130	115	250	171	285	265	152	46	24	58	57
22	6.1	86	174	250	156	283	275	145	44	24	58	57
23	6.2	87	202	251	149	282	272	138	44	24	59	56
24	6.3	94	731	251	150	280	268	136	44	26	58	56
25	6.6	533	1230	176	151	279	267	118	44	26	59	55
26	6.7	2200	1300	124	152	277	263	98	44	26	60	55
27	6.7	2130	2340	124	152	280	260	94	44	26	56	54
28	6.5	1680	2850	124	153	282	258	91	45	46	51	40
29	6.9	483	2770	124	153	281	255	61	45	70	51	24
30	11	120	2730	124	---	278	266	41	45	61	52	24
31	15	---	2700	106	---	277	---	41	---	42	52	---
TOTAL	238.8	15715	46520	16779	4267	6822	7882	4980	1291	997.3	1573	1771
MEAN	7.70	524	1501	541	147	220	263	161	43.0	32.2	50.7	59.0
MAX	15	2200	2850	2650	462	293	275	274	46	70	68	81
MIN	6.1	13	102	106	84	151	251	41	39	6.3	29	24
AC-FT	474	31170	92270	33280	8460	13530	15630	9880	2560	1980	3120	3510
CAL YR 1983	TOTAL	219945.9	MEAN	603	MAX	4950	MIN	6.1	AC-FT	436300		
WTR YR 1984	TOTAL	108836.1	MEAN	297	MAX	2850	MIN	6.1	AC-FT	215900		

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA--Continued

## WATER-QUALITY RECORDS

## PERIOD OF RECORD.--

WATER TEMPERATURES: November 1981 to current year.

## PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1981 to current year.

## INSTRUMENTATION.--Temperature recorder.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 27.0°C July 11, August 5, 6, 8, 12, 15, 16, 1983; minimum recorded, 6.5°C Jan. 20, 1982.

## EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum recorded, 25.0°C July 10; minimum recorded, 8.0°C Feb. 22.

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	21.5	19.5	18.0	17.0	11.5	11.0	12.0	12.0	---	---	10.0	10.0
2	21.5	19.5	18.0	17.0	11.5	11.5	12.0	12.0	---	---	10.0	10.0
3	21.5	19.0	18.0	17.5	11.5	11.0	12.0	12.0	10.5	10.0	10.0	10.0
4	21.5	19.5	18.0	17.0	11.5	11.0	12.0	11.5	10.5	10.5	10.0	10.0
5	21.5	19.0	18.0	16.5	11.0	11.0	11.5	11.5	10.5	10.5	10.0	10.0
6	22.0	19.5	17.5	16.5	11.0	11.0	11.5	11.5	10.5	10.5	10.0	10.0
7	21.0	19.5	17.0	15.5	11.0	11.0	---	---	10.5	10.5	10.0	10.0
8	20.5	19.5	16.0	15.0	11.0	11.0	---	---	10.5	10.5	10.0	10.0
9	20.0	19.5	15.5	14.0	11.5	11.0	---	---	10.5	10.5	10.0	10.0
10	21.0	19.0	14.5	13.5	11.5	11.5	---	---	10.5	10.5	10.0	10.0
11	21.5	19.0	13.5	13.5	12.0	11.5	---	---	10.5	10.5	10.0	10.0
12	21.0	19.5	14.0	13.5	12.0	12.0	---	---	10.5	10.5	10.0	10.0
13	19.5	18.0	14.0	13.5	12.0	12.0	---	---	10.5	10.5	10.5	10.0
14	19.0	17.5	13.5	13.5	12.0	12.0	---	---	10.5	10.5	10.5	10.0
15	19.5	17.5	13.5	13.5	12.0	12.0	---	---	10.5	10.5	10.5	10.0
16	19.0	17.0	13.5	13.5	12.0	12.0	---	---	10.5	10.5	10.5	10.5
17	18.5	17.0	13.5	13.5	12.5	12.0	---	---	10.5	10.0	10.5	10.0
18	19.0	17.0	13.5	13.5	12.5	12.5	---	---	10.0	10.0	10.5	10.0
19	19.0	17.0	13.5	13.0	12.5	12.5	---	---	10.0	10.0	10.5	10.5
20	19.0	17.0	13.0	13.0	12.5	12.0	---	---	10.0	10.0	10.5	10.5
21	19.0	17.0	13.0	13.0	12.0	12.0	---	---	10.5	10.0	10.5	10.5
22	19.5	17.0	13.0	12.5	12.0	11.5	---	---	10.0	8.0	10.5	10.5
23	19.5	18.5	12.5	12.5	11.5	11.0	---	---	10.0	8.5	10.5	10.5
24	19.5	17.5	12.5	12.0	11.0	10.5	---	---	10.5	9.5	10.5	10.5
25	19.5	17.5	12.0	11.5	11.5	10.5	---	---	10.0	10.0	10.5	10.5
26	19.0	17.0	12.0	12.0	11.5	10.5	---	---	10.0	10.0	11.0	10.5
27	18.5	17.0	12.0	12.0	11.5	11.0	---	---	10.0	9.5	10.5	10.5
28	18.5	17.0	12.0	11.5	11.5	11.5	---	---	10.0	9.5	11.0	10.5
29	18.0	17.5	11.5	11.5	12.0	11.5	---	---	10.0	10.0	11.0	10.5
30	18.0	17.5	11.5	11.0	12.0	12.0	---	---	---	---	11.0	11.0
31	18.0	17.5	---	---	12.0	12.0	---	---	---	---	11.0	11.0
MONTH	22.0	17.0	18.0	11.0	12.5	10.5	---	---	10.5	8.0	11.0	10.0

## RUSSIAN RIVER BASIN

11465000 DRY CREEK BELOW WARM SPRINGS DAM, NEAR GEYSERVILLE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.0	11.0	13.5	13.5	16.5	15.5	18.0	17.5	19.5	18.5	22.0	20.5
2	11.0	11.0	14.0	13.5	16.5	15.5	18.0	17.5	19.5	18.5	21.5	20.5
3	11.5	11.0	14.0	14.0	16.5	15.5	18.0	17.5	19.5	18.0	21.5	20.5
4	11.5	11.0	14.0	14.0	16.0	15.5	18.5	17.5	19.5	18.0	21.5	20.5
5	11.5	11.0	14.0	14.0	16.5	15.5	18.5	18.0	19.5	18.0	21.5	20.5
6	11.5	11.0	14.0	14.0	16.5	15.5	19.0	17.5	19.5	18.0	22.0	21.0
7	11.5	11.5	14.0	14.0	16.5	15.5	18.5	17.5	19.5	18.0	22.0	21.0
8	12.0	11.5	14.0	14.0	16.5	15.5	18.5	17.5	19.5	18.5	21.5	21.5
9	12.0	11.5	14.5	14.0	17.0	15.5	20.0	17.5	20.0	18.5	21.5	21.0
10	12.0	11.5	14.5	14.5	16.5	15.5	25.0	17.5	20.5	19.0	21.5	21.0
11	12.0	11.5	14.5	14.5	17.0	15.5	22.0	18.5	20.5	20.0	22.0	21.0
12	12.0	12.0	14.5	14.5	17.0	15.5	19.0	17.5	20.5	19.5	21.5	21.0
13	12.0	12.0	15.0	14.5	17.5	16.0	19.0	17.5	20.5	20.0	21.5	21.0
14	12.0	12.0	15.5	14.5	17.0	16.5	19.0	18.0	20.5	20.0	21.5	21.0
15	12.5	12.0	15.0	15.0	17.0	16.5	19.0	18.0	20.5	20.0	21.5	21.0
16	12.5	12.0	15.0	15.0	17.5	16.5	19.0	18.0	21.0	20.0	22.0	21.0
17	12.5	12.0	15.0	15.0	17.5	16.5	19.0	14.5	21.0	20.0	21.5	21.0
18	12.5	12.0	15.0	15.0	17.5	16.5	19.0	18.0	21.0	20.0	22.5	21.0
19	12.5	12.5	15.5	15.0	17.5	16.5	19.0	18.0	21.0	20.0	22.5	21.0
20	12.5	12.5	15.5	15.0	17.5	16.0	19.0	18.0	21.0	20.5	22.0	21.0
21	13.0	12.5	15.5	15.5	17.5	16.0	19.0	18.0	21.0	20.5	22.0	21.0
22	13.0	12.5	15.5	15.5	17.5	16.5	18.5	14.5	21.0	20.5	22.0	21.0
23	13.0	13.0	16.0	15.5	17.5	16.5	18.5	18.0	21.0	20.5	21.5	20.5
24	14.0	13.0	16.5	15.5	17.5	16.5	19.0	14.5	21.5	21.0	21.0	20.0
25	14.5	13.0	17.0	15.5	17.5	17.0	19.0	18.0	21.5	20.5	20.0	19.0
26	13.5	13.5	16.0	16.0	17.5	17.0	19.0	18.0	21.0	20.5	20.0	19.5
27	13.5	13.5	16.0	16.0	18.0	17.0	19.0	18.0	21.5	20.5	20.0	19.5
28	13.5	13.5	16.5	16.0	18.0	17.0	19.5	18.0	21.5	20.5	20.0	19.5
29	13.5	13.5	16.5	16.0	18.0	17.0	19.5	19.0	21.5	20.5	20.0	19.0
30	13.5	13.5	16.5	15.5	18.0	17.0	19.5	19.0	21.5	20.5	20.0	19.5
31	---	---	16.0	15.5	---	---	19.5	19.0	22.0	20.5	---	---
MONTH	14.5	11.0	17.0	13.5	18.0	15.5	25.0	14.5	22.0	18.0	22.5	19.0

11465150 PENA CREEK NEAR GEYSERVILLE, CA

LOCATION.--Lat 38°42'02", long 122°58'16", in sec. 21, T.10 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, on right bank on upstream side of bridge on West Dry Creek Road, 1.1 mi upstream from mouth, and 3.7 mi west of Geyserville.

DRAINAGE AREA.--22.3 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 195 ft from topographic map.

REMARKS.--Records good. No regulation; some small diversion for irrigation of less than 200 acres in summer months.

AVERAGE DISCHARGE.--6 years, 59.0 ft<sup>3</sup>/s, 42,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,710 ft<sup>3</sup>/s Jan. 26, 1983, gage height 9.01 ft; minimum daily, no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 950 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1630	2,180	7.00	Dec. 9	0700	1,710	6.53
Nov. 17	0445	1,320	6.07	Dec. 25	1000	*3,190	7.91

No flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		4.1	44	197	20	26	23	8.4	.95			
2		1.3	40	155	18	25	22	9.0	.75			
3		.03	185	124	17	23	21	8.0	.13			
4		0	102	101	17	22	20	7.4	.56			
5		0	80	86	16	22	19	6.8	1.1			
6		0	72	74	16	21	19	6.6	2.1			
7		.14	75	65	16	20	18	6.4	2.1			
8		0	226	59	16	20	18	5.9	1.2			
9		17	1190	53	17	19	18	5.5	.76			
10		691	715	47	18	18	25	5.1	.47			
11		163	869	43	16	18	19	5.3	.28			
12		180	434	41	23	17	17	5.3	.15			
13		274	248	38	195	104	15	4.4	.15			
14		113	172	36	109	112	14	4.5	.16			
15		56	134	40	110	201	13	4.5	.13			
16		132	111	43	108	153	12	4.0	.09			
17		556	94	37	84	138	12	4.1	0			
18		157	80	33	73	107	15	4.2	0			
19		139	71	31	62	89	14	4.0	0			
20		135	63	29	54	75	12	3.6	0			
21		96	58	29	49	63	11	3.2	0			
22		73	52	28	43	54	11	3.0	0			
23		69	84	26	40	48	10	2.7	0			
24		413	900	25	40	42	9.7	2.5	0			
25		208	2090	24	36	38	9.5	2.5	0			
26		118	783	23	32	35	9.3	2.3	0			
27		84	391	22	30	32	9.0	2.0	0			
28		67	255	22	29	29	8.6	1.9	0			
29		57	204	21	27	27	8.2	1.5	0			
30		49	360	20	---	25	7.7	1.3	0			
31		---	250	20	---	24	---	1.2	---			
TOTAL	0	3852.57	10432	1592	1331	1647	440.0	137.1	11.08	0	0	0
MEAN	0	128	337	51.4	45.9	53.1	14.7	4.42	.37	0	0	0
MAX	0	691	2090	197	195	201	25	9.0	2.1	0	0	0
MIN	0	0	40	20	16	17	7.7	1.2	0	0	0	0
AC-FT	0	7640	20690	3160	2640	3270	873	272	22	0	0	0

CAL YR 1983	TOTAL	48180.14	MEAN	132	MAX	2340	MIN	0	AC-FT	95570
WTR YR 1984	TOTAL	19442.75	MEAN	53.1	MAX	2090	MIN	0	AC-FT	38560

## RUSSIAN RIVER BASIN

11465150 PENA CREEK NEAR GEYSERVILLE, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

WATER TEMPERATURES: Water years 1979 to current year.

SEDIMENT RECORDS: Water years 1979 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1978 to current year.

SEDIMENT RECORDS: October 1978 to current year.

REMARKS.--Zero bedload discharge observed at flows less than 41 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 5,000 mg/L Dec. 25, 1983; minimum daily mean, no flow for many days in 1979-84.

SEDIMENT DISCHARGE: Maximum daily, 32,600 tons Jan. 26, 1983; minimum daily, 0 tons many days in 1979-84.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 5,000 mg/L Dec. 25; minimum daily mean, no flow many days.

SEDIMENT DISCHARGE: Maximum daily, 31,900 tons Dec. 25; minimum daily, 0 tons many days.

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		14.0	10.5	10.5	7.5	15.5	---	13.0	---			
2		14.0	---	7.5	10.5	15.5	---	20.0	22.0			
3		14.0	---	9.5	8.0	15.0	9.5	20.0	---			
4		---	---	10.5	8.5	15.0	---	14.0	17.0			
5		---	10.0	9.5	8.5	---	---	---	---			
6		12.0	10.5	10.0	7.5	13.5	---	---	16.0			
7		13.0	11.0	10.5	7.0	---	11.5	12.5	---			
8		---	12.0	10.5	7.0	13.0	17.0	21.0	25.0			
9		11.0	12.0	12.0	7.0	14.0	---	15.0	22.0			
10		12.0	12.0	10.0	6.5	---	11.5	---	---			
11		12.0	11.5	7.5	7.5	13.5	10.0	16.0	---			
12		12.0	10.5	7.5	9.5	---	11.5	---	---			
13		12.5	11.0	8.5	10.0	13.5	11.5	---	23.0			
14		10.0	12.0	7.0	9.0	14.5	20.0	15.0	21.0			
15		9.5	12.0	7.0	9.0	---	---	---	---			
16		11.0	12.5	7.5	7.5	9.5	---	13.5	---			
17		13.0	12.0	7.0	6.5	---	---	21.0	---			
18		12.0	11.0	7.0	9.0	15.0	---	---	---			
19		12.0	10.5	6.5	10.0	---	---	---	---			
20		10.0	8.5	7.5	9.0	11.5	---	---	---			
21		9.0	9.0	8.5	7.5	---	18.0	16.0	---			
22		9.0	8.5	9.0	7.0	16.0	19.0	---	---			
23		9.5	8.5	7.5	6.0	---	14.0	17.5	---			
24		---	---	7.5	9.0	---	---	---	---			
25		9.5	---	7.5	9.5	---	16.0	15.5	---			
26		10.0	9.0	7.5	10.0	---	11.5	---	---			
27		10.0	13.5	8.0	11.0	16.0	14.5	---	---			
28		9.5	9.5	8.0	9.0	11.5	---	22.0	---			
29		8.5	10.0	8.5	11.5	10.5	17.0	---	---			
30		10.5	10.0	8.5	---	10.0	11.5	17.5	---			
31		---	10.0	8.5	---	---	---	17.0	---			
MONTH		11.0	10.5	8.5	8.5	---	---	---	---			

11465150 PENA CREEK NEAR GEYSERVILLE, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

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				4.1	38	.63	44	0	0
2				1.3	3	.01	40	0	0
3				.03	1	0	185	59	56
4				0	0	0	102	13	3.6
5				0	0	0	80	6	1.3
6				0	0	0	72	3	.58
7				.14	1	0	75	4	.81
8				0	0	0	226	119	238
9				17	24	1.6	1190	1990	7440
10				691	2810	9320	715	756	1580
11				163	1040	458	869	826	2010
12				180	1290	1050	434	265	311
13				274	1500	1600	248	90	60
14				113	372	113	172	28	13
15				56	79	12	134	14	5.1
16				132	252	108	111	9	2.7
17				556	1970	4060	94	6	1.5
18				157	300	127	80	5	1.1
19				139	127	60	71	3	.58
20				135	69	25	63	2	.34
21				96	9	2.3	58	2	.31
22				73	4	.79	52	2	.28
23				69	4	.75	84	15	4.1
24				413	613	974	900	1170	3960
25				208	65	37	2090	5000	31900
26				118	8	2.5	783	967	2500
27				84	4	.91	391	199	210
28				67	2	.36	255	40	28
29				57	1	.15	204	42	23
30				49	0	0	360	258	272
31				---	---	---	250	70	47
TOTAL	0	0	0	3852.57	---	17954.00	10432	---	50670.30

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	197	31	16	20	1	.05	26	2	.14
2	155	24	10	18	2	.10	25	3	.20
3	124	14	4.7	17	2	.09	23	2	.12
4	101	8	2.2	17	2	.09	22	1	.06
5	86	3	.70	16	2	.09	22	2	.12
6	74	3	.60	16	2	.09	21	4	.23
7	65	2	.35	16	1	.04	20	2	.11
8	59	2	.32	16	2	.09	20	0	0
9	53	4	.57	17	2	.05	19	3	.15
10	47	4	.51	18	3	.15	18	2	.10
11	43	0	0	16	2	.09	18	2	.10
12	41	1	.11	23	8	.50	17	2	.09
13	38	3	.31	195	218	180	104	292	136
14	36	1	.10	109	100	29	112	70	24
15	40	1	.11	110	61	23	201	248	248
16	43	1	.12	108	18	5.2	153	143	63
17	37	2	.20	84	6	1.4	138	46	17
18	33	1	.09	73	5	.99	107	8	2.3
19	31	2	.17	62	3	.50	89	6	1.4
20	29	1	.08	54	3	.44	75	6	1.2
21	29	1	.08	49	4	.53	63	5	.85
22	28	1	.08	43	2	.23	54	4	.58
23	26	0	0	40	2	.22	48	3	.39
24	25	1	.07	40	2	.22	42	2	.23
25	24	1	.06	36	2	.19	38	1	.10
26	23	0	0	32	1	.09	35	2	.19
27	22	1	.06	30	1	.08	32	2	.17
28	22	0	0	29	2	.16	29	1	.08
29	21	1	.06	27	1	.07	27	1	.07
30	20	6	.32	---	---	---	25	2	.14
31	20	0	0	---	---	---	24	2	.13
TOTAL	1592	---	37.97	1331	---	243.79	1647	---	497.25



11465150 PENA CREEK NEAR GEYSERVILLE, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	0.0	0.0	0	0
NOVEMBER ...	3852.57	17954.00	1240	19200
DECEMBER ...	10432.00	50670.30	5120	55800
JANUARY 1984	1592.00	37.97	93	131
FEBRUARY ...	1331.00	243.79	96	340
MARCH .....	1647.00	497.25	136	633
APRIL .....	440.00	1.46	0	1
MAY .....	137.10	0.38	0	0
JUNE .....	11.08	0.03	0	0
JULY .....	0.0	0.0	0	0
AUGUST .....	0.0	0.0	0	0
SEPTEMBER ..	0.0	0.0	0	0
TOTAL .....	19442.75	69405.18	6685	76105

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, PENDE (T/DAY)	SED. SUSP. DIAM. % FINER THAN .002 MM	SED. SUSP. DIAM. % FINER THAN .004 MM
MAR 13...	1330	238	13.5	650	418	55	65
APR 10...	0745	34	11.5	20	1.8	--	--
DATE		SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
MAR 13...	76	85	90	93	96	98	100
APR 10...	--	--	--	100	--	--	--

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	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
FEB 02...	1430	10.5	4	18	--	1	3
SEP 24...	1715	--	4	.00	1	2	6
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
FEB 02...	6	13	20	28	45	72	100
SEP 24...	12	23	35	46	64	90	100

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA

LOCATION.--Lat 38°41'55", long 122°57'25", in Tzabaco Grant, Sonoma County, Hydrologic Unit 18010110, on left bank pier of bridge 0.3 mi downstream from Pena Creek, and 3 mi west of Geyserville.

DRAINAGE AREA.--162 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD CA-65-1: 1962(M), 1963(M).

GAGE.--Water-stage recorder. Datum of gage is 156.40 ft, National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1964, at datum 4.00 ft higher. Oct. 1, 1964, to Apr. 8, 1976, datum 3.00 ft higher.

REMARKS.--Records good. Small diversions above station for irrigation of about 1,200 acres in summer. Flow regulated by Warm Springs Dam (station 11464900) 3 miles upstream beginning October 1983.

AVERAGE DISCHARGE.--25 years, 342 ft<sup>3</sup>/s, 248,000 acreft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,400 ft<sup>3</sup>/s Jan. 31, 1963, gage height, 20.50 ft present datum; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4500 ft<sup>3</sup>/s Dec. 25, gage height, 9.64 ft; minimum daily, 2.3 ft<sup>3</sup>/s Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	18	287	2800	112	190	293	300	45	45	38	46
2	6.3	17	341	2700	112	190	291	299	45	46	36	46
3	6.2	16	537	2600	113	190	289	297	45	45	35	46
4	6.3	25	602	1500	113	189	287	267	43	45	31	45
5	6.0	31	858	700	114	188	284	228	43	45	30	45
6	5.3	30	863	520	113	185	282	226	45	38	29	57
7	4.6	28	872	410	113	184	280	224	48	27	29	72
8	4.1	24	1010	400	113	187	279	226	48	27	29	77
9	4.1	43	2430	390	113	186	276	222	46	27	32	78
10	3.8	866	2810	365	114	183	286	221	46	11	49	78
11	4.0	351	3120	330	113	184	279	191	46	16	66	77
12	4.9	403	2850	310	122	185	275	160	46	22	67	77
13	4.1	538	2380	305	303	300	270	164	46	23	69	76
14	3.2	320	2220	310	624	293	266	163	49	24	69	67
15	2.5	205	2050	310	737	431	265	162	49	24	68	57
16	2.4	309	2420	310	326	421	265	161	48	25	62	55
17	2.3	956	2310	310	295	453	265	159	47	23	57	54
18	3.7	1610	2170	300	278	404	268	158	47	23	50	53
19	12	2040	1180	290	265	375	267	158	46	22	51	52
20	14	2110	250	260	254	358	264	158	44	22	52	50
21	13	1270	255	250	246	342	266	157	46	22	51	52
22	12	245	300	250	227	330	263	151	46	22	51	51
23	4.7	234	400	250	214	322	263	147	46	22	51	51
24	4.0	647	920	250	210	314	263	145	46	23	51	51
25	4.1	745	2850	210	206	308	264	132	46	24	51	52
26	4.4	2100	2100	148	202	302	265	110	46	24	53	53
27	4.1	2020	2350	148	197	302	265	105	46	25	51	51
28	4.1	1660	3050	147	193	305	265	104	46	34	45	44
29	4.2	627	3000	147	190	301	264	77	46	52	46	26
30	6.4	242	3000	147	---	296	280	49	45	48	46	25
31	12	---	2900	125	---	293	---	45	---	41	46	---
TOTAL	178.7	19730	52685	17492	6332	8691	8189	5366	1381	917	1491	1664
MEAN	5.76	658	1700	564	218	280	273	173	46.0	29.6	48.1	55.5
MAX	14	2110	3120	2800	737	453	293	300	49	52	69	78
MIN	2.3	16	250	125	112	183	263	45	43	11	29	25
AC-FT	354	39130	104500	34700	12560	17240	16240	10640	2740	1820	2960	3300
CAL YR 1983	TOTAL	321270.2	MEAN	880	MAX	7990	MIN	2.3	AC-FT	637200		
WTR YR 1984	TOTAL	124116.7	MEAN	339	MAX	3120	MIN	2.3	AC-FT	246200		

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to current year.

CHEMICAL ANALYSIS: Water years 1971-81.

WATER TEMPERATURES: Water years 1964 to current year.

SEDIMENT RECORDS: Water years 1964 to current year.

TURBIDITY: Water years 1964 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: March 1964 to current year.

SEDIMENT RECORDS: March 1964 to current year.

INSTRUMENTATION.--Temperature recorder since November 1964.

REMARKS.--Sediment discharge for the period Dec. 16 to Feb. 2, July 10-23, and July 29 to Aug. 1 are estimated. Zero bedload discharge observed at flows less than 227 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 28.5°C June 15, 1980; minimum recorded, 3.5°C Jan. 3, 1974.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 15,000 mg/L (estimated) Dec. 22, 1964; minimum daily mean, no flow many days in 1964, 1966, 1970-82.

SEDIMENT DISCHARGE: Maximum daily, 830,000 tons, estimated, Dec. 22, 1964; minimum daily, 0 tons many days in 1964, 1966, 1968-83.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 26.5°C Aug. 7, 17; minimum recorded, 8.5°C, Feb. 14.

SEDIMENT CONCENTRATIONS: Maximum daily mean, unknown Dec. 25; minimum daily mean, 1 mg/L Oct. 10, May 14, and July 24.

SEDIMENT DISCHARGE: Maximum daily, 2,400 tons Dec. 25 estimated; minimum daily, .02 ton several days during October.

## TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	18.0	16.0	12.0	11.0	12.0	11.5	12.5	10.5	12.0	9.5
2	---	---	18.5	15.5	12.5	11.0	12.0	11.5	12.0	10.0	12.5	9.5
3	---	---	18.0	15.5	11.5	10.5	11.5	11.5	12.5	9.5	13.0	9.5
4	---	---	18.5	15.5	11.5	10.5	12.0	11.5	12.5	9.5	12.5	9.5
5	---	---	18.0	15.0	11.0	11.0	12.0	11.5	12.0	9.5	12.5	9.5
6	---	---	17.0	15.0	11.0	11.0	12.0	11.5	12.5	9.5	12.5	9.5
7	---	---	16.5	14.0	11.0	10.5	12.0	11.5	12.5	9.5	12.0	10.0
8	---	---	16.0	13.0	11.5	11.0	12.0	11.5	12.5	10.0	12.5	9.5
9	---	---	14.5	12.5	12.0	11.0	11.5	11.5	12.0	10.0	13.0	9.5
10	---	---	14.0	12.0	11.5	11.0	12.0	11.0	12.0	9.0	12.5	10.0
11	---	---	14.5	13.0	12.0	11.0	12.0	11.0	10.5	9.5	12.5	10.0
12	---	---	14.5	13.0	12.0	11.5	12.5	11.0	11.0	10.0	13.0	10.5
13	---	---	13.5	12.0	12.0	11.0	11.5	10.5	11.5	9.5	12.5	10.5
14	---	---	14.0	12.0	12.0	11.0	11.5	10.5	10.5	8.5	13.0	10.5
15	---	---	14.0	12.0	12.5	11.5	11.0	11.0	10.5	10.0	13.0	10.5
16	---	---	13.5	12.5	12.0	12.0	12.0	10.5	11.5	9.0	11.0	10.0
17	---	---	14.0	13.0	12.5	12.0	11.5	10.5	11.5	9.0	12.5	10.0
18	---	---	13.0	13.0	12.5	12.0	11.5	10.5	11.5	9.0	12.5	10.0
19	17.0	13.5	13.0	13.0	13.0	12.0	11.5	10.0	12.0	10.0	13.5	10.5
20	18.0	14.5	13.0	12.5	12.5	11.0	11.5	10.0	11.0	10.0	13.0	10.5
21	18.5	14.5	13.0	12.0	12.0	11.0	12.0	10.5	12.0	9.5	12.5	10.0
22	---	---	13.0	11.5	11.5	11.5	11.5	10.0	11.5	9.0	13.0	10.0
23	---	---	12.5	12.0	11.5	10.5	12.0	10.0	11.0	9.0	13.0	10.5
24	---	---	12.5	11.5	11.0	10.0	12.5	10.5	11.5	9.5	12.5	10.5
25	---	---	12.0	10.5	12.0	11.0	13.0	10.5	12.0	9.5	12.0	10.5
26	---	---	12.0	11.5	11.5	11.0	12.5	10.5	12.0	9.5	13.5	10.5
27	---	---	12.0	11.5	11.5	11.0	12.5	10.5	12.0	9.5	12.5	10.0
28	---	---	11.5	11.5	11.5	11.0	12.5	10.5	11.5	9.5	13.5	10.5
29	---	---	12.5	11.5	12.0	11.5	12.5	10.0	11.5	9.5	13.0	10.5
30	---	---	12.5	11.5	12.0	12.0	12.5	10.0	---	---	---	---
31	---	---	---	---	12.0	11.5	11.5	10.5	---	---	---	---
MONTH	---	---	18.5	10.5	13.0	10.0	13.0	10.0	12.5	8.5	13.5	9.5

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1			---	---	22.5	14.5	24.5	16.5	25.0	17.5	26.0	18.5
2			---	---	21.5	14.0	25.5	17.0	25.0	17.0	25.5	18.5
3			16.0	13.5	21.5	14.0	25.0	17.0	24.5	17.0	25.0	18.0
4			16.5	13.5	18.5	14.5	25.0	16.5	25.5	17.0	26.0	18.0
5			17.0	13.0	20.5	14.0	24.0	17.0	25.0	17.0	25.5	18.0
6			17.0	13.0	19.0	14.5	24.5	17.0	25.0	17.0	25.0	19.5
7			17.5	13.5	21.5	14.0	24.0	16.5	26.5	18.0	26.0	19.5
8			18.0	13.5	21.5	14.0	24.0	16.5	26.0	18.0	26.0	20.5
9			17.0	13.5	21.5	14.0	24.5	16.0	26.0	17.0	26.0	20.5
10			17.0	13.5	22.0	13.5	---	---	25.0	18.5	25.0	19.0
11			18.0	14.0	22.0	14.5	---	---	24.5	18.5	24.5	19.0
12			18.5	14.0	22.0	14.5	---	---	25.0	18.5	25.0	19.5
13			18.5	14.0	22.0	15.0	---	---	25.0	18.5	24.5	19.0
14			18.0	14.0	22.0	15.0	---	---	25.0	18.5	24.5	19.5
15			18.0	13.5	22.0	15.5	25.0	19.0	25.0	18.5	25.0	19.0
16			17.5	14.0	23.0	15.0	23.5	18.5	26.0	19.0	25.5	19.0
17			18.5	14.0	21.5	15.5	24.0	19.0	26.5	19.0	24.0	19.5
18			18.5	14.0	22.5	15.5	24.5	18.0	26.0	18.5	25.5	20.5
19			19.0	14.5	23.0	15.0	24.0	18.0	25.5	18.0	25.5	20.0
20			19.0	14.5	22.5	15.0	23.5	18.0	25.0	19.0	25.0	19.5
21			18.5	14.5	23.0	14.5	22.0	16.0	25.0	19.0	24.5	19.0
22			19.5	14.5	21.0	15.5	19.5	16.5	25.5	19.0	23.5	19.0
23			19.0	15.0	22.0	15.5	22.0	16.0	25.0	19.0	23.0	18.0
24			19.0	14.5	23.0	15.5	22.0	17.0	25.0	19.0	23.0	17.5
25			20.0	15.0	22.0	15.5	22.0	16.0	23.5	19.0	23.0	17.0
26			20.5	15.0	22.5	15.5	25.0	16.5	24.0	19.0	23.5	17.0
27			20.0	15.0	22.0	17.0	24.5	16.5	24.5	19.0	23.5	17.5
28			20.0	15.5	21.0	16.0	25.0	17.0	26.0	19.0	23.5	17.5
29			22.0	15.0	19.0	16.0	24.0	18.0	25.5	19.0	22.5	16.5
30			22.0	14.5	24.5	16.0	24.5	18.0	22.5	19.0	21.0	17.5
31			22.5	14.0	---	---	25.0	17.5	25.0	18.0	---	---
MONTH			22.5	13.0	24.5	13.5	25.5	16.0	26.5	17.0	26.0	16.5
YEAR	26.5	8.5										

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	5.9	2	.03	18	32	1.6	287	84	65
2	6.3	4	.07	17	33	1.5	341	80	74
3	6.2	3	.05	16	34	1.5	537	260	424
4	6.3	3	.05	25	32	2.2	602	138	249
5	6.0	8	.13	31	30	2.5	858	122	283
6	5.3	8	.11	30	30	2.4	863	103	240
7	4.6	2	.02	28	32	2.4	872	98	231
8	4.1	2	.02	24	32	2.1	1010	127	386
9	4.1	2	.02	43	53	8.2	2430	206	1410
10	3.8	1	.01	866	572	1750	2810	225	1710
11	4.0	4	.04	351	256	262	3120	260	2190
12	4.9	3	.04	403	311	395	2850	218	1680
13	4.1	4	.04	538	418	690	2380	263	1690
14	3.2	4	.03	320	260	225	2220	193	1160
15	2.5	3	.02	205	180	100	2050	157	869
16	2.4	3	.02	309	318	277	2420	---	1400
17	2.3	3	.02	956	499	1400	2310	---	1300
18	3.7	11	.11	1610	363	1680	2170	---	1180
19	12	12	.39	2040	292	1610	1180	---	430
20	14	10	.38	2110	255	1450	250	---	7.7
21	13	13	.46	1270	220	754	255	---	8.0
22	12	13	.42	245	160	106	300	---	40
23	4.7	14	.18	234	165	104	400	---	100
24	4.0	14	.15	647	379	700	920	---	700
25	4.1	8	.09	745	225	525	2850	---	2400
26	4.4	8	.10	2100	210	1190	2100	---	1500
27	4.1	9	.10	2020	200	1090	2350	---	1700
28	4.1	9	.10	1660	160	717	3050	---	2000
29	4.2	14	.16	627	138	234	3000	---	1900
30	6.4	12	.21	242	103	67	3000	---	1800
31	12	79	2.9	---	---	---	2900	---	1500
TOTAL	178.7	---	6.47	19730	---	15350.4	52685	---	30626.7

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	2800		1200	112	---	5.1	190	17	8.7
2	2700		1100	112	---	4.8	190	20	10
3	2600		1000	113	16	4.9	190	5	2.6
4	1500		580	113	8	2.4	189	17	8.7
5	700		230	114	13	4.0	188	16	8.1
6	520		90	113	18	5.5	185	14	7.0
7	410		71	113	16	4.9	184	14	7.0
8	400		69	113	14	4.3	187	14	7.1
9	390		64	113	15	4.6	186	12	6.0
10	365		58	114	14	4.3	183	12	5.9
11	330		52	113	12	3.7	184	11	5.5
12	310		46	122	26	8.6	185	11	5.5
13	305		46	303	107	113	300	152	158
14	310		43	624	74	118	293	36	28
15	310		42	737	32	64	431	128	173
16	310		37	326	11	9.7	421	58	73
17	310		36	295	10	8.0	453	31	38
18	300		34	278	23	17	404	13	14
19	290		31	265	20	14	375	12	12
20	260		17	254	19	13	358	10	9.7
21	250		16	246	22	15	342	10	9.2
22	250		17	227	28	17	380	10	8.9
23	250		18	214	32	18	322	9	7.8
24	250		14	210	12	6.8	314	9	7.6
25	210		20	206	17	9.5	308	8	6.7
26	148		13	202	24	13	302	8	6.5
27	148		8.0	197	30	16	302	8	6.5
28	147		7.5	193	18	9.4	305	8	6.6
29	147		7.5	190	21	11	301	8	6.5
30	147		7.5	---	---	---	296	10	8.0
31	125		5.4	---	---	---	293	10	7.9
TOTAL	17492		4979.9	6332	---	529.5	8691	---	670.0

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	293	11	8.7	300	4	3.2	45	2	.24
2	291	11	8.6	299	5	4.0	45	2	.24
3	289	12	9.4	297	4	3.2	45	2	.24
4	287	11	8.5	267	3	2.2	43	2	.23
5	284	10	7.7	228	4	2.5	43	2	.23
6	282	9	6.9	226	4	2.4	45	3	.36
7	280	8	6.0	224	5	3.0	48	3	.39
8	279	7	5.3	226	3	1.8	48	3	.39
9	276	8	6.0	222	2	1.2	46	3	.37
10	286	9	6.9	221	2	1.2	46	3	.37
11	279	7	5.3	191	3	1.5	46	3	.37
12	275	7	5.2	160	3	1.3	46	3	.37
13	270	7	5.1	164	3	1.3	46	4	.50
14	266	7	5.0	163	1	.44	49	4	.53
15	265	7	5.0	162	2	.87	49	5	.66
16	265	7	5.0	161	3	1.3	48	5	.65
17	265	6	4.3	159	7	3.0	47	5	.63
18	268	6	4.3	158	6	2.6	47	6	.76
19	267	5	3.6	158	5	2.1	46	6	.75
20	264	5	3.6	158	4	1.7	44	5	.59
21	266	5	3.6	157	3	1.3	46	5	.62
22	263	5	3.6	151	2	.82	46	5	.62
23	263	4	2.8	147	2	.79	46	6	.75
24	263	4	2.8	145	3	1.2	46	6	.75
25	264	5	3.6	132	4	1.4	46	6	.75
26	265	5	3.6	110	4	1.2	46	7	.87
27	265	5	3.6	105	3	.85	46	4	.50
28	265	4	2.9	104	3	.84	46	2	.25
29	264	4	2.9	77	2	.42	46	3	.37
30	280	3	2.3	49	2	.26	45	4	.49
31	---	---	---	45	2	.24	---	---	---
TOTAL	8189	---	152.1	5366	---	50.13	1381	---	14.84

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	45	3	.36	38	---	.62	46	9	1.1
2	46	2	.25	36	6	.58	46	8	.99
3	45	2	.24	35	5	.47	46	8	.99
4	45	3	.36	31	5	.42	45	8	.97
5	45	4	.49	30	5	.41	45	8	.97
6	38	4	.41	29	4	.31	57	12	1.8
7	27	4	.29	29	4	.31	72	16	3.1
8	27	3	.22	29	4	.31	77	14	2.9
9	27	2	.15	32	5	.43	78	12	2.5
10	11	---	.03	49	7	.93	78	10	2.1
11	16	---	.04	66	9	1.6	77	8	1.7
12	22	---	.12	67	12	2.2	77	6	1.2
13	23	---	.12	69	9	1.7	76	6	1.2
14	24	---	.13	69	6	1.1	67	5	.90
15	24	---	.13	68	6	1.1	57	5	.77
16	25	---	.20	62	7	1.2	55	4	.59
17	23	---	.19	57	7	1.1	54	4	.58
18	23	---	.12	50	7	.95	53	5	.72
19	22	---	.12	51	7	.96	52	6	.84
20	22	---	.12	52	7	.98	50	6	.81
21	22	---	.18	51	7	.96	52	5	.70
22	22	---	.12	51	6	.83	51	4	.55
23	22	---	.12	51	6	.83	51	4	.55
24	23	1	.06	51	5	.69	51	4	.55
25	24	2	.13	51	5	.69	52	4	.56
26	24	2	.13	53	4	.57	53	2	.29
27	25	8	.54	51	4	.55	51	2	.28
28	34	15	1.4	45	7	.85	44	2	.24
29	52	---	1.7	46	9	1.1	26	2	.14
30	48	---	1.2	46	12	1.5	25	2	.14
31	41	---	.66	46	11	1.4	---	---	---
TOTAL	917	---	10.33	1491	---	27.65	1664	---	30.73
YEAR 124116.7			52448.75						

SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	178.70	6.47	0	6
NOVEMBER ...	19730.00	15350.40	6060	21500
DECEMBER ...	52685.00	30626.70	25800	56400
JANUARY 1984	17492.00	4979.90	5320	10300
FEBRUARY ...	6332.00	529.50	155	684
MARCH .....	8691.00	670.00	42	712
APRIL .....	8189.00	152.10	6	158
MAY .....	5366.00	50.13	1	51
JUNE .....	1381.00	14.84	0	15
JULY .....	917.00	10.33	0	10
AUGUST .....	1491.00	27.65	0	28
SEPTEMBER ..	1664.00	30.73	0	31
TOTAL .....	124116.70	52448.75	37384	89895

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .006 MM
DEC 27...	1235	3600	12.5	524	5090	28	38	43
FEB 14...	0730	236	10.0	69	44	--	--	--
14...	1750	921	10.5	66	164	--	--	--
22...	1330	218	11.5	28	16	--	--	--
MAR 13...	1315	409	13.0	325	359	--	--	--
DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
DEC 27...	46	49	54	64	83	96	99	100
FEB 14...	--	--	79	87	100	--	--	--
14...	--	--	82	90	100	--	--	--
22...	--	--	95	97	100	--	--	--
MAR 13...	--	--	92	97	100	--	--	--

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
				% FINER THAN .125 MM	% FINER THAN .250 MM	% FINER THAN .500 MM	% FINER THAN 1.00 MM
FEB 02...	1500	11.0	5	0	2	8	21
SEP 25...	1130	20.0	5	0	1	3	7

DATE	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM	% FINER THAN 64.0 MM
FEB 02...	32	40	49	63	79	100
SEP 25...	12	19	34	57	77	95

## PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.
						% FINER THAN .250 MM	% FINER THAN .500 MM	
DEC 27...	1330	12.5	24	3790	198	2560	3	16

DATE	TIME	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.
		% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM
DEC 27...	26	34	43	54	71	88	100

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	TUR- BID- ITY (NTU)
OCT						
01...	0830	5.3	17.5	1	.01	1.0
01...	1630	6.2	19.5	2	.03	1.0
02...	0900	6.7	20.0	3	.05	1.0
02...	1630	6.2	21.0	6	.10	1.0
03...	1200	6.7	20.5	3	.05	1.0
04...	1000	6.2	20.0	3	.05	2.0
05...	1005	5.8	19.0	8	.13	2.0
06...	1030	5.3	18.5	8	.11	1.0
07...	1015	4.9	18.0	2	.03	1.0
08...	0930	4.1	17.0	2	.02	1.0
08...	1730	4.1	18.5	2	.02	1.0
09...	0930	3.8	16.5	2	.02	1.0
09...	1730	3.8	18.0	2	.02	1.0
10...	0800	3.8	16.5	1	.01	1.0
11...	0800	3.8	16.5	4	.04	3.0
12...	0800	3.4	16.5	3	.03	3.0
13...	0800	3.4	16.0	4	.04	3.0
14...	0800	3.4	16.0	4	.04	3.0
15...	0900	3.0	15.0	3	.02	2.0
15...	1800	3.0	16.5	3	.02	2.0

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	TUR- BID- ITY (NTU)
OCT						
16...	0900	2.7	15.0	3	.02	2.0
16...	1730	2.4	16.0	3	.02	2.0
17...	0815	2.9	15.0	3	.02	2.0
18...	1130	2.1	16.5	11	.06	4.0
19...	1200	9.9	17.0	12	.32	4.0
20...	1200	14	17.0	10	.38	4.0
21...	0830	14	15.0	13	.49	11
22...	0830	14	15.0	13	.49	11
22...	1600	13	17.0	13	.46	12
23...	0930	5.3	15.5	12	.17	11
23...	1600	4.1	17.5	14	.16	11
24...	0800	4.1	15.5	14	.16	11
25...	0800	4.1	15.0	8	.09	6.0
26...	0800	4.1	15.0	8	.09	6.0
27...	0800	4.1	15.0	9	.10	7.0
28...	0800	4.1	15.0	9	.10	7.0
29...	0800	4.1	15.0	13	.14	7.0
29...	1600	4.1	17.0	14	.16	8.0
30...	0800	5.3	15.0	12	.17	7.0
30...	1600	6.2	18.0	13	.22	8.0
31...	0800	11	15.0	15	.45	7.0
31...	1410	15	17.5	172	7.0	100
31...	1420	15	17.5	184	7.5	110
31...	1430	15	17.5	217	8.8	130
JAN						
11...	0745	--	10.0	58	--	60
12...	0745	--	11.0	55	--	55
13...	1425	--	12.0	56	--	55
14...	0815	--	10.5	51	--	50
14...	1615	--	11.5	50	--	50
15...	0900	--	10.0	52	--	50
15...	1800	--	11.0	49	--	55
16...	0845	--	11.0	49	--	55
16...	1730	--	11.5	40	--	45
17...	0730	--	11.0	43	--	38
18...	0730	--	11.0	42	--	40
19...	0745	--	11.0	39	--	40
20...	0745	--	11.0	24	--	25
21...	1015	--	11.0	25	--	27
21...	1600	--	16.0	23	--	29
22...	0945	--	11.0	26	--	30
22...	1600	--	11.5	24	--	29
23...	0730	--	11.0	26	--	29
24...	0745	--	11.0	24	--	30
25...	0730	--	11.0	35	--	37
26...	0730	--	11.0	31	--	37
27...	0730	--	11.0	20	--	22
28...	0730	--	11.0	19	--	23
28...	1800	--	11.5	20	--	24
29...	0730	--	11.0	19	--	24
29...	1800	--	11.5	19	--	24
30...	0730	--	11.0	19	--	23
31...	0730	--	11.0	16	--	22
FEB						
01...	0730	114	9.5	17	5.2	21
02...	0715	106	9.0	8	2.3	22
02...	1405	114	11.0	16	4.9	17
03...	0715	114	10.0	16	4.9	17
04...	0725	113	10.5	10	3.1	17
04...	1530	114	12.0	6	1.8	14
05...	0730	113	11.0	15	4.6	18
05...	1545	113	12.5	11	3.4	17
06...	0730	112	9.5	18	5.4	16
07...	0730	112	9.0	16	4.8	17
08...	0730	113	9.0	14	4.3	15
09...	0730	113	9.0	15	4.6	15
10...	0730	112	8.5	14	4.2	14
11...	0730	113	9.0	15	4.6	14
11...	1745	113	9.5	14	4.3	15
12...	0730	119	9.5	25	8.0	15
12...	1745	126	10.5	28	9.5	15
13...	0730	132	10.0	27	9.6	15
14...	1730	930	10.5	66	166	50
15...	1730	426	10.0	23	26	26
16...	0730	353	9.0	17	16	25
17...	0730	296	8.5	7	5.6	22
18...	0730	282	9.5	24	18	25
22...	1330	218	11.5	28	16	28
22...	1345	218	11.5	27	16	30

## RUSSIAN RIVER BASIN

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	TUR- BID- ITY (NTU)
FEB						
23...	0730	210	8.5	37	21	40
25...	1700	201	12.5	24	13	37
26...	0730	197	11.0	22	12	26
26...	1615	197	13.0	25	13	26
27...	0730	196	12.0	30	16	29
28...	0730	194	12.5	18	9.4	28
29...	0730	192	12.5	21	11	22
MAR						
01...	1400	190	16.0	17	8.7	22
02...	1630	190	16.0	20	10	23
03...	1320	188	15.5	5	2.5	23
04...	1300	188	15.5	17	8.6	17
06...	1530	185	14.0	14	7.0	13
08...	1305	188	13.0	14	7.1	15
09...	1320	185	13.5	12	6.0	14
11...	1620	183	13.5	11	5.4	12
13...	1315	542	13.0	325	476	130
14...	1315	291	13.0	18	14	16
16...	0715	326	10.5	21	18	17
18...	1720	393	12.5	13	14	12
20...	0750	356	11.0	10	9.6	12
22...	1700	326	13.0	10	8.8	11
25...	1435	305	--	8	6.6	10
28...	0715	300	11.0	8	6.5	11
29...	0715	298	10.5	8	6.4	11
30...	0710	296	10.5	10	8.0	11
APR						
03...	1255	289	13.5	11	8.6	11
03...	1310	289	13.5	12	9.4	10
07...	0845	278	17.0	8	6.0	10
08...	1400	278	15.0	7	5.3	9.0
10...	0730	293	12.0	9	7.1	10
11...	0740	278	12.0	7	5.3	8.0
12...	0745	274	12.0	7	5.2	7.0
13...	0740	271	12.0	7	5.1	7.0
14...	1520	267	17.0	7	5.0	7.0
21...	1645	296	15.0	5	4.0	4.0
22...	1645	263	16.0	5	3.6	3.0
23...	0730	263	13.0	4	2.8	4.0
25...	1600	263	15.5	5	3.6	3.0
26...	0740	263	13.0	5	3.6	4.0
27...	1815	263	14.0	5	3.6	4.0
29...	1705	261	17.0	4	2.8	4.0
30...	0750	265	13.0	3	2.1	3.0
MAY						
01...	0735	298	14.0	4	3.2	3.0
02...	1100	300	14.5	5	4.1	3.0
02...	1515	300	17.0	5	4.1	3.0
03...	1350	298	17.0	4	3.2	3.0
04...	0735	296	13.5	3	2.4	3.0
07...	0735	222	13.5	5	3.0	2.0
08...	0730	222	13.5	3	1.8	2.0
09...	0730	222	14.0	2	1.2	2.0
11...	0740	222	14.5	3	1.8	2.0
13...	0730	161	14.0	3	1.3	2.0
14...	0740	160	15.0	1	.43	1.0
16...	0735	160	14.0	3	1.3	3.0
17...	1305	160	19.0	7	3.0	3.0
21...	0740	156	15.0	3	1.3	2.0
23...	0700	146	15.5	2	.79	2.0
25...	0730	142	15.0	4	1.5	2.0
28...	1015	102	19.0	3	.83	2.0
30...	0750	54	15.0	2	.29	1.0
31...	0750	44	15.0	2	.24	2.0
JUN						
02...	1845	44	22.0	2	.24	2.0
04...	0750	42	15.5	2	.23	2.0
06...	0745	42	15.0	3	.34	2.0
08...	0740	49	14.5	3	.40	2.0
09...	1800	46	21.0	3	.37	2.0
12...	1430	46	20.0	3	.37	2.0
14...	1040	50	17.0	4	.54	2.0
18...	1700	45	25.0	6	.73	4.0
21...	2000	48	25.0	5	.65	4.0
24...	1800	46	25.0	6	.75	4.0
26...	1930	44	23.0	7	.83	4.0
28...	2030	45	23.0	2	.24	4.0
30...	1930	45	25.0	4	.49	3.0

11465200 DRY CREEK NEAR GEYSERVILLE, CA--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	TUR- BID- ITY (NTU)
JUL						
02...	2100	44	24.0	2	.24	2.0
06...	1830	24	25.0	4	.26	2.0
08...	1700	27	25.0	3	.22	2.0
12...	2100	17	25.0	2	.09	1.0
14...	1830	16	26.0	2	.09	1.0
16...	2000	19	24.0	3	.15	2.0
19...	2000	18	24.0	2	.10	1.0
21...	1800	20	23.0	3	.16	2.0
24...	2100	23	21.0	1	.06	1.0
26...	1800	24	25.0	1	.06	2.0
28...	1940	66	22.5	15	2.7	10
31...	1945	33	24.0	6	.53	2.0
AUG						
04...	2035	27	24.0	5	.36	1.0
07...	1815	29	26.5	4	.31	1.0
09...	1720	27	25.5	5	.36	2.0
12...	2010	63	23.0	12	2.0	6.0
14...	1750	66	24.5	6	1.1	4.0
17...	2000	47	24.0	7	.89	2.0
20...	0620	47	24.5	7	.89	3.0
27...	1700	44	25.0	4	.48	2.0
30...	1005	47	20.0	12	1.5	3.0
SEP						
02...	1750	47	25.0	8	1.0	4.0
05...	1810	47	25.0	8	1.0	3.0
07...	0700	72	20.0	16	3.1	6.0
12...	1750	78	24.0	6	1.3	3.0
15...	0805	58	19.5	5	.78	3.0
17...	0700	55	20.0	4	.59	2.0
19...	0700	52	21.5	6	.84	2.0
21...	1440	50	24.5	5	.68	1.0
23...	1725	52	23.0	4	.56	1.0
25...	1235	53	20.0	4	.57	2.0



11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA  
(National stream-quality accounting network station)

LOCATION.--Lat 38°30'31", long 122°55'36", in NE 1/4 SE 1/4 sec.26, T.8 N., R.10 W., Sonoma County, Hydrologic Unit 18010110, on right bank at downstream side of Hacienda bridge, 0.1 mi upstream from Hobson Creek, and 3.8 mi east of Guerneville.

DRAINAGE AREA.--1,338 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1954, published as "at Guerneville."

REVISED RECORDS.--WSP 1395: Drainage area at former site. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 20.14 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1954, nonrecording gage at bridge 5.3 mi downstream at datum 8.58 ft lower. Oct. 1, 1954, to Oct. 23, 1974, at site 0.7 mi downstream at datum 2.75 ft lower. Supplementary water-stage recorder 2.1 mi downstream used during periods of low flow 1948-54.

REMARKS.--Records good. Flow regulated by Lake Mendocino (station 11461800) 77 mi upstream, and by Lake Sonoma, capacity 381,000 acre-ft, 26 mi upstream, since October 1983. Many diversions above station for irrigation of about 29,000 acres. Flow also affected by diversion into basin (see REMARKS for East Fork Russian River stations), and by diversion at Wohler pumping plant beginning in May 1959.

AVERAGE DISCHARGE.--45 years, 2,397 ft<sup>3</sup>/s, 1,737,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 93,400 ft<sup>3</sup>/s Dec. 23, 1964, gage height, 49.6 ft site and datum then in use, from floodmarks; maximum gage height, 49.7 ft Dec. 23, 1955, site and datum then in use, from floodmarks; minimum daily discharge, 0.75 ft<sup>3</sup>/s May 6, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55,200 ft<sup>3</sup>/s Dec. 25, gage height 35.79 ft; minimum daily 49 ft<sup>3</sup>/s June 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	308	2640	13800	1420	1830	1210	750	151	122	159	143
2	238	394	2360	11400	1350	1670	1150	779	146	129	143	137
3	231	338	5450	9890	1130	1480	1090	793	138	126	145	134
4	223	286	6860	8740	1080	1370	1060	765	120	128	146	127
5	219	255	5170	6000	1050	1280	1090	697	125	149	149	121
6	216	240	4840	4850	1050	1200	1160	666	131	155	134	116
7	216	235	6380	4220	1020	1140	1140	642	139	152	133	114
8	215	234	8940	3680	1030	1090	1140	589	140	154	126	126
9	215	282	27800	3350	1090	1030	1170	531	147	152	106	124
10	218	4930	34100	3230	1250	999	1300	564	145	153	103	109
11	219	15900	37300	3010	1250	962	1830	504	155	164	109	203
12	219	6220	29100	2850	1420	929	1610	490	159	145	119	184
13	220	7970	17200	2650	3980	1580	1480	473	142	129	139	124
14	208	7340	13700	2350	9030	3320	1350	458	86	133	139	113
15	171	3890	11400	2260	6240	5740	1210	447	79	141	139	113
16	192	6040	9950	2790	8850	5350	1130	435	103	123	144	116
17	204	16900	9330	2640	6660	6920	1100	404	126	127	148	130
18	256	14800	8170	2470	5110	4780	1150	405	118	131	141	122
19	307	9200	6890	2350	4310	3800	1290	399	111	122	127	116
20	253	12600	4400	2080	3800	3160	1310	382	103	126	112	117
21	240	9700	3790	1880	3610	2650	1200	364	102	126	118	122
22	236	5840	3330	1810	3590	2350	1150	354	100	140	127	123
23	236	5390	3650	1770	2960	2130	1100	305	94	143	131	125
24	234	12900	16900	1900	2560	1960	1020	305	92	137	136	134
25	233	16700	45400	1870	2490	1820	931	292	93	160	136	129
26	219	10600	44100	1710	2350	1700	885	284	88	157	143	133
27	196	7810	26200	1440	2170	1600	821	264	82	140	145	138
28	182	6160	18100	1340	2040	1480	785	249	49	146	134	144
29	173	4330	14100	1280	1930	1350	757	215	64	150	132	151
30	187	3040	19800	1280	---	1260	740	170	96	157	129	156
31	232	---	19200	1450	---	1230	---	151	---	164	134	---
TOTAL	6838	190832	466550	112340	85820	69160	34359	14126	3424	4381	4126	3944
MEAN	221	6361	15050	3624	2959	2231	1145	456	114	141	133	131
MAX	307	16900	45400	13800	9030	6920	1830	793	159	164	159	203
MIN	171	234	2360	1280	1020	929	740	151	49	122	103	109
AC-FT	13560	378500	925400	222800	170200	137200	68150	28020	6790	8690	8180	7820
CAL YR 1983	TOTAL	2465320	MEAN	6754	MAX	68500	MIN	161	AC-FT	4890000		
WTR YR 1984	TOTAL	995900	MEAN	2721	MAX	45400	MIN	49	AC-FT	1975000		

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

CHEMICAL ANALYSIS: Water years 1951 to current year. Published as "at Guerneville" in 1961-65.

BIOLOGICAL DATA: Water years 1975-81.

SPECIFIC CONDUCTANCE: Water years 1974-81.

WATER TEMPERATURES: Water years 1964 to current year.

SEDIMENT RECORDS: Water years 1966 to current year.

TURBIDITY: Water years 1967 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1973 to September 1981.

WATER TEMPERATURES: January 1964 to current year.

SEDIMENT RECORDS: April to September 1967, October 1969 to current year.

INSTRUMENTATION.--Specific conductance recorder October 1973 to September 1981, at site 0.7 mi downstream.

Temperature recorder from January 1964 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS (water years 1970-84): Maximum daily mean, 2,350 mg/L Jan. 16, 1974; minimum daily mean, 1 mg/L Oct. 21, 1982.

SEDIMENT DISCHARGE (water years 1970-84): Maximum daily, 356,000 tons Dec. 20, 1981; minimum daily, 0.03 ton May 6, 1977.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,670 mg/L Dec. 25; minimum daily mean, 4 mg/L Aug. 31, Sept. 23-25.

SEDIMENT DISCHARGE: Maximum daily, 211,000 tons Dec. 25; minimum daily, 0.79 ton June 28.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV , 1983											
30...	1340	3010	219	7.5	12.0	755	22	9.1	85	--	640
JAN , 1984											
18...	1330	2460	245	7.7	9.5	770	18	10.0	87	120	740
MAR											
13...	1410	1600	248	7.5	15.0	755	15	9.4	94	540	230
MAY											
17...	1100	424	257	7.9	18.0	760	2.5	8.8	93	K46	44
JUL											
03...	1120	126	296	7.7	26.5	760	3.3	7.7	96	110	29
SEP											
11...	1300	123	276	8.2	21.5	755	1.5	8.3	95	39	K5

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LILITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV , 1983											
30...	100	8	21	12	8.5	15	.4	1.7	94	14	6.3
JAN , 1984											
18...	100	0	21	12	9.6	17	.4	1.5	104	13	7.7
MAR											
13...	110	0	23	13	9.6	16	.4	1.3	112	15	6.6
MAY											
17...	120	3	25	15	10	15	.4	1.1	122	14	5.9
JUL											
03...	140	2	29	16	10	13	.4	1.3	136	18	6.2
SEP											
11...	120	0	25	14	9.2	14	.4	1.2	121	14	5.2

See footnotes at end of table.

## 11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA---Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV , 1983											
30...	<.1	17	135	140	.18	.61	.13	1.0	.19	.07	.07
JAN , 1984											
18...	.1	18	140	150	.19	.60	.20	.60	.20	.13	.12
MAR											
13...	.1	15	156	150	.21	.29	.04	.40	.07	.02	.04
MAY											
17...	.1	14	156	160	.21	<.10	.06	.60	.05	.03	.03
JUL											
03...	.1	13	164	180	.22	.16	.04	.30	.06	.05	.04
SEP											
11...	.1	13	156	150	.21	<.10	.02	.20	.01	<.01	<.01

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV , 1983										
30...	1340	60	<1	61	<.5	<1	1	<3	—	78
JAN , 1984										
18...	1330	70	1	62	<.5	<1	<1	<3	3	79
MAY										
17...	1100	<10	<1	76	<1	<1	<1	<3	2	29
SEP										
11...	1300	<10	<1	98	<1	<1	2	<3	1	5

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1983											
30...	1	<.4	19	<.1	<10	4	<1	<1	190	<6	16
JAN , 1984											
18...	<1	8	27	.1	<10	3	<1	<1	190	<6	13
MAY											
17...	<1	8	16	<.1	<10	2	<1	<1	230	<6	14
SEP											
11...	2	8	9	<.1	<10	<1	<1	<1	230	<6	29

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.

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19.0	15.0	11.0	---	10.5	---	14.5	---	25.0	---	---	---
2	20.0	16.0	11.5	10.0	---	12.0	11.5	14.5	---	---	---	23.0
3	19.0	15.0	11.5	11.5	---	12.0	14.0	16.0	---	26.5	---	---
4	18.5	15.0	9.0	10.5	---	---	---	---	---	---	---	23.0
5	18.0	15.0	---	---	---	---	13.0	15.0	20.0	---	---	---
6	19.0	15.0	9.0	---	---	14.0	---	15.5	---	25.5	---	---
7	18.5	12.0	12.0	---	11.0	14.0	---	---	22.0	---	---	24.5
8	18.0	12.0	11.0	10.5	11.0	---	14.5	22.0	---	---	---	---
9	18.5	10.0	12.0	10.5	11.0	14.0	12.5	---	23.0	---	---	---
10	17.5	12.0	---	10.5	11.0	15.5	---	18.0	23.0	---	---	---
11	16.5	14.0	---	10.0	11.0	14.0	14.5	18.0	---	---	24.5	21.5
12	18.0	14.0	---	9.5	10.5	15.0	16.5	---	21.0	---	---	---
13	15.0	13.0	---	9.5	10.5	13.0	18.0	23.0	21.0	---	24.5	22.0
14	15.0	---	11.5	8.0	---	12.5	15.5	---	23.0	---	---	---
15	15.5	---	---	8.5	9.5	---	---	17.5	---	---	---	23.0
16	15.0	13.0	12.0	9.0	9.0	---	---	19.0	---	---	---	---
17	15.0	12.5	---	10.0	---	12.0	---	17.5	---	---	---	23.0
18	15.0	---	12.0	9.0	11.5	---	---	---	25.0	---	---	---
19	---	13.0	12.0	9.0	---	13.0	---	---	25.5	---	---	24.5
20	---	---	9.0	8.0	---	16.5	---	---	---	---	---	---
21	---	---	8.5	8.5	---	14.0	14.5	20.0	22.5	---	---	24.0
22	12.0	---	9.0	9.5	---	---	16.0	19.5	22.0	---	---	---
23	13.0	10.0	9.5	9.5	---	16.0	---	---	---	---	---	---
24	14.0	---	---	10.0	12.0	---	18.0	21.5	---	---	---	20.5
25	14.0	---	---	10.5	---	---	13.5	20.0	---	---	---	---
26	14.0	---	---	10.5	---	16.0	16.0	---	---	---	---	20.5
27	15.0	---	---	11.0	---	15.5	13.5	21.0	---	---	23.5	---
28	11.0	---	---	10.5	---	16.5	14.5	---	---	---	---	---
29	14.5	---	10.5	10.5	---	15.0	---	22.0	---	---	---	---
30	15.0	12.0	---	10.0	---	15.0	15.0	25.0	---	---	23.0	---
31	15.0	---	---	11.5	---	---	---	---	---	---	23.0	---
MONTH	16.0	---	---	10.0	---	---	---	---	---	---	---	---

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	230	8	5.0	308	29	28	2640	63	449
2	238	7	4.5	394	45	48	2360	57	363
3	231	7	4.4	338	23	21	5450	356	7110
4	223	6	3.6	286	11	8.5	6860	464	9100
5	219	7	4.1	255	9	6.2	5170	210	2930
6	216	8	4.7	240	8	5.2	4840	160	2090
7	216	6	3.5	235	7	4.4	6380	516	9280
8	215	6	3.5	234	6	3.8	8940	681	17100
9	215	7	4.1	282	24	21	27800	1140	90900
10	218	7	4.1	4930	330	7980	34100	1280	119000
11	219	6	3.5	15900	678	34100	37300	1320	132000
12	219	8	4.7	6220	352	6520	29100	1020	82000
13	220	10	5.9	7970	478	10800	17200	678	32100
14	208	8	4.5	7340	439	9240	13700	450	16600
15	171	5	2.3	3890	158	1760	11400	305	9390
16	192	5	2.6	6040	226	3940	9950	215	5780
17	204	5	2.8	16900	574	32300	9330	170	4280
18	256	16	14	14800	564	24000	8170	155	3420
19	307	25	22	9200	392	10100	6890	145	2700
20	253	17	12	12600	503	17300	4400	115	1370
21	240	9	5.8	9700	300	7860	3790	95	972
22	236	6	3.8	5840	190	3000	3330	79	710
23	236	5	3.2	5390	170	2500	3650	123	1360
24	234	7	4.4	12900	454	19400	16900	692	38500
25	233	7	4.4	16700	501	24000	45400	1670	211000
26	219	7	4.1	10600	421	12200	44100	1440	176000
27	196	7	3.7	7810	260	5480	26200	898	64800
28	182	9	4.4	6160	160	2660	18100	516	25800
29	173	6	2.8	4330	110	1290	14100	290	11100
30	187	6	3.0	3040	76	624	19800	577	33600
31	232	12	7.5	---	---	---	19200	636	33800
TOTAL	6838	---	162.9	190832	---	237200.1	466550	---	1145604

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

## SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	13800	332	12400	1420	13	50	1830	23	114
2	11400	185	5690	1350	11	40	1670	21	95
3	9890	160	4270	1130	10	31	1480	19	76
4	8740	155	3660	1080	10	29	1370	18	67
5	6000	140	2270	1050	9	26	1280	18	62
6	4850	116	1520	1050	8	23	1200	17	55
7	4220	100	1140	1020	9	25	1140	16	49
8	3680	76	755	1030	10	28	1090	16	47
9	3350	60	543	1090	12	35	1030	15	42
10	3230	48	419	1250	15	51	999	14	38
11	3010	42	341	1250	11	37	962	13	34
12	2850	40	308	1420	43	187	929	12	30
13	2650	39	279	3980	252	3650	1580	124	804
14	2350	37	235	9030	704	18000	3320	302	2710
15	2260	40	244	6240	492	8410	5740	478	8060
16	2790	51	384	8850	463	11200	5350	297	4530
17	2640	40	285	6660	150	2700	6920	336	6440
18	2470	33	220	5110	84	1160	4780	89	1180
19	2350	29	184	4310	68	791	3800	60	616
20	2080	23	129	3800	55	564	3160	50	427
21	1880	16	81	3610	48	468	2650	42	301
22	1810	15	73	3590	42	407	2350	34	216
23	1770	16	76	2960	37	296	2130	29	167
24	1900	19	97	2560	33	228	1960	26	138
25	1870	18	91	2490	31	208	1820	23	113
26	1710	17	78	2350	30	190	1700	22	101
27	1440	16	62	2170	28	164	1600	21	91
28	1340	15	54	2040	26	143	1480	19	76
29	1280	14	48	1930	25	130	1350	18	66
30	1280	15	52	---	---	---	1260	17	58
31	1450	16	63	---	---	---	1230	15	50
TOTAL	112340	---	36051	85820	---	49271	69160	---	26853
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	1210	14	46	750	13	26	151	6	2.4
2	1150	13	40	779	15	32	146	6	2.4
3	1090	12	35	793	15	32	138	6	2.2
4	1060	11	31	765	15	31	120	6	1.9
5	1090	14	41	697	14	26	125	7	2.4
6	1160	17	53	666	13	23	131	7	2.5
7	1140	15	46	642	12	21	139	8	2.6
8	1140	13	40	589	11	17	140	8	3.0
9	1170	11	35	531	14	20	147	9	3.2
10	1300	30	112	564	12	18	145	9	3.5
11	1830	62	308	504	12	16	155	10	4.2
12	1610	30	130	490	12	16	159	10	4.3
13	1480	19	76	473	12	15	142	8	3.1
14	1350	18	66	458	11	14	86	7	1.6
15	1210	17	56	447	9	11	79	7	1.5
16	1130	16	49	435	8	9.4	103	9	2.5
17	1100	15	45	404	8	8.7	126	8	2.7
18	1150	20	62	405	8	8.7	118	6	1.9
19	1290	27	94	399	8	8.6	111	8	2.4
20	1310	14	50	382	7	7.2	103	8	2.2
21	1200	18	58	364	7	6.9	102	9	2.5
22	1150	22	68	354	8	7.6	100	10	2.7
23	1100	19	56	305	7	5.8	94	9	2.3
24	1020	15	41	305	6	4.9	92	9	2.2
25	931	15	38	292	7	5.5	93	9	2.3
26	885	12	29	284	9	6.9	88	8	1.9
27	821	15	33	264	12	8.6	82	8	1.8
28	785	18	38	249	10	6.7	49	6	.79
29	757	17	35	215	8	4.6	64	6	1.0
30	740	14	28	170	8	3.7	96	8	2.1
31	---	---	---	151	8	3.3	---	---	---
TOTAL	34359	---	1839	14126	---	425.1	3424	---	72.09

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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	122	9	3.0	159	10	4.3	143	5	1.9
2	129	10	3.5	143	10	3.9	137	6	2.2
3	126	10	3.4	145	10	3.9	134	8	2.9
4	128	10	3.5	146	10	3.9	127	10	3.4
5	149	11	4.4	149	10	4.0	121	9	2.9
6	155	11	4.6	134	10	3.6	116	8	2.5
7	152	10	4.1	133	10	3.6	114	8	2.5
8	154	10	4.2	126	10	3.4	126	8	2.7
9	152	9	3.7	106	9	2.6	124	8	2.7
10	153	9	3.7	103	9	2.5	109	9	2.6
11	164	10	4.4	109	10	2.9	203	20	11
12	145	9	3.5	119	10	3.2	184	15	7.5
13	129	9	3.1	139	11	4.1	124	11	3.7
14	133	10	3.6	139	11	4.1	113	9	2.7
15	141	10	3.8	139	11	4.1	113	7	2.1
16	123	9	3.0	144	11	4.3	116	7	2.2
17	127	9	3.1	148	11	4.4	130	12	4.2
18	131	10	3.5	141	11	4.2	122	11	3.6
19	122	9	3.0	127	10	3.4	116	9	2.8
20	126	9	3.1	112	9	2.7	117	7	2.2
21	126	9	3.1	118	9	2.9	122	5	1.6
22	140	10	3.8	127	8	2.7	123	5	1.7
23	143	10	3.9	131	8	2.8	125	4	1.4
24	137	10	3.7	136	8	2.9	134	4	1.4
25	160	10	4.3	136	7	2.9	129	4	1.4
26	157	10	4.2	143	7	2.7	133	5	1.8
27	140	10	3.8	145	6	2.3	138	5	1.9
28	146	10	3.9	134	8	2.9	144	5	1.9
29	150	10	4.1	132	10	3.6	151	5	2.0
30	157	10	4.2	129	8	2.8	156	5	2.1
31	164	10	4.4	134	4	1.4	---	---	---
TOTAL	4381	---	115.6	4126	---	103.0	3944	---	85.5
YEAR	995900.0		1497782						

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
NOV 30...	1515	2970	12.0	74	593	30	37
JAN 18...	1430	2460	9.5	32	213	--	--
FEB 16...	0630	9380	9.0	586	14800	33	40
FEB 18...	0845	5240	11.5	87	1230	--	--
MAR 13...	1455	1780	15.0	84	404	--	--
APR 17...	1215	826	15.0	14	31	--	--
MAY 17...	1130	424	18.0	11	13	--	--
DATE		SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM
NOV 30...		46	55	67	81	95	100
JAN 18...		--	--	--	78	--	--
FEB 16...		50	60	71	80	91	100
FEB 18...		--	--	--	86	97	100
MAR 13...		--	--	--	80	98	100
APR 17...		--	--	--	85	--	--
MAY 17...		--	--	--	93	--	--

## 11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	TUR- BID- ITY (NTU)
OCT						
01...	0800	226	--	--	--	3.0
01...	0800	226	19.0	7	4.3	3.0
01...	1700	236	19.5	8	5.1	2.0
01...	1700	236	19.5	8	5.1	2.0
02...	1700	238	20.0	6	3.9	2.0
03...	1110	232	19.0	7	4.4	2.0
04...	0905	222	18.5	6	3.6	2.0
05...	0900	221	18.0	7	4.2	2.0
06...	0730	217	19.0	9	5.3	3.0
07...	0930	217	18.5	6	3.5	2.0
08...	1030	217	18.0	6	3.5	2.0
08...	1700	213	19.5	5	2.9	2.0
09...	0900	215	18.5	6	3.5	2.0
09...	1700	217	19.0	8	4.7	2.0
10...	0700	219	17.5	8	4.7	2.0
11...	0730	219	16.5	6	3.5	2.0
12...	0700	219	18.0	6	3.5	3.0
13...	0700	221	15.0	10	6.0	2.0
14...	0700	219	15.0	9	5.3	2.0
15...	1000	165	15.5	4	1.8	2.0
15...	1700	168	16.0	5	2.3	2.0
16...	1000	192	15.0	4	2.1	2.0
16...	1700	196	16.5	5	2.6	1.0
17...	0700	202	15.0	5	2.7	1.0
18...	0700	205	15.0	6	3.3	1.0
22...	0900	234	12.0	6	3.8	1.0
22...	1700	236	16.5	5	3.2	1.0
23...	0900	236	13.0	6	3.8	2.0
23...	1700	234	18.0	4	2.5	2.0
24...	0700	234	14.0	7	4.4	2.0
25...	0700	232	14.0	7	4.4	2.0
26...	0700	224	14.0	7	4.2	2.0
27...	0700	202	15.0	7	3.8	2.0
28...	0700	185	11.0	9	4.5	3.0
29...	0900	177	14.5	6	2.9	3.0
29...	1700	168	17.0	7	3.2	3.0
30...	0900	180	15.0	6	2.9	1.0
30...	1700	192	17.0	7	3.6	2.0
31...	0700	236	15.0	6	3.8	3.0
31...	1700	236	18.0	15	9.6	6.0
NOV						
01...	0700	253	15.0	14	9.6	6.0
01...	1800	390	18.0	48	51	37
02...	0700	382	16.0	48	50	26
02...	1700	407	18.0	43	47	24
03...	0700	353	15.0	47	45	38
03...	1800	317	17.0	49	42	26
04...	0700	293	15.0	9	7.1	4.0
04...	1800	275	17.0	10	7.4	4.0
05...	0700	262	15.0	8	5.7	4.0
05...	1800	247	17.0	10	6.7	4.0
06...	0700	243	15.0	7	4.6	4.0
06...	1900	238	15.5	6	3.9	3.0
07...	0700	236	12.0	5	3.2	3.0
07...	1900	230	14.0	6	3.7	3.0
08...	0700	234	12.0	5	3.2	2.0
08...	1700	236	13.0	6	3.8	3.0
09...	0700	234	10.0	7	4.4	3.0
10...	0700	536	12.0	7	10	3.0
11...	2145	7170	14.0	389	7530	160
12...	1630	6840	14.0	401	7410	170
13...	0800	6830	13.0	394	7270	180
13...	2300	9870	13.0	667	17800	200
16...	1700	6270	13.0	211	3570	150
17...	0700	8910	12.5	351	8350	140
19...	0800	8950	13.0	388	9380	140
23...	0640	5170	10.0	157	2190	90
27...	1830	7110	12.0	157	3010	80
28...	1110	6220	--	163	2740	75
30...	1340	3010	12.0	--	--	22
30...	1515	2970	12.0	74	593	21
DEC						
01...	0700	2720	11.0	64	470	25
02...	0700	2430	11.5	58	381	22
03...	1630	7490	11.5	515	10400	140
04...	0700	7910	9.0	533	11400	150
06...	0700	4870	9.0	146	1920	50
06...	1700	4720	11.0	146	1860	50
07...	1730	7110	12.0	698	13400	260

## RUSSIAN RIVER BASIN

11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	TUR- BID- ITY (NTU)
DEC						
08...	0630	7840	11.0	589	12500	230
09...	0700	22000	12.0	961	57100	220
14...	0700	14400	11.5	482	18700	140
16...	0730	10200	12.0	225	6200	85
18...	0930	8240	12.0	153	3400	70
19...	0900	7410	12.0	152	3040	70
20...	0835	4470	9.0	114	1380	45
21...	0815	3870	8.5	104	1090	40
22...	1015	3400	9.0	78	716	22
23...	1200	3290	9.5	93	826	35
29...	1730	13500	10.5	259	9440	85
JAN						
02...	1030	11400	10.0	181	5570	80
03...	1800	9590	11.5	158	4090	70
04...	0700	9070	10.5	168	4110	70
08...	0730	3780	10.5	77	786	29
08...	1515	3590	12.0	73	708	29
09...	0700	3360	10.5	72	653	29
10...	0700	3280	10.5	51	452	20
11...	0715	3050	10.0	77	634	23
12...	0700	2880	9.5	40	311	18
13...	0815	2740	9.5	42	311	17
14...	0830	2380	8.0	36	231	19
14...	1700	2300	9.0	38	236	19
15...	0810	2210	8.5	41	245	19
15...	1530	2230	9.5	41	247	18
16...	0800	2730	9.0	53	391	25
17...	1600	2590	10.0	29	203	15
18...	0815	2500	9.0	29	196	13
18...	1330	2460	9.5	--	--	18
18...	1430	2460	9.5	32	213	16
19...	2100	2280	9.0	27	166	12
20...	0830	2160	8.0	27	157	13
21...	0900	1880	8.5	17	86	10
21...	1800	1860	10.0	16	80	8.0
22...	1130	1810	9.5	15	73	8.0
22...	1800	1780	10.0	14	67	8.0
23...	0800	1860	9.5	18	90	10
24...	0700	1910	10.0	16	83	9.0
25...	0700	1900	10.5	18	92	10
26...	0700	1780	10.5	17	82	9.0
27...	0715	1460	11.0	17	67	9.0
28...	0715	1360	10.5	15	55	8.0
28...	1530	1330	11.5	14	50	7.0
29...	0930	1280	10.5	13	45	7.0
29...	1700	1270	11.5	15	51	7.0
30...	0715	1250	10.0	13	44	7.0
31...	2100	1460	11.5	15	59	7.0
FEB						
01...	0715	1430	10.5	12	46	7.0
02...	1905	1280	--	12	41	6.0
03...	0715	1150	--	12	37	5.0
04...	0745	1090	--	10	29	4.0
04...	1700	1070	--	9	26	4.0
05...	0800	1050	--	9	26	5.0
05...	1730	1050	--	9	26	4.0
06...	0715	1050	--	8	23	4.0
10...	1310	1260	11.0	16	54	4.0
MAR						
13...	1410	1600	15.0	--	--	15
14...	0750	3380	13.0	354	3230	180
15...	0750	4740	12.5	424	5430	120
17...	1515	6960	12.0	248	4660	85
19...	0755	3900	13.0	63	663	27
20...	1535	3050	16.5	48	395	19
21...	1215	2650	14.0	41	293	16
23...	1550	2100	16.0	28	159	12
26...	1710	1690	16.0	22	100	8.0
27...	1300	1590	15.5	19	82	8.0
28...	1305	1480	16.5	20	80	7.0
29...	1305	1340	15.0	19	69	7.0
30...	1305	1260	15.0	14	48	6.0
APR						
01...	1630	1200	14.5	14	45	4.0
02...	0755	1160	11.5	10	31	5.0
03...	1115	1100	14.0	12	36	4.0
05...	0800	1040	13.0	11	31	4.0
08...	0755	1130	14.5	14	43	3.0
09...	0805	1170	12.5	11	35	4.0
11...	1625	1810	14.5	55	269	26

## 11467000 RUSSIAN RIVER NEAR GUERNEVILLE, CA--Continued

PERIODIC DETERMINATIONS OF SUSPENDED-SEDIMENT CONCENTRATION AND TURBIDITY,  
WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	TUR- BID- ITY (NTU)
APR						
12...	1705	1570	16.5	24	102	9.0
13...	1705	1460	18.0	18	71	7.0
14...	0820	1390	15.5	18	68	6.0
21...	0830	1210	14.5	18	59	6.0
22...	0830	1160	16.0	22	69	6.0
24...	1640	1000	18.0	14	38	4.0
25...	0800	931	13.5	14	35	6.0
26...	1540	882	16.0	12	29	5.0
27...	0800	826	13.5	15	33	6.0
27...	1215	826	15.0	14	31	6.0
28...	0800	789	14.5	18	38	6.0
30...	0715	741	15.0	14	28	4.0
MAY						
02...	0800	777	14.5	16	34	5.0
03...	0805	801	16.0	16	35	5.0
05...	0940	798	15.0	15	32	4.0
06...	0930	668	15.5	13	23	4.0
08...	1745	559	22.0	11	17	3.0
10...	0810	616	18.0	12	20	3.0
11...	1500	335	18.0	10	9.0	4.0
13...	1830	471	23.0	12	15	3.0
15...	0755	447	17.5	9	11	3.0
16...	1645	433	19.0	8	9.4	2.0
17...	0650	430	17.5	7	8.1	2.0
17...	1100	424	18.0	--	--	2.5
17...	1130	424	18.0	11	13	3.0
21...	0700	366	20.0	7	6.9	1.0
22...	0800	355	19.5	8	7.7	3.0
24...	1910	303	21.5	5	4.1	5.0
25...	0650	289	20.0	6	4.7	2.0
27...	0830	262	21.0	12	8.5	4.0
29...	0800	232	22.0	8	5.0	3.0
30...	2040	119	25.0	6	1.9	3.0
JUN						
01...	1840	152	25.0	7	2.9	3.0
05...	0800	126	20.0	7	2.4	3.0
07...	1315	142	22.0	8	3.1	3.0
09...	1645	152	23.0	10	4.1	3.0
10...	1900	146	23.0	9	3.5	3.0
12...	0800	165	21.0	10	4.5	4.0
13...	0810	165	21.0	3	1.3	2.0
14...	1840	88	23.0	7	1.7	3.0
18...	1745	111	25.0	6	1.8	2.0
19...	1900	107	25.5	8	2.3	3.0
21...	0720	101	22.5	9	2.5	2.0
21...	1720	101	22.5	9	2.5	2.0
22...	0730	102	22.0	10	2.8	3.0
JUL						
03...	1035	128	26.5	13	4.5	4.0
03...	1120	126	26.5	--	--	3.3
06...	1010	167	25.5	11	5.0	3.0
AUG						
11...	1105	108	24.5	11	3.2	3.0
13...	1640	144	25.0	26	10	3.0
27...	1330	141	23.5	5	1.9	3.0
29...	1325	138	24.0	12	4.5	2.0
31...	1305	139	23.0	4	1.5	2.0
SEP						
02...	1040	138	23.0	6	2.2	1.0
04...	0905	129	23.0	10	3.5	2.0
07...	1745	125	24.5	8	2.7	1.0
11...	1255	123	21.5	9	3.0	2.0
11...	1300	123	21.5	--	--	1.5
11...	1910	374	22.0	10	10	2.0
13...	1910	108	22.0	11	3.2	3.0
15...	1820	120	23.0	7	2.3	2.0
17...	1915	187	23.0	12	6.1	3.0
19...	1820	122	24.5	9	3.0	3.0
21...	1835	132	24.0	5	1.8	1.0
24...	1710	141	20.5	4	1.5	1.0
26...	1735	141	20.5	5	1.9	1.0

## NAVARRO RIVER BASIN

11468000 NAVARRO RIVER NEAR NAVARRO, CA

LOCATION.--Lat 39°10'20", long 123°40'06", in SE 1/4 sec.7, T.15 N., R.16 W., Mendocino County, Hydrologic Unit 18010108, on right bank 2.9 mi downstream from North Fork, 5.2 mi upstream from mouth, and 6.8 mi west of Navarro.

DRAINAGE AREA.--303 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1445: 1954(M). WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4.79 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1969, at site 0.2 mi upstream at datum 1.86 ft higher.

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

AVERAGE DISCHARGE.--34 years, 548 ft<sup>3</sup>/s, 397,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,500 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 40.60 ft site and datum then in use, from rating curve extended above 19,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 0.23 ft<sup>3</sup>/s July 13, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1937 reached a stage of 38.2 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2130	9,810	16.89	Dec. 9	1330	13,900	20.38
Nov. 17	1000	13,900	20.40	Dec. 25	1645	*16,500	22.11
Nov. 24	1545	9,950	17.05				

Minimum daily, 5.6 ft<sup>3</sup>/s Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	73	519	2440	197	407	250	144	57	27	13	8.9
2	28	111	452	1760	192	377	244	165	56	26	12	9.1
3	27	64	1250	1330	187	342	233	154	54	26	12	9.0
4	24	52	1140	1080	182	316	225	148	56	24	12	9.0
5	23	46	798	918	178	292	210	135	59	24	12	8.5
6	23	43	1070	795	173	272	206	129	70	23	12	8.3
7	23	53	2480	693	170	255	187	124	80	22	12	7.2
8	22	54	2310	618	167	242	215	117	73	20	11	6.4
9	22	74	10900	553	180	231	210	113	63	21	10	6.4
10	22	3130	8690	505	245	221	642	109	58	20	9.9	6.4
11	23	2750	9020	463	213	213	545	108	48	18	9.2	6.4
12	23	1310	6250	429	261	209	394	108	49	19	9.3	5.6
13	23	1880	3670	397	1890	487	321	105	50	18	9.5	6.0
14	22	1340	2850	371	1990	1010	280	100	49	17	9.7	6.0
15	21	658	2340	345	1570	1790	250	96	47	16	9.4	6.4
16	20	881	1860	400	2200	1360	228	93	43	15	9.2	6.4
17	20	7010	1710	342	1550	1730	211	92	39	15	9.3	6.4
18	18	2640	1310	313	1130	1120	213	89	37	14	8.7	6.4
19	18	2290	1110	294	908	891	269	84	36	14	9.3	6.9
20	18	3960	964	281	749	610	264	83	34	14	9.2	6.9
21	18	2300	835	276	852	590	223	81	34	14	9.0	7.3
22	18	1330	735	270	783	505	205	79	33	14	9.2	7.6
23	18	1010	1080	257	674	445	194	76	33	14	8.4	8.2
24	19	5090	5960	244	665	405	186	74	32	15	7.7	8.4
25	19	4140	13000	238	673	365	175	72	32	15	8.5	8.0
26	20	2030	8000	230	598	335	164	71	31	15	9.6	7.9
27	19	1250	4890	221	542	305	157	70	30	14	9.6	7.4
28	18	922	3250	215	492	285	151	67	30	14	9.5	7.2
29	18	731	2340	210	450	270	144	63	28	14	9.0	6.4
30	21	613	4720	206	---	257	138	59	27	14	8.5	6.3
31	43	---	3640	201	---	250	---	59	---	15	8.4	---
TOTAL	675	47835	109143	16895	20061	16387	7334	3067	1368	551	306.1	217.3
MEAN	21.8	1594	3521	545	692	529	244	98.9	45.6	17.8	9.87	7.24
MAX	43	7010	13000	2440	2200	1790	642	165	80	27	13	9.1
MIN	18	43	452	201	167	209	138	59	27	14	7.7	5.6
AC-FT	1340	94880	216500	33510	39790	32500	14550	6080	2710	1090	607	431
CAL YR 1983	TOTAL	545758.0	MEAN	1495	MAX	20700	MIN	18	AC-FT	1083000		
WTR YR 1984	TOTAL	223839.4	MEAN	612	MAX	13000	MIN	5.6	AC-FT	444000		

## 11468500 NOYO RIVER NEAR FORT BRAGG, CA

LOCATION.--Lat 39°25'42", long 123°44'12", in NE 1/4 sec.15, T.18 N., R.17 W., Mendocino County, Hydrologic Unit 18010108, on right bank 0.7 mi downstream from South Fork, and 3.5 mi east of Fort Bragg.

DRAINAGE AREA.--106 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 11.73 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. No gage height record Oct. 31 to Jan. 24. No regulation or diversion above station.

AVERAGE DISCHARGE.--33 years, 222 ft<sup>3</sup>/s, 160,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft<sup>3</sup>/s Mar. 29, 1974, gage height, 27.14 ft, from rating curve extended above 4,500 ft<sup>3</sup>/s on basis of slope-conveyance study; minimum daily, 0.79 ft<sup>3</sup>/s Sept. 8, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2400 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	Unknown	Unknown	Unknown	Dec. 9	Unknown	*3,930	12.37
Nov. 24	Unknown	Unknown	Unknown	Dec. 25	Unknown	3,240	11.34

Minimum daily, 4.7 ft<sup>3</sup>/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	650	202	650	76	233	135	109	41	25	12	7.5
2	12	112	222	540	73	213	118	152	38	24	12	7.3
3	11	12	258	460	70	190	107	157	35	23	12	14
4	10	11	316	400	67	172	102	156	42	22	12	6.6
5	9.8	10	248	350	65	155	98	143	45	21	12	6.1
6	9.4	15	680	310	63	140	92	132	53	21	11	6.0
7	9.2	23	1470	280	62	130	86	120	58	20	11	6.0
8	9.1	17	1130	250	61	120	139	109	47	20	11	5.9
9	9.0	110	2780	225	77	112	136	100	42	19	10	6.0
10	11	1070	2900	206	86	105	495	93	39	19	9.5	5.8
11	12	940	2240	188	79	100	425	94	38	19	9.2	5.6
12	11	508	1600	172	131	96	332	91	37	19	9.0	5.5
13	10	660	1200	156	622	182	272	83	36	18	8.7	5.4
14	9.7	410	1260	142	685	338	229	78	35	18	8.8	6.2
15	9.5	280	910	130	518	678	196	72	35	17	8.6	6.5
16	9.4	620	710	168	578	695	171	69	33	16	8.6	5.9
17	9.2	1230	560	142	524	775	152	67	32	16	8.4	5.7
18	9.1	750	460	128	434	599	159	63	31	16	8.3	5.6
19	9.1	1310	385	124	359	461	216	60	30	16	8.0	5.8
20	9.0	1050	320	122	305	373	206	59	30	15	8.0	5.6
21	8.9	650	270	142	359	308	185	57	30	15	7.6	5.5
22	8.9	506	228	130	359	259	170	55	29	15	7.6	5.5
23	9.2	495	430	112	335	223	156	53	29	15	7.5	5.4
24	9.3	1760	980	100	344	198	144	52	28	16	7.3	5.2
25	9.4	1100	2700	97	382	177	129	50	27	15	7.3	5.0
26	9.3	700	2450	93	366	166	120	49	26	15	7.3	4.9
27	9.2	490	1630	90	337	150	113	48	26	15	7.4	4.8
28	9.0	395	1180	86	298	134	104	47	26	14	7.3	4.7
29	9.1	304	720	84	262	122	95	44	26	14	7.1	4.7
30	16	256	940	82	---	117	89	43	25	13	7.1	5.2
31	24	---	810	79	---	139	---	42	---	13	7.2	---
TOTAL	323.8	16444	32189	6238	7977	7860	5171	2547	1049	544	278.8	179.9
MEAN	10.4	548	1038	201	275	254	172	82.2	35.0	17.5	8.99	6.00
MAX	24	1760	2900	650	685	775	495	157	58	25	12	14
MIN	8.9	10	202	79	61	96	86	42	25	13	7.1	4.7
AC-FT	642	32620	63850	12370	15820	15590	10260	5050	2080	1080	553	357

CAL YR 1983	TOTAL	183272.2	MEAN	502	MAX	6290	MIN	8.8	AC-FT	363500
WTR YR 1984	TOTAL	80801.5	MEAN	221	MAX	2900	MIN	4.7	AC-FT	160300

## MATTOLE RIVER BASIN

11469000 MATTOLE RIVER NEAR PETROLIA, CA

LOCATION.--Lat 40°18'42", long 124°15'48", in NW 1/4 sec.11, T.2 S., R.2 W., Humboldt County, Hydrologic Unit 18010107, on right bank 0.2 mi upstream from Clear Creek, 1.5 mi southeast of Petrolia, and 1.7 mi upstream from North Fork.

DRAINAGE AREA.--240 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1911 to December 1913, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1285: 1912-13.

\*GAGE.--Water-stage recorder. Altitude of gage is 40 ft, from topographic map. November 1911 to December 1913, nonrecording gages at several sites upstream within 0.3 mi of present site at various datums. Dec. 11, 1950, to July 14, 1955, at site 0.3 mi upstream at datum 7.48 ft higher. July 15, 1955, to Oct. 26, 1967, at site 0.4 mi downstream at different datum.

REMARKS.--Records good. Diversions for irrigation of about 350 acres above station.

AVERAGE DISCHARGE.--36 years, 1,389 ft<sup>3</sup>/s, 1,006,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,400 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 29.60 ft site and datum then in use, from rating curve extended above 26,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 17 ft<sup>3</sup>/s Sept. 5, 15, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1515	25,100	15.72	Dec. 25	Unknown	e 24,000	Unknown
Dec. 7	0445	*47,000	21.22	Feb. 13	1415	16,700	13.28

Minimum daily, 28 ft<sup>3</sup>/s Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	2250	1180	3400	371	1300	802	817	235	124	63	42
2	84	1240	1050	2800	359	1240	686	1440	228	120	62	42
3	80	941	1560	2400	343	1100	626	1140	225	118	61	42
4	78	1880	1440	2020	328	1000	647	1010	256	115	59	39
5	74	1170	1350	1730	319	914	600	892	268	110	57	38
6	73	2330	13100	1490	313	837	554	792	354	105	57	37
7	70	1880	34500	1340	299	783	540	721	507	102	56	37
8	69	1200	11400	1210	322	726	1430	662	339	98	56	37
9	73	1740	16400	1070	665	693	1230	612	281	95	56	36
10	87	15500	12800	991	710	652	3180	571	256	93	54	36
11	92	8290	15000	954	619	619	2050	610	239	93	54	36
12	86	6850	10000	849	2170	601	1640	598	228	90	52	36
13	79	6010	7900	789	10500	2230	1360	529	219	86	51	35
14	71	3730	6100	736	5630	4340	1160	493	210	86	51	34
15	67	2380	4510	779	4730	5830	1020	463	201	84	49	34
16	65	3850	3600	813	4720	5300	913	437	192	82	49	34
17	65	9200	3100	701	3080	5010	819	415	184	82	49	33
18	64	5080	2600	654	2270	3400	949	398	176	80	48	34
19	62	3890	2200	625	1870	2470	1190	379	174	78	47	35
20	62	4800	1930	596	1670	1960	1120	362	174	76	47	34
21	62	3750	1690	589	2370	1640	970	348	169	71	45	32
22	60	2720	1500	562	1980	1410	881	337	164	67	44	30
23	61	2550	3100	537	1690	1230	805	325	160	69	44	29
24	62	9540	6400	508	2260	1090	757	312	154	72	43	29
25	60	7320	15000	483	2470	987	697	303	147	72	42	29
26	58	4480	8500	467	2000	932	650	296	143	70	42	29
27	56	2940	5600	437	1720	846	612	284	140	71	42	28
28	56	2070	4100	420	1610	764	573	272	136	71	42	28
29	53	1610	3500	407	1390	706	540	261	132	69	42	28
30	411	1380	6400	397	---	666	519	253	126	67	42	28
31	1380	---	4600	382	---	836	---	245	---	65	43	---
TOTAL	3806	122571	212110	31136	58778	52112	29520	16577	6417	2681	1549	1021
MEAN	123	4086	6842	1004	2027	1681	984	535	214	86.5	50.0	34.0
MAX	1380	15500	34500	3400	10500	5830	3180	1440	507	124	63	42
MIN	53	941	1050	382	299	601	519	245	126	65	42	28
AC-FT	7550	243100	420700	61760	116600	103400	58550	32880	12730	5320	3070	2030

CAL YR 1983	TOTAL	1002508	MEAN	2747	MAX	34500	MIN	48	AC-FT	1988000
WTR YR 1984	TOTAL	538278	MEAN	1471	MAX	34500	MIN	28	AC-FT	1068000

e Estimated.

## 11470000 LAKE PILLSBURY NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°24'30", long 122°57'30", on line between secs.14 and 23, T.18 N., R.10., Lake County, Hydrologic Unit 18010103, Mendocino National Forest, at Scott Dam near right bank of Eel River, 0.3 mi downstream from Rice Fork, and 10.2 mi northeast of town of Potter Valley.

DRAINAGE AREA.--289 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1922 to September 1928 (daily gage heights only), October 1928 to current year. Monthend contents only for some periods, published in WSP 1315-B. Prior to October 1953, published as "at Hullville".

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 81.7 ft below National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Jan. 26, 1950, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by concrete overflow type dam; storage began in December 1921. Usable capacity, 86,400 acre-ft between gage heights 1,822.4 ft, sill of outlet gate and 1,910.0 ft, top of spillway gates; dead storage, 397 acre-ft; spillway at gage height 1,900.0 ft. Water is released down Eel River to Van Arsdale Reservoir, from which it is diverted through tunnel to Potter Valley powerhouse; part is then used for irrigation and remainder flows into East Fork Russian River. Records given herein represent total contents.

COOPERATION.--Records furnished by Pacific Gas and Electric Co. in connection with a Federal Energy Regulatory Commission Project.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 95,600 acre-ft May 13, 16, 1925, gage height, 1,910.8 ft; maximum gage height, 1,911.84 ft Dec. 22, 1964, from floodmarks; minimum contents, 10 acre-ft Dec. 9, 10, 1931, gage height, 1,822.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 79,874 acre-ft May 22, gage height, 1,906.89 ft; minimum, 33,243 acre-ft Nov. 8, gage height, 1,878.10 ft.

## Capacity table (gage height, in feet, and contents, in acre-ft)

1822.4	397	1840	3986	1864	19050	1890	48415
1824	534	1845	6084	1870	23525	1895	56654
1827	864	1850	8693	1875	28720	1900	65761
1830	1314	1855	11783	1880	34537	1905	75833
1835	2406	1860	15180	1885	41072	1910	86785

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36706	33363	66511	69815	65165	66376	66376	75558	79350	78227	71039	58152
2	36605	33570	66491	68461	64708	66318	66414	76128	79285	78550	70597	57834
3	36543	33543	67070	68127	64632	66318	66588	76444	79264	78164	70155	57505
4	36567	33495	67148	67833	64349	66318	66550	76719	79243	77949	69675	57259
5	36439	33411	66974	67501	64048	66318	66684	76972	79199	77949	69215	57068
6	36313	33339	67012	67285	63746	66125	66724	77264	79111	77905	68757	57000
7	36186	33363	69595	67070	63429	66125	66664	77649	79089	77586	68304	56773
8	36047	33243	69475	66877	63169	66086	66743	77862	79264	77479	67873	56600
9	35909	33811	72768	66684	63096	66067	66857	77862	79285	77394	67305	56445
10	35770	39527	72256	66781	62745	66029	68402	78206	79243	77267	66838	56272
11	35634	49552	70075	66645	62465	65953	69195	78506	79221	77162	66376	56169
12	35479	52969	71282	66511	62930	65953	69835	78894	79221	77645	65894	55827
13	35341	57138	69875	66452	66067	66743	70255	79111	79204	76698	65453	55656
14	35205	60113	69295	66357	67950	67969	70477	79133	79264	76487	65013	55485
15	35069	61455	68481	66338	68757	98441	70557	79264	79264	76297	64557	55144
16	34969	63486	68342	66376	69435	68127	70577	79328	79221	76318	64084	55144
17	34896	69655	68029	66275	68519	68579	70758	79524	79177	75980	63615	54872
18	34772	68265	67657	66259	67853	68009	70879	79644	79155	75790	63169	54685
19	34649	68205	67401	66240	67520	67597	71322	79764	79155	75620	62707	54498
20	34524	69055	67070	66145	67305	67461	71706	79786	79068	75432	62245	54396
21	34400	68245	66917	66278	67205	67305	72358	79830	79026	75242	61841	54176
22	34263	67070	66743	66183	67050	67149	72809	79874	78960	75179	61491	54008
23	34139	67343	66724	66145	66917	67031	72994	79830	78916	74759	61163	53857
24	34030	71686	73200	66105	66877	66877	73592	79786	78787	74507	60835	53504
25	33908	69715	75074	66065	66743	66762	73986	79742	78721	74007	60437	53002
26	33761	68285	72134	66079	66645	66838	74194	79699	78657	73675	60113	52343
27	33627	67520	71059	66010	66569	66626	74612	79612	78594	73242	59753	51688
28	33459	67070	69715	65683	66471	66800	74906	79525	78484	72788	59431	50762
29	33327	66743	69095	65549	66452	66588	75137	79438	78442	72358	59111	50096
30	33327	66588	71322	65453	---	66511	75347	79416	78313	71910	58789	49440
31	33315	---	69995	65242	---	66395	---	79394	---	71484	58470	---
MAX	36706	71686	75074	69815	69435	98441	75347	79874	79350	78550	71039	58152
MIN	33315	33243	66491	65242	62465	65953	66376	75558	78313	71484	58470	49440
a	1879.00	1900.43	1902.16	1899.73	1900.36	1900.33	1904.77	1906.67	1906.17	1902.90	1896.04	1890.65
b	-3496	+33273	+3407	-4753	+1210	-57	+8952	+4047	-1081	-6829	-13014	-9030

CAL YR 1983 b 2885.

WTR RY 1984 b 12629.

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

## EEL RIVER BASIN

11470500 EEL RIVER BELOW SCOTT DAM, NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°24'29", long 122°58'29", in SE 1/4 sec.15, T.18 N., R.10 W., Lake County, Hydrologic Unit 18010103, Mendocino National Forest, on left bank 0.4 mi upstream from Soda Creek, 0.7 mi downstream from Scott Dam, and 9.7 mi northeast of town of Potter Valley.

DRAINAGE AREA.--290 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1929, published as South Eel River at Hullville, and October 1929 to September 1953 as "at Hullville."

REVISED RECORDS.--WSP 1315-B: 1923(M), 1938(M). WSP 1395: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 1,740 ft from topographic map. Prior to Dec. 15, 1930, at datum 3.00 ft higher.

REMARKS.--Flow regulated by Lake Pillsbury (station 11470000) 0.7 mi upstream. No diversion above station.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE.--62 years, 569 ft<sup>3</sup>/s, 412,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,300 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 24.24 ft, from floodmarks, from rating curve extended above 9,400 ft<sup>3</sup>/s on basis of computed flow over Scott Dam at gage heights 18.50 ft and 21.85 ft; minimum daily, 0.1 ft<sup>3</sup>/s Sept. 8, 1924.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,400 ft<sup>3</sup>/s Dec. 25, gage height, 13.22 ft; minimum daily, 70 ft<sup>3</sup>/s June 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	87	698	2890	373	550	478	155	108	79	235	162
2	92	87	663	2200	385	511	404	150	96	79	237	162
3	92	87	945	1760	400	503	324	155	100	79	237	162
4	92	87	1190	1450	377	470	346	155	100	79	237	124
5	92	87	917	1240	373	445	358	156	99	79	237	99
6	92	87	1170	1100	385	428	360	156	88	79	235	97
7	87	87	3430	987	382	418	367	136	77	84	232	95
8	87	87	3650	888	391	401	353	115	80	90	232	93
9	87	90	7130	788	397	381	328	111	82	90	234	93
10	87	98	7720	712	393	362	272	107	83	90	239	94
11	87	99	6950	676	390	347	253	106	78	90	242	93
12	87	101	5320	631	342	338	263	103	75	90	242	93
13	87	108	3620	590	618	657	298	98	77	90	241	93
14	87	107	3130	546	1630	1580	335	113	76	90	237	93
15	87	108	2680	531	2050	1960	337	107	91	90	238	93
16	87	110	2100	555	3090	1950	337	91	94	90	239	93
17	87	2410	1740	512	2150	2170	344	112	78	91	237	93
18	87	2350	1410	483	1550	1610	328	133	70	91	237	93
19	87	2110	1180	456	1220	1340	322	131	72	91	239	93
20	87	3240	1010	420	1040	1200	265	129	75	92	239	89
21	87	2120	903	446	1010	1090	170	126	76	92	210	84
22	87	1370	807	421	977	958	147	146	76	91	188	84
23	87	1200	915	416	885	859	140	159	76	142	177	84
24	87	4610	6610	393	804	782	137	156	76	235	162	188
25	87	4500	11500	396	762	718	137	155	76	200	161	335
26	87	2340	8100	385	698	666	147	152	76	210	161	328
27	87	1510	5640	352	657	616	154	150	75	237	161	328
28	87	1140	3760	360	624	580	158	147	77	234	162	328
29	87	909	2910	369	594	539	163	137	79	235	161	328
30	87	774	4910	362	---	497	165	127	79	237	162	328
31	87	---	4110	360	---	485	---	126	---	237	162	---
TOTAL	2727	32100	106818	23675	24947	25411	8190	4100	2465	3883	6613	4522
MEAN	88.0	1070	3446	764	860	820	273	132	82.2	125	213	151
MAX	92	4610	11500	2890	3090	2170	478	159	108	237	242	335
MIN	87	87	663	352	342	338	137	91	70	79	161	84
AC-FT	5410	63670	211900	46960	49480	50400	16240	8130	4890	7700	13120	8970

CAL YR 1983 TOTAL 575020 MEAN 1584 MAX 15400 MIN 87 AC-FT 1440600  
WTR YR 1984 TOTAL 245451 MEAN 671 MAX 11500 MIN 70 AC-FT 486900

## 11471000 POTTER VALLEY POWERHOUSE TAILRACE NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°21'42", long 123°07'38", in SW 1/4 NW 1/4 sec.6, T.17 N., R.11 W., Mendocino County, Hydrologic Unit 18010103 on right bank 100 ft downstream from powerhouse of Pacific Gas and Electric Co., 1.8 mi southwest of Van Arsdale Dam, and 2.9 mi northwest of town of Potter Valley.

PERIOD OF RECORD.--December 1909 to current year. Prior to October 1922, monthly discharge only, published in WSP 1315-B. Prior to October 1931, published as Snow Mountain Water and Power Co.'s tailrace near Potter Valley.

REVISED RECORDS.--WSP 1395: 1950.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 1,020 ft from topographic map. No gage prior to Dec. 1, 1922. Dec. 1, 1922, to Sept. 30, 1923, nonrecording gage and Oct. 1, 1923, to Apr. 12, 1950, water-stage recorder, at site 50 ft upstream at different datum.

REMARKS.--Water is diverted from Eel River above Van Arsdale Dam. After passing through powerhouse, part of it is used for irrigation in Potter Valley and remainder flows into East Fork Russian River. Water for irrigation diverted from tailrace is included in figures of discharge.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE.--74 years (water years 1911-84), 204 ft<sup>3</sup>/s, 147,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD (1922 TO CURRENT YEAR).--Maximum daily discharge, 351 ft<sup>3</sup>/s Oct. 31, 1982; no flow at times in several years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	94	226	318	311	318	318	161	82	76	201	161
2	86	92	226	318	315	318	318	161	82	76	202	161
3	86	82	226	318	306	318	318	161	81	76	202	161
4	86	95	226	252	318	318	318	161	79	76	204	147
5	85	95	226	252	318	318	318	161	80	76	205	93
6	82	95	226	318	318	318	318	161	79	76	205	93
7	84	97	226	318	318	318	318	153	79	76	205	95
8	86	95	226	318	318	318	318	118	79	76	205	95
9	86	149	226	318	318	318	318	100	79	76	205	95
10	86	246	226	318	318	318	318	96	79	76	205	89
11	86	275	226	318	318	318	318	151	79	76	203	86
12	86	239	226	318	318	318	318	46	79	77	202	86
13	86	262	201	318	318	318	318	92	83	76	202	86
14	81	211	226	318	318	318	318	89	86	76	201	86
15	73	163	219	318	318	318	318	83	82	76	199	86
16	72	192	249	318	318	318	318	112	76	76	199	87
17	69	194	285	318	318	318	318	84	76	76	199	86
18	69	226	293	318	318	318	318	89	76	76	199	86
19	75	226	295	318	318	318	318	95	76	76	199	86
20	82	226	295	318	318	318	247	95	76	76	202	89
21	79	226	310	318	318	318	161	95	76	76	192	87
22	79	226	318	318	318	318	161	95	76	76	168	82
23	79	226	318	318	318	318	161	103	76	89	162	82
24	79	226	318	318	318	318	161	107	76	205	161	118
25	80	226	318	318	318	318	159	107	76	188	161	318
26	79	226	318	318	318	318	158	108	76	175	161	318
27	82	226	318	318	318	318	161	107	76	201	161	318
28	87	226	318	318	318	318	161	107	77	199	161	318
29	86	226	318	318	318	318	156	103	76	199	161	318
30	87	226	318	318	---	318	161	82	77	199	161	318
31	89	---	318	318	---	318	---	82	---	199	161	---
TOTAL	2538	5615	8265	9726	9200	9858	7889	3465	2350	3327	5854	4330
MEAN	81.9	187	267	314	317	318	263	112	79.3	107	189	144
MAX	89	275	318	318	318	318	318	161	86	205	205	318
MIN	69	82	201	252	306	318	156	46	76	76	161	82
AC-FT	5030	11140	16390	19290	18290	19550	15650	6870	4660	6600	11610	8590
CAL YR 1983	TOTAL	93462	MEAN	264	MAX	319	MIN	69	AC-FT	185381		
WTR YR 1984	TOTAL	72417	MEAN	198	MAX	318	MIN	46	AC-FT	143600		

## EEL RIVER BASIN

11471500 EEL RIVER AT VAN ARSDALE DAM, NEAR POTTER VALLEY, CA

LOCATION.--Lat 39°23'19", long 123°06'54", in NE 1/4 sec.30, T.18 N., R.11 W., Mendocino County, Hydrologic Unit 18010103, on left bank 1,000 ft downstream from Van Arsdale Dam, and 4.6 mi north of town of Potter Valley.

DRAINAGE AREA.--349 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1909 to September 1922 (combined monthly discharge only, of Eel River at this station and Snow Mountain Water and Power Co.'s tailrace near Potter Valley), October 1922 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1929, published as South Eel River at Van Arsdale Dam, near Potter Valley.

REVISED RECORDS.--WSP 1315-B: 1913, 1920-23, 1925-27. WSP 1395: 1923(M), 1938.

GAGE.--Water-stage recorder. Altitude of gage is 1,400 ft from topographic map. Nov. 18, 1909, to Mar. 3, 1927, recorder in reservoir 800 ft upstream from Van Arsdale Dam at different datum. Oct. 1, 1927, to Feb. 28, 1937, nonrecording gage at present site and datum.

REMARKS.--Flow regulated by Lake Pillsbury (station 11470000) 11 mi upstream. Water is diverted from Van Arsdale Reservoir through tunnel to Potter Valley powerhouse (station 11471000) after which part is used for irrigation and remainder flows into East Fork Russian River. Records given herein show only flow passing down Eel River.

COOPERATION.--Records collected by Pacific Gas and Electric Co., under general supervision of the Geological Survey, in connection with a Federal Energy Regulatory Commission Project.

AVERAGE DISCHARGE (combined flow of Eel River at Van Arsdale Dam and Potter Valley powerhouse tailrace).--75 years (water years 1910-84), 668 ft<sup>3</sup>/s 484,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 64,100 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 33.9 ft from floodmarks; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,900 ft<sup>3</sup>/s Dec. 25, gage height, 18.24 ft; minimum daily, 4.0 ft<sup>3</sup>/s June 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	25	545	3080	114	362	236	72	74	5.0	5.3	5.6
2	12	15	505	2380	114	329	177	43	31	5.4	5.4	5.7
3	11	17	1090	2020	133	302	75	53	43	5.7	5.3	6.2
4	8.7	9.2	1150	1730	127	262	95	43	47	5.0	5.3	7.1
5	8.4	9.2	871	1500	121	230	100	37	46	5.7	5.3	6.6
6	11	15	1990	1190	118	209	106	35	55	5.4	5.3	6.6
7	11	11	4230	995	116	188	101	37	24	5.0	5.3	6.4
8	8.0	8.7	4260	846	116	167	151	36	17	5.6	5.3	6.3
9	11	26	8880	715	142	151	103	40	22	6.2	5.3	6.3
10	9.8	294	9710	619	146	131	273	45	16	7.8	6.1	6.2
11	9.2	144	8510	539	133	116	140	39	24	7.6	6.1	6.3
12	9.2	123	6360	478	262	106	103	38	5.7	6.7	6.1	6.4
13	9.2	180	3930	427	737	96	106	34	6.9	6.3	6.9	7.7
14	9.2	59	3360	367	1970	673	116	35	5.3	6.2	11	8.3
15	9.0	53	2880	349	2310	2240	116	42	4.9	6.2	11	8.3
16	8.7	123	2370	371	3540	2290	112	23	9.0	6.3	11	8.3
17	8.7	2870	2060	325	2450	2460	105	28	8.0	6.1	7.7	9.0
18	8.7	2640	1700	256	1840	2050	121	63	4.0	6.9	7.7	8.0
19	11	2490	1370	202	1390	1610	127	55	4.1	7.6	9.2	7.5
20	11	3530	1110	207	1110	1360	121	58	5.6	7.2	7.5	8.1
21	11	2320	896	207	1070	1090	125	58	6.4	7.4	8.7	8.7
22	12	1560	752	207	1000	871	87	58	6.6	7.0	9.5	8.0
23	13	1400	976	180	838	730	78	58	4.6	5.5	9.2	8.0
24	11	5660	7420	158	752	600	57	57	4.6	6.6	9.8	7.3
25	12	4460	14500	149	694	533	49	69	4.4	6.1	10	7.7
26	12	2380	10200	167	594	467	55	86	4.4	6.5	6.9	8.2
27	13	1650	7700	129	522	412	53	94	4.8	6.3	6.4	8.1
28	9.5	1130	7580	112	452	354	49	83	4.2	6.0	4.7	8.0
29	9.8	822	4630	118	407	305	56	83	4.8	8.5	7.0	9.0
30	13	626	5490	118	---	256	53	78	4.5	8.2	6.9	8.0
31	9.8	---	4410	118	---	243	---	29	---	5.6	5.4	---
TOTAL	323.9	34640.1	131435	20259	23318	21193	3246	1609	501.8	197.6	222.6	220.9
MEAN	10.4	1155	4240	654	804	684	108	51.9	16.7	6.37	7.18	7.36
MAX	13	5660	14500	3080	3540	2460	273	94	74	8.5	11	9.0
MIN	8.0	8.7	505	112	114	96	49	23	4.0	5.0	4.7	5.6
AC-FT	642	68710	260700	40180	46250	42040	6440	3190	995	392	442	438

CAL YR 1983 TOTAL 631144.4 MEAN 1739 MAX 18200 MIN 7.4 AC-FT 1252000  
WTR YR 1984 TOTAL 237166.9 MEAN 648 MAX 14500 MIN 4.0 AC-FT 470400

## 11472150 EEL RIVER NEAR DOS RIOS, CA

LOCATION.--Lat 39°37'30", long 123°20'25", in SW 1/4 SW 1/4 sec.32, T.21 N., R.13 W., Mendocino County, Hydrologic Unit 18010103, on left bank 1,100 ft upstream from Outlet Creek, and 6.3 mi south of Dos Rios.

DRAINAGE AREA.--528 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 1,001.28 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of missing record and discharges below 9.0 ft<sup>3</sup>/s, which are fair. Flow partly regulated by Lake Pillsbury (station 11470000) 40 mi upstream and by diversion through Potter Valley powerhouse (station 11471000).

AVERAGE DISCHARGE.--18 years, 1,033 ft<sup>3</sup>/s, 748,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65,500 ft<sup>3</sup>/s Jan. 16, 1974, gage height, 33.64 ft, from rating curve extended above 26,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; no flow many days in 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 45.52 ft from information by local resident, discharge, 100,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,000 ft<sup>3</sup>/s Dec. 9, gage height, 15.1 ft; minimum daily, 4.9 ft<sup>3</sup>/s Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	64	1500	3200	240	759	481	242	100	16	7.2	6.3
2	15	56	1700	2200	230	731	428	347	94	16	6.9	6.3
3	17	39	2000	1700	220	675	316	290	66	16	6.9	6.3
4	17	31	1800	1370	210	616	261	252	70	16	6.4	6.3
5	16	27	1600	1200	205	554	270	210	77	15	6.3	6.3
6	15	35	2700	1050	195	503	274	185	87	13	6.3	6.3
7	14	63	6000	920	190	465	249	167	102	13	6.3	5.1
8	14	40	4800	810	187	428	470	154	73	13	6.3	4.9
9	15	350	11000	740	312	405	440	140	58	11	6.3	5.5
10	17	3500	8400	690	479	362	1620	137	52	11	6.3	5.6
11	17	2030	7000	640	441	335	943	143	50	11	5.4	5.6
12	17	1500	5300	590	1660	317	627	140	48	11	5.6	5.6
13	16	1700	4700	540	3930	970	499	124	46	11	5.3	5.6
14	14	1120	5100	500	3320	2450	439	112	37	11	5.0	5.6
15	14	495	4300	460	3680	3430	400	108	36	10	5.0	5.6
16	14	800	3430	560	5130	3220	363	114	31	9.1	5.0	5.6
17	14	5000	3030	500	3470	3520	336	97	30	8.2	6.0	5.6
18	14	3390	2630	450	2530	2510	429	96	31	8.3	6.3	5.6
19	15	3810	2280	420	1940	1980	776	116	28	8.9	6.3	6.2
20	16	5220	2040	400	1530	1670	626	107	25	8.4	6.3	6.3
21	15	3200	1850	480	1700	1450	494	105	24	7.0	6.3	6.1
22	14	2070	1750	470	1520	1260	407	104	25	7.3	5.9	5.6
23	14	1840	3800	430	1300	1090	340	108	25	7.5	5.0	5.6
24	16	7300	8500	390	1330	963	299	123	23	8.5	5.0	6.3
25	17	6400	9000	360	1310	862	262	119	21	9.5	5.6	6.3
26	17	3300	7400	330	1130	783	243	117	21	9.7	5.6	6.3
27	16	2600	5800	315	994	715	234	113	20	9.7	5.6	6.3
28	16	2200	4500	300	896	639	217	110	19	8.9	5.6	6.3
29	16	1900	4300	280	822	572	200	104	19	8.6	6.1	6.3
30	19	1700	8000	270	---	508	191	101	16	8.2	6.3	6.6
31	25	---	5000	255	---	494	---	100	---	7.9	6.3	---
TOTAL	491	61780	141210	22820	41101	35236	13134	4485	1354	329.7	184.7	177.9
MEAN	15.8	2059	4555	736	1417	1137	438	145	45.1	10.6	5.96	5.93
MAX	25	7300	11000	3200	5130	3520	1620	347	102	16	7.2	6.6
MIN	14	27	1500	255	187	317	191	96	16	7.0	5.0	4.9
AC-FT	974	122500	280100	45260	81520	69890	26050	8900	2690	654	366	353

CAL YR 1983 TOTAL 845596 MEAN 2317 MAX 27400 MIN 12 AC-FT 1677000  
WTR YR 1984 TOTAL 322303.3 MEAN 881 MAX 11000 MIN 4.9 AC-FT 639300

Note: No gage height record Nov. 25 to Dec. 14, Dec. 21 to Feb. 6.

## EEL RIVER BASIN

11472200 OUTLET CREEK NEAR LONGVALE, CA

LOCATION.--Lat 39°37'05", long 123°21'20", in NE 1/4 sec.1, T.20 N., R.14 W., Mendocino County, Hydrologic Unit 18010103, on right bank 0.2 mi downstream from Bloody Run Creek, 0.9 mi upstream from mouth, and 6.9 mi northeast of Longvale.

DRAINAGE AREA.--161 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WSP 1929: 1958(M), 1960.

GAGE.--Water-stage recorder. Datum of gage is 1,018.14 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for periods of no gage height record and discharges below 2.0 ft<sup>3</sup>/s, which are fair. No regulation or diversion above station.

AVERAGE DISCHARGE.--28 years, 434 ft<sup>3</sup>/s, 314,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 77,900 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 30.6 ft, from floodmarks, from rating curve extended above 17,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; no flow at times in 1959, 1967, 1977, and 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 9	Unknown	*8,820	11.41
Dec. 25	1500	7,190	10.36

Minimum daily, 0.69 ft<sup>3</sup>/s Sept. 6, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	25	290	1130	85	210	166	226	23	6.8	1.8	1.8
2	3.5	21	330	778	81	250	137	324	22	6.4	1.7	1.7
3	3.3	14	400	590	77	210	119	323	21	6.2	1.9	1.5
4	2.9	14	360	483	73	180	110	238	22	5.4	1.9	1.3
5	2.6	12	300	410	71	155	104	188	24	5.0	1.9	1.0
6	2.6	30	600	355	68	140	96	156	34	4.6	1.7	.69
7	2.6	47	3400	310	66	130	87	135	55	4.3	1.7	.81
8	2.5	25	2500	276	65	120	342	115	42	3.9	1.7	.79
9	2.6	423	5500	248	163	110	381	97	35	3.5	1.7	.88
10	3.6	1700	4000	232	254	102	1560	89	29	3.5	1.6	1.0
11	3.8	1300	3000	221	289	96	846	95	25	3.3	1.6	.80
12	3.8	800	1500	205	1370	90	509	101	22	3.2	1.4	.78
13	3.6	1000	1200	189	4000	450	361	86	21	3.0	1.4	.69
14	3.5	700	1550	171	2500	1500	282	75	20	2.9	1.4	.77
15	3.5	450	1110	159	2000	2000	232	68	18	2.7	1.5	.73
16	3.5	600	840	194	2700	1400	201	62	17	2.6	1.5	.87
17	3.5	1500	733	175	1600	1500	177	59	15	2.4	1.3	.93
18	3.2	940	580	156	950	900	339	56	14	2.9	1.4	.89
19	3.2	1350	477	144	680	770	813	51	13	2.9	1.4	1.3
20	3.2	2000	401	136	540	880	536	46	12	2.4	1.5	1.3
21	3.2	1250	343	169	660	690	377	44	12	2.1	1.5	1.3
22	3.2	850	299	169	480	520	285	40	12	2.0	1.4	1.2
23	3.3	880	1380	150	400	390	231	38	11	2.1	1.4	1.1
24	3.7	2500	4340	136	375	320	199	36	9.8	2.6	1.4	1.2
25	3.8	1800	4570	126	350	270	178	34	8.9	3.0	1.4	1.4
26	3.8	950	3400	118	290	230	162	33	8.8	2.9	1.5	1.3
27	3.8	710	2660	109	255	190	151	31	8.4	2.7	1.8	1.2
28	3.8	530	1650	101	230	167	136	29	7.7	2.6	1.9	1.2
29	3.9	480	1470	96	220	150	121	27	7.3	2.6	1.7	1.1
30	5.6	340	2780	92	---	138	112	25	6.9	2.3	1.4	1.2
31	7.7	---	1700	88	---	160	---	24	---	2.0	1.7	---
TOTAL	109.9	23241	53663	7916	20892	14418	9350	2951	576.8	104.8	49.1	32.73
MEAN	3.55	775	1731	255	720	465	312	95.2	19.2	3.38	1.58	1.09
MAX	7.7	2500	5500	1130	4000	2000	1560	324	55	6.8	1.9	1.8
MIN	2.5	12	290	88	65	90	87	24	6.9	2.0	1.3	.69
AC-FT	218	46100	106400	15700	41440	28600	18550	5850	1140	208	97	65

CAL YR 1983 TOTAL 289293.5 MEAN 793 MAX 13000 MIN 2.1 AC-FT 573800  
WTR YR 1984 TOTAL 133304.33 MEAN 364 MAX 5500 MIN .69 AC-FT 264400

Note: No gage-height record Nov. 11 to Dec. 14, Feb. 13 to Mar. 27.

## 11473900 MIDDLE FORK EEL RIVER NEAR DOS RIOS, CA

LOCATION.--Lat 39°42'23", long 123°19'27", in NE 1/4 SE 1/4 sec.5, T.21 N., R.13 W., Mendocino County, Hydrologic Unit 18010104, on right bank 0.6 mi upstream from Eastman Creek, 1.7 mi southeast Dos Rios, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--745 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 901.58 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--19 years, 1,759 ft<sup>3</sup>/s, 1,274,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,500 ft<sup>3</sup>/s Jan. 23, 1970, gage height, 27.15 ft; minimum daily, 3.3 ft<sup>3</sup>/s Aug. 21-23, Sept. 12-14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,600 ft<sup>3</sup>/s Nov. 10, gage height 17.54 ft, no peak above base of 35,000 ft<sup>3</sup>/s; minimum daily, 6.7 ft<sup>3</sup>/s Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	292	2420	5560	645	1320	1400	1100	271	98	31	12
2	52	695	2880	4680	603	1670	1300	1540	250	92	29	13
3	51	214	3590	4120	558	1520	1200	1450	238	85	28	13
4	47	127	3250	3770	533	1390	1130	1460	232	80	27	12
5	43	140	2670	3530	511	1280	1080	1300	267	76	27	12
6	40	147	4670	3250	491	1220	1030	1170	275	72	26	11
7	38	1030	9860	2970	472	1150	933	1070	430	67	25	11
8	37	336	7720	2720	456	1100	1440	1010	344	63	25	11
9	37	1270	14800	2470	601	1030	1320	998	277	61	24	10
10	37	12600	13300	2280	887	959	3460	971	251	59	23	10
11	38	9140	11600	2180	685	903	2720	998	237	59	24	10
12	37	5710	8550	1960	2260	862	2320	1250	231	56	22	9.0
13	37	6850	7450	1800	7460	2570	2380	1110	237	54	21	7.5
14	36	4440	8660	1620	5010	5560	2240	1020	234	50	20	7.2
15	35	3170	7600	1520	4500	5930	2140	970	223	48	18	8.1
16	34	4270	6080	1610	5620	4500	1930	909	203	46	18	8.2
17	34	9830	5360	1420	3610	4550	1740	837	187	45	17	7.0
18	33	5660	4540	1280	2830	3400	1740	762	177	43	17	6.7
19	33	8120	4010	1210	2420	3260	2280	707	166	42	16	7.2
20	32	10200	3580	1130	2320	3500	2230	657	163	41	16	13
21	32	5580	3230	1210	2900	3380	2010	616	158	40	15	16
22	31	4130	2910	1180	2420	2930	1900	571	151	46	15	14
23	31	4150	3900	1070	2100	2620	1770	531	143	43	14	12
24	33	14100	15600	983	2100	2380	1620	493	134	41	14	9.9
25	36	8320	15100	943	2010	2150	1480	458	125	39	13	9.4
26	36	5150	11500	892	1780	2100	1410	424	119	38	13	15
27	34	4100	9580	825	1630	2010	1320	402	111	37	13	13
28	33	3490	6750	778	1500	1770	1220	364	106	36	12	11
29	31	2990	6340	748	1410	1600	1120	335	103	35	12	10
30	33	2600	10700	716	---	1470	1040	312	101	34	11	12
31	46	---	7170	677	---	1430	---	291	---	33	11	---
TOTAL	1159	138851	225370	61102	60322	71514	50903	26086	6144	1659	597	321.2
MEAN	37.4	4628	7270	1971	2080	2307	1697	841	205	53.5	19.3	10.7
MAX	52	14100	15600	5560	7460	5930	3460	1540	430	98	31	16
MIN	31	127	2420	677	456	862	933	291	101	33	11	6.7
AC-FT	2300	275400	447000	121200	119600	141800	101000	51740	12190	3290	1180	637
CAL YR 1983	TOTAL	1322459	MEAN	3623	MAX	38700	MIN	30	AC-FT	2623000		
WTR YR 1984	TOTAL	644028.2	MEAN	1760	MAX	15600	MIN	6.7	AC-FT	1277000		

## EEL RIVER BASIN

## 11475000 EEL RIVER AT FORT SEWARD, CA

LOCATION.--Lat 40°13'05", long 123°37'54", in SE 1/4 NE 1/4 sec.8, T.3 S., R.5 E., Humboldt County, Hydrologic Unit 18010105, on right bank at downstream side of bridge, 1.0 mi southeast of Fort Seward, 1.9 mi upstream from Dobbys Creek, and 11.8 mi northeast of Garberville.

DRAINAGE AREA.--2,107 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1955 to current year. Prior to October 1965, published as "at Alderpoint."

GAGE.--Water-stage recorder. Datum of gage is 217.26 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 22, 1964, at site 7.5 mi upstream at datum 46.55 ft higher. Feb. 2 to Sept. 30, 1965, at site 7.7 mi upstream at datum 49.42 ft higher.

REMARKS.--Records good. Flow slightly regulated by Lake Pillsbury (station 11470000) 99 mi upstream and by diversion through Potter Valley powerhouse (station 11471000).

AVERAGE DISCHARGE.--29 years, 4,909 ft<sup>3</sup>/s, 3,557,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 561,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 87.2 ft, from floodmarks, site and datum then in use, from rating curve extended above 110,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 72.5 ft; minimum daily, 1.2 ft<sup>3</sup>/s Sept. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 41,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 11	0130	43,200	23.79	Dec. 9	2130	60,100	27.33
Nov. 24	2100	55,200	26.34	Dec. 25	2400	*62,400	27.77

Minimum daily, 26 ft<sup>3</sup>/s on several days during September.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	225	4840	18900	1350	4250	3170	1980	624	194	67	32
2	88	564	5010	14800	1300	4320	2800	3130	594	188	64	33
3	95	698	6580	12000	1250	4190	2530	2820	563	183	60	33
4	102	486	9220	9970	1210	3710	2290	2960	551	173	57	32
5	102	366	6580	8590	1190	3350	2170	2490	555	161	56	32
6	101	551	12600	7360	1150	3090	2080	2220	622	150	55	31
7	95	832	38100	6290	1120	2930	1970	2020	704	140	55	31
8	89	964	29800	5480	1100	2770	2870	1850	849	132	53	31
9	88	1060	46700	4840	1220	2620	4090	1760	661	126	52	30
10	88	18000	52800	4370	1980	2480	8830	1680	555	121	52	28
11	88	25800	46200	4110	1880	2340	8700	1650	514	116	49	26
12	88	12500	38300	3630	5130	2250	5590	1930	482	112	46	26
13	88	16800	28300	3290	18200	4750	4770	1970	458	110	44	26
14	88	12900	26500	3000	21200	15600	4250	1660	452	108	41	26
15	87	6550	23200	2770	15100	18400	3890	1520	429	106	39	27
16	85	6980	18000	2850	21900	16600	3480	1410	403	102	38	26
17	84	21700	15100	2750	16200	18400	3110	1320	370	98	38	26
18	82	18000	12200	2490	11800	13400	3000	1220	343	94	37	26
19	82	15600	9900	2350	9260	10600	4820	1140	326	92	36	27
20	82	30200	8130	2200	7690	9310	5310	1100	313	87	36	27
21	80	18700	6890	2100	9180	8320	4190	1040	300	82	35	26
22	80	11900	6010	1990	8620	7070	3640	1000	288	93	35	27
23	80	9760	6320	1880	7040	6060	3210	941	282	92	34	26
24	80	31000	41700	1780	7110	5290	2880	900	273	83	33	26
25	80	33800	53400	1700	8320	4720	2620	889	258	78	33	30
26	80	18300	49200	1640	6790	4340	2410	848	243	78	33	30
27	80	12300	36900	1580	5760	4180	2280	813	230	78	32	30
28	82	8920	25400	1520	5110	3670	2130	777	220	77	32	30
29	80	6850	20300	1480	4650	3260	1970	726	209	75	32	28
30	114	5550	30800	1420	---	2980	1860	678	199	73	32	29
31	157	---	26500	1380	---	3060	---	642	---	70	32	---
TOTAL	2783	347856	741480	140510	203810	198310	106910	47084	12870	3472	1338	858
MEAN	89.8	11600	23920	4533	7028	6397	3564	1519	429	112	43.2	28.6
MAX	157	33800	53400	18900	21900	18400	8830	3130	849	194	67	33
MIN	80	225	4840	1380	1100	2250	1860	642	199	70	32	26
AC-FT	5520	690000	1471000	278700	404300	393300	212100	93390	25530	6890	2650	1700

CAL YR 1983	TOTAL	4079962	MEAN	11180	MAX	128000	MIN	60	AC-FT	8093000
WTR YR 1984	TOTAL	1807281	MEAN	4938	MAX	53400	MIN	26	AC-FT	3585000

11475560 ELDER CREEK NEAR BRANSCOMB, CA  
(Hydrologic benchmark station)

LOCATION.--Lat 39°43'47", long 123°38'34", in NW 1/4 NE 1/4 sec.29, T.22 N., R.16 W., Mendocino County, Hydrologic Unit 18010106, on right bank 0.2 mi upstream from mouth, and 5.3 mi north of Branscomb.  
Rain gage No. 1: Lat 39°43'50", long 123°38'07", in NW 1/4 NW 1/4 sec.28, T.22 N., R.16 W., altitude, 1,440 ft at site 0.5 mi east of gaging station.

DRAINAGE AREA.--6.50 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and one recording and storage-type precipitation gage. Datum of gage is 1,391.08 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. No regulation; small diversion above station for domestic use.

AVERAGE DISCHARGE.--17 years, 27.8 ft<sup>3</sup>/s, 20,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,280 ft<sup>3</sup>/s Mar. 29, 1974, gage height, 9.77 ft, from rating curve extended above 660 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 9.40 ft and 11.41 ft; minimum daily, 0.27 ft<sup>3</sup>/s Sept. 10-15, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 11.41 ft, from floodmarks, discharge, 3,660 ft<sup>3</sup>/s by slope-area measurement of maximum flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 288 ft<sup>3</sup>/s Dec. 6, gage height 5.93 ft, no peak above base of 400 ft<sup>3</sup>/s; minimum daily, 0.48 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	5.4	33	103	9.5	36	19	24	7.7	3.6	1.6	.87
2	1.7	3.8	29	76	9.2	33	18	26	7.6	3.4	1.6	.87
3	1.6	2.8	41	60	8.9	29	17	27	7.4	3.2	1.6	.86
4	1.5	3.6	41	51	8.8	26	16	26	7.9	3.0	1.6	.79
5	1.5	3.3	41	44	8.6	24	16	25	7.4	3.0	1.6	.79
6	1.5	8.0	126	39	8.3	22	15	23	9.2	2.8	1.6	.79
7	1.5	6.2	251	35	8.1	21	15	22	8.5	2.8	1.6	.79
8	1.5	4.1	178	31	8.1	19	25	21	7.4	2.8	1.5	.78
9	1.6	20	205	28	11	18	25	19	6.8	2.7	1.4	.72
10	1.7	78	213	26	10	18	59	18	6.4	2.7	1.3	.60
11	1.7	47	182	23	10	17	55	19	6.2	2.7	1.3	.60
12	1.6	56	160	21	22	16	48	17	6.0	2.6	1.3	.60
13	1.5	91	131	20	114	44	42	16	5.8	2.5	1.3	.60
14	1.5	65	118	19	94	95	37	15	5.6	2.5	1.3	.60
15	1.5	42	104	18	79	122	33	14	5.4	2.4	1.2	.60
16	1.5	36	87	17	87	111	30	14	5.3	2.4	1.2	.60
17	1.4	90	71	16	77	102	27	13	5.0	2.4	1.2	.59
18	1.4	65	59	15	64	84	29	13	4.8	2.3	1.2	.54
19	1.4	93	52	14	55	69	32	12	4.7	2.2	1.0	.54
20	1.4	119	46	14	49	58	32	12	4.6	2.2	1.0	.54
21	1.4	86	41	14	51	50	31	11	4.6	2.2	.95	.54
22	1.4	61	37	13	48	44	28	11	4.6	2.2	.95	.54
23	1.4	55	48	13	45	39	26	11	4.4	2.2	.95	.54
24	1.4	146	150	12	50	35	24	10	4.3	2.2	.95	.54
25	1.4	140	177	12	51	31	22	9.9	4.2	2.2	.95	.49
26	1.4	94	174	11	49	29	21	9.6	4.1	2.2	.95	.49
27	1.4	66	147	11	46	25	20	9.2	4.0	2.2	.95	.49
28	1.4	52	118	11	42	23	18	8.9	3.9	2.2	.95	.49
29	1.3	42	108	10	38	21	18	8.5	3.8	2.0	.94	.49
30	2.8	36	165	10	---	20	17	8.3	3.7	1.8	.87	.48
31	2.6	---	141	9.7	---	21	---	7.9	---	1.7	.87	---
TOTAL	48.6	1617.2	3474	796.7	1161.5	1302	815	481.3	171.3	77.3	37.68	18.76
MEAN	1.57	53.9	112	25.7	40.1	42.0	27.2	15.5	5.71	2.49	1.22	.63
MAX	2.8	146	251	103	114	122	59	27	9.2	3.6	1.6	.87
MIN	1.3	2.8	29	9.7	8.1	16	15	7.9	3.7	1.7	.87	.48
AC-FT	96	3210	6890	1580	2300	2580	1620	955	340	153	75	37
a	2.84	23.81	25.50	1.15	9.13	7.25	5.51	2.91	1.62	0.00	0.05	0.17

CAL YR 1983 TOTAL 18377.1 MEAN 50.3 MAX 334 MIN 1.3 AC-FT 36450  
WTR YR 1984 TOTAL 10001.34 MEAN 27.3 MAX 251 MIN .48 AC-FT 19840

a Precipitation, in inches, at raingage no. 1.

## EEL RIVER BASIN

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

CHEMICAL ANALYSES: Water years 1968 to current year.

WATER TEMPERATURES: Water years 1968-79.

SEDIMENT RECORDS: Water years 1969 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1967 to September 1979.

SEDIMENT RECORDS: October 1973 to September 1975.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	
DEC , 1983												
15...	1100	105	85	7.4	10.0	725	1.1	10.5	8	13	>670	
MAR , 1984												
15...	1100	122	81	7.3	8.5	725	3.4	10.1	91	42	K21	
JUN												
12...	1300	6.1	117	7.6	12.0	720	.70	10.3	101	K6	K12	
SEP												
11...	1200	.60	139	8.0	13.0	715	.50	9.4	95	K3	49	
DATE	TIME	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS S04)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC , 1983												
15...	30	0	8.0	2.5	4.7	25	.4	.4	39	2.0	2.2	
MAR , 1984												
15...	30	0	7.8	2.6	4.7	25	.4	.6	38	1.9	2.1	
JUN												
12...	43	0	11	3.7	6.5	25	.4	.6	53	2.8	2.1	
SEP												
11...	53	0	14	4.3	7.7	24	.5	.7	62	3.1	2.5	
DATE	TIME	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC , 1983												
15...	<.1	15	46	58	.06	<.10	<.01	.60	.01	<.01	.02	
MAR , 1984												
15...	.1	14	—	57	.07	<.10	.05	<.20	.02	.01	.02	
JUN												
12...	.2	15	72	74	.10	<.10	.01	<.20	.01	.01	.02	
SEP												
11...	.1	16	89	86	.12	<.10	<.01	<.20	.01	.01	.02	
DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)		
MAR , 1984												
15...	1100	40	<1	16	<.5	<1	<1	<3	2	29		
SEP												
11...	1200	20	<1	21	<1	<1	1	<3	2	3		
DATE	TIME	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAR , 1984												
15...	<1	<4	1	<.1	<10	<1	<1	<1	77	<6	11	
SEP												
11...	6	5	3	<.1	<10	1	<1	<1	140	<6	10	

See footnotes at end of table.

11475560 ELDER CREEK NEAR BRANSCOMB, CA--Continued  
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	MEDIUM	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)
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SEP , 1984

11...	1200	9	2.5	<.4	1.3	<.4	1.2	<.4	.05
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K Results based on colony count outside the acceptable range (non-ideal colony count).  
 < Actual value is known to be less than the value shown.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC					
15...	1100	105	10.0	2	.57
MAR					
15...	1100	122	9.5	6	2.0
JUN					
12...	1300	6.1	12.5	1	.02
SEP					
11...	1200	.60	13.0	4	.00

## EEL RIVER BASIN

11475800 SOUTH FORK EEL RIVER AT LEGGETT, CA

LOCATION.--Lat 39°52'29", long 123°43'10", in NE 1/4 SE 1/4 sec.3, T.23 N., R.17 W., Mendocino County, Hydrologic Unit 18010106, on right bank near Standish Hickey State Park, 0.2 mi upstream from Rock Creek, and 0.7 mi northwest of Leggett.

DRAINAGE AREA.--248 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 693.32 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--19 years, 959 ft<sup>3</sup>/s, 694,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 72,700 ft<sup>3</sup>/s Jan. 4, 1966, gage height, 25.4 ft, from floodmarks, from rating curve extended above 21,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 26.13 ft; minimum daily, 7.3 ft<sup>3</sup>/s Aug. 4-6, 12, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 26.13 ft, from floodmarks, discharge, 78,700 ft<sup>3</sup>/s, by slope-area measurement of maximum flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,500 ft<sup>3</sup>/s and maximum(\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1530	10,200	9.61	Dec. 25	1730	18,400	13.36
Nov. 24	1245	11,900	10.44	Feb. 13	1300	10,300	9.63
Dec. 7	0315	*27,500	16.24				

Minimum daily, 22 ft<sup>3</sup>/s Sept. 26-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	172	1320	2820	268	947	515	591	171	88	43	31
2	41	180	1240	2180	257	915	453	930	164	83	42	30
3	40	109	1810	1780	248	798	424	828	158	81	41	29
4	38	144	1580	1490	240	716	408	758	177	77	41	28
5	38	129	1450	1300	233	651	388	674	186	74	41	27
6	36	347	8890	1150	226	602	367	600	233	71	41	26
7	35	374	21600	1020	222	565	350	547	286	68	39	26
8	35	191	11000	910	226	532	830	499	213	66	38	26
9	35	1090	17000	822	370	504	765	462	182	66	36	26
10	39	5690	14600	778	552	478	2730	432	168	64	36	25
11	39	2950	12700	720	434	457	1690	460	160	64	35	25
12	40	3120	8820	662	1670	450	1230	431	154	62	35	25
13	40	4420	6470	609	5550	1900	998	384	148	59	34	25
14	37	2650	4870	566	3540	3410	837	355	144	58	34	24
15	36	1540	3620	552	3260	3780	729	334	138	55	34	24
16	35	1550	2860	585	3540	3150	650	316	131	54	33	24
17	35	4340	2450	512	2530	3110	588	303	125	54	33	23
18	35	2330	2100	467	1990	2270	713	289	122	55	33	24
19	35	4360	1850	443	1630	1810	1160	276	119	56	33	24
20	35	5260	1600	418	1360	1450	912	264	115	53	32	24
21	35	3020	1420	450	1660	1230	738	254	113	50	31	24
22	34	1950	1300	431	1430	1050	658	243	111	49	30	23
23	34	2150	2270	399	1260	915	600	235	109	49	30	23
24	34	7940	12200	375	1600	819	552	224	104	50	30	23
25	34	5140	12600	357	1730	732	509	218	100	53	30	23
26	34	3010	7700	342	1480	671	479	214	97	52	30	22
27	34	2200	5600	324	1310	606	451	204	97	51	30	22
28	34	1810	3630	307	1160	558	420	197	95	50	30	22
29	34	1570	3280	296	1020	517	395	186	91	49	30	22
30	68	1390	6410	290	---	490	376	182	89	46	30	22
31	99	---	3990	274	---	531	---	178	---	44	30	---
TOTAL	1218	71126	188230	23629	40996	36614	21915	12068	4300	1851	1065	742
MEAN	39.3	2371	6072	762	1414	1181	730	389	143	59.7	34.4	24.7
MAX	99	7940	21600	2820	5550	3780	2730	930	286	88	43	31
MIN	34	109	1240	274	222	450	350	178	89	44	30	22
AC-FT	2420	141100	373400	46870	81320	72620	43470	23940	8530	3670	2110	1470
CAL YR 1983	TOTAL	750005	MEAN	2055	MAX	21600	MIN	34	AC-FT	1488000		
WTR YR 1984	TOTAL	403754	MEAN	1103	MAX	21600	MIN	22	AC-FT	800800		

## 11476500 SOUTH FORK EEL RIVER NEAR MIRANDA, CA

LOCATION.--Lat 40°10'55", long 123°46'30", in NW 1/4 sec.30, T.3 S., R.4 E., Humboldt County, Hydrologic Unit 18010106, on right bank at Sylvandale Campgrounds on U.S. Highway 101, 0.5 mi upstream from Rocky Glen Creek, 4.3 mi southeast of Miranda, and 20 mi upstream from mouth.

DRAINAGE AREA.--537 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1395: Drainage area. WSP 2129: 1955.

GAGE.--Water-stage recorder. Datum of gage is 217.57 ft National Geodetic Vertical Datum of 1929. Prior to Nov. 2, 1940, nonrecording gage at site 200 ft upstream at datum 0.8 ft higher. Nov. 2, 1940, to Oct. 31, 1944, nonrecording gage at present site and datum.

REMARKS.--Records good. Occasional storage and release for recreation use during summer months at Benbow Dam. No diversion above station.

AVERAGE DISCHARGE.--45 years, 1,978 ft<sup>3</sup>/s, 1,433,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 46.0 ft, from floodmarks, from rating curve extended above 53,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 42.7 ft; minimum observed, 9 ft<sup>3</sup>/s Oct. 17, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2200	23,300	15.48	Dec. 24	1615	28,400	16.85
Nov. 24	1845	27,000	16.48	Dec. 30	1030	22,000	15.14
Dec. 7	0830	*43,300	20.25	Feb. 13	2000	23,100	15.45
Dec. 11	1330	32,200	17.77				

Minimum daily, 35 ft<sup>3</sup>/s Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	671	1970	7740	597	2010	1220	964	335	171	87	54
2	88	579	1850	5650	575	1930	1040	1860	318	168	85	52
3	85	385	2710	4370	551	1700	947	1530	306	163	83	50
4	83	539	3260	3510	530	1530	927	1520	330	157	81	49
5	81	486	2490	2950	512	1380	867	1320	360	150	79	48
6	80	989	10100	2540	499	1260	812	1190	410	143	76	48
7	79	1140	35900	2210	486	1180	774	1080	563	139	73	47
8	77	609	20200	1960	496	1100	1610	985	457	134	71	47
9	78	1320	27300	1750	815	1030	1950	908	376	129	69	46
10	87	13400	25700	1620	1170	972	5240	845	338	126	68	46
11	90	10600	26000	1520	1000	922	4090	835	316	124	66	45
12	89	7690	17900	1370	2640	895	2860	835	302	122	65	45
13	85	9950	12500	1270	13000	3980	2280	774	291	121	64	45
14	81	7110	9610	1180	10200	9000	1900	714	283	118	62	44
15	78	3840	7510	1150	7560	9930	1650	670	272	117	61	44
16	77	4110	5910	1240	8820	8480	1470	635	261	113	60	44
17	76	10100	5140	1110	6310	8350	1320	606	247	110	59	43
18	74	6410	4130	1010	4720	5960	1380	560	239	110	58	44
19	73	6260	3440	951	3780	4580	2030	544	231	109	57	45
20	73	12000	2960	903	3070	3560	2010	520	227	106	56	44
21	73	7470	2570	895	3890	2900	1570	490	222	103	56	42
22	72	4730	2250	899	3380	2450	1380	470	219	101	54	39
23	71	4160	3150	850	2860	2130	1250	450	215	99	54	37
24	71	17000	21600	803	3250	1870	1150	432	209	99	54	37
25	71	14000	21100	771	3970	1680	1060	422	202	99	54	36
26	71	7610	19500	740	3260	1550	987	404	196	99	54	36
27	71	5070	14500	709	2840	1410	934	400	192	98	53	35
28	71	3710	9470	681	2520	1270	875	385	188	97	53	35
29	71	2870	8420	657	2220	1160	818	369	181	96	53	35
30	135	2320	18800	637	---	1080	784	354	174	94	53	35
31	363	---	11600	615	---	1230	---	344	---	91	53	---
TOTAL	2760	167128	359540	54261	95521	88479	47185	23449	8460	3706	1971	1297
MEAN	89.0	5571	11600	1750	3294	2854	1573	756	282	120	63.6	43.2
MAX	363	17000	35900	7740	13000	9930	5240	1860	563	171	87	54
MIN	71	385	1850	615	486	895	774	344	174	91	53	35
AC-FT	5470	331500	713100	107600	189500	175500	93590	46510	16780	7350	3910	2570
CAL YR 1983	TOTAL	1705619	MEAN	4673	MAX	51500	MIN	55	AC-FT	3383000		
WTR YR 1984	TOTAL	853757	MEAN	2333	MAX	35900	MIN	35	AC-FT	1693000		

NOTE.--No gage-height record Aug. 8 to Sept. 18.

## EEL RIVER BASIN

11476600 BULL CREEK NEAR WEOTT, CA

LOCATION.--Lat 40°21'05", long 124°00'10", in SW 1/4 NW 1/4 sec.30, T.1 S., R.2 E., Humboldt County, Hydrologic Unit 18010106, on left bank 0.2 mi downstream from Albee Creek, 4.5 mi northwest of Weott, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--28.1 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 269.36 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 22, 1964, water-stage recorder, and Jan. 14 to Aug. 10, 1965, nonrecording gage at site 150 ft downstream at datum 8.90 ft lower.

REMARKS.--Records fair. Minor diversions above station for domestic use.

AVERAGE DISCHARGE.--24 years, 132 ft<sup>3</sup>/s, 95,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,520 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 20.6 ft, from floodmarks, site and datum then in use, from rating curve extended above 2,100 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 0.30 ft<sup>3</sup>/s Sept. 28, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1330	*2,810	9.06
Dec. 11	1045	2,780	9.02
Dec. 25	0745	2,130	8.21

Minimum daily, 1.9 ft<sup>3</sup>/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	132	216	459	40	166	88	90	27	12	5.8	3.1
2	5.4	44	192	362	38	146	78	82	25	11	5.5	3.0
3	4.8	37	210	299	36	133	72	81	25	11	5.4	2.9
4	4.1	54	194	257	35	121	80	72	32	10	5.2	2.6
5	4.1	35	204	225	33	111	69	68	29	9.9	5.2	2.6
6	4.0	82	686	195	32	102	63	63	44	9.7	5.0	2.5
7	3.6	65	1290	171	32	95	67	60	31	9.5	5.0	2.6
8	3.4	53	1030	152	31	88	120	57	26	9.2	4.7	2.4
9	4.0	122	1550	136	59	83	154	55	25	9.1	4.6	2.4
10	4.4	1610	1250	125	47	78	219	53	23	9.3	4.4	2.4
11	4.3	903	1760	113	49	73	181	61	22	9.3	4.2	2.3
12	4.0	747	1230	103	82	70	162	52	22	9.0	4.2	2.3
13	3.7	745	1060	96	331	243	143	48	21	8.7	4.3	2.3
14	3.7	598	875	89	225	298	128	47	20	8.6	4.1	2.8
15	3.7	463	634	91	269	455	119	46	18	8.2	4.1	3.3
16	3.6	558	527	83	284	447	107	44	17	7.9	3.9	2.7
17	3.4	810	428	76	241	417	99	42	16	7.6	3.9	2.5
18	3.4	617	363	71	215	339	107	40	16	7.7	3.8	2.4
19	3.4	605	318	67	190	287	128	38	15	7.4	3.8	2.6
20	3.4	646	282	64	191	245	119	37	16	7.1	3.6	2.4
21	3.4	558	250	63	238	209	108	36	15	7.3	3.5	2.3
22	3.4	432	220	59	208	183	101	34	15	7.4	3.5	2.2
23	3.4	388	247	56	194	162	94	33	14	7.4	3.5	2.2
24	3.4	819	1100	55	243	142	88	33	13	7.5	3.5	2.2
25	3.4	673	1560	51	275	129	83	32	13	7.4	3.4	2.1
26	3.4	524	968	50	244	119	78	30	13	6.9	3.3	2.1
27	3.4	414	694	47	221	106	73	30	13	6.7	3.1	2.0
28	3.3	346	543	46	203	96	67	29	13	6.7	3.1	1.9
29	3.1	280	523	44	181	89	63	28	12	6.6	3.1	1.9
30	40	243	819	42	---	83	62	27	12	6.1	3.3	2.4
31	67	---	600	41	---	105	---	27	---	5.9	3.5	---
TOTAL	219.0	13603	21823	3788	4467	5420	3120	1475	603	258.1	127.5	73.4
MEAN	7.06	453	704	122	154	175	104	47.6	20.1	8.33	4.11	2.45
MAX	67	1610	1760	459	331	455	219	90	44	12	5.8	3.3
MIN	3.1	35	192	41	31	70	62	27	12	5.9	3.1	1.9
AC-FT	434	26980	43290	7510	8860	10750	6190	2930	1200	512	253	146

CAL YR 1983	TOTAL	116444.7	MEAN	319	MAX	4500	MIN	3.1	AC-FT	231000
WTR YR 1984	TOTAL	54977.0	MEAN	150	MAX	1760	MIN	1.9	AC-FT	109000

55191

11477000 EEL RIVER AT SCOTIA, CA  
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 40°29'30", long 124°05'55", in SW 1/4 sec.5, T.1 N., R.1 E., Humboldt County, Hydrologic Unit 18010105, near center of span in left pier of bridge on U.S. Highway 101, 0.5 mi north of Scotia, and 6 mi upstream from Van Duzen River.

DRAINAGE AREA.--3,113 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to current year. Monthly discharge only for some periods and yearly estimates for 1915-16, published in WSP 1315-B.

REVISED RECORDS.--WSP 931: 1938. WSP 1315-B: 1914-15(M), 1917(M), 1927-28(M), 1936(M), 1939(M).  
WSP 1345: Drainage area. WSP 1715: 1959.

GAGE.--Water-stage recorder. Datum of gage is 35.50 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 12, 1940, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow slightly regulated by Lake Pillsbury (station 11470000) 138 mi upstream and by diversion through Potter Valley powerhouse (station 11471000).

AVERAGE DISCHARGE.--74 years, 7,526 ft<sup>3</sup>/s, 5,453,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 752,000 ft<sup>3</sup>/s Dec. 23, 1964, gage height, 72.0 ft, from floodmarks, from rating curve extended above 220,000 ft<sup>3</sup>/s on basis of maximum flow at upstream stations; minimum observed, 10 ft<sup>3</sup>/s Aug. 12-14, 1924.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 72,000 ft<sup>3</sup>/s and maximum(\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)
Nov. 11	0615	78,600	25.36	Dec. 9	1845	*112,000	29.44
Nov. 25	0245	97,800	27.73	Dec. 26	0715	109,000	29.05

Minimum daily, 114 ft<sup>3</sup>/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	2060	6810	37300	2590	8330	6550	3440	1250	511	238	131
2	268	2080	6760	26500	2500	7860	5710	4990	1200	498	232	133
3	262	1800	8990	19800	2410	7750	5060	5700	1150	483	222	135
4	259	2010	12300	15900	2320	6930	4800	5200	1180	473	217	135
5	257	1800	9350	13500	2260	6270	4390	4670	1210	443	217	135
6	257	2220	31000	11800	2190	5750	4130	4170	1310	423	212	134
7	257	3840	87700	10300	2130	5400	3980	3820	1640	405	205	134
8	255	2920	60500	9020	2100	5090	5450	3510	1700	386	200	130
9	251	2710	97400	8120	2340	4770	7890	3290	1570	371	193	125
10	248	28900	93100	7340	3560	4490	13900	3100	1300	365	189	121
11	257	60000	97400	6880	4070	4230	18500	3030	1160	347	182	123
12	262	27000	69800	6250	5910	4040	11800	3210	1080	339	162	123
13	255	35000	52600	5650	25600	7290	9240	3360	1030	337	150	124
14	247	31800	50000	5220	47400	28800	7960	2960	984	329	157	127
15	244	15600	45000	4920	26200	34600	6950	2680	948	319	157	130
16	244	14200	35000	5000	36800	34800	6200	2530	909	312	157	128
17	237	35100	30100	4900	30200	35200	5490	2380	865	301	155	125
18	221	39700	24500	4480	20600	25600	5150	2240	816	287	153	125
19	232	24100	19500	4160	16100	18900	7050	2090	758	280	151	126
20	224	52000	14500	3930	13400	15800	9730	1940	727	274	150	126
21	221	38900	12500	3890	15200	13800	7650	1870	717	268	143	122
22	219	22500	10900	4020	15800	12000	6320	1830	702	264	141	117
23	219	17500	10100	3960	12900	10300	5610	1700	683	257	138	115
24	223	42300	62700	3680	12500	9050	5000	1630	661	260	135	117
25	223	74500	97200	3470	16800	8130	4570	1640	644	260	135	116
26	223	36900	94300	3310	13900	7520	4220	1580	616	249	134	115
27	223	21600	68300	3170	11700	7090	3980	1530	595	240	132	115
28	223	14600	48200	3040	10300	6490	3760	1480	568	241	130	115
29	224	9770	36100	2880	9190	5840	3530	1440	537	244	129	115
30	323	8000	58600	2770	---	5380	3340	1340	523	242	130	114
31	836	---	55600	2680	---	6180	---	1290	---	239	130	---
TOTAL	8165	671410	1406810	247840	368970	363680	197910	85640	29033	10247	5176	3731
MEAN	263	22380	45380	7995	12720	11730	6597	2763	968	331	167	124
MAX	836	74500	97400	37300	47400	35200	18500	5700	1700	511	238	135
MIN	219	1800	6760	2680	2100	4040	3340	1290	523	239	129	114
AC-FT	16200	1332000	2790000	491600	731900	721400	392600	169900	57590	20320	10270	7400
CAL YR 1983	TOTAL	6880997	MEAN	18850	MAX	229000	MIN	219	AC-FT	13650000		
WTR YR 1984	TOTAL	3398612	MEAN	9286	MAX	97400	MIN	114	AC-FT	6741000		

NOTE.--No gage height record Aug. 16 to Sept. 20.

## EEL RIVER BASIN

11477000 EEL RIVER AT SCOTIA, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952 to current year.  
 CHEMICAL ANALYSES: Water years 1952-75, 1977, 1979 to current year.  
 BIOLOGICAL DATA: Water year 1979-81.  
 SPECIFIC CONDUCTANCE: Water years 1979-81.  
 WATER TEMPERATURES: Water years 1958-82.  
 SEDIMENT RECORDS: Water years 1955 to current year.  
 TURBIDITY: Water years 1965-68, 1972-73.

PERIOD OF DAILY RECORD.--  
 SPECIFIC CONDUCTANCE: June 1979 to September 1981.  
 WATER TEMPERATURE: October 1957 to June 1982.  
 SEDIMENT RECORDS: October 1957 to September 1980.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE.--Maximum recorded, 414 micromhos Dec. 21, 1980; minimum recorded, 94 micromhos Jan. 14, 1980.  
 WATER TEMPERATURES: Maximum recorded, 27.0°C July 23, 1979; minimum recorded, 2.0°C Dec. 11, 1972.  
 SEDIMENT CONCENTRATIONS: Maximum daily mean, 33,000 mg/L (estimated) Dec. 23, 1964; minimum daily mean, 1 mg/L days in 1958-64, 1966-67, 1970, 1972-80.  
 SEDIMENT DISCHARGE: Maximum daily, 57,000,000 tons, (estimated), Dec. 23, 1964; minimum daily, 0.07 ton Aug. 13, 17-20, 1977.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV , 1983											
08...	0945	2870	186	7.8	11.0	755	55	9.7	89	380	720
JAN , 1984											
11...	1200	6870	159	8.1	9.0	765	20	10.5	90	K11	56
MAR											
14...	1145	30900	123	7.7	12.0	755	320	10.0	94	1000	900
MAY											
08...	1330	3810	168	7.8	17.0	765	3.2	9.3	96	K1	<1
JUL											
03...	1100	490	264	8.0	21.5	760	1.3	9.4	107	<1	K5
SEP											
10...	1100	121	301	8.2	19.0	755	.70	8.7	95	K3	K2

DATE	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY FIELD (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV , 1983											
08...	80	1	21	6.6	6.5	15	.3	1.1	79	16	4.8
JAN , 1984											
11...	72	0	19	5.8	4.9	13	.3	.8	71	9.6	2.6
MAR											
14...	52	0	14	4.2	4.0	14	.2	.8	53	11	2.4
MAY											
08...	72	0	19	6.0	5.2	13	.3	.8	76	10	2.6
JUL											
03...	120	8	34	8.6	7.4	12	.3	1.5	112	17	4.4
SEP											
10...	150	14	40	11	8.8	12	.3	1.4	132	17	6.0

See footnotes at end of table.

11477000 EEL RIVER AT SCOTIA, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV , 1983											
08...	.2	10	107	110	.15	<.10	.02	.70	.11	.04	.02
JAN , 1984											
11...	.1	12	95	98	.13	<.10	<.01	<.20	.06	.01	.02
MAR											
14...	<.1	8.8	77	77	.10	<.10	.01	1.5	.32	.01	.02
MAY											
08...	.1	11	86	100	.12	<.10	<.01	<.20	.03	.01	.03
JUL											
03...	.1	10	149	150	.20	<.10	<.01	<.20	.01	<.01	.02
SEP											
10...	<.1	9.4	179	170	.24	<.10	.01	<.20	<.01	<.01	<.01

		ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
DATE	TIME									
NOV , 1983										
08...	0945	30	1	50	<.5	<1	<1	<3	2	60
JAN , 1984										
11...	1200	20	1	43	<.5	<1	<1	<3	2	31
MAY										
08...	1330	20	<1	47	.6	<1	<1	<3	2	10
SEP										
10...	1100	<10	<1	91	<1	<1	2	<3	1	<3

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1983											
08...	<1	9	2	<.1	<10	2	<1	<1	250	<6	4
JAN , 1984											
11...	<1	4	4	<.1	<10	<1	<1	<1	230	<6	5
MAY											
08...	<1	5	2	<.1	<10	<1	<1	<1	230	<6	7
SEP											
10...	4	8	5	<.1	<10	<1	<1	<1	420	<6	9

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

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

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
NOV									
08...	0945	2870	11.0	105	814	--	--	--	--
MAR									
14...	1145	30900	12.0	1150	95900	77	89	96	100
MAY									
08...	1330	3810	17.0	10	103	--	--	--	--
JUL									
03...	1100	490	22.5	3	4.0	--	--	--	--
SEP									
10...	1100	121	19.0	1	.33	--	--	--	--

## 11478500 VAN DUZEN RIVER NEAR BRIDGEVILLE, CA

LOCATION.--Lat 40°28'50", long 123°53'23", in NE 1/4 SE 1/4 sec.12, T.1 N., R.2 E., Humboldt County, Hydrologic Unit 18010105, on left bank at downstream side of bridge on State Highway 36, 0.9 mi upstream from Grizzly Creek, and 5 mi west of Bridgeville.

DRAINAGE AREA.--222 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 358.18 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1965, at site 2.4 mi upstream at different datum.

REMARKS.--Records good. No storage or large diversion above station.

AVERAGE DISCHARGE.--34 years, 907 ft<sup>3</sup>/s, 657,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 24.0 ft, from floodmarks, present site and datum, from rating curve extended above 20,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 21.3 ft, former site and datum; minimum daily, 4.6 ft<sup>3</sup>/s Aug. 8, 13-24, Sept. 9-15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,800 ft<sup>3</sup>/s Nov. 10, gage height, 13.12 ft, no peak above base of 15,000 ft<sup>3</sup>/s; minimum daily, 10 ft<sup>3</sup>/s Sept. 24-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	813	1080	2300	223	1070	878	791	148	66	23	12
2	34	508	1130	1660	210	980	803	1360	141	64	23	12
3	34	309	1480	1320	198	862	687	1230	135	57	23	12
4	33	847	1360	1090	190	769	736	992	159	54	23	12
5	31	448	1390	952	181	666	643	797	176	50	22	12
6	30	695	4680	822	175	594	576	704	211	50	22	11
7	30	744	9840	722	169	552	522	618	465	47	21	11
8	29	414	5820	647	167	517	1880	541	305	46	20	11
9	29	1100	9430	586	311	497	1710	497	222	44	19	11
10	30	9150	7300	561	418	464	2970	460	186	43	18	11
11	33	5710	9190	550	547	440	2160	695	169	43	18	11
12	33	4440	6440	478	2110	425	1700	768	155	43	17	11
13	33	4560	7030	441	7310	2680	1450	557	145	40	16	11
14	31	2810	7090	411	3840	4740	1180	477	136	38	16	11
15	30	1640	4850	402	3370	4170	1030	435	128	36	16	12
16	30	2410	3510	426	3800	3490	927	400	125	33	16	15
17	29	6210	2970	387	2500	3200	808	370	112	31	16	13
18	29	3280	1960	358	1920	2370	769	339	107	30	15	13
19	28	5140	1570	335	1620	1910	1210	314	106	30	15	13
20	28	5430	1320	314	1590	1670	1360	288	100	29	15	13
21	27	2820	1150	423	2610	1490	1130	269	96	28	14	12
22	27	1750	995	439	1940	1190	957	252	93	28	14	11
23	26	2260	1100	401	1660	994	848	238	90	28	14	11
24	26	8200	6870	357	2340	876	735	221	86	27	14	10
25	26	5500	7320	334	2570	758	656	211	80	26	14	10
26	26	2950	5550	312	1870	775	602	204	76	25	14	10
27	26	1980	4580	298	1500	747	549	195	73	24	14	10
28	25	1620	2780	274	1320	653	487	181	71	24	13	10
29	24	1340	2710	261	1150	569	443	170	68	24	12	10
30	43	1170	7570	250	---	522	415	161	67	24	12	10
31	278	---	3810	232	---	756	---	156	---	23	12	---
TOTAL	1174	86248	133875	18343	47809	41396	30821	14891	4231	1155	521	342
MEAN	37.9	2875	4319	592	1649	1335	1027	480	141	37.3	16.8	11.4
MAX	278	9150	9840	2300	7310	4740	2970	1360	465	66	23	15
MIN	24	309	995	232	167	425	415	156	67	23	12	10
AC-FT	2330	171100	265500	36380	94830	82110	61130	29540	8390	2290	1030	678
CAL YR 1983	TOTAL	609618	MEAN	1670	MAX	19400	MIN	17	AC-FT	1209000		
WTR YR 1984	TOTAL	380806	MEAN	1040	MAX	9840	MIN	10	AC-FT	755300		

## 11480390 MAD RIVER ABOVE RUTH RESERVOIR NEAR FOREST GLEN, CA

LOCATION.--Lat 40°17'04", long 123°20'03", in NW 1/4 NE 1/4 sec.24, T.2 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, near right bank on downstream end of pier of Zenia Road Bridge, 1,600 ft downstream from Marshall Creek, 1.2 mi northwest of Ruth and 6.1 mi southwest of Forest Glen.

DRAINAGE AREA.--93.8 mi<sup>2</sup>.

PERIOD OF RECORD.--September to December 1971, July 1972, June to September 1977, April to May 1980 (discharge measurements only), June 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,660 ft, from topographic map.

REMARKS.--Records fair except for discharges below 10 ft<sup>3</sup>/s, which are poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft<sup>3</sup>/s Dec. 19, 1981, gage height, 12.49 ft; no flow at times in every year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1230	3,050	7.24
Dec. 7	0300	*3,340	7.50
Dec. 24	1100	3,110	7.29

Minimum, no flow Aug. 1 to Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	8.0	272	948	66	294	140	182	48	17		
2	2.2	4.7	281	706	64	291	129	209	46	14		
3	2.2	3.3	366	536	62	260	119	257	45	12		
4	1.9	5.3	350	419	59	235	116	230	43	10		
5	1.8	4.1	331	339	57	212	113	197	43	7.8		
6	1.8	25	1370	284	57	190	107	174	51	7.1		
7	1.7	54	2450	251	50	171	102	154	59	5.5		
8	1.6	35	1450	226	43	154	237	138	51	5.2		
9	1.7	324	2200	199	71	142	215	128	46	4.6		
10	1.8	1160	2090	188	82	130	549	118	41	4.1		
11	2.0	709	1820	172	95	122	461	134	41	3.3		
12	2.4	717	1480	153	601	116	347	145	40	2.8		
13	2.2	957	1510	140	1800	414	287	125	40	2.5		
14	2.1	623	1330	128	1180	921	252	111	39	2.3		
15	1.9	327	1090	121	1080	1100	224	102	37	2.3		
16	1.8	364	906	119	1100	1080	197	98	34	1.7		
17	1.8	1210	834	108	799	972	179	93	32	1.7		
18	1.9	638	678	100	617	792	210	88	31	1.3		
19	1.9	1180	561	95	500	646	236	84	29	.80		
20	1.7	1240	467	89	445	539	231	80	29	.58		
21	1.8	680	399	98	569	427	206	77	29	.53		
22	1.8	411	344	98	463	342	184	72	29	.53		
23	1.8	613	398	92	399	287	167	70	29	.53		
24	2.0	2060	2100	86	465	257	152	68	27	.53		
25	2.2	1300	2200	83	452	233	139	64	27	.53		
26	2.2	782	1920	80	446	218	132	63	25	.53		
27	2.2	549	1840	79	401	192	125	61	20	.53		
28	2.2	417	1270	74	363	171	115	58	21	.51		
29	2.2	338	1290	72	323	156	108	54	20	.46		
30	3.1	289	2050	69	---	145	105	49	19	.36		
31	4.8	---	1310	67	---	148	---	48	---	.20		
TOTAL	64.9	17027.4	36957	6219	12709	11357	5884	3531	1071	111.82	0	0
MEAN	2.09	568	1192	201	438	366	196	114	35.7	3.61	0	0
MAX	4.8	2060	2450	948	1800	1100	549	257	59	17	0	0
MIN	1.6	3.3	272	67	43	116	102	48	19	.20	0	0
AC-FT	129	33770	73300	12340	25210	22530	11670	7000	2120	222	0	0

CAL YR 1983	TOTAL	172007.4	MEAN	471	MAX	4630	MIN	1.6	AC-FT	341200
WTR YR 1984	TOTAL	94932.12	MEAN	259	MAX	2450	MIN	0	AC-FT	188300

## MAD RIVER BASIN

## 11480400 RUTH RESERVOIR NEAR FOREST GLEN, CA

LOCATION.--Lat 40°22'08", long 123°25'56", in NW 1/4 NW 1/4 sec.19, T.1 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, near center of Robert W. Matthews Dam on Mad River, 5.6 mi west of Forest Glen.

DRAINAGE AREA.--121 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1966 to current year. Records prior to October 1966 in files of Humboldt Bay Municipal Water District.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Humboldt Bay Municipal Water District).

REMARKS.--Reservoir is formed by earthfill dam; storage began July 1961. Total capacity, 51,800 acre-ft at elevation 2,654.0 ft, crest of spillway. Water is released down Mad River for municipal use. Records given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 66,400 acre-ft Feb. 14, 1975, elevation, 2,665.98 ft; minimum, 11,700 acre-ft Oct. 24-28, 1977; minimum elevation, 2,607.13 ft Oct. 28, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 57,000 acre-ft Dec. 25; maximum elevation, 2,658.59 ft Dec. 25; minimum contents, 32,000 acre-ft Sept. 30; minimum elevation, 2,634.48 ft.

Capacity table (elevation, in feet NGVD, and contents, in acre-feet)

2,595	6,670	2,640	37,300
2,600	8,520	2,645	42,300
2,605	10,700	2,650	47,400
2,610	13,300	2,655	52,900
2,615	16,500	2,660	58,700
2,620	20,100	2,665	65,000
2,625	23,900	2,670	72,300
2,630	27,800	2,675	80,300
2,635	32,500		

CONTENTS, IN ACRE-FEET, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41700	34100	52300	54700	51000	52600	51600	51200	50900	48400	43300	37700
2	41400	33900	52100	54200	50900	52400	51400	51500	50800	48300	43100	37500
3	41200	33600	52300	53700	50800	52300	51200	52000	50800	48100	43100	37300
4	41100	33300	52300	53200	50800	52200	51000	52000	50700	48000	42800	37100
5	40900	33100	52300	52900	50700	52100	50800	52000	50700	47800	42700	36900
6	40700	33000	54800	52700	50600	52000	50600	52000	50700	47700	42500	36700
7	40400	32800	56500	52500	50500	51900	50700	51900	50700	47500	42300	36500
8	40200	32600	55500	52300	50500	51700	51000	51600	50600	47300	42200	36300
9	39900	33900	56700	52200	50600	51700	51300	51500	50500	47200	42000	36200
10	39700	38300	56400	52100	50700	51600	52200	51600	50500	47000	41900	35900
11	39500	40000	56200	51900	50900	51700	52700	51600	50500	46800	41700	35700
12	39200	41900	55400	51800	52200	51800	52700	51800	50400	46700	41500	35500
13	38900	44100	55300	51700	55100	52600	52600	51700	50400	46500	41300	35300
14	38600	45300	54900	51600	54600	53500	52400	51900	50300	46400	41100	35200
15	38300	46000	54500	51600	54700	54200	52300	52100	50200	46200	40900	34900
16	38000	46700	54200	51600	54500	54300	52100	51900	50100	46100	40800	34800
17	37700	50000	53900	51500	53900	54200	52000	51800	50000	45900	40600	34600
18	37500	51100	53500	51500	53600	53900	52000	51600	49900	45700	40300	34400
19	37300	53600	53200	51400	53300	53600	52100	51600	49800	45500	40200	34200
20	37000	54100	53000	51400	53100	53300	52200	51600	49700	45300	40000	34000
21	36800	53600	52800	51300	53200	53100	52200	51500	49600	45200	39800	33800
22	36500	53000	52600	51200	53100	52900	52100	51500	49500	45000	39600	33600
23	36200	53300	52900	51200	52900	52700	52000	51400	49400	44900	39400	33300
24	36000	55700	56600	51100	52900	52400	51800	51300	49300	44700	39200	33100
25	35700	54800	57000	51100	53100	52400	51700	51300	49200	44400	39000	32900
26	35500	53800	56500	51100	53000	52200	51600	51200	49100	44200	38800	32700
27	35300	53200	56000	51100	52900	52100	51500	51200	48900	43800	38600	32500
28	35000	52800	55100	51100	52800	52000	51200	51100	48800	43600	38500	32400
29	34800	52700	55200	51100	52600	51900	51000	51100	48600	43500	38300	32100
30	34600	52400	56200	51100	---	51700	50900	51000	48500	43400	38100	32000
31	34300	---	55200	51000	---	51700	---	51000	---	43300	37900	---
MAX	41700	55700	57000	54700	55100	54300	52700	52100	50900	48400	43300	37700
MIN	34300	32600	52100	51000	50500	51600	50600	51000	48500	43300	37900	32000
a	2636.92	2654.49	2656.97	2653.30	2654.72	2653.89	2653.18	2653.24	2651.03	2645.96	2640.55	2634.48
b	-7500	+18000	+2800	-4200	+1600	-900	-800	+100	-2500	-5200	-5400	-5900

CAL YR 1983 b +2100

WTR YR 1984 b -9700

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

## 11480410 MAD RIVER BELOW RUTH RESERVOIR NEAR FOREST GLEN, CA

LOCATION.--Lat 40°22'16", long 123°26'06", in SW 1/4 SW 1/4 sec.18, T.1 S., R.7 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, 1,200 ft downstream from Robert W. Matthews Dam, 5.3 mi northwest of Ruth, and 5.8 mi west of Forest Glen.

DRAINAGE AREA.--121 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 2,560 ft, from topographic map.

REMARKS.--Records good. Flow regulated by R. W. Matthews Dam, capacity, 51,800 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft<sup>3</sup>/s Dec. 19, 1981, gage height 14.13 ft; minimum daily, 7.5 ft<sup>3</sup>/s Nov. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,370 ft<sup>3</sup>/s Dec. 25, gage height, 9.30 ft; minimum daily, 56 ft<sup>3</sup>/s June 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	136	386	1360	112	451	270	122	75	71	79	91
2	96	137	353	1050	112	421	269	122	71	76	79	91
3	96	136	364	907	110	394	270	166	69	78	78	92
4	97	138	393	779	109	363	272	253	70	78	78	98
5	96	137	376	612	110	334	272	265	72	79	78	94
6	96	137	730	511	108	311	207	275	73	82	78	94
7	114	137	2750	437	110	280	131	265	72	78	78	94
8	129	137	2470	383	97	277	167	263	73	78	79	95
9	130	139	2780	345	109	269	209	229	70	79	79	95
10	106	137	3160	318	109	191	272	142	60	79	80	94
11	110	144	2810	296	111	115	410	152	56	79	80	95
12	129	142	2310	278	177	181	456	154	60	78	80	95
13	130	145	1960	266	1060	321	438	142	68	82	79	94
14	132	145	1760	251	1670	699	401	60	69	86	80	92
15	132	131	1470	172	1390	1060	361	68	70	88	80	94
16	132	176	1160	173	1490	1250	329	204	69	88	79	95
17	132	216	1080	178	1180	1240	303	243	70	89	80	95
18	114	259	897	177	926	1080	295	168	71	88	81	93
19	98	367	749	179	760	912	311	115	70	87	81	95
20	118	1210	637	180	655	784	282	114	69	86	85	96
21	132	1070	547	180	667	668	309	114	70	88	90	95
22	132	774	477	179	645	569	298	111	70	87	85	95
23	132	666	403	158	590	492	287	108	70	86	85	95
24	107	1600	1780	151	586	429	271	107	70	86	90	93
25	111	2040	3130	106	573	384	262	107	70	90	92	95
26	110	1280	2960	109	610	352	262	98	69	89	92	96
27	119	873	2750	109	571	324	263	91	69	85	91	94
28	124	652	2030	91	527	300	263	77	70	81	90	90
29	134	445	1670	110	484	281	266	75	71	80	89	91
30	135	454	2640	110	---	272	186	75	71	78	87	91
31	135	---	2220	111	---	269	---	75	---	78	91	---
TOTAL	3654	14160	49202	10266	15758	15273	8592	4560	2077	2557	2573	2817
MEAN	118	472	1587	331	543	493	286	147	69.2	82.5	83.0	93.9
MAX	135	2040	3160	1360	1670	1250	456	275	75	90	92	98
MIN	96	131	353	91	97	115	131	60	56	71	78	90
AC-FT	7250	28090	97590	20360	31260	30290	17040	9040	4120	5070	5100	5590
CAL YR 1983	TOTAL	235819	MEAN	646	MAX	7320	MIN	14	AC-FT	467700		
WTR YR 1984	TOTAL	131489	MEAN	360	MAX	3160	MIN	56	AC-FT	260800		

## MAD RIVER BASIN

11480500 MAD RIVER NEAR FOREST GLEN, CA

LOCATION.--Lat 40°27'30", long 123°30'35", in SW 1/4 sec.16, T.1 N., R.6 E., Trinity County, Hydrologic Unit 18010102, Six Rivers National Forest, on right bank 0.7 mi downstream from Lamb Creek, and 11.1 mi northwest of Forest Glen.

DRAINAGE AREA.--143 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1395: 1954. WSP 1715: 1957(M), 1958(P).

GAGE.--Water-stage recorder. Datum of gage is 2,408.18 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 22, 1955, water-stage recorder at site 0.7 mi upstream at different datum. Jan. 13 to June 18, 1956, nonrecording gage at former site at datum 4.17 ft lower than former datum.

REMARKS.--Records good. Flow regulated by Ruth Reservoir (station 11480400), 9 mi upstream, beginning in July 1961. No diversion above station.

AVERAGE DISCHARGE.--31 years, 394 ft<sup>3</sup>/s, 285,500 acre-ft/yr (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,200 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 24.5 ft present datum, from floodmarks, from rating curve extended above 8,100 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily, 0.60 ft<sup>3</sup>/s Sept. 15, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,080 ft<sup>3</sup>/s Dec. 9, gage height, 8.56 ft; minimum daily, 43 ft<sup>3</sup>/s May 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	147	494	1730	131	548	310	163	90	75	79	83
2	102	150	451	1340	130	504	305	156	88	78	79	83
3	102	150	533	1120	127	465	300	179	83	81	79	83
4	102	159	526	968	127	423	300	282	87	81	78	88
5	104	152	515	755	126	382	297	277	88	81	77	87
6	101	174	1040	623	124	355	255	291	95	83	77	86
7	112	168	3340	526	124	322	163	280	91	80	77	86
8	135	153	3030	455	112	314	228	276	88	79	78	86
9	130	156	3710	403	139	303	274	261	86	80	78	86
10	112	151	3820	370	131	249	401	166	77	81	78	85
11	120	158	3660	343	159	152	501	177	68	80	78	86
12	132	157	2980	322	316	188	544	174	69	79	78	86
13	135	158	2610	307	1370	496	511	166	79	81	78	86
14	139	158	2390	302	2010	921	461	108	80	87	78	85
15	140	153	2000	217	1770	1370	409	43	80	88	79	86
16	140	180	1610	209	1860	1580	368	198	77	88	79	86
17	140	228	1460	215	1490	1580	339	257	78	89	79	86
18	121	290	1200	211	1160	1370	337	210	77	89	79	85
19	107	450	978	212	934	1150	371	137	77	88	79	86
20	120	1650	825	212	803	972	341	135	77	87	79	86
21	141	1220	703	217	840	821	350	135	77	87	93	86
22	141	1030	602	212	794	692	334	133	76	88	83	86
23	141	860	542	194	720	590	319	130	76	88	81	86
24	115	1900	2550	181	753	506	302	130	75	88	83	85
25	118	2600	3850	144	744	449	291	129	75	90	83	88
26	117	1600	3530	134	773	412	287	118	75	93	83	88
27	122	1100	3220	134	722	370	285	116	75	88	83	86
28	130	820	2440	128	663	341	282	97	75	81	83	83
29	142	680	2110	116	598	319	286	92	75	80	82	83
30	143	569	3160	133	---	308	235	92	75	78	80	83
31	143	---	2600	132	---	318	---	91	---	78	83	---
TOTAL	3845	17521	62479	12565	19750	18770	9986	5199	2389	2594	2483	2565
MEAN	124	584	2015	405	681	605	333	168	79.6	83.7	80.1	85.5
MAX	143	2600	3850	1730	2010	1580	544	291	95	93	93	88
MIN	98	147	451	116	112	152	163	43	68	75	77	83
AC-FT	7630	34750	123900	24920	39170	37230	19810	10310	4740	5150	4930	5090
CAL YR 1983	TOTAL	302280	MEAN	828	MAX	9760	MIN	36	AC-FT	599600		
WTR YR 1984	TOTAL	160146	MEAN	438	MAX	3850	MIN	43	AC-FT	317600		

## 11481000 MAD RIVER NEAR ARCATA, CA

LOCATION.--Lat 40°54'35", long 124°03'35", in NW 1/4 NW 1/4 sec.15, T.6 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank 100 ft upstream from bridge on U.S. Highway 299, 1.0 mi downstream from Warren Creek, and 2.8 mi northeast of Arcata.

DRAINAGE AREA.--485 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to September 1913, August 1950 to current year. Monthly discharge only for some periods published in WSP 1315B.

REVISED RECORDS.--WDR CA-72-1: 1965(M).

GAGE.--Water-stage recorder. Datum of gage is 12.79 ft National Geodetic Vertical Datum of 1929. December 1910 to September 1913, nonrecording gage at site 0.1 mi upstream at different datum. August 15, 1950, to July 23, 1956, water-stage recorder at site 0.6 mi upstream at datum 11.00 ft higher. July 24, 1956, to Apr. 9, 1965, water-stage recorder at datum 5.00 ft higher. Aug. 29 to Oct. 26, 1961, auxiliary water-stage recorder at site 0.5 mi downstream at different datum.

REMARKS.--Records good except those for summer months, which are fair. Flow regulated by Ruth Reservoir (station 11480400), 68 mi upstream, beginning in July 1961. Water is diverted 0.5 mi upstream from station for municipal supply and industrial use in Humboldt Bay area.

AVERAGE DISCHARGE (adjusted for diversions).--37 years, 1,539 ft<sup>3</sup>/s, 1,115,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 30.7 ft present datum, from highwater profile; minimum daily, 0.10 ft<sup>3</sup>/s Aug. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,900 ft<sup>3</sup>/s Dec. 11, gage height, 15.13 ft; minimum daily, 27 ft<sup>3</sup>/s Sept. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	684	1580	5720	592	2180	2210	1710	339	151	78	38
2	63	696	2070	4280	608	2180	1770	2720	292	140	70	36
3	65	499	2740	3480	561	1800	1500	3070	291	150	72	36
4	65	1020	2540	3040	549	1570	1720	2480	453	156	67	34
5	63	743	2870	2580	551	1400	1530	1900	501	132	68	33
6	66	687	8150	2170	540	1270	1340	1650	738	124	66	34
7	63	950	15100	1880	526	1140	1120	1470	1770	121	65	33
8	62	627	10200	1610	513	1050	2940	1330	1070	126	62	32
9	89	1270	10500	1430	805	985	2870	1240	731	133	59	30
10	111	6170	12000	1350	1060	936	3870	1120	578	128	61	31
11	111	7150	14900	1400	1030	860	3600	2380	489	122	58	28
12	75	3800	11800	1230	3440	743	3130	3170	425	102	57	27
13	78	5260	13200	1110	8670	1550	2780	1990	385	91	56	28
14	94	3980	16900	1040	7670	4720	2360	1650	379	82	52	35
15	96	2040	11700	993	5500	5540	2090	1370	344	80	53	38
16	99	2220	7750	922	7750	6770	1870	1120	308	84	53	42
17	101	6820	6750	848	5730	6930	1680	1170	285	82	49	39
18	103	5380	5000	797	4150	5050	1610	1100	265	74	47	33
19	99	6680	3930	761	3420	4090	2010	941	242	73	50	47
20	75	8980	2990	747	3230	3560	2410	779	223	71	50	35
21	68	5640	2440	1010	5570	3350	2060	719	218	72	46	38
22	94	3750	1970	1200	4120	2670	1850	668	194	72	45	37
23	111	3840	1860	1120	3080	2160	1660	626	183	72	47	29
24	114	10500	7000	995	3870	1800	1520	560	184	71	45	31
25	98	10300	10500	906	6670	1550	1390	540	173	72	45	32
26	73	6280	10500	817	3990	2730	1300	548	159	74	43	37
27	68	4230	9250	773	3120	2580	1220	508	158	72	41	40
28	69	3030	6880	704	2700	1820	1100	450	162	72	42	39
29	81	2230	6730	679	2360	1430	1030	383	157	72	41	44
30	125	1710	10600	632	---	1230	1060	374	151	73	39	58
31	298	---	8110	613	---	2140	---	355	---	75	40	---
TOTAL	2846	117166	238510	46837	92375	77784	58600	40091	11847	3019	1667	1074
MEAN	91.8	3906	7694	1511	3185	2509	1953	1293	395	97.4	53.8	35.8
MAX	298	10500	16900	5720	8670	6930	3870	3170	1770	156	78	58
MIN	62	499	1580	613	513	743	1030	355	151	71	39	27
AC-FT	5650	232400	473100	92900	183200	154300	116200	79520	23500	5990	3310	2130
a	4950	4440	4330	4310	4330	4600	4430	4940	4930	4890	5280	4860

CAL YR 1983 TOTAL 1033607 MEAN 2832 MAX 24400 MIN 32 AC-FT 2050000  
WTR YR 1984 TOTAL 691816 MEAN 1890 MAX 16900 MIN 27 AC-FT 1372000

a Diversion, in acre-feet, for municipal supply and industrial use; furnished by Humboldt Municipal Water District.

## 11481200 LITTLE RIVER NEAR TRINIDAD, CA

LOCATION.--Lat 41°00'40", long 124°04'50", in NE 1/4 sec.8, T.7 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, on right bank 0.5 mi upstream from Coon Creek, 4.7 mi southeast of Trinidad, and 9.1 mi north of Arcata.

DRAINAGE AREA.--40.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1955 to current year. Prior to October 1971, published as "at Crannell."

REVISED RECORDS.--WSP 2129: 1956-60. WDR CA-78-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 17.62 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--29 years, 148 ft<sup>3</sup>/s, 107,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft<sup>3</sup>/s Mar. 18, 1975, gage height, 14.19 ft, from rating curve extended above 3,100 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 14.08 ft; minimum daily, 2.8 ft<sup>3</sup>/s Oct. 20-22, 1964.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 17, 18, 1953, reached a stage of 15.7 ft, observed by an employee of Hammond Lumber Co.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage Height (ft)
Dec. 6	2100	3,960	8.03
Dec. 11	1315	4,260	8.35
Dec. 14	1030	*4,690	8.80

Minimum daily 6.7, ft<sup>3</sup>/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	267	95	510	54	185	196	335	43	27	14	9.7
2	11	103	125	330	51	164	156	434	43	25	14	9.5
3	10	82	209	245	48	138	132	515	41	25	14	9.0
4	9.5	393	182	200	47	119	140	344	76	23	13	9.0
5	9.5	110	386	168	46	106	120	242	66	22	13	9.1
6	9.5	203	2010	150	45	95	105	195	248	22	13	9.0
7	9.5	154	1860	136	43	89	109	163	277	21	12	9.0
8	9.5	82	936	122	44	82	622	143	135	21	12	9.0
9	9.7	244	1130	111	148	76	404	130	94	21	12	8.9
10	17	843	1190	113	216	75	560	120	79	21	12	8.4
11	15	605	2130	115	175	74	413	468	68	21	11	8.4
12	13	335	1150	99	316	73	322	369	62	20	11	8.2
13	12	507	1570	90	1150	291	256	233	58	19	11	7.2
14	11	384	2950	82	581	461	216	187	56	19	9.7	7.2
15	9.6	212	1460	95	418	655	194	148	51	18	9.7	7.8
16	9.5	246	970	98	699	797	172	125	48	17	9.7	7.8
17	9.5	715	788	85	509	749	153	109	45	16	9.7	7.8
18	9.5	452	523	77	338	438	155	96	44	16	9.7	7.8
19	9.5	697	373	72	252	298	241	88	42	16	9.7	8.0
20	9.5	731	282	69	239	266	247	81	40	16	9.7	8.3
21	9.5	405	231	110	502	290	196	74	39	15	9.7	7.8
22	9.5	279	186	111	362	229	166	70	36	16	9.7	7.8
23	10	293	183	113	258	189	147	66	34	16	9.7	7.7
24	12	973	636	99	500	158	132	62	34	16	9.7	7.2
25	12	695	990	89	745	142	119	59	34	15	9.7	7.2
26	11	375	909	81	429	412	111	59	32	15	9.7	7.2
27	11	256	569	73	305	317	104	55	30	15	9.7	7.2
28	9.6	187	419	67	239	219	97	51	30	14	9.7	7.2
29	9.5	141	680	63	197	176	91	48	29	14	9.7	6.7
30	52	113	950	60	---	147	96	46	28	14	9.7	7.8
31	186	---	700	57	---	232	---	46	---	14	9.7	---
TOTAL	546.4	11082	26772	3890	8956	7742	6172	5161	1942	570	336.6	242.9
MEAN	17.6	369	864	125	309	250	206	166	64.7	18.4	10.9	8.10
MAX	186	973	2950	510	1150	797	622	515	277	27	14	9.7
MIN	9.5	82	95	57	43	73	91	46	28	14	9.7	6.7
AC-FT	1080	21980	53100	7720	17760	15360	12240	10240	3850	1130	668	482
CAL YR 1983	TOTAL	98178.8	MEAN	269	MAX	3600	MIN	9.5	AC-FT	194700		
WTR YR 1984	TOTAL	73412.9	MEAN	201	MAX	2950	MIN	6.7	AC-FT	145600		

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA

LOCATION.--Lat 40°54'22", long 123°48'51", in SE 1/4 NE 1/4 sec.15, T.6 N., R.3 E., Humboldt County, Hydrologic Unit 18010102, on right bank 400 ft upstream from Lupton Creek, and 9.1 mi east of town of Blue Lake.

DRAINAGE AREA.--67.7 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1953 to September 1958, October 1972 to current year.

REVISED RECORDS.--WDR CA-78-2: Drainage area.

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

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

AVERAGE DISCHARGE.--17 years, 269 ft<sup>3</sup>/s, 194,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft<sup>3</sup>/s Mar. 18, 1975, gage height, 13.70 ft, from rating curve extended above 6,400 ft<sup>3</sup>/s; minimum daily, 2.6 ft<sup>3</sup>/s Aug. 24, Sept. 11-15, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1545	2,770	6.84	Dec. 11	1015	3,830	7.87
Nov. 17	0645	2,370	6.42	Dec. 14	0900	3,500	7.54
Nov. 24	0930	3,210	7.26	Dec. 30	0530	2,110	6.13
Dec. 6	2130	*3,950	7.98	Feb. 13	1245	3,210	7.26

Minimum daily, 5.6 ft<sup>3</sup>/s Sept. 29.DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	109	310	643	118	499	397	540	105	44	16	9.4
2	13	61	481	525	112	485	373	600	99	42	16	9.4
3	12	56	582	445	107	429	353	693	99	39	17	8.6
4	12	135	449	389	103	392	401	510	147	37	17	7.9
5	11	68	591	352	99	371	362	400	120	36	16	7.5
6	11	146	2070	319	96	355	332	335	181	34	15	7.5
7	10	119	2240	300	94	339	322	301	268	33	15	7.5
8	10	77	1150	278	92	330	688	266	178	32	14	7.5
9	10	357	1670	255	149	318	591	250	142	31	13	7.5
10	11	1390	1690	266	150	308	890	244	130	31	13	7.3
11	11	820	2430	254	316	294	660	704	119	30	13	6.9
12	11	623	1750	226	627	283	700	557	112	29	13	6.8
13	11	842	2520	21	1680	554	620	407	104	28	13	6.8
14	11	558	2890	192	895	782	560	380	94	27	12	6.8
15	10	347	1930	187	822	861	490	348	84	25	12	7.1
16	10	484	1340	180	893	840	470	290	80	24	12	7.2
17	10	1640	1000	168	667	880	390	280	75	22	12	7.1
18	10	833	741	158	570	716	400	253	71	22	11	6.5
19	10	1550	609	151	551	654	450	231	68	21	11	6.7
20	9.9	1420	517	148	610	638	470	214	66	20	11	6.8
21	9.8	754	439	241	770	619	430	201	65	20	10	6.8
22	9.4	554	376	219	600	523	400	187	61	20	9.8	6.8
23	11	748	391	204	523	467	341	175	58	20	9.8	6.6
24	13	1960	1090	184	821	428	323	160	55	20	9.8	6.5
25	11	1250	1190	173	951	403	280	155	52	20	9.8	6.5
26	10	754	1160	162	693	564	260	143	50	19	9.8	6.2
27	9.4	562	1060	152	597	500	246	135	49	19	9.5	5.9
28	9.3	445	795	144	545	417	230	127	48	19	9.4	5.9
29	8.9	364	881	138	497	381	210	120	47	18	9.0	5.6
30	12	313	1440	130	---	357	246	112	47	17	9.0	6.2
31	43	---	811	124	---	407	---	108	---	16	9.3	---
TOTAL	364.7	19339	36593	7514	14748	15394	12885	9426	2874	815	377.2	211.8
MEAN	11.8	645	1180	242	509	497	430	304	95.8	26.3	12.2	7.06
MAX	43	1960	2890	643	1680	880	890	704	268	44	17	9.4
MIN	8.9	56	310	124	92	283	210	108	47	16	9.0	5.6
AC-FT	723	38360	72580	14900	29250	30530	25560	18700	5700	1620	748	420
CAL YR 1983	TOTAL	160065.7	MEAN	439	MAX	4330	MIN	8.9	AC-FT	317500		
WTR YR 1984	TOTAL	120541.7	MEAN	329	MAX	2890	MIN	5.6	AC-FT	239100		

## REDWOOD CREEK BASIN

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973 to current year.

CHEMICAL ANALYSES: Water years 1974-75.

WATER TEMPERATURES: Water years 1973 to current year.

SEDIMENT RECORDS: Water years 1973 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1972 to September 1981, October 1981 to current year (storm season only).

SEDIMENT RECORDS: October 1972 to September 1981, October 1981 to current year (storm season only).

INSTRUMENTATION.--Temperature recorder October 1972 to September 30, 1980.

REMARKS.--Zero bedload discharge observed at flows less than 250 ft<sup>3</sup>/s.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 33.5°C Aug. 2, 1977; minimum recorded, 0.5°C Jan. 9, 1977.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 11,200 mg/L Mar. 18, 1975; minimum daily mean, 0 mg/L on several days in 1976, 1980, 1983, and 1984 water years.

SEDIMENT DISCHARGE: Maximum daily, 276,000 tons Mar. 18, 1975; minimum daily, 0 ton on several days in 1976, 1980, 1983, and 1984 water years.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum observed, 19.5°C Oct. 15; minimum observed, 5.0°C Jan. 14, 17, 18, 20 and Feb. 21.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,280 mg/L Dec. 11; minimum daily mean, 0 mg/L on Oct. 3, 4, 13.

SEDIMENT DISCHARGE: Maximum daily, 18,200 tons Dec. 11; minimum daily, 0 ton on Oct. 3, 4, 13.

TEMPERATURE (DEG. C) OF WATER, OCTOBER 1983 TO APRIL 1984  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18.0	---	---	---	7.0	9.0	---					
2	---	---	9.0	9.0	---	6.5	---					
3	19.0	---	7.5	9.5	8.0	---	---					
4	---	---	8.0	9.5	7.0	6.0	8.0					
5	19.5	---	7.0	9.5	8.0	8.0	---					
6	---	---	8.0	9.0	---	10.0	---					
7	18.0	---	9.0	9.0	---	11.0	---					
8	---	---	9.0	---	9.0	10.5	---					
9	19.0	10.5	9.0	9.0	8.0	10.0	6.0					
10	---	---	9.0	9.0	7.0	10.5	8.0					
11	19.0	---	8.0	8.0	7.0	9.0	9.0					
12	---	---	8.0	7.0	8.0	9.5	11.0					
13	18.0	---	9.0	6.0	8.5	9.5	12.0					
14	---	9.0	9.5	5.0	5.5	8.0	14.0					
15	17.0	---	9.0	5.5	7.5	7.0	10.0					
16	---	---	9.5	---	6.5	8.0	10.0					
17	15.0	9.5	9.0	5.0	6.0	8.0	11.0					
18	---	---	9.0	5.0	7.0	0.0	9.0					
19	---	10.0	9.0	6.5	9.0	9.5	8.0					
20	---	8.0	9.0	5.0	9.5	10.5	10.5					
21	---	8.0	---	9.0	5.0	7.5	12.0					
22	---	9.0	8.0	6.0	6.0	9.0	13.5					
23	---	9.0	---	7.0	6.0	10.5	10.0					
24	---	8.0	8.0	9.0	6.0	8.0	9.5					
25	---	8.0	8.0	9.5	7.0	8.0	8.0					
26	---	8.0	---	7.5	8.0	9.0	9.5					
27	---	8.0	8.0	7.0	8.5	9.0	11.0					
28	---	8.0	8.0	7.0	8.0	8.5	12.0					
29	---	8.0	9.0	8.0	8.5	---	11.0					
30	---	9.0	8.5	7.0	---	---	10.5					
31	---	---	---	8.0	---	---	---					
MONTH	---	---	8.5	7.5	7.5	8.5	---					

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

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	14	2	.08	109	118	43	310	21	18
2	13	1	.04	61	30	4.9	481	159	209
3	12	0	0	56	15	2.3	582	246	421
4	12	0	0	135	145	59	449	104	126
5	11	1	.03	68	32	5.9	591	191	365
6	11	1	.03	146	143	80	2070	1540	11100
7	10	1	.03	119	90	29	2240	1350	8930
8	10	1	.03	77	38	7.9	1150	415	1290
9	10	1	.03	357	584	782	1670	1400	7000
10	11	1	.03	1390	1180	5430	1690	950	4330
11	11	1	.03	820	605	1340	2430	2280	18200
12	11	1	.03	623	328	584	1750	1020	4820
13	11	0	0	842	552	1370	2520	1630	11200
14	11	1	.03	558	190	286	2890	1620	12900
15	10	1	.03	347	58	54	1930	930	4850
16	10	2	.05	484	204	303	1340	680	2460
17	10	3	.08	1640	1060	5100	1000	400	1080
18	10	2	.05	833	320	720	741	210	420
19	10	1	.03	1550	893	4270	609	150	247
20	9.9	1	.03	1420	660	2530	517	110	154
21	9.8	1	.03	754	310	631	439	75	89
22	9.4	1	.03	554	180	269	376	60	61
23	11	1	.03	748	267	640	391	80	84
24	13	1	.04	1960	2080	13000	1090	556	1740
25	11	1	.03	1250	900	3040	1190	487	1710
26	10	1	.03	754	155	316	1160	411	1360
27	9.4	1	.03	562	92	140	1060	490	1400
28	9.3	1	.03	445	54	65	795	296	672
29	8.9	1	.02	364	34	33	881	320	761
30	12	3	.10	313	26	22	1440	789	3320
31	43	40	7.2	---	---	---	811	375	821
TOTAL	364.7	---	8.23	19339	---	41157.0	36593	---	102138
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	643	200	347	118	4	1.3	499	74	100
2	525	108	153	112	4	1.2	485	66	86
3	445	71	85	107	6	1.7	429	45	52
4	389	36	38	103	4	1.1	392	37	39
5	352	33	31	99	3	.80	371	33	33
6	319	30	26	96	3	.78	355	30	29
7	300	24	19	94	3	.76	339	27	25
8	278	24	18	92	3	.75	330	24	21
9	255	21	14	149	120	52	318	20	17
10	266	35	25	150	50	20	308	24	20
11	254	23	16	316	314	383	294	20	16
12	226	14	8.5	627	435	791	283	18	14
13	207	14	7.8	1680	1680	9960	554	421	846
14	192	12	6.2	895	370	894	782	460	971
15	187	14	7.1	822	367	929	861	568	1490
16	180	11	5.3	893	680	1640	840	383	924
17	168	9	4.1	667	136	245	880	280	665
18	158	7	3.0	570	70	108	716	208	402
19	151	8	3.3	551	56	83	654	145	256
20	148	9	3.6	610	142	269	638	140	247
21	241	70	46	770	310	644	619	153	256
22	219	20	12	600	172	279	523	76	107
23	204	14	7.7	523	120	169	467	60	76
24	184	14	7.0	821	247	620	428	57	66
25	173	15	7.0	951	175	449	403	44	48
26	162	11	4.8	693	118	221	564	222	367
27	152	10	4.1	597	90	145	500	91	123
28	144	9	3.5	545	78	115	417	40	45
29	138	11	4.1	497	82	110	381	30	31
30	130	12	4.2	---	---	---	357	27	26
31	124	7	2.3	---	---	---	407	35	38
TOTAL	7514	---	923.6	14748	---	18134.39	15394	---	7436

## REDWOOD CREEK BASIN

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

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	397	30	32	540			105		
2	373	26	26	600			99		
3	353	27	26	693			99		
4	401	94	103	510			147		
5	362	30	29	400			120		
6	332	20	18	335			181		
7	322	22	19	301			268		
8	688	280	544	266			178		
9	591	203	336	250			142		
10	890	395	992	244			130		
11	660	172	307	704			119		
12	700	177	340	557			112		
13	620	105	176	407			104		
14	560	57	86	380			94		
15	490	52	69	348			84		
16	470	46	58	290			80		
17	390	32	34	280			75		
18	400	42	45	253			71		
19	450	90	113	231			68		
20	470	63	80	214			66		
21	430	34	39	201			65		
22	400	30	32	187			61		
23	341	21	19	175			58		
24	323	20	17	160			55		
25	280	18	14	155			52		
26	260	19	13	143			50		
27	246	15	10	135			49		
28	230	13	8.1	127			48		
29	210	10	5.7	120			47		
30	246	20	13	112			47		
31	---	---	---	108			---		
TOTAL	12885	---	3603.8	9426			2874		

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO APRIL 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	364.70	8.23	0	8
NOVEMBER ...	19339.00	41157.00	12200	53400
DECEMBER ...	36593.00	102138.00	31600	134000
JANUARY 1984	7514.00	923.60	386	1310
FEBRUARY ...	14748.00	18134.39	6520	24700
MARCH .....	15394.00	7436.00	3710	11100
APRIL .....	12885.00	3603.80	2250	5850
TOTAL .....	120541.70	173401.02	56666	230360

11481500 REDWOOD CREEK NEAR BLUE LAKE, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
NOV											
09...	1405	568	10.5	836	1280	25	34	46	58	69	--
17...	1145	1870	9.5	1110	5600	19	21	27	37	48	--
DEC											
14...	1525	2990	9.5	1420	11500	16	22	31	41	50	--
FEB											
12...	1140	667	8.0	397	715	31	37	46	55	64	--
13...	1215	3180	8.0	2990	25700	16	21	29	40	49	59
MAR											
01...	1315	481	8.0	64	83	--	--	--	--	--	--

DATE	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV										
09...	77	--	82	--	91	--	97	--	--	--
17...	56	--	66	--	78	--	92	--	98	100
DEC										
14...	59	--	68	--	80	--	93	--	99	100
FEB										
12...	71	--	76	--	82	--	89	--	99	100
13...	--	71	--	85	--	97	--	100	--	--
MAR										
01...	80	--	84	--	88	--	92	--	97	100

## REDWOOD CREEK BASIN

11482110 LACKS CREEK NEAR ORICK, CA

LOCATION.--Lat 41°03'39", long 123°51'57", unsurveyed, Humboldt County, Hydrologic Unit 18010102, on right bank at private road bridge, 0.3 mi upstream from mouth, and 19 mi southeast of Orick.

DRAINAGE AREA.--16.9 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 480 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,300 ft<sup>3</sup>/s Dec. 16, 1982, gage height, unknown; maximum recorded gage height, 25.95 ft Dec. 6, 1983; minimum daily, 0.38 ft<sup>3</sup>/s Oct. 10, 1980.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 6	2045	*1,570	25.95
Dec. 11	1230	1,220	25.67

Minimum daily, 0.64 ft<sup>3</sup>/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	60	68	185	22	112	68	165	13	7.1	2.1	1.2
2	2.1	23	81	128	20	103	59	207	12	6.4	2.1	1.1
3	1.8	38	154	97	19	85	54	245	12	6.1	2.2	1.0
4	1.8	84	122	77	17	70	73	189	21	5.5	2.3	.91
5	1.7	32	230	64	17	59	62	131	17	5.2	2.1	.91
6	1.7	150	864	56	16	51	56	97	71	5.0	2.0	.91
7	1.6	70	835	49	15	45	56	77	103	4.8	1.9	.91
8	1.6	41	404	44	15	39	212	63	57	4.5	1.8	.91
9	1.6	228	464	38	51	35	207	54	43	4.5	1.7	.91
10	1.9	338	490	45	56	32	334	49	35	4.4	1.5	.85
11	1.9	361	792	45	130	30	256	246	30	4.3	1.5	.84
12	1.7	258	554	38	261	29	201	186	26	4.1	1.5	.84
13	1.7	382	833	33	675	91	144	128	23	4.1	1.5	.79
14	1.6	284	952	31	381	176	111	100	21	3.8	1.5	.79
15	1.6	168	644	32	368	341	90	80	19	3.6	1.5	.81
16	1.4	238	407	31	419	360	76	67	17	3.4	1.4	.84
17	1.5	578	311	28	283	334	65	57	16	3.2	1.4	.79
18	1.6	342	214	25	197	246	73	49	14	3.0	1.4	.74
19	1.4	542	150	24	154	170	99	42	13	3.0	1.3	.83
20	1.4	509	112	24	159	130	119	37	13	2.8	1.3	.84
21	1.4	286	86	58	239	113	94	33	12	2.7	1.2	.83
22	1.4	183	54	52	181	92	81	29	11	2.7	1.1	.74
23	1.8	238	80	48	137	77	69	27	11	2.7	1.1	.73
24	2.1	624	456	44	318	67	60	24	9.9	2.7	1.1	.73
25	1.9	435	408	41	423	60	51	22	9.3	2.7	1.1	.73
26	1.6	271	377	37	258	112	46	21	8.8	2.7	1.1	.68
27	1.4	172	309	33	180	97	40	19	8.4	2.6	1.1	.68
28	1.4	119	243	31	139	81	35	17	8.1	2.6	1.1	.65
29	1.4	91	337	29	112	71	31	16	7.7	2.4	1.1	.64
30	5.4	74	530	26	---	62	35	15	7.6	2.3	1.1	.73
31	18	---	291	24	---	78	---	14	---	2.1	1.2	---
TOTAL	71.6	7219	11852	1517	5262	3448	2957	2506	669.8	117.0	46.3	24.86
MEAN	2.31	241	382	48.9	181	111	98.6	80.8	22.3	3.77	1.49	.83
MAX	18	624	952	185	675	360	334	246	103	7.1	2.3	1.2
MIN	1.4	23	54	24	15	29	31	14	7.6	2.1	1.1	.64
AC-FT	142	14320	23510	3010	10440	6840	5870	4970	1330	232	92	49
CAL YR 1983	TOTAL	44535.70	MEAN	122	MAX	1110	MIN	1.10	AC-FT	88340		
WTR YR 1984	TOTAL	35690.56	MEAN	97.5	MAX	952	MIN	.64	AC-FT	70790		

WATER-QUALITY RECORDS

SEDIMENT RECORDS: Water years 1975, 1978 to current year.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

	SED.	SED.	SED.	SED.	SED.	SED.	SED.	SED.
	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.	SUSP.
	FALL	FALL	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE	SIEVE
	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER	% FINER
	THAN	THAN	THAN	THAN	THAN	THAN	THAN	THAN
DATE	.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM	1.00 MM	2.00 MM

NOV								
07...	--	--	--	--	--	--	--	--
DEC								
01...	--	--	--	--	--	--	--	--
07...	49	60	68	77	85	92	99	100
07...	--	--	66	--	--	--	--	--
07...	--	--	70	--	--	--	--	--
JAN								
03...	--	--	--	--	--	--	--	--
FEB								
02...	--	--	--	--	--	--	--	--
MAR								
07...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--

## REDWOOD CREEK BASIN

11482120 REDWOOD CREEK ABOVE PANTHER CREEK NEAR ORICK, CA

LOCATION.--Lat 41°05'21", long 123°54'23", unsurveyed, Humboldt County, Hydrologic Unit 18010102, on right bank 100 ft upstream from Panther Creek, 2.0 mi upstream from south boundary of Redwood National Park, 16 mi southeast of Orick, and 28 mi upstream from mouth.

DRAINAGE AREA.--150 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 490 ft, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft<sup>3</sup>/s Dec. 16, 1982, gage height, 16.08 ft; minimum daily, 6.2 ft<sup>3</sup>/s Sept. 14, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 5,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 19	2345	5,350	9.23	Dec. 11	1315	8,810	12.06
Nov. 24	1330	6,310	10.07	Dec. 14	1100	8,160	11.58
Dec. 6	2215	*9,690	12.60	Feb. 13	1430	6,040	9.83

Minimum daily, 11 ft<sup>3</sup>/s Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	208	942	1890	269	1140	772	1130	193	100	30	15
2	29	158	1090	1490	255	1070	703	1330	183	93	30	15
3	28	145	1440	1240	241	930	653	1570	178	85	30	15
4	28	271	1230	1070	233	825	761	1220	243	78	30	15
5	27	171	1740	942	224	752	690	979	219	78	30	15
6	26	316	5280	831	215	701	622	833	398	75	29	15
7	25	266	6260	749	211	642	584	729	638	72	25	14
8	24	186	3600	693	209	579	1560	641	362	65	22	14
9	24	839	3990	618	387	532	1430	565	284	63	23	13
10	27	2160	4570	628	454	488	2100	512	249	64	23	13
11	27	2250	5880	622	761	459	1710	1720	226	64	22	12
12	26	1300	4560	531	1770	439	1510	1440	211	63	22	12
13	25	2130	6170	476	3940	834	1290	1050	199	59	22	12
14	24	1650	7010	437	2810	1600	1110	903	189	57	22	12
15	24	868	5070	417	2330	2020	1000	788	178	52	21	12
16	24	1210	3820	413	3100	2440	896	704	168	49	20	13
17	24	3690	3110	378	2280	2540	804	619	161	46	20	13
18	23	2670	2360	353	1750	1900	800	538	155	42	20	13
19	23	3710	1850	329	1480	1530	960	475	149	43	19	13
20	23	4160	1410	321	1420	1360	1040	425	146	41	19	13
21	22	2520	1150	571	2020	1300	893	387	143	40	18	13
22	22	1780	976	510	1520	1090	810	350	136	40	17	13
23	23	2230	942	478	1270	960	733	325	131	40	16	13
24	25	4700	2810	433	2280	864	662	305	125	40	16	13
25	25	3820	2960	405	3240	797	583	286	120	38	16	13
26	24	2380	3060	377	2130	1110	528	270	116	38	16	12
27	22	1780	2950	351	1640	1010	473	254	112	37	16	12
28	22	1470	2330	326	1390	852	420	235	110	35	16	11
29	21	1220	2960	314	1190	771	383	217	106	35	15	11
30	34	1040	3990	298	---	704	415	209	105	34	15	11
31	80	---	2600	283	---	800	---	203	---	32	15	---
TOTAL	830	51298	98110	18774	41019	33039	26895	21212	5933	1698	655	391
MEAN	26.8	1710	3165	606	1414	1066	896	684	198	54.8	21.1	13.0
MAX	80	4700	7010	1890	3940	2540	2100	1720	638	100	30	15
MIN	21	145	942	283	209	439	383	203	105	32	15	11
AC-FT	1650	101700	194600	37240	81360	65530	53350	42070	11770	3370	1300	776
CAL YR 1983	TOTAL	361101	MEAN	989	MAX	8130	MIN	21	AC-FT	716200		
WTR YR 1984	TOTAL	299854	MEAN	819	MAX	7010	MIN	11	AC-FT	594800		

11482120 REDWOOD CREEK ABOVE PANTHER CREEK, NEAR ORICK, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1974-76, 1980 to current year.

CHEMICAL ANALYSES: Water years 1974-75.

SEDIMENT RECORDS: Water years 1974-76, 1980 to current year.

REMARKS.--Prior to October 1975, published in Geological Survey open-file report, "Redwood National Park Studies," Data Release Numbers 1 and 2.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
OCT								
06...	1510	27	17.5	1	.07	--	--	--
NOV								
16...	1240	1230	11.0	240	797	27	35	44
DEC								
07...	1300	5620	10.5	1160	17600	13	19	28
07...	1400	5520	10.5	1190	17700	--	--	--
JAN								
13...	1300	473	6.0	9	11	--	--	--
FEB								
06...	1300	219	7.5	3	1.8	--	--	--
MAR								
08...	1240	585	9.5	19	30	--	--	--
APR								
03...	1400	647	17.0	19	33	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT								
06...	--	--	--	--	--	--	--	--
NOV								
16...	52	56	59	63	68	76	84	100
DEC								
07...	--	47	56	65	78	91	98	100
07...	--	--	56	--	--	--	--	--
JAN								
13...	--	--	46	--	--	--	--	--
FEB								
06...	--	--	--	--	--	--	--	--
MAR								
08...	--	--	68	--	--	--	--	--
APR								
03...	--	--	77	--	--	--	--	--

## REDWOOD CREEK BASIN

11482125 PANTHER CREEK NEAR ORICK, CA

LOCATION.--Lat 41°05'19", long 123°54'26", unsurveyed, Humboldt County, Hydrologic Unit 18010102, on right bank 300 ft upstream from mouth, 16 mi southeast of Orick.

DRAINAGE AREA.--6.07 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

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

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

AVERAGE DISCHARGE.--5 years, 31.6 ft<sup>3</sup>/s, 22,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 650 ft<sup>3</sup>/s Dec. 19, 1981, gage height, 3.92 ft; minimum daily, 0.43 ft<sup>3</sup>/s Oct. 5, 1979 and Sept. 24, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 11	1215	310	3.07
Dec. 14	0900	*503	3.56

Minimum daily, 0.89 ft<sup>3</sup>/s Sept. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	16	45	88	16	53	37	39	15	8.8	4.1	1.7
2	2.6	9.5	42	75	16	47	36	43	14	8.4	4.1	1.7
3	2.3	12	42	68	15	43	34	48	14	8.0	4.1	1.5
4	2.3	18	37	61	15	38	35	44	19	7.7	4.1	1.5
5	2.3	10	51	53	14	34	32	41	16	7.6	3.8	1.5
6	2.4	16	136	47	14	32	30	39	29	7.2	3.8	1.5
7	2.6	13	194	42	14	29	32	37	28	7.0	3.8	1.5
8	2.6	10	152	38	14	27	54	35	22	6.9	3.8	1.5
9	2.7	22	170	35	25	25	48	34	20	6.9	3.5	1.5
10	3.2	52	186	34	23	24	59	33	18	6.9	3.5	1.3
11	2.7	49	228	32	27	23	54	55	18	6.6	3.0	1.3
12	2.6	40	197	29	36	22	54	45	16	6.6	2.9	1.3
13	2.6	45	251	27	94	36	49	41	16	6.5	2.9	1.3
14	2.6	41	370	26	72	45	47	38	15	6.2	2.9	1.3
15	2.6	37	241	26	71	56	45	36	15	6.1	2.9	1.3
16	2.6	41	177	24	83	71	42	35	14	5.6	2.6	1.3
17	2.6	70	132	22	71	80	40	33	14	5.5	2.6	1.3
18	2.6	62	103	21	66	71	40	31	13	5.4	2.6	1.3
19	2.6	85	83	21	61	66	43	29	13	5.5	2.6	1.3
20	2.6	97	72	20	58	63	41	27	13	5.2	2.6	1.3
21	2.6	80	63	26	64	59	37	26	12	5.2	2.3	1.3
22	2.4	71	54	23	57	53	35	24	12	5.2	2.3	1.1
23	2.6	73	52	22	51	49	32	23	11	5.1	2.3	1.1
24	2.7	118	71	21	80	46	30	22	11	4.8	2.3	1.1
25	2.6	117	78	20	96	43	28	21	10	4.8	2.3	1.1
26	2.6	94	82	19	77	51	27	20	10	4.7	2.3	1.1
27	2.6	77	81	19	70	45	25	19	9.8	4.5	2.0	.94
28	2.4	67	80	18	64	43	24	18	9.4	4.5	2.0	.89
29	2.3	57	96	18	56	40	23	17	9.3	4.5	2.0	.89
30	6.8	50	128	17	---	38	24	16	8.9	4.4	2.0	1.1
31	9.9	---	106	17	---	41	---	16	---	4.1	1.8	---
TOTAL	91.2	1549.5	3800	1009	1420	1393	1137	985	445.4	186.4	89.8	38.82
MEAN	2.94	51.6	123	32.5	49.0	44.9	37.9	31.8	14.8	6.01	2.90	1.29
MAX	9.9	118	370	88	96	80	59	55	29	8.8	4.1	1.7
MIN	2.3	9.5	37	17	14	22	23	16	8.9	4.1	1.8	.89
AC-FT	181	3070	7540	2000	2820	2760	2260	1950	883	370	178	77

CAL YR 1983	TOTAL	14785.3	MEAN	40.5	MAX	370	MIN	2.0	AC-FT	29330
WTR YR 1984	TOTAL	12145.12	MEAN	33.2	MAX	370	MIN	.89	AC-FT	24090

11482125 PANTHER CREEK NEAR ORICK, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

WATER TEMPERATURES: Water year 1980.

SEDIMENT RECORDS: Water years 1979 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: December 1979 to September 1980.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
OCT											
06...	1310	2.3	12.5	0	.00	--	--	--	--	--	--
NOV											
10...	1125	29	11.5	22	1.7	--	--	--	--	--	--
DEC											
09...	1210	140	10.5	82	31	28	31	34	43	61	100
JAN											
04...	1615	60	10.5	12	1.9	37	--	--	--	--	--
FEB											
06...	1500	14	8.5	6	.23	82	--	--	--	--	--
MAR											
06...	1300	32	8.5	5	.43	58	--	--	--	--	--
APR											
05...	1215	31	9.0	6	.50	--	--	--	--	--	--

## REDWOOD CREEK BASIN

11482130 COYOTE CREEK NEAR ORICK, CA

LOCATION.--Lat 41°07'03", long 123°54'34", unsurveyed, Humboldt County, Hydrologic Unit 18010102, on left bank  
300 ft downstream from small left-bank tributary, 1,900 ft upstream from mouth, and 15 mi southeast of Orick.

DRAINAGE AREA.--7.78 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to September 1982, October 1983 to September 1984.

GAGE.--Water-stage recorder. Altitude of gage is 450 ft, from topographic map. Prior to October 9, 1980, at datum 2.00 ft higher.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft<sup>3</sup>/s Dec. 19, 1981, gage height 5.98 ft; minimum daily, 0.10 ft<sup>3</sup>/s Sept. 23-25, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 650 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1400	*942	4.37
Dec. 6	1830	890	4.28
Feb. 13	1000	865	4.23

Minimum daily discharge, 0.24 ft<sup>3</sup>/s Sept. 26-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	54	29	75	11	47	30	93	6.1	3.7	.79	.40
2	.86	30	33	56	11	43	24	90	5.8	3.5	.84	.39
3	.81	55	77	44	9.8	34	22	98	5.6	3.3	.86	.35
4	.79	63	53	36	9.6	28	28	59	11	3.1	.86	.32
5	.79	30	126	30	9.0	24	23	44	8.2	2.9	.84	.29
6	.79	104	536	25	8.7	21	20	35	43	2.7	.77	.29
7	.77	65	369	22	8.3	19	32	28	46	2.6	.72	.29
8	.72	31	214	20	8.3	17	174	24	23	2.6	.70	.29
9	.88	134	256	18	27	15	106	20	16	2.6	.65	.29
10	1.4	328	259	20	29	14	198	18	14	2.4	.60	.29
11	1.0	162	368	21	96	14	122	88	12	2.2	.58	.29
12	.89	123	250	17	189	13	85	52	11	2.1	.55	.29
13	.86	156	375	16	403	83	60	37	9.7	2.1	.55	.29
14	.82	95	416	14	173	157	46	32	8.8	1.9	.55	.29
15	.78	70	265	16	218	223	37	26	8.1	1.9	.55	.29
16	.72	117	180	15	202	205	32	23	7.5	1.7	.54	.28
17	.72	265	124	14	108	158	26	19	7.0	1.7	.49	.26
18	.72	116	79	13	72	96	34	17	6.6	1.6	.49	.26
19	.72	281	60	12	56	66	55	15	6.0	1.6	.49	.26
20	.72	222	47	13	54	53	58	14	5.9	1.4	.48	.26
21	.70	102	39	41	86	52	42	12	6.2	1.3	.45	.26
22	.66	78	32	30	67	43	34	11	6.2	1.2	.44	.25
23	.79	143	37	26	54	34	29	11	5.9	1.2	.44	.25
24	.84	309	240	23	187	29	25	9.7	5.6	1.2	.40	.25
25	.77	209	190	20	208	28	21	9.2	5.3	1.1	.40	.25
26	.72	100	151	18	98	80	18	8.8	5.0	1.1	.40	.24
27	.66	72	105	16	71	54	16	8.2	5.0	1.0	.40	.24
28	.66	53	95	15	55	39	14	7.7	4.7	1.0	.36	.24
29	.68	41	190	14	45	33	13	6.9	4.5	1.0	.36	.24
30	6.7	33	256	13	---	28	14	6.7	4.0	.94	.36	.26
31	22	---	115	12	---	34	---	6.6	---	.86	.39	---
TOTAL	51.87	3641	5566	725	2573.7	1784	1438	929.8	313.7	59.50	17.30	8.45
MEAN	1.67	121	180	23.4	88.7	57.5	47.9	30.0	10.5	1.92	.56	.28
MAX	22	328	536	75	403	223	198	98	46	3.7	.86	.40
MIN	.66	30	29	12	8.3	13	13	6.6	4.0	.86	.36	.24
AC-FT	103	7220	11040	1440	5100	3540	2850	1840	622	118	34	17

WTR YR 1984 TOTAL 17108.32 MEAN 46.7 MAX 536 MIN .24 AC-FT 33930

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

[illegible]

## REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CA

LOCATION.--Lat 41°17'18", long 124°03'27", in NE 1/4 NE 1/4 sec.4, T.10 N., R.1 E., Humboldt County, Hydrologic 18010102, on left bank at upstream side of bridge on U.S. Highway 101 at Orick, 0.9 mi downstream from Prairie Creek.

DRAINAGE AREA.--278 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1911 to September 1913, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1315-B: 1912-13.

GAGE.--Water-stage recorder. Datum of gage is 5.16 ft National Geodetic Vertical Datum of 1929. Sept. 10, 1911, to Aug. 9, 1913, nonrecording gage at different datum.

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

AVERAGE DISCHARGE.--33 years, 1,089 ft<sup>3</sup>/s, 789,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,500 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 24.0 ft, from outside high-water marks; minimum daily, 9.3 ft<sup>3</sup>/s Oct. 17-19, 21, 23-26, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 18, 1953, reached a stage of 23.95 ft, from floodmarks, discharge, 50,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 9,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1745	9,420	13.32	Dec. 14	1345	*17,900	16.37
Dec. 7	0030	15,600	15.66	Feb. 13	1645	9,280	13.26

Minimum daily, 20 ft<sup>3</sup>/s Sept. 29-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	515	1590	3450	481	1920	1420	1620	459	192	81	38
2	50	472	1690	2830	453	1870	1270	2460	429	181	80	38
3	48	379	2220	2370	424	1630	1170	2590	412	166	79	37
4	46	822	2140	2020	401	1450	1250	2250	569	151	79	36
5	45	514	2540	1730	379	1320	1190	1820	615	151	78	35
6	45	807	7500	1490	361	1220	1100	1520	881	148	75	36
7	43	832	12000	1300	346	1120	1040	1340	1670	142	71	31
8	42	527	6400	1160	338	1040	2430	1200	1120	138	66	28
9	42	1200	6380	1040	647	982	2310	1130	858	131	64	27
10	52	3490	8710	1020	897	937	3340	1060	735	129	62	26
11	52	4580	9880	1030	972	902	3060	2340	646	131	60	25
12	47	2670	8320	912	2520	890	2640	2420	584	129	59	24
13	45	3450	10100	829	5730	1330	2280	1840	529	124	57	24
14	43	3130	14400	765	4620	2620	1940	1600	489	113	55	24
15	41	1920	11000	752	3650	3260	1730	1400	445	107	54	25
16	40	2020	6860	748	4630	4570	1570	1270	402	107	53	25
17	40	4420	5360	683	3570	4340	1420	1170	367	103	52	25
18	39	3870	3990	638	2820	3330	1410	1070	338	99	51	25
19	39	4630	3270	605	2400	2680	1760	995	315	95	49	25
20	38	6030	2700	579	2180	2340	1980	929	302	93	48	25
21	38	3750	2290	839	3180	2330	1680	871	287	90	46	25
22	37	2670	1980	866	2800	2010	1500	815	272	91	44	25
23	37	2660	1800	808	2360	1790	1370	773	260	91	44	25
24	39	6550	4040	736	3240	1620	1240	718	246	91	41	23
25	40	6100	4540	691	5300	1470	1140	674	236	90	41	22
26	40	3980	5040	654	3660	2170	1050	658	226	86	41	22
27	38	3070	4400	617	2920	2140	972	623	218	86	41	21
28	37	2480	3490	583	2450	1730	895	579	215	85	40	21
29	36	2080	4270	555	2080	1500	832	534	208	85	38	20
30	71	1810	6320	530	---	1350	843	505	197	84	38	20
31	376	---	4360	503	---	1450	---	489	---	81	38	---
TOTAL	1677	81428	169580	33333	65809	59311	47832	39263	14530	3590	1725	803
MEAN	54.1	2714	5470	1075	2269	1913	1594	1267	484	116	55.6	26.8
MAX	376	6550	14400	3450	5730	4570	3340	2590	1670	192	81	38
MIN	36	379	1590	503	338	890	832	489	197	81	38	20
AC-FT	3330	161500	336400	66120	130500	117600	94870	77880	28820	7120	3420	1590
CAL YR 1983	TOTAL	67004	MEAN	1836	MAX	14400	MIN	36	AC-FT	1329000		
WTR YR 1984	TOTAL	518881	MEAN	1418	MAX	14400	MIN	20	AC-FT	1029000		

11482500 REDWOOD CREEK AT ORICK, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955-56, 1959 to current year.

CHEMICAL ANALYSES: Water years 1959-66, 1973-81.

WATER TEMPERATURES: Water years 1966 to current year.

SEDIMENT RECORDS: Water years 1955-56, 1970 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: October 1965 to September 1981, October 1981 to current year (storm season only).

SEDIMENT RECORDS: March 1970 to September 1981, October 1981 to current year (storm season only).

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 24.0°C July 10, 1976; minimum recorded, 1.0°C Dec. 14, 1967.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 9,610 mg/L Mar. 18, 1975; minimum daily mean, 1 mg/L on many days in 1970, 1973-74, 1976, 1978-81 and several days in 1983-84.

SEDIMENT DISCHARGE: Maximum daily, 1,070,000 tons Mar. 18, 1975; minimum daily, 0.03 ton Oct. 7, 8, 11, 12, 1970, Oct. 9, 10, 1979, and several days during 1981.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum observed, 19.5°C Oct. 10; minimum observed, 5.5°C Dec. 22-23.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,670 mg/L Nov. 24; minimum daily mean, 1 mg/L on several days during the year.

SEDIMENT DISCHARGE: Maximum daily, 54,500 tons Dec. 7; minimum daily, 0.10 ton Oct. 20, 27-29.

TEMPERATURE (DEG C) OF WATER, OCTOBER 1983 TO APRIL 1984  
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	14.5	10.0	9.5	10.5	10.5	11.0					
2	17.0	13.5	10.5	9.5	11.5	9.0	9.5					
3	---	14.5	9.0	9.5	9.5	10.0	11.5					
4	17.0	13.5	8.5	10.0	10.0	9.5	10.5					
5	---	12.0	8.5	10.0	9.5	11.5	11.5					
6	18.0	13.0	10.5	9.5	11.0	11.5	12.0					
7	---	12.0	11.0	10.5	---	12.0	10.5					
8	15.0	11.5	10.0	9.0	---	11.5	11.5					
9	---	11.5	10.5	9.5	9.0	12.5	8.0					
10	19.5	12.0	10.5	10.5	8.0	11.5	11.0					
11	---	12.0	9.0	10.0	8.5	11.5	10.0					
12	---	11.5	9.0	10.0	11.0	12.5	11.0					
13	17.0	10.5	10.0	9.0	10.0	11.0	12.0					
14	---	10.5	11.0	7.0	7.5	10.0	13.0					
15	---	11.0	11.0	7.0	9.5	9.5	11.5					
16	---	11.0	10.5	8.0	7.5	---	10.5					
17	17.0	11.0	11.5	8.5	8.0	9.5	12.0					
18	---	10.0	---	8.0	8.5	10.0	11.0					
19	16.0	11.0	10.0	7.0	10.5	13.0	9.0					
20	---	9.5	8.0	7.0	10.5	11.0	9.5					
21	16.5	9.0	7.0	8.5	9.5	10.0	10.0					
22	---	8.5	5.5	9.0	8.5	12.0	13.0					
23	---	10.0	5.5	9.5	7.0	11.0	12.0					
24	---	10.5	8.5	10.0	7.5	12.5	13.0					
25	17.5	9.0	---	11.5	9.0	10.5	11.5					
26	---	9.5	---	10.0	9.0	10.5	12.0					
27	16.0	10.0	9.0	8.5	9.5	10.5	11.0					
28	---	9.5	8.5	9.5	10.5	10.5	12.5					
29	14.5	9.0	10.0	7.0	10.0	12.0	13.0					
30	15.0	10.5	10.5	9.5	---	11.5	10.5					
31	14.0	---	10.0	9.0	---	10.5	---					
MONTH	---	11.0	9.5	9.0	9.5	11.0	11.0					

## REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

OCTOBER				NOVEMBER				DECEMBER			
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	51	2	.28	515	87	141	1590	51	219		
2	50	2	.27	472	28	36	1690	57	260		
3	48	1	.13	379	12	12	2220	222	1480		
4	46	1	.12	822	131	306	2140	120	693		
5	45	2	.24	514	16	22	2540	362	3100		
6	45	2	.24	807	111	330	7500	1420	36900		
7	43	3	.35	832	45	101	12000	1560	54500		
8	42	4	.45	527	10	14	6400	500	8640		
9	42	5	.57	1200	327	1640	6380	748	15800		
10	52	6	.84	3490	1070	15800	8710	925	23700		
11	52	4	.56	4580	770	9520	9880	1390	43900		
12	47	3	.38	2670	213	1560	8320	640	14400		
13	45	2	.24	3450	380	3780	10100	772	21900		
14	43	3	.35	3130	258	2180	14400	1060	43800		
15	41	4	.44	1920	100	518	11000	770	22900		
16	40	5	.54	2020	160	893	6860	550	10200		
17	40	7	.76	4420	951	13400	5360	390	5640		
18	39	3	.32	3870	380	3510	3990	228	2460		
19	39	1	.11	4630	928	15300	3270	162	1430		
20	38	1	.10	6030	900	14700	2700	128	933		
21	38	2	.21	3750	310	3140	2290	100	618		
22	37	2	.20	2670	165	1190	1980	84	449		
23	37	2	.20	2660	250	1800	1800	66	321		
24	39	2	.21	6550	1670	35900	4040	653	7830		
25	40	2	.22	6100	725	11900	4540	616	8280		
26	40	1	.11	3980	250	2690	5040	660	8980		
27	38	1	.10	3070	155	1280	4400	395	4690		
28	37	1	.10	2480	110	737	3490	218	2050		
29	36	1	.10	2080	89	500	4270	487	5710		
30	71	30	13	1810	66	323	6320	876	15600		
31	376	100	98	---	---	---	4360	280	3300		
TOTAL	1677	---	119.74	81428	---	143223	169580	---	370683		

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	3450	160	1490	481	4	5.2	1920	100	518		
2	2830	135	1030	453	5	6.1	1870	80	404		
3	2370	96	614	424	5	5.7	1630	52	229		
4	2020	77	420	401	5	5.4	1450	43	168		
5	1730	66	308	379	5	5.1	1320	39	139		
6	1490	50	201	361	4	3.9	1220	34	112		
7	1300	43	151	346	4	3.7	1120	28	85		
8	1160	33	103	338	3	2.7	1040	25	70		
9	1040	24	67	647	120	249	982	17	45		
10	1020	27	74	897	69	167	937	18	46		
11	1030	27	75	972	90	332	902	24	58		
12	912	19	47	2520	481	3330	890	15	36		
13	829	17	38	5730	1180	21900	1330	132	582		
14	765	16	33	4620	545	6800	2620	369	2650		
15	752	16	32	3650	339	3450	3260	357	3530		
16	748	16	32	4630	523	6640	4570	384	4890		
17	683	12	22	3570	200	1930	4340	320	3750		
18	638	10	17	2820	136	1040	3330	180	1620		
19	605	10	16	2400	101	654	2680	115	832		
20	579	10	16	2180	85	500	2340	120	756		
21	839	53	128	3180	269	2330	2330	129	812		
22	866	32	75	2800	140	1060	2010	77	418		
23	808	17	37	2360	114	726	1790	52	251		
24	736	14	28	3240	295	3120	1620	41	179		
25	691	15	28	5300	576	8480	1470	37	147		
26	654	12	21	3660	278	2750	2170	123	788		
27	617	10	17	2920	175	1380	2140	116	670		
28	583	7	11	2450	133	880	1730	43	201		
29	555	9	13	2080	118	663	1500	28	113		
30	530	13	19	---	---	---	1350	27	98		
31	503	9	12	---	---	---	1450	34	133		
TOTAL	33333	---	5175	65809	---	68418.8	59311	---	24330		

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), OCTOBER 1983 TO APRIL 1984

[illegible]

## REDWOOD CREEK BASIN

11482500 REDWOOD CREEK AT ORICK, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO APRIL 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	1677.00	119.74	32	152
NOVEMBER ...	81428.00	143223.00	52740	196000
DECEMBER ...	169580.00	370683.00	108000	479000
JANUARY 1984	33333.00	5175.00	14600	19800
FEBRUARY ...	65809.00	68418.80	42200	111000
MARCH .....	59311.00	24330.00	35400	59700
APRIL .....	47832.00	13860.00	26400	40300
TOTAL .....	458970.00	625809.54	279372	905952

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM
DEC							
07...	1330	11000	10.5	1150	34200	--	--
30...	1135	7380	10.5	1190	23700	19	27
FEB							
12...	1030	2760	11.0	719	5360	25	28
13...	1530	8820	10.0	1900	45200	18	23
25...	1435	4920	9.0	482	6400	30	38
29...	1400	2070	9.5	105	587	--	--
MAR							
16...	1015	4370	--	368	4340	--	--

DATE	.008 MM	.016 MM	.031 MM	.062 MM	.125 MM	.250 MM	.500 MM
DEC							
07...	--	--	--	68	--	--	--
30...	37	48	61	75	89	99	100
FEB							
12...	37	47	58	69	84	97	100
13...	33	44	56	70	86	98	100
25...	49	60	69	77	86	97	100
29...	--	--	--	61	--	--	--
MAR							
16...	--	--	--	72	81	95	100

11482500 REDWOOD CREEK AT ORICK, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF BEDLOAD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

V0 to VEA

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM
DEC							
05...	1410	9.0	20	2560	160	1260	--
07...	1100	10.5	15	12800	280	14600	--
07...	1425	10.5	15	10600	230	14600	--
JAN							
12...	1400	6.0	13	910	142	140	--
FEB							
29...	1445	9.5	10	2040	163	1570	--
APR							
02...	1500	9.0	10	1270	155	420	1

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM
DEC							
05...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--
JAN							
12...	--	--	--	--	--	--	--
FEB							
29...	3	10	32	57	79	93	100
APR							
02...	11	29	46	61	78	94	100

## RESERVOIRS IN KLAMATH RIVER BASIN, CA

11511400 COPCO LAKE NEAR COPCO.--Lat 41°58'46", long 122°20'00", in SE 1/4 SW 1/4 sec.29, T.48 N., R.4 W., Siskiyou County, Hydrologic Unit 18010206, 12.7 mi northeast of Hornbrook. DRAINAGE AREA, 4,300 mi<sup>2</sup>. PERIOD OF RECORD, October 1967 to current year. GAGE, pressure device and telemark read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pacific Power and Light Co.).

Reservoir is formed by gravity-type dam completed in 1922. Normal capacity at elevation 2,607.5 ft is 46,867 acre-ft. Records represent contents at 0800 hours. Records of contents furnished by Pacific Power and Light Co.

EXTREMES (at 0800) FOR PERIOD OF RECORD: Maximum contents, 46,818 acre-ft June 24, 1969, elevation, 2,607.45 ft; minimum, 30,360 acre-ft Aug. 19, 1971, elevation, 2,589.24 ft.

EXTREMES (at 0800) FOR CURRENT YEAR: Maximum contents, 45,920 acre-ft Aug. 20, elevation, 2,606.54 ft; minimum 40,022 acre-ft Jan. 3, 4, elevation, 2,600.34 ft.

11516510 IRON GATE RESERVOIR NEAR HORN BROOK.--Lat 41°55'58", long 122°26'06", in SW 1/4 SW 1/4 sec.9, T.47 N., R.5 W., Siskiyou County, Hydrologic Unit 18010206, 6.6 mi northeast of Hornbrook. DRAINAGE AREA, 4,573 mi<sup>2</sup>. PERIOD OF RECORD, October 1967 to current year. GAGE, pressure device and telemark read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Pacific Power and Light Co.).

Reservoir is formed by earth and rockfill dam completed in 1962. Capacity is 58,794 acre-ft at elevation 2,328.0 ft, crest of spillway. Records represent contents at 0800 hours. Records of contents furnished by Pacific Power and Light Co.

EXTREMES (at 0800) FOR PERIOD OF RECORD: Maximum contents, 61,776 acre-ft Mar. 3, 1972, elevation, 2,330.96 ft; minimum, 50,103 acre-ft Dec. 9, 1968, elevation, 2,318.40 ft.

EXTREMES (at 0800) FOR CURRENT YEAR: Maximum contents, 60,906 acre-ft Dec. 17, elevation, 2,330.11 ft; minimum, 55,244 acre-ft Sept. 13, elevation, 2,324.26 ft.

## MONTHEND ELEVATION NGVD AND CONTENTS AT 0800, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
11511400 COPCO LAKE				11516510 IRON GATE RESERVOIR		
Sept. 30.....	2605.09	44506	--	2326.87	57698	--
Oct. 31.....	2602.58	42111	-2395	2328.56	59348	+1650
Nov. 30.....	2601.09	40716	-1395	2329.06	59845	+497
Dec. 31.....	2601.85	41425	+709	2329.65	60440	+595
CAL YR 1983.....	--	--	+149	--	--	+1032
Jan. 31.....	2602.15	41706	+281	2328.47	59259	-1181
Feb. 28.....	2602.46	41999	+293	2328.58	59368	+109
Mar. 31.....	2601.22	40838	-1161	2329.50	60289	+921
Apr. 30.....	2603.34	42830	+1992	2328.69	59477	-812
May 31.....	2602.94	42451	-379	2328.23	59022	-455
June 30.....	2605.10	44516	+2065	2328.43	59220	+198
July 31.....	2606.00	45390	+874	2326.72	57555	-1665
Aug. 31.....	2606.35	45734	+344	2327.35	58163	+608
Sept. 30.....	2605.53	44933	-801	2326.35	57202	-961
WTR YR 1984.....	--	--	+427	--	--	-496

## 11516530 KLAMATH RIVER BELOW IRON GATE DAM, CA

LOCATION.--Lat 41°55'41", long 122°26'35", in SE 1/4 NE 1/4 sec.17, T.47 N., R.5 W., Siskiyou County, Hydrologic Unit 18010206, on left bank 0.1 mi downstream from Bogus Creek, 0.6 mi downstream from Iron Gate Dam, and 5.9 mi northeast of Hornbrook.

DRAINAGE AREA.--4,630 mi<sup>2</sup>, approximately (not including Lost River and Lower Klamath Lake basins).

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

GAGE.--Water-stage recorder. Datum of gage is 2,162.44 ft National Geodetic Vertical Datum of 1929 (levels by Pacific Power and Light Co.).

REMARKS.--Records excellent. Flow regulated by Upper Klamath Lake, capacity, 523,700 acre-ft, Iron Gate Reservoir (station 11516510), other smaller reservoirs, and diversions above station.

AVERAGE DISCHARGE.--24 years, 2,290 ft<sup>3</sup>/s, 1,659,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 29,400 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 13.63 ft, from rating curve extended above 15,000 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily discharge, 647 ft<sup>3</sup>/s Oct. 30, Nov. 6, 1960, Sept. 24, Oct. 1, 1961.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,900 ft<sup>3</sup>/s Dec. 17, gage height, 9.26 ft; minimum daily discharge, 722 ft<sup>3</sup>/s July 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1810	2960	5110	6860	2950	3340	6680	3360	2030	970	1020	1870
2	1810	2930	5130	6290	2950	3290	6420	3850	2020	900	1030	1990
3	1810	2910	5440	5800	2950	3210	6320	3880	2030	770	1030	1820
4	1840	2900	5330	5700	2940	3200	5710	4040	2110	768	1030	1950
5	2590	2900	5120	5920	2960	3350	5720	4520	2500	830	1030	1790
6	2870	2930	5540	5950	2780	4430	5660	4480	2250	909	1030	1760
7	2890	2920	6290	5460	2430	4290	5490	4420	2050	782	1030	1760
8	2790	2900	6010	5480	2420	4240	5620	4410	3090	755	1030	1760
9	2800	2920	6440	5350	2450	4390	5670	4330	3060	758	1030	1760
10	2820	2910	5830	4570	2640	4880	5700	3740	2840	722	1020	1760
11	2940	2930	6210	4460	3050	4750	5670	3650	2790	764	1020	1540
12	2920	2950	6390	3770	3040	4900	5510	3660	2790	762	1020	1320
13	2900	2990	7620	3230	3810	5550	6200	3540	2780	752	1030	1310
14	2930	3470	9550	3140	4740	5870	6680	3600	2770	729	1020	1330
15	2900	4460	9660	3560	5630	6710	6670	3650	2730	729	1020	1540
16	2890	4600	9810	3690	5810	7080	6630	3740	2580	725	1020	1560
17	2890	5040	9420	3160	5600	7820	5570	4240	2560	727	1020	1570
18	2900	5490	7280	2940	5200	7670	5230	4190	2480	726	1020	1570
19	2900	5680	7440	2890	5210	7440	4960	4400	1840	724	1020	1570
20	2900	5800	7160	2970	5060	8120	4530	4060	1400	722	1020	1570
21	2900	5440	6710	3130	4810	7640	4450	4010	1520	722	1020	1570
22	2910	5420	6060	3100	4750	7480	4410	3600	1180	727	1020	1570
23	2940	5220	6190	3040	4730	6310	4310	3530	981	726	1020	1570
24	2910	5410	6660	3030	4530	6010	4650	3510	970	726	1020	1690
25	2910	5450	6570	3100	4320	6000	4430	3520	969	726	1020	1790
26	2910	5360	6200	3110	4280	6860	3640	3510	967	737	1020	1790
27	2900	5240	6270	3010	3950	6790	3440	3490	988	731	1020	1790
28	2900	5040	6290	2980	3350	6950	3220	3490	971	731	1020	1790
29	2910	5000	6280	2970	3320	7040	3200	3410	966	731	1020	1790
30	2910	4850	7440	2840	---	6600	3380	2900	968	731	1040	1780
31	2920	---	7350	2890	---	6790	---	2130	---	743	1210	---
TOTAL	85120	125020	208800	124390	112660	179000	155770	116860	59180	23601	31920	50230
MEAN	2746	4167	6735	4013	3885	5774	5192	3770	1973	761	1030	1674
MAX	2940	5800	9810	6860	5810	8120	6680	4520	3090	970	1210	1990
MIN	1810	2900	5110	2840	2420	3200	3200	2130	966	722	1020	1310
AC-FT	168800	248000	414200	246700	223500	355000	309000	231800	117400	46810	63310	99630
CAL YR 1983	TOTAL	1369779	MEAN	3753	MAX	10500	MIN	720	AC-FT	2717000		
WTR YR 1984	TOTAL	1272551	MEAN	3477	MAX	9810	MIN	722	AC-FT	2524000		

## KLAMATH RIVER BASIN

11517500 SHASTA RIVER NEAR YREKA, CA

LOCATION.--Lat 41°49'23", long 122°35'40", in SE 1/4 NE 1/4 sec.24, T.46 N., R.7 W., Siskiyou County, Hydrologic Unit 18010207, on right bank 0.5 mi upstream from mouth, and 7 mi north of Yreka.

DRAINAGE AREA.--793 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1933 to December 1941, December 1944 to current year.

REVISED RECORDS.--WSP 1929: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 2,000 ft, from topographic map. Prior to Nov. 2, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow partly regulated by Lake Dwinnell beginning in 1928; storage limited to 50,000 acre-ft. Many diversions above station for irrigation.

AVERAGE DISCHARGE.--47 years (water years 1934-41, 1946-84), 191 ft<sup>3</sup>/s, 138,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,500 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 12.92 ft in gage well, 13.85 ft from floodmarks, from rating curve extended above 4,100 ft<sup>3</sup>/s on basis of slope-area measurement of maximum flow; minimum daily discharge, 1.5 ft<sup>3</sup>/s Aug 24, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,710 ft<sup>3</sup>/s Dec. 30, gage height, 6.18 ft; minimum daily discharge, 18 ft<sup>3</sup>/s Aug. 9, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	209	271	995	308	329	364	183	138	46	45	144
2	178	226	263	815	303	330	354	180	132	50	50	114
3	177	232	337	719	299	324	320	183	127	44	47	82
4	167	232	416	682	297	315	342	187	128	38	32	73
5	166	226	363	643	297	300	360	182	133	36	28	68
6	166	229	403	608	293	299	376	171	140	35	30	71
7	166	231	596	606	289	299	345	165	135	33	27	68
8	166	228	562	591	291	299	356	169	134	42	20	87
9	168	232	499	576	289	295	348	159	126	57	18	66
10	172	234	497	564	292	295	321	157	119	44	23	72
11	183	255	656	542	289	294	312	172	113	38	19	76
12	181	352	681	494	289	293	300	192	104	34	18	79
13	209	372	984	443	367	308	277	205	101	32	23	75
14	207	360	1490	416	441	330	267	204	100	36	21	69
15	205	345	1280	406	407	319	258	202	92	40	21	89
16	204	316	1010	404	398	321	256	193	98	41	26	88
17	206	354	893	392	374	335	248	177	79	41	28	82
18	204	350	730	371	359	343	247	164	75	39	29	83
19	209	404	630	359	350	347	228	164	73	70	29	79
20	208	420	536	352	354	347	228	163	71	61	32	88
21	206	366	450	355	404	362	228	164	67	49	31	91
22	205	357	395	359	406	361	222	161	76	49	35	94
23	226	358	348	351	386	342	222	155	80	51	35	94
24	230	414	335	341	379	346	209	160	84	48	36	89
25	221	402	341	340	361	362	195	153	84	41	43	89
26	212	365	406	332	345	406	184	142	70	36	41	98
27	209	326	652	322	342	426	184	153	65	48	42	107
28	213	301	845	314	339	351	180	153	71	40	39	101
29	205	289	785	317	331	327	172	149	56	62	46	104
30	205	282	1430	314	---	314	174	144	40	55	64	105
31	204	---	1270	310	---	333	---	142	---	47	155	---
TOTAL	6049	9267	20354	14633	9879	10252	8077	5248	2911	1383	1133	2625
MEAN	195	309	657	472	341	331	269	169	97.0	44.6	36.5	87.5
MAX	230	420	1490	995	441	426	376	205	140	70	155	144
MIN	166	209	263	310	289	293	172	142	40	32	18	66
AC-FT	12000	18380	40370	29020	19590	20330	16020	10410	5770	2740	2250	5210
CAL YR 1983	TOTAL	136144	MEAN	373	MAX	2600	MIN	45	AC-FT	270000		
WTR YR 1984	TOTAL	91811	MEAN	251	MAX	1490	MIN	18	AC-FT	182100		

## 11519500 SCOTT RIVER NEAR FORT JONES, CA

LOCATION.--Lat 41°38'27", long 123°00'50", in NE 1/4 NE 1/4 sec.29, T.44 N., R.10 W., Siskiyou County, Hydrologic Unit 18010208, on right bank 1.8 mi upstream from Snow Creek, and 9.0 mi west of Fort Jones.

DRAINAGE AREA.--653 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1941 to current year. Monthly discharge only October to December 1941, published in WSP 1315-B.

REVISED RECORDS.--WSP 1445: 1942-43(M), 1946(M), 1948. WSP 1715: 1951-52(M). WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,623.80 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Oct. 1, 1966, water-stage recorder 400 ft downstream at datum 2.00 ft higher.

REMARKS.--Records good. Diversions for irrigation of about 30,000 acres above station.

AVERAGE DISCHARGE.--43 years, 680 ft<sup>3</sup>/s, 492,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 54,600 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 25.34 ft from floodmarks, from rating curve extended above 15,000 ft<sup>3</sup>/s on basis of slope-area measurement at 21.40 ft, site and datum then in use; minimum daily discharge, 5.0 ft<sup>3</sup>/s on several days during August 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,700 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 17	1530	2,730	9.56	Dec. 30	1815	4,510	11.22
Dec. 15	0545	*4,700	11.37	May 12	0700	3,020	9.86

Minimum daily discharge, 39 ft<sup>3</sup>/s Aug. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	229	730	2640	647	890	1010	753	1210	332	82	44
2	190	291	714	2210	644	893	948	870	1070	311	76	45
3	188	283	741	1980	631	870	903	984	1010	299	69	46
4	188	288	748	1900	621	841	950	1140	1010	289	66	46
5	189	300	685	1930	613	816	960	1040	1020	270	65	46
6	187	314	943	1930	604	803	949	943	991	256	64	47
7	183	427	2170	1880	594	797	903	882	1050	247	54	47
8	181	346	2110	1790	589	800	1020	906	905	238	65	47
9	181	328	2210	1650	593	817	1020	1110	813	230	56	47
10	183	568	2830	1540	601	828	1000	1100	758	220	52	49
11	183	1530	2200	1430	593	828	982	1810	710	211	51	49
12	187	985	1930	1340	649	819	941	2780	670	195	50	48
13	188	1080	2520	1260	1530	969	926	2290	663	188	50	47
14	190	974	3890	1170	1900	1420	933	2090	655	177	50	47
15	190	772	4490	1120	1480	1330	1060	1620	661	174	48	47
16	192	912	3490	1080	1400	1230	1240	1300	697	170	46	49
17	192	1990	2800	1020	1200	1230	1300	1170	673	165	44	49
18	195	1610	2270	970	1090	1160	1270	1130	644	159	44	51
19	193	1490	1940	932	1030	1140	1200	1210	610	152	44	53
20	194	2200	1700	886	1040	1240	1080	1420	578	143	45	57
21	193	1450	1520	867	1190	1440	987	1390	523	138	46	58
22	194	1090	1320	857	1160	1380	951	1250	470	132	46	58
23	195	968	1220	824	1080	1280	981	1500	449	128	43	58
24	205	1680	1300	796	1070	1240	992	1440	444	124	42	59
25	212	1770	1960	772	1070	1210	953	1230	449	118	41	60
26	213	1290	2790	750	1010	1290	891	1320	433	111	42	60
27	214	1070	2220	725	965	1350	833	1310	410	106	44	61
28	213	943	1890	707	934	1230	772	1350	399	100	43	61
29	212	854	2030	689	898	1160	724	1650	389	98	41	61
30	211	780	3720	672	---	1090	711	1760	360	94	39	61
31	213	---	3570	655	---	1060	---	1520	---	86	41	---
TOTAL	6043	28812	64651	38972	27426	33451	29390	42268	20724	5661	1589	1558
MEAN	195	960	2086	1257	946	1079	980	1363	691	183	51.3	51.9
MAX	214	2200	4490	2640	1900	1440	1300	2780	1210	332	82	61
MIN	181	229	685	655	589	797	711	753	360	86	39	44
AC-FT	11990	57150	128200	77300	54400	66350	58300	83840	41110	11230	3150	3090
CAL YR 1983	TOTAL	504628	MEAN	1383	MAX	7330	MIN	173	AC-FT	1001000		
WTR YR 1984	TOTAL	300545	MEAN	821	MAX	4490	MIN	39	AC-FT	596100		

## KLAMATH RIVER BASIN

11520500 KLAMATH RIVER NEAR SEIAD VALLEY, CA

LOCATION.--Lat 41°51'14", long 123°13'52", in SW 1/4 SW 1/4 sec.3, T.46 N., R.12 W., Siskiyou County, Hydrologic Unit 18010206, Klamath National Forest, on left bank 0.4 mi upstream from Bittenbender Creek, 1.4 mi downstream from Grider Creek, and 2.2 mi west of Seiad Valley.

DRAINAGE AREA.--6,940 mi<sup>2</sup>, approximately (not including Lost River or Lower Klamath Lake basins).

PERIOD OF RECORD.--October 1912 to September 1925, July 1951 to current year. Monthly discharges only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder. Altitude of gage is 1,320 ft from river-profile map. November 1912 to June 1925, nonrecording gage at site 3.5 mi upstream at different datum.

REMARKS.--Records good. Flow regulated considerably by reservoirs and powerplants above station. Large diversions above station for irrigation.

AVERAGE DISCHARGE.--46 years, 4,167 ft<sup>3</sup>/s, 3,019,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 165,000 ft<sup>3</sup>/s Dec. 23, 1964, gage height, 33.75 ft from floodmarks, from rating curve extended above 49,000 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 20.1 ft and 29.2 ft; minimum daily discharge, 320 ft<sup>3</sup>/s Nov. 25, 1917.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24,500 ft<sup>3</sup>/s Dec. 14, gage height, 13.53 ft; minimum daily discharge, 1,080 ft<sup>3</sup>/s July 29-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2320	3670	6740	14000	4740	6100	9960	5600	4840	1960	1130	1830
2	2320	3730	6800	12200	4700	6070	9500	5970	4550	1930	1300	2370
3	2320	3780	7120	11100	4670	5880	9300	6520	4420	1760	1310	2110
4	2310	3860	7340	10200	4640	5770	8910	6820	4390	1620	1310	2070
5	2300	3770	7080	10400	4620	5650	7790	7050	4670	1580	1300	2140
6	2730	4020	7750	10300	4610	6470	8600	7010	4900	1610	1290	1980
7	3360	4100	12700	10000	4180	6730	8500	6860	4490	1640	1290	1980
8	3320	3900	12000	9570	4060	6630	8600	6890	4870	1430	1270	1990
9	3300	3930	11700	9100	4100	6690	8790	7090	5170	1410	1270	2000
10	3340	4290	13000	8800	4130	7190	8900	6780	4950	1400	1250	1990
11	3410	5750	11800	8400	4590	7230	8780	7440	4670	1370	1240	1980
12	3470	5070	11800	7740	4840	7210	8610	8870	4560	1340	1230	1640
13	3470	5500	13600	6850	7080	8330	9300	8370	4530	1300	1230	1580
14	3460	5240	20900	6280	9250	9720	9910	8240	4520	1270	1230	1560
15	3490	6060	22600	6360	9140	10300	10000	7640	4520	1230	1230	1670
16	3440	6740	19500	6600	9740	11700	10100	7010	4450	1230	1220	1800
17	3430	8560	18300	6170	9050	11400	9420	7090	4290	1230	1220	1810
18	3450	8650	14300	5650	8360	11200	8980	7200	4210	1220	1220	1810
19	3450	8640	12900	5360	8100	11200	8300	7420	3900	1190	1220	1820
20	3460	10200	12000	5340	8210	11700	7980	7500	3080	1190	1220	1900
21	3450	8590	11000	5400	8160	11900	7410	7400	2920	1170	1220	1880
22	3450	7830	9780	5520	8080	11800	7180	6910	2730	1170	1220	1870
23	3580	7580	9320	5320	7910	10400	7020	7010	2440	1150	1220	1870
24	3550	9060	9830	5260	7750	9690	7390	6990	2290	1150	1230	1860
25	3530	9650	10200	5220	7440	9580	6980	6630	2280	1130	1230	2020
26	3510	8360	11400	5230	7210	10400	6240	6670	2250	1110	1230	2050
27	3490	7820	11200	5070	7000	10900	5700	6650	2190	1100	1220	2060
28	3480	7330	11100	4960	6320	10400	5390	6650	2180	1100	1210	2060
29	3480	6960	11200	4890	5930	10400	5210	7010	2110	1080	1210	2060
30	3490	6770	17900	4830	---	9940	5380	6880	2040	1080	1250	2040
31	3540	---	16900	4610	---	9870	---	5890	---	1080	1340	---
TOTAL	100700	189410	380360	226730	188610	278450	244130	218060	113410	41230	38560	57800
MEAN	3248	6314	12270	7314	6504	8982	8138	7034	3780	1330	1244	1927
MAX	3580	10200	22600	14000	9740	11900	10100	8870	5170	1960	1340	2370
MIN	2300	3670	6740	4610	4060	5650	5210	5600	2040	1080	1130	1560
AC-FT	199700	375700	754400	449700	374100	552300	484200	432500	224900	81780	76480	114600
CAL YR 1983	TOTAL	2720380	MEAN	7253	MAX	24300	MIN	1480	AC-FT	5396000		
WTR YR 1984	TOTAL	2077450	MEAN	5676	MAX	22600	MIN	1080	AC-FT	4121000		

## 11521500 INDIAN CREEK NEAR HAPPY CAMP, CA

LOCATION.--Lat 41°50'07", long 123°22'55", in SW 1/4 SW 1/4 sec.26, T.17 N., R.7 E., Siskiyou County, Hydrologic Unit 18010209, on left bank 0.2 mi upstream from Slater Creek, 3.0 mi north of Happy Camp, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--120 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1911 to September 1921 (fragmentary), December 1956 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1635: 1957-58.

GAGE.--Water-stage recorder. Datum of gage is 1,198.37 ft National Geodetic Vertical Datum of 1929. Prior to December 1956, nonrecording gages at sites 1.0 mi upstream at different datums. December 1956 to Sept. 20, 1969, water-stage recorder at site 0.8 mi upstream at different datum.

REMARKS.--Records good. Small diversions above station for irrigation.

AVERAGE DISCHARGE.--30 years (water years 1912-14, 1958-84), 446 ft<sup>3</sup>/s, 323,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 24.3 ft from floodmarks, present site and datum, from rating curve extended above 6,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 29.0 ft, previous site and datum; minimum discharge observed, 20 ft<sup>3</sup>/s Aug. 19 to Sept. 6, 1914.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 21, 1955, reached a stage of 29.0 ft, at 1956-69 site and datum, from floodmarks, discharge, 23,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

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

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1615	3,260	8.75	Dec. 14	1830	4,360	9.68
Nov. 17	0245	3,330	8.81	Dec. 30	0330	4,010	9.40
Dec. 9	2145	3,810	9.23	Feb. 13	1030	*4,380	9.70

Minimum daily discharge, 52 ft<sup>3</sup>/s Sept. 27-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	289	456	1200	352	705	670	699	391	162	92	68
2	66	190	455	1020	341	754	629	750	375	159	92	65
3	66	283	462	942	331	681	603	834	363	154	91	62
4	65	409	417	975	324	640	624	777	400	149	90	60
5	65	211	423	1010	319	623	595	663	389	146	90	59
6	65	616	804	981	315	622	567	597	491	143	89	61
7	65	333	1990	926	310	648	570	564	569	138	86	61
8	65	218	1520	863	310	693	895	595	417	135	84	60
9	66	310	2210	788	375	720	764	621	363	133	82	59
10	78	1590	2510	778	347	741	878	581	333	131	81	57
11	73	1130	1790	749	354	724	816	987	317	129	79	56
12	69	920	1360	685	525	677	826	923	304	128	78	56
13	68	940	2010	636	2700	1420	803	815	301	125	78	56
14	67	656	3880	587	1450	1640	837	749	295	117	77	56
15	66	575	3290	558	1060	1470	928	637	291	110	76	58
16	65	1220	2150	518	935	1370	871	572	280	109	75	56
17	65	2190	1690	486	807	1250	774	554	255	109	75	55
18	64	1100	1350	464	723	1080	754	556	243	108	74	54
19	64	1650	1150	439	686	1060	697	576	236	105	72	56
20	64	1460	1000	419	746	1240	642	589	232	103	70	71
21	64	942	884	422	870	1270	610	550	222	102	69	61
22	64	726	781	419	768	1080	610	505	210	102	68	57
23	74	677	714	406	694	1010	620	536	204	101	68	56
24	69	1930	843	420	723	965	596	504	202	100	68	55
25	65	1290	1150	434	667	918	553	480	196	99	69	55
26	64	905	1190	422	631	1200	517	521	188	98	67	54
27	63	734	984	402	605	1080	487	484	184	97	64	52
28	63	633	873	390	592	933	467	524	181	96	63	52
29	63	556	1120	383	594	847	452	568	174	95	63	52
30	83	498	2760	373	---	776	480	527	168	94	66	52
31	164	---	1560	361	---	724	---	451	---	92	70	---
TOTAL	2169	25181	43776	19456	19454	29561	20135	19289	8774	3669	2366	1732
MEAN	70.0	839	1412	628	671	954	671	622	292	118	76.3	57.7
MAX	164	2190	3880	1200	2700	1640	928	987	569	162	92	71
MIN	63	190	417	361	310	622	452	451	168	92	63	52
AC-FT	4300	49950	86830	38590	38590	58630	39940	38260	17400	7280	4690	3440
CAL YR 1983	TOTAL	283956	MEAN	778	MAX	6270	MIN	63	AC-FT	563200		
WTR YR 1984	TOTAL	195562	MEAN	534	MAX	3880	MIN	52	AC-FT	387900		

## KLAMATH RIVER BASIN

11522500 SALMON RIVER AT SOMES BAR, CA

LOCATION.--Lat 41°22'40", long 123°28'35", in NE 1/4 sec.3, T.11 N., R.6 E., Siskiyou County, Hydrologic Unit 18010210, Klamath National Forest, on left bank at Somes Bar, 1.0 mi upstream from mouth.

DRAINAGE AREA.--751 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1911 to September 1915, October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1285: 1912, 1914, 1915(M), 1946(M), 1948(M). WDR CA-72-1: 1971(P).

GAGE.--Water-stage recorder. Datum of gage is 482.97 ft National Geodetic Vertical Datum of 1929. Prior to October 1927, nonrecording gage at different datum, October 1927 to Dec. 22, 1964, water-stage recorder at site 0.5 mi upstream at datum 6.54 ft higher.

REMARKS.--Records good. No storage or large diversion above station.

AVERAGE DISCHARGE.--61 years, 1,840 ft<sup>3</sup>/s, 1,333,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 133,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 46.6 ft present site and datum, from floodmarks, from rating curve extended above 33,000 ft<sup>3</sup>/s; minimum, 70 ft<sup>3</sup>/s Aug. 25, Sept. 4, 5, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 10,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Dec. 7	0400	10,000	8.97
Dec. 14	2330	*17,600	12.17
Dec. 30	1015	13,900	10.62

Minimum daily discharge, 211 ft<sup>3</sup>/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	352	1090	2090	7210	1400	3400	2820	2650	2790	1080	393	298
2	352	985	2100	6080	1360	3530	2630	3030	2670	1080	386	279
3	343	912	2160	5520	1340	3230	2510	3970	2620	1060	383	264
4	333	1320	1990	5540	1330	2960	2610	3970	2830	1010	378	252
5	324	914	1930	5730	1320	2820	2520	3340	2720	981	374	245
6	317	1580	3870	5530	1300	2820	2410	2980	3090	927	366	241
7	310	1560	9170	5120	1280	2830	2140	2820	3260	897	358	241
8	306	963	7390	4590	1270	2880	3210	3090	2410	838	346	241
9	310	1200	7070	4060	1390	2870	2890	3600	2130	767	333	238
10	352	2840	8350	3700	1340	2810	3350	3210	1980	728	327	231
11	357	4740	7090	3430	1390	2700	3460	6640	1930	712	320	228
12	330	2920	6250	3090	1950	2560	3480	7040	1900	699	313	226
13	314	3290	10100	2840	6180	3720	3480	5810	1990	668	312	226
14	306	2610	15800	2620	5620	4940	3720	5400	2040	644	308	226
15	304	2210	15100	2470	4490	4820	4270	4270	2160	634	304	227
16	299	3360	11400	2310	4820	4740	4310	3600	2220	624	297	229
17	293	7370	8900	2160	4160	4810	3870	3380	2080	629	292	225
18	288	4830	7250	2050	3600	4640	3670	3370	1910	612	292	220
19	284	6030	6030	1950	3290	4690	3370	3600	1910	677	291	240
20	281	7530	5130	1860	3570	5360	3010	3970	1830	618	283	266
21	278	4670	4480	1930	4470	5730	2810	3630	1590	564	277	254
22	275	3310	3850	1860	3950	4900	2850	3330	1470	541	273	239
23	306	2960	3570	1770	3520	4480	2980	4130	1440	507	269	233
24	337	6740	5310	1710	3590	4220	2890	3620	1520	486	264	226
25	317	6400	7690	1670	3420	3910	2660	3180	1550	474	264	226
26	296	4540	8680	1610	3320	4600	2470	3500	1500	462	263	223
27	284	3520	7360	1550	3290	4350	2290	3360	1310	448	259	222
28	278	2920	6290	1510	3300	3880	2170	3830	1410	436	256	217
29	273	2530	7060	1480	3300	3550	2110	4480	1340	427	254	211
30	315	2250	11800	1450	---	3230	2160	4300	1160	414	257	213
31	681	---	9280	1430	---	3040	---	3570	---	402	294	---
TOTAL	9995	98094	214540	95830	84560	119020	89120	120670	60680	21046	9586	7107
MEAN	322	3270	6921	3091	2916	3839	2971	3893	2023	679	309	237
MAX	681	7530	15800	7210	6180	5730	4310	7040	3260	1080	393	298
MIN	273	912	1930	1430	1270	2560	2110	2650	1160	402	254	211
AC-FT	19830	194600	425500	190100	167700	236100	176800	239300	120400	41740	19010	14100
CAL YR 1983	TOTAL	1299281	MEAN	3560	MAX	16600	MIN	273	AC-FT	2577000		
WTR YR 1984	TOTAL	930248	MEAN	2542	MAX	15800	MIN	211	AC-FT	1845000		

## 11523000 KLAMATH RIVER AT ORLEANS, CA

LOCATION.--Lat 41°18'13", long 123°32'00", in SW 1/4 NE 1/4 sec.31, T.11 N., R.6 E., Humboldt County, Hydrologic Unit 18010209, Six Rivers National Forest, on right bank at Orleans, 25 ft upstream from highway bridge, and 0.2 mi downstream from Cheenitch Creek.

DRAINAGE AREA.--8,475 mi<sup>2</sup>, not including Lost River or Lower Klamath Lake basins.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1315-B. Prior to October 1965, published as "at Somesbar."

REVISED RECORDS.--WSP 1565: 1935(M), 1949.

GAGE.--Water-stage recorder. Datum of gage is 355.98 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1965, at site 6.7 mi upstream at datum 90.68 ft higher.

REMARKS.--Records good. Flow considerably regulated by reservoirs and powerplants above station. Large diversions above station for irrigation.

AVERAGE DISCHARGE.--57 years, 8,369 ft<sup>3</sup>/s, 6,063,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 307,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 76.5 ft, from floodmarks, site and datum then in use, from rating curve extended above 80,000 ft<sup>3</sup>/s by slope-conveyance study; minimum daily, 320 ft<sup>3</sup>/s Aug. 25, Sept. 1, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 17	0730	53,700	17.12	Dec. 15	0015	*76,800	20.05
Dec. 10	0415	46,500	16.00	Dec. 30	0930	53,200	17.04

Minimum daily, 1,820 ft<sup>3</sup>/s Aug. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3420	6150	12400	30800	8240	13600	16600	11600	9640	4130	2120	1960
2	3440	6120	12500	26400	8160	14200	15800	13300	9090	4030	2170	2530
3	3420	6080	12800	23800	8030	13300	15100	15000	8840	3940	2240	2860
4	3410	7580	12900	22700	7940	12500	15200	15200	8970	3670	2240	2550
5	3380	6200	12500	22600	7890	12100	14300	13900	9070	3560	2230	2560
6	3370	8920	18700	22600	7830	12200	14100	13200	9910	3420	2210	2530
7	3990	7770	40500	21600	7610	13300	13500	12600	10800	3420	2190	2450
8	4200	5150	35600	20200	7280	13300	16500	12800	9010	3330	2160	2450
9	4150	6000	31800	19100	7720	13300	15900	13600	9130	3120	2130	2450
10	4260	15500	41900	18100	7640	13500	17100	13000	8750	3030	2110	2410
11	4260	27000	33600	16800	7900	13800	17500	18100	8370	2970	2080	2400
12	4320	16200	29500	15500	9780	13200	17100	21000	8180	2930	2060	2330
13	4290	18700	38900	13900	26000	17600	16800	18500	8150	2850	2050	2030
14	4280	15400	64300	12700	25400	23700	17700	17200	8150	2780	2040	2010
15	4280	12300	67400	12100	21300	23500	19200	15000	8210	2720	2020	2010
16	4280	21100	48000	12000	23200	23800	19200	13400	8230	2680	1990	2120
17	4250	38700	39100	11600	20600	24800	18100	12800	7860	2640	1970	2190
18	4250	32100	31500	10500	18300	23700	16800	13000	7640	2620	1960	2190
19	4240	27000	26200	10000	16800	22900	15900	13200	7510	2630	1960	2230
20	4240	22200	23600	9700	16900	24000	14600	14000	6890	2560	1930	2440
21	4230	21100	21400	9840	18800	25600	13600	13400	6110	2500	1920	2360
22	4220	16900	19200	9870	17600	23300	13300	12600	5950	2460	1900	2280
23	4340	15800	17600	9700	16300	21500	13400	13200	5520	2430	1890	2250
24	4440	27700	20600	9460	16600	19800	13200	12900	5300	2380	1880	2240
25	4350	27200	25200	9420	16500	18800	12900	11800	5230	2350	1880	2260
26	4310	20700	28600	9290	15500	20900	12100	12200	5100	2310	1880	2380
27	4280	17400	25400	9070	14900	21900	10800	12000	4890	2280	1860	2380
28	4260	15500	23100	8820	14200	19800	10200	12300	4770	2230	1830	2380
29	4240	14100	25100	8670	13400	18900	9820	13600	4610	2220	1820	2380
30	4340	13200	45200	8550	---	17900	9800	13600	4350	2190	1820	2360
31	5010	---	38800	8320	---	16900	---	11800	---	2160	1880	---
TOTAL	127750	495770	923900	453710	408320	567600	446120	429800	224230	88540	62420	69970
MEAN	4121	16530	29800	14640	14080	18310	14870	13860	7474	2856	2014	2332
MAX	5010	38700	67400	30800	26000	25600	19200	21000	10800	4130	2240	2860
MIN	3370	5150	12400	8320	7280	12100	9800	11600	4350	2160	1820	1960
AC-FT	253400	983400	1833000	899900	809900	1126000	884900	852500	444800	175600	123800	138800
CAL YR 1983	TOTAL	6163620	MEAN	16890	MAX	77900	MIN	2320	AC-FT	12230000		
WTR YR 1984	TOTAL	4298130	MEAN	11740	MAX	67400	MIN	1820	AC-FT	8525000		

## KLAMATH RIVER BASIN

11523200 TRINITY RIVER ABOVE COFFEE CREEK, NEAR TRINITY CENTER, CA

LOCATION.--Lat 41°06'41", long 122°42'16", in SW 1/4 NW 1/4 sec.32, T.38 N., R.7 W., Trinity County, Hydrologic Unit 18010211, Shasta National Forest, on left bank 24 ft upstream from State Highway No. 3 bridge, 1.8 mi upstream from Coffee Creek, and 8.6 mi north of Trinity Center.

DRAINAGE AREA.--149 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 2,536.93 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1978, water-stage recorder at site 0.2 mi downstream at datum 3.57 ft lower.

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

AVERAGE DISCHARGE.--27 years, 432 ft<sup>3</sup>/s, 313,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,500 ft<sup>3</sup>/s Jan. 16, 1974, gage height, 19.2 ft from floodmarks, present site and datum, on basis of slope-area measurement at peak flow; minimum daily discharge, 16 ft<sup>3</sup>/s Sept. 11-14, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 10.5 ft, previous site and datum, from floodmarks, discharge, 11,400 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	1430	*2,840	8.47
Dec. 9	1545	2,680	8.33

Minimum daily discharge, 41 ft<sup>3</sup>/s Sept. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	591	278	675	394	371	553	712	598	167	77	66
2	98	264	295	624	398	385	519	740	559	159	77	61
3	93	201	381	688	398	379	515	859	524	153	77	58
4	89	270	352	961	406	378	542	901	520	148	77	56
5	87	196	326	1200	424	383	584	852	470	143	75	54
6	84	249	322	1250	423	402	568	799	554	138	72	54
7	84	227	389	1110	418	423	536	840	471	133	72	54
8	83	182	408	914	411	450	651	1070	394	131	69	53
9	84	186	2090	782	459	473	577	1180	368	126	68	51
10	90	1500	1410	697	437	494	552	1050	352	123	67	50
11	87	896	1160	633	413	503	515	1760	342	118	66	49
12	83	1010	855	574	402	484	504	1680	341	116	64	49
13	81	760	664	535	477	860	512	1530	350	111	64	49
14	80	533	722	492	424	889	611	1300	356	109	64	49
15	80	434	980	471	409	828	906	935	378	105	63	49
16	79	487	1030	442	389	737	1170	808	368	104	62	48
17	78	1080	922	416	367	658	1040	780	332	103	61	47
18	77	664	761	399	359	613	950	808	313	102	60	46
19	77	542	658	385	355	686	779	982	307	107	60	48
20	75	454	575	370	400	889	672	1060	287	126	60	57
21	75	391	518	362	484	977	640	929	260	107	59	49
22	74	353	456	350	438	793	736	931	244	101	58	46
23	84	328	445	335	412	744	891	1020	235	96	56	45
24	83	344	461	340	403	735	878	853	231	95	55	44
25	77	313	1290	365	382	690	747	829	225	91	55	44
26	75	290	1550	368	368	775	658	854	214	89	55	44
27	74	280	1020	367	364	761	599	808	204	87	55	42
28	74	282	797	369	362	717	580	893	197	84	55	42
29	74	276	704	377	360	694	609	973	187	84	54	41
30	188	273	860	380	---	639	647	918	174	81	59	41
31	208	---	771	387	---	607	---	739	---	78	90	---
TOTAL	2775	13856	23450	17618	11736	19417	20241	30393	10355	3515	2006	1486
MEAN	89.5	462	756	568	405	626	675	980	345	113	64.7	49.5
MAX	208	1500	2090	1250	484	977	1170	1760	598	167	90	66
MIN	74	182	278	335	355	371	504	712	174	78	54	41
AC-FT	5500	27480	46510	34950	23280	38510	40150	60280	20540	6970	3980	2950
CAL YR 1983	TOTAL	316587	MEAN	867	MAX	5060	MIN	74	AC-FT	628000		
WTR YR 1984	TOTAL	156848	MEAN	429	MAX	2090	MIN	41	AC-FT	311100		

## 11525400 CLAIR ENGLE LAKE NEAR LEWISTON, CA

LOCATION.--Lat 40°48'05", long 122°45'44", in NW 1/4 SW 1/4 sec.15, T.34 N., R.8 W., Trinity County, Hydrologic Unit 18010211, Trinity National Forest, on side of intake structure of Trinity Dam on Trinity River, 9 mi north of Lewiston.

DRAINAGE AREA.--692 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1960 to current year. Prior to October 1963 published as Trinity Lake near Lewiston.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Bureau of Reclamation). Prior to Jan. 4, 1962, nonrecording gage at same site and datum.

REMARKS.--The lake is formed by an earthfill dam completed in November 1960. Storage began Nov. 23, 1960. Usable capacity, 2,437,700 acre-ft between elevations 1,995.5 ft, elevation of invert of river outlets and 2,370.0 ft, gross pool elevation. Dead storage, 10,000 acre-ft. Records represent total contents at 2400 hours.

COOPERATION.--Records furnished by Bureau of Reclamation.

EXTREMES (at 2400) FOR PERIOD OF RECORD.--Maximum contents, 2,588,000 acre-ft Jan. 19, 1974, elevation, 2,378.32 ft; minimum since lake first filled, 222,400 acre-ft Nov. 9, 1977, elevation, 2,120.22 ft.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 2,432,500 acre-ft June 25, 26, elevation, 2,369.08 ft; minimum, 1,888,900 acre-ft Sept. 30, elevation, 2,333.13 ft.

## Capacity table (elevation, in feet NGVD, and contents, in acre-feet)

2,100	162,200	2,250	955,100
2,140	292,900	2,310	1,583,600
2,190	529,600	2,380	2,617,000

CONTENTS, IN ACRE-Feet, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2160800	2066600	2052300	2111600	1972300	1937100	2069000	2184300	2394300	2428400	2276500	2060000
2	2157400	2065600	2049100	2108400	1969400	1938800	2070900	2189000	2396400	2425800	2269200	2053200
3	2154300	2064000	2047500	2105100	1966200	1941700	2073100	2194500	2397700	2423000	2263300	2046500
4	2151200	2062800	2044400	2103300	1963500	1944700	2074900	2198300	2399600	2419500	2256500	2039400
5	2148200	2060600	2041900	2102100	1960500	1947400	2077600	2204800	2400100	2415800	2249400	2032400
6	2144900	2060600	2042500	2102400	1957600	1950200	2079500	2210400	2404500	2414000	2242900	2026200
7	2141700	2059000	2045600	2099500	1954600	1953400	2081500	2215200	2406500	2409400	2236700	2019800
8	2138100	2056900	2047000	2095000	1951500	1956600	2084400	2221000	2407900	2403900	2230400	2013100
9	2134700	2057600	2063000	2089600	1949500	1960200	2086900	2228200	2409100	2399600	2223900	2006100
10	2131500	2069500	2074300	2081800	1946800	1963400	2089500	2234100	2410500	2395600	2216700	1998600
11	2128200	2072100	2086400	2072000	1944400	1967000	2091100	2246400	2412200	2391800	2209200	1990500
12	2124600	2075200	2094100	2061900	1942100	1970400	2092700	2258200	2414100	2388400	2201700	1982800
13	2120800	2077000	2098400	2051700	1944400	1979300	2094800	2267600	2416100	2385200	2194500	1975700
14	2117100	2076400	2100800	2044100	1943900	1987000	2099600	2276000	2416400	2381600	2187400	1968100
15	2113600	2074500	2105600	2037500	1943400	1994500	2106500	2281600	2420000	2378300	2180700	1961100
16	2109900	2075100	2109500	2029300	1942000	2001600	2113200	2286400	2421500	2374600	2173500	1954400
17	2106500	2080000	2110400	2022300	1939800	2007300	2119500	2291300	2423600	2368900	2166500	1947100
18	2102900	2079800	2109800	2017200	1937700	2012500	2126500	2297500	2425100	2363300	2159300	1939800
19	2099300	2081300	2107500	2012400	1935100	2018200	2131600	2303800	2426400	2357200	2152300	1932400
20	2095900	2080600	2104500	2007300	1933400	2024900	2135900	2310600	2425900	2350600	2145200	1925200
21	2092600	2079200	2100800	2002200	1934000	2032200	2140500	2316200	2426200	2344300	2138300	1921300
22	2089800	2077200	2096500	1996500	1934900	2038400	2146000	2323500	2428200	2337600	2130900	1917500
23	2087100	2075700	2094700	1992300	1934900	2043800	2151700	2332000	2429400	2332200	2123200	1913700
24	2083400	2074800	2093500	1989400	1934900	2047300	2156800	2338700	2431000	2326200	2115400	1910000
25	2080100	2072400	2101400	1988100	1932200	2050400	2160800	2345600	2432500	2319900	2108400	1907100
26	2076400	2069500	2111300	1987600	1929500	2054800	2164700	2353800	2432500	2313700	2101800	1903000
27	2073100	2066200	2112700	1987000	1932200	2059400	2168000	2361500	2432200	2307400	2095000	1899600
28	2069800	2062700	2110200	1984100	1934100	2063100	2171800	2370500	2429700	2301500	2088700	1896400
29	2066200	2059100	2109000	1981400	1935800	2062400	2175500	2379100	2429000	2295700	2081600	1892600
30	2064600	2055700	2114700	1978200	---	2064600	2179300	2386000	2428500	2289700	2074300	1888900
31	2063000	---	2115100	1975200	---	2067100	---	2390900	---	2283600	2067100	---
MAX	2160800	2081300	2115100	2111600	1972300	2067100	2179300	2390900	2432500	2428400	2276500	2060000
MIN	2063000	2055700	2041900	1975200	1929500	1937100	2069000	2184300	2394300	2283600	2067100	1888900
a	2345.24	2344.75	2348.75	2339.22	2336.47	2345.52	2353.00	2390.90	2428.50	2283.60	2067.10	2333.13
b	-101100	-7300	+59400	-139900	-39400	+131300	+112200	+211600	+37600	-144900	-216500	-178200
c	2180	510	380	510	770	2610	3800	6750	8140	9090	8100	5530
CAL YR 1983	b	+98400										
WTR YR 1984	b	-275200										

a Elevation, in feet NGVD, at end of month.

b Change in contents, in acre-feet.

c Evaporation, in acre-feet.

## KLAMATH RIVER BASIN

11525430 JUDGE FRANCIS CARR POWERPLANT NEAR FRENCH GULCH, CA

LOCATION.--Lat 40°38'49", long 122°37'34", Shasta County, Hydrologic Unit 18010212, at powerplant 1.6 mi downstream from Mill Creek, and 3.8 mi south of French Gulch.

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

GAGE.--Recorded powerplant output.

REMARKS.--Water is diverted from Trinity River at NW 1/4 SE 1/4 sec.8, T.33 N., R.8 W., through a tunnel to powerplant and then into Whiskeytown Lake (station 11371700). See schematic diagram of Pit and McCloud River basins.

COOPERATION.--Records furnished by Bureau of Reclamation, rounded to Geological Survey standards.

AVERAGE DISCHARGE.--21 years, 1,584 ft<sup>3</sup>/s, 1,148,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,910 ft<sup>3</sup>/s Feb. 11, 1970; no flow many days in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1680	1640	1830	1850	2620	0	1060	243	563	743	3250	3260
2	1680	1640	1830	1850	2710	0	900	62	1260	2070	3100	3350
3	1680	1640	1830	1830	2760	0	1160	402	1240	2090	2480	3450
4	1680	1620	1830	1830	2770	0	1020	494	1030	1990	3150	3350
5	1680	1620	1830	1830	2770	0	700	489	778	2090	3150	2720
6	1680	1640	1830	1830	2720	0	925	0	917	1190	3150	3000
7	1680	1640	1860	1830	2720	0	979	661	975	1990	3110	3090
8	1680	1660	1850	1830	2670	0	906	643	974	2030	3110	3350
9	1680	1620	1860	1810	2680	0	1150	654	756	2070	3180	3350
10	1660	1640	1840	1810	2730	0	1020	664	745	2040	3050	3580
11	1660	1720	1870	1810	2720	0	906	668	743	2020	3110	3430
12	1660	1760	1830	1810	2720	0	936	654	743	1650	3180	3430
13	1660	1760	1850	1830	2720	0	919	656	756	1870	3350	3430
14	1660	1760	1850	1480	2730	0	0	665	753	1830	3260	3430
15	1660	1800	1850	2670	2740	0	0	656	753	1980	3180	3430
16	1660	1860	1830	3100	2790	0	341	656	753	2040	3180	3430
17	1660	1880	1820	3040	2770	157	345	656	743	2740	3110	3560
18	1660	1860	1850	2420	2840	0	259	411	743	2770	3180	3560
19	1660	1860	1830	3330	2870	0	255	738	745	2700	3350	3560
20	1660	1860	1840	2840	2840	0	248	738	842	2760	3260	3680
21	1650	1450	1840	3330	1560	0	0	713	756	2810	2820	1510
22	1380	1650	1840	3330	1800	0	0	6.0	0	2820	3350	1480
23	1650	1640	1860	3190	1650	146	259	0	485	2480	3350	1500
24	1650	1860	1850	2520	1970	989	246	0	479	2810	3260	1390
25	1650	1850	1860	2260	2680	1030	246	0	570	2810	2930	1440
26	1650	1830	1860	1190	2460	1070	243	0	822	2760	2930	1440
27	1650	1830	1860	1400	123	1020	246	0	1700	2810	3050	1500
28	1650	1830	1860	2500	0	969	0	0	1560	2770	3110	1500
29	1650	1830	1830	2710	0	1000	0	227	743	2770	3180	1440
30	1650	1830	1830	2720	---	1080	246	495	753	2810	3180	1460
31	1640	---	1850	2660	---	1100	---	678	---	2810	3180	---
TOTAL	51250	52080	57160	70440	67133	8561	15515	12929.0	24680	71123	97230	82100
MEAN	1653	1736	1844	2272	2315	276	517	417	823	2294	3136	2737
MAX	1680	1880	1870	3330	2870	1100	1160	738	1700	2820	3350	3680
MIN	1380	1450	1830	1190	0	0	0	0	0	743	2480	1390
AC-FT	101700	103300	113400	139700	133200	16980	30770	25640	48950	141100	192900	162800
CAL YR 1983	TOTAL	870835	MEAN	2386	MAX	3350	MIN	0	AC-FT	1727000		
WTR YR 1984	TOTAL	610201.0	MEAN	1667	MAX	3680	MIN	0	AC-FT	1210000		

## 11525500 TRINITY RIVER AT LEWISTON, CA

LOCATION.--Lat 40°43'10", long 122°48'09", in SW 1/4 NW 1/4 sec.17, T.33 N., R.8 W., Trinity County, Hydrologic Unit 18010211, on right bank 400 ft upstream from Deadwood Creek, and 0.8 mi northeast of Lewiston.

DRAINAGE AREA.--719 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1911 to current year.

REVISED RECORDS.--WSP 331: 1911-12. WSP 1181: 1949. WSP 1929: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,815.95 ft, National Geodetic Vertical Datum of 1929. See WSP 1929 for history of changes prior to July 7, 1964.

REMARKS.--Records good. Flow regulated by Clair Engle Lake (station 11525400) beginning in November 1960. Diversion to Judge Francis Carr powerplant (station 11525430) began in April 1963. Small diversions above head of Trinity Lake for irrigation, power, and placer mining.

AVERAGE DISCHARGE (adjusted for change in contents, evaporation, and diversion).--73 years, 1,758 ft<sup>3</sup>/s, 1,274,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 71,600 ft<sup>3</sup>/s Dec. 22, 1955, gage height, 27.3 ft from floodmarks, site and datum then in use; minimum, 23 ft<sup>3</sup>/s July 30, 1924. Maximum discharge since construction of Lewiston Dam in 1960, 14,400 ft<sup>3</sup>/s Jan. 18, 1974, gage height, 10.41 ft; minimum daily discharge, 100 ft<sup>3</sup>/s Apr. 14, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1861 reached a stage of 21.6 ft from floodmarks, at site 1.1 mi downstream at different datum, discharge, not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,480 ft<sup>3</sup>/s Jan. 11, gage height, 7.79 ft; minimum daily discharge, 215 ft<sup>3</sup>/s May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	323	327	1140	4220	328	1010	335	310	331	469	537	426
2	325	328	1140	4170	328	734	336	224	341	555	538	426
3	324	332	1140	4160	328	339	337	215	336	560	537	425
4	318	335	1140	4180	328	336	335	309	334	556	535	422
5	316	334	1140	4210	328	336	335	308	333	562	534	425
6	316	334	1140	4490	330	336	335	306	336	564	534	425
7	318	330	1150	4760	332	336	334	304	333	560	534	421
8	319	330	1150	4740	331	336	333	304	332	562	530	420
9	318	332	1150	4910	331	336	332	303	334	574	527	418
10	319	334	1140	6010	332	336	334	304	330	574	528	354
11	320	794	1150	6350	334	336	328	304	326	574	529	316
12	319	1180	1150	6290	335	336	328	304	325	566	530	318
13	320	1170	1530	5720	336	337	328	304	324	572	528	333
14	320	1080	2720	4580	334	336	328	304	324	564	528	322
15	320	1050	2730	3330	338	338	324	302	325	562	525	313
16	320	1040	2720	2920	336	339	324	301	327	566	524	316
17	321	1030	2720	2450	336	338	324	302	328	562	527	315
18	322	1050	2710	1560	336	336	325	302	326	561	528	315
19	325	1160	2710	985	336	336	323	302	326	563	526	256
20	325	1150	2710	956	336	339	323	302	328	556	523	314
21	325	1150	2720	787	335	338	324	302	330	538	526	319
22	325	1150	2720	785	336	339	319	303	333	538	528	320
23	325	1150	2730	632	336	339	319	304	335	537	528	318
24	325	1150	2720	401	336	340	317	303	334	525	527	316
25	325	1150	2730	329	336	337	316	304	333	528	526	316
26	326	1140	2730	324	336	340	313	304	333	532	524	316
27	325	1140	3360	328	336	338	313	304	330	536	527	317
28	325	1140	4280	328	630	336	315	304	335	538	524	317
29	325	1140	4200	328	1010	337	309	305	338	538	523	318
30	325	1140	4190	327	---	336	310	308	353	538	523	313
31	326	---	4170	327	---	336	---	306	---	538	524	---
TOTAL	9985	25470	70830	85887	10644	11522	9756	9261	9953	17068	16382	10450
MEAN	322	849	2285	2771	367	372	325	299	332	551	528	348
MAX	326	1180	4280	6350	1010	1010	337	310	353	574	538	426
MIN	316	327	1140	324	328	336	309	215	324	469	523	256
AC-FT	19810	50520	140500	170400	21110	22850	19350	18370	19740	33850	32490	20730
MEAN a	366	2469	5100	2776	2010	2825	2791	4267	1923	636	275	182
AC-FT a	22520	146900	313600	170700	115600	173700	166100	262400	114400	39110	16890	10810

CAL YR 1983	TOTAL	721561	MEAN	1977	MAX	8560	MIN	284	AC-FT	1431000	MEAN a	4553	AC-FT a	3296000
WTR YR 1984	TOTAL	287208	MEAN	785	MAX	6350	MIN	215	AC-FT	569700	MEAN a	2139	AC-FT a	1553000

a Adjusted for change in contents and evaporation from Clair Engle Lake and diversion to Judge Francis Carr powerplant.

## KLAMATH RIVER BASIN

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA

LOCATION.--Lat 40°40'35", long 122°49'46", in SW 1/4 NE 1/4 sec.36, T.33 N., R.9 W., Trinity County, Hydrologic Unit 18010211, on right bank 0.1 mi upstream from Phillips Gulch, and 2.5 mi southwest of Lewiston.

DRAINAGE AREA.--30.8 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,049.73 ft National Geodetic Vertical Datum of 1929 (California State Highway Department bench mark).

REMARKS.--Records fair. No regulation; small diversions above station for domestic use.

AVERAGE DISCHARGE.--8 years (water years 1977-84), 56.0 ft<sup>3</sup>/s, 40,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,670 ft<sup>3</sup>/s Feb. 28, 1983; gage height, 10.11 ft from rating curve extended above 700 ft<sup>3</sup>/s on basis of slope-area measurement at gage-height 10.11 ft in gage well, 10.5 ft from floodmarks; minimum daily discharge, 4.3 ft many days in 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 982 ft<sup>3</sup>/s Dec. 11, gage height, 7.92 ft, no other peak above base of 500 ft<sup>3</sup>/s; minimum daily discharge, 11.0 ft<sup>3</sup>/s Sept. 10, 11, 17, 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	61	54	211	65	59	50	45	29	20	16	14
2	22	30	53	184	65	59	50	44	28	20	16	13
3	21	24	68	168	65	58	49	43	28	19	16	13
4	20	24	58	158	64	58	50	42	28	19	16	12
5	20	21	56	151	63	57	50	41	29	19	16	12
6	21	26	70	144	60	57	48	41	31	18	16	12
7	21	22	109	136	58	57	47	40	30	18	15	12
8	21	21	102	130	58	58	50	39	29	18	15	12
9	21	31	428	122	66	57	48	38	28	18	15	12
10	20	218	338	117	61	57	50	37	28	18	14	11
11	16	116	592	113	63	56	49	39	28	17	14	11
12	15	93	438	110	68	53	48	37	27	17	15	12
13	15	106	388	107	97	86	47	36	27	17	15	12
14	15	73	351	101	84	73	46	36	27	17	15	12
15	16	58	279	98	89	90	45	36	26	17	14	12
16	15	63	243	95	86	89	45	36	25	17	14	12
17	15	90	217	93	78	84	45	35	24	18	14	11
18	16	63	191	90	66	67	50	34	24	18	14	11
19	15	119	171	87	61	61	48	34	24	18	14	14
20	15	105	152	84	60	59	46	33	24	17	13	14
21	15	78	138	83	67	57	45	33	24	17	13	14
22	15	69	122	81	62	56	45	32	23	17	13	15
23	16	67	125	80	61	56	44	32	23	17	13	15
24	13	114	169	77	62	55	43	32	22	17	13	15
25	12	84	343	76	61	54	43	31	22	17	14	15
26	12	69	315	75	61	53	43	31	22	17	14	14
27	12	63	260	72	60	53	42	30	22	17	13	14
28	12	60	218	71	60	52	42	30	21	17	13	14
29	12	57	214	69	59	52	41	30	21	17	13	13
30	20	54	315	68	---	51	43	30	21	16	13	13
31	20	---	248	68	---	51	---	30	---	16	15	---
TOTAL	522	2079	6825	3319	1930	1885	1392	1107	765	545	444	386
MEAN	16.8	69.3	220	107	66.6	60.8	46.4	35.7	25.5	17.6	14.3	12.9
MAX	23	218	592	211	97	90	50	45	31	20	16	15
MIN	12	21	53	68	58	51	41	30	21	16	13	11
AC-FT	1040	4120	13540	6580	3830	3740	2760	2200	1520	1080	881	766
CAL YR 1983	TOTAL	55430	MEAN	152	MAX	2420	MIN	12	AC-FT	109900		
WTR YR 1984	TOTAL	21199	MEAN	57.9	MAX	592	MIN	11	AC-FT	42050		

WATER-QUALITY RECORDS

[illegible]

## 11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	23	14	.87	61	464	99	54	20	2.9
2	22	13	.77	30	55	4.5	53	20	2.9
3	21	12	.68	24	20	1.3	68	40	7.3
4	20	11	.59	24	18	1.2	58	30	4.7
5	20	10	.54	21	20	1.1	56	27	4.1
6	21	12	.68	26	20	1.4	70	41	8.7
7	21	14	.79	22	19	1.1	109	100	29
8	21	16	.91	21	20	1.1	102	97	27
9	21	15	.85	31	75	6.3	428	1350	1880
10	20	15	.81	218	521	434	338	405	396
11	16	15	.65	116	106	41	592	1270	2560
12	15	14	.57	93	70	20	438	600	766
13	15	14	.57	106	146	49	388	210	220
14	15	14	.57	73	65	13	351	175	166
15	16	14	.60	58	40	6.3	279	125	94
16	15	14	.57	63	40	6.8	243	80	52
17	15	13	.53	90	120	32	217	56	33
18	16	13	.56	63	38	6.5	191	46	24
19	15	12	.49	119	247	92	171	38	18
20	15	12	.49	105	158	45	152	34	14
21	15	12	.49	78	90	19	138	27	10
22	15	12	.49	69	70	13	122	23	7.6
23	16	13	.56	67	55	9.9	125	21	7.1
24	13	12	.42	114	228	86	169	156	71
25	12	12	.39	84	72	16	343	689	672
26	12	11	.36	69	27	5.0	315	254	206
27	12	11	.36	63	23	3.9	260	124	87
28	12	10	.32	60	21	3.4	218	90	53
29	12	9	.29	57	20	3.1	214	61	35
30	20	17	.92	54	20	2.9	315	296	258
31	20	15	.81	---	---	---	248	95	64
TOTAL	522	---	18.50	2079	---	1024.8	6825	---	7780.3

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	211	66	38	65	12	2.1	59	34	5.4
2	184	56	28	65	11	1.9	59	33	5.3
3	168	48	22	65	11	1.9	58	30	4.7
4	158	39	17	64	11	1.9	58	30	4.7
5	151	33	13	63	11	1.9	57	29	4.5
6	144	29	11	60	11	1.8	57	25	3.8
7	136	28	10	58	11	1.7	57	22	3.4
8	130	28	9.8	58	11	1.7	58	18	2.8
9	122	27	8.9	66	16	2.9	57	15	2.3
10	117	26	8.2	61	12	2.0	57	13	2.0
11	113	26	7.9	63	13	2.2	56	11	1.7
12	110	25	7.4	68	15	2.8	53	10	1.4
13	107	24	6.9	97	149	44	86	133	34
14	101	23	6.3	84	117	27	73	100	21
15	98	21	5.6	89	78	19	90	138	33
16	95	19	4.9	86	88	20	89	127	31
17	93	18	4.5	78	73	15	84	116	26
18	90	16	3.9	66	62	11	67	95	17
19	87	15	3.5	61	55	9.1	61	88	14
20	84	15	3.4	60	52	8.4	59	84	13
21	83	15	3.4	67	76	14	57	79	12
22	81	15	3.3	62	51	8.5	56	71	11
23	80	14	3.0	61	49	8.1	56	62	9.4
24	77	14	2.9	62	48	8.0	55	48	7.1
25	76	14	2.9	61	44	7.2	54	35	5.1
26	75	14	2.8	61	42	6.9	53	26	3.7
27	72	14	2.7	60	38	6.2	53	22	3.1
28	71	14	2.7	60	36	5.8	52	20	2.8
29	69	13	2.4	59	35	5.6	52	18	2.5
30	68	13	2.4	---	---	---	51	18	2.5
31	68	12	2.2	---	---	---	51	17	2.3
TOTAL	3319	---	250.9	1930	---	248.6	1885	---	292.5

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE, (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	50	15	2.0	45	11	1.3	29	7	.55
2	50	14	1.9	44	10	1.2	28	9	.68
3	49	13	1.7	43	11	1.3	28	12	.91
4	50	13	1.8	42	10	1.1	28	9	.68
5	50	12	1.6	41	9	1.0	29	6	.47
6	48	13	1.7	41	9	1.0	31	8	.67
7	47	13	1.6	40	8	.86	30	9	.73
8	50	19	2.6	39	7	.74	29	9	.70
9	48	19	2.5	38	6	.62	28	9	.68
10	50	19	2.6	37	6	.60	28	10	.76
11	49	18	2.4	39	7	.74	28	8	.60
12	48	18	2.3	37	8	.80	27	6	.44
13	47	17	2.2	36	8	.78	27	3	.22
14	46	17	2.1	36	7	.68	27	3	.22
15	45	17	2.1	36	6	.58	26	3	.21
16	45	16	1.9	36	6	.58	25	3	.20
17	45	15	1.8	35	7	.66	24	4	.26
18	50	22	3.0	34	8	.73	24	4	.26
19	48	17	2.2	34	11	1.0	24	4	.26
20	46	14	1.7	33	14	1.2	24	3	.19
21	45	12	1.5	33	13	1.2	24	3	.19
22	45	12	1.5	32	12	1.0	23	3	.19
23	44	12	1.4	32	9	.78	23	3	.19
24	43	11	1.3	32	7	.60	22	3	.18
25	43	11	1.3	31	4	.33	22	3	.18
26	43	11	1.3	31	4	.33	22	2	.12
27	42	10	1.1	30	5	.41	22	2	.12
28	42	10	1.1	30	7	.57	21	2	.11
29	41	9	1.0	30	7	.57	21	2	.11
30	43	9	1.0	30	6	.49	21	3	.17
31	---	---	---	30	6	.49	---	---	---
TOTAL	1392	---	54.2	1107	---	24.24	765	---	11.25

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	20	3	.16	16	4	.17	14	3	.11
2	20	3	.16	16	4	.17	13	1	.04
3	19	3	.15	16	3	.13	13	0	.00
4	19	3	.15	16	3	.13	12	1	.03
5	19	3	.15	16	3	.13	12	2	.06
6	18	3	.15	16	3	.13	12	4	.13
7	18	3	.15	15	3	.12	12	3	.10
8	18	3	.15	15	4	.16	12	3	.10
9	18	3	.15	15	4	.16	12	2	.06
10	18	2	.10	14	3	.11	11	2	.06
11	17	2	.09	14	2	.08	11	2	.06
12	17	2	.09	15	2	.08	12	2	.06
13	17	2	.09	15	2	.08	12	2	.06
14	17	2	.09	15	2	.08	12	3	.10
15	17	2	.09	14	1	.04	12	2	.06
16	17	3	.14	14	1	.04	12	2	.06
17	18	3	.15	14	1	.04	11	2	.06
18	18	3	.15	14	1	.04	11	2	.06
19	18	2	.10	14	2	.08	14	2	.08
20	17	3	.14	13	3	.11	14	2	.08
21	17	3	.14	13	4	.14	14	2	.08
22	17	3	.14	13	3	.11	15	2	.08
23	17	2	.09	13	0	.00	15	1	.04
24	17	2	.09	13	0	.00	15	2	.08
25	17	2	.09	14	2	.08	15	1	.04
26	17	2	.09	14	4	.15	14	0	.00
27	17	2	.09	13	6	.21	14	0	.00
28	17	2	.09	13	6	.21	14	0	.00
29	17	2	.09	13	6	.21	13	0	.00
30	16	2	.09	13	6	.21	13	1	.04
31	16	2	.09	15	6	.24	---	---	---
TOTAL	545	---	3.69	444	---	3.64	386	---	1.73
YEAR	21199		9714.35						

## KLAMATH RIVER BASIN

11525600 GRASS VALLEY CREEK AT FAWN LODGE, NEAR LEWISTON, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	522.00	18.50	0	19
NOVEMBER ...	2079.00	1024.80	506	1530
DECEMBER ...	6825.00	7780.30	5240	13000
JANUARY 1984	3319.00	250.90	1160	1410
FEBRUARY ...	1930.00	248.60	292	541
MARCH .....	1885.00	292.50	227	520
APRIL .....	1392.00	54.20	45	99
MAY .....	1107.00	24.24	2	26
JUNE .....	765.00	11.25	0	11
JULY .....	545.00	3.69	0	4
AUGUST .....	444.00	3.64	0	4
SEPTEMBER ..	386.00	1.73	0	2
TOTAL .....	21199.00	9714.35	7472	17166

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
NOV 01...	1315	92	11.0	980	243	11	17	23
MAR 15...	0915	90	6.0	208	51	--	--	--

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 01...	28	30	32	38	54	84	98	100
MAR 15...	--	--	11	14	26	56	88	100

11525600 GRASS VALLEY CREEK AT PAWN LODGE, NEAR LEWISTON, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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
MAR							
15...	0940	6.0	1	90	2	9	26
15...	0945	6.0	1	90	2	8	22
15...	0950	6.0	1	90	--	--	--
15...	0955	6.0	1	90	--	--	--
15...	1000	6.0	1	90	3	12	20

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
MAR							
15...	61	94	100	--	--	--	--
15...	48	86	100	--	--	--	--
15...	--	1	1	1	1	22	100
15...	--	--	--	--	--	28	100
15...	23	24	26	26	29	100	--

## PARTICLE-SIZE DISTRIBUTION OF SEDIMENT BEDLOAD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM
DEC							
05...	1500	4.0	19	58	32.0	3.9	2
MAR							
15...	0915	6.0	15	90	38.0	122	2

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM
DEC						
05...	14	39	71	96	99	100
MAR						
15...	16	41	74	97	100	--

## 11525655 TRINITY RIVER BELOW LIMEKILN GULCH, NEAR DOUGLAS CITY, CA

LOCATION.--Lat 40°40'21", long 122°55'07", in SW 1/4 NW 1/4 sec. 32, T.33 N., R.9 W., Trinity County, Hydrologic Unit 18010211, on left bank 1.8 mi northeast of Douglas City and 2.3 mi downstream from Limekiln Gulch.

DRAINAGE AREA.--812 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 1,650 ft, from topographic map.

REMARKS.--Records fair. Flow regulated by Clair Engle Lake (station 11525400) and transbasin diversion to Judge Francis Carr powerplant (station 11525430). Small diversion for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,070 ft<sup>3</sup>/s June 12, 1983, gage height, 10.45 ft; minimum daily discharge, 298 ft<sup>3</sup>/s Sept. 19, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,280 ft<sup>3</sup>/s Jan. 11, gage height, 9.30 ft; minimum daily discharge, 298 ft<sup>3</sup>/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	377	510	1200	4690	460	1110	469	448	426	461	551	477
2	377	427	1200	4600	460	961	465	416	442	557	551	450
3	374	408	1250	4510	447	502	461	382	442	570	550	445
4	368	412	1220	4550	445	471	457	469	439	567	545	435
5	368	387	1210	4550	441	467	465	456	441	571	545	434
6	367	426	1270	4730	435	465	462	448	443	572	548	430
7	364	411	1550	5000	435	465	456	444	449	565	551	429
8	364	380	1450	5000	432	460	474	450	430	562	549	425
9	364	414	1780	5050	443	460	469	464	420	565	546	423
10	364	716	1780	5810	433	460	478	448	419	567	545	387
11	364	962	1980	6250	436	456	469	527	415	567	545	335
12	364	1350	1820	6190	455	450	465	520	414	560	545	331
13	360	1390	2040	5950	601	529	463	487	415	557	545	330
14	359	1250	3270	4880	574	539	460	480	411	554	545	343
15	359	1170	3260	3670	586	544	470	451	417	545	544	321
16	359	1180	3110	3250	590	551	477	437	417	550	540	318
17	359	1340	3060	2790	542	557	470	430	413	551	540	318
18	359	1210	2980	1970	515	535	484	434	411	551	540	318
19	359	1480	2930	1310	496	527	475	444	412	554	540	298
20	359	1420	2900	1260	491	523	461	458	404	554	540	314
21	359	1310	2860	1040	526	525	455	444	400	540	540	327
22	359	1270	2850	1030	515	513	455	437	396	540	542	327
23	367	1280	2840	914	488	498	462	458	396	536	545	327
24	366	1430	2940	633	482	496	459	438	400	528	545	327
25	359	1330	3290	510	477	489	452	426	400	529	545	327
26	359	1280	3470	496	468	499	444	444	394	534	544	327
27	359	1250	3790	489	460	500	440	438	392	539	544	327
28	357	1230	4790	486	624	486	439	444	393	540	545	327
29	350	1220	4730	480	1120	481	435	453	391	543	544	327
30	365	1210	5100	470	---	476	437	447	394	545	540	323
31	399	---	4840	469	---	470	---	429	---	548	541	---
TOTAL	11287	30053	82760	93027	14877	16465	13828	13951	12436	17022	16880	10827
MEAN	364	1002	2670	3001	513	531	461	450	415	549	545	361
MAX	399	1480	5100	6250	1120	1110	484	527	449	572	551	477
MIN	350	380	1200	469	432	450	435	382	391	461	540	298
AC-FT	22390	59610	164200	184500	29510	32660	27430	27670	24670	33760	33480	21480
CAL YR 1983	TOTAL	815202	MEAN	2233	MAX	8020	MIN	350	AC-FT	1617000		
WTR YR 1984	TOTAL	333413	MEAN	911	MAX	6250	MIN	298	AC-FT	661300		

WATER-QUALITY RECORDS

EXTREMES FOR CURRENT YEAR.--  
SEDIMENT CONCENTRATIONS: Maximum daily mean, 117 mg/L Dec. 30; minimum daily mean, 0 mg/L May 3, Sept. 11-13.  
SEDIMENT DISCHARGE: Maximum daily, 1,610 tons Dec. 30; minimum daily, 0 ton May 3, Sept. 11-13.

[illegible]

## KLAMATH RIVER BASIN

11525655 TRINITY RIVER BELOW LIMEKILN GULCH, NEAR DOUGLAS CITY, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

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)
OCTOBER				NOVEMBER			DECEMBER		
1	377	7	7.1	510	11	18	1200	6	19
2	377	6	6.1	427	6	6.9	1200	5	16
3	374	4	4.0	408	5	5.5	1250	5	17
4	368	4	4.0	412	5	5.6	1220	5	16
5	368	4	4.0	387	5	5.2	1210	5	16
6	367	5	5.0	426	8	9.2	1270	11	38
7	364	5	4.9	411	6	6.7	1550	16	67
8	364	5	4.9	380	4	4.1	1450	15	59
9	364	5	4.9	414	5	5.6	1780	112	485
10	364	5	4.9	716	19	45	1780	47	226
11	364	5	4.9	962	26	70	1980	116	694
12	364	5	4.9	1350	27	98	1820	85	418
13	360	5	4.9	1390	26	98	2040	45	248
14	359	4	3.9	1250	16	54	3270	95	839
15	359	4	3.9	1170	14	44	3260	53	467
16	359	4	3.9	1180	11	35	3110	31	260
17	359	3	2.9	1340	18	65	3060	27	223
18	359	3	2.9	1210	12	39	2980	26	209
19	359	3	2.9	1480	28	116	2930	23	182
20	359	3	2.9	1420	16	61	2900	19	149
21	359	3	2.9	1310	11	39	2860	18	139
22	359	4	3.9	1270	8	27	2850	18	139
23	367	4	4.0	1280	8	28	2840	19	146
24	366	4	4.0	1430	14	54	2940	23	183
25	359	4	3.9	1330	9	32	3290	37	329
26	359	4	3.9	1280	8	28	3470	27	253
27	359	3	2.9	1250	8	27	3790	52	583
28	357	3	2.9	1230	7	23	4790	115	1490
29	350	3	2.8	1220	6	20	4730	96	1230
30	365	4	3.9	1210	6	20	5100	117	1610
31	399	4	4.3	---	---	---	4840	93	1220
TOTAL	11287	---	127.2	30053	---	1089.8	82760	---	11970

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)
JANUARY				FEBRUARY			MARCH		
1	4690	72	912	460	3	3.7	1110	9	27
2	4600	65	807	460	3	3.7	961	5	13
3	4510	65	792	447	3	3.6	502	3	4.1
4	4550	59	725	445	3	3.6	471	3	3.8
5	4550	60	737	441	4	4.8	467	3	3.8
6	4730	69	881	435	4	4.7	465	3	3.8
7	5000	72	972	435	4	4.7	465	3	3.8
8	5000	64	864	432	3	3.5	460	3	3.7
9	5050	54	736	443	3	3.6	460	3	3.7
10	5810	67	1050	433	3	3.5	460	3	3.7
11	6250	69	1160	436	3	3.5	456	3	3.7
12	6190	57	953	455	3	3.7	450	3	3.6
13	5950	35	562	601	8	13	529	8	11
14	4880	26	343	574	7	11	539	9	13
15	3670	22	218	586	5	7.9	544	10	15
16	3250	21	184	590	5	8.0	551	9	13
17	2790	19	143	542	5	7.3	557	9	14
18	1970	15	80	515	4	5.6	535	7	10
19	1310	10	35	496	4	5.4	527	5	7.1
20	1260	10	34	491	4	5.3	523	4	5.6
21	1040	10	28	526	6	8.5	525	3	4.3
22	1030	9	25	515	6	8.3	513	3	4.2
23	914	8	20	488	7	9.2	498	3	4.0
24	633	6	10	482	8	10	496	3	4.0
25	510	4	5.5	477	7	9.0	489	3	4.0
26	496	4	5.4	468	5	6.3	499	3	4.0
27	489	4	5.3	460	4	5.0	500	3	4.1
28	486	3	3.9	624	8	17	486	3	3.9
29	480	3	3.9	1120	14	42	481	3	3.9
30	470	3	3.8	---	---	---	476	2	2.6
31	469	3	3.8	---	---	---	470	2	2.5
TOTAL	93027	---	12302.6	14877	---	225.4	16465	---	207.9

11525655 TRINITY RIVER BELOW LIMEKILN GULCH, NEAR DOUGLAS CITY, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	469	2	2.5	448	1	1.2	426	1	1.2
2	465	1	1.3	416	1	1.1	442	2	2.4
3	461	1	1.2	382	0	.00	442	2	2.4
4	457	1	1.2	469	3	3.8	439	2	2.4
5	465	1	1.3	456	3	3.7	441	2	2.4
6	462	1	1.2	448	2	2.4	443	2	2.4
7	456	1	1.2	444	2	2.4	449	2	2.4
8	474	1	1.3	450	2	2.4	430	2	2.3
9	469	1	1.3	464	2	2.5	420	2	2.3
10	478	1	1.3	448	1	1.2	419	2	2.3
11	469	1	1.3	527	5	7.1	415	2	2.2
12	465	1	1.3	520	4	5.6	414	2	2.2
13	463	1	1.3	487	3	3.9	415	2	2.2
14	460	1	1.2	480	2	2.6	411	2	2.2
15	470	1	1.3	451	2	2.4	417	2	2.3
16	477	2	2.6	437	1	1.2	417	2	2.3
17	470	2	2.5	430	1	1.2	413	1	1.1
18	484	3	3.9	434	1	1.2	411	1	1.1
19	475	2	2.6	444	1	1.2	412	1	1.1
20	461	2	2.5	458	2	2.5	404	1	1.1
21	455	2	2.5	444	2	2.4	400	1	1.1
22	455	2	2.5	437	1	1.2	396	1	1.1
23	462	1	1.2	458	1	1.2	396	1	1.1
24	459	1	1.2	438	1	1.2	400	1	1.1
25	452	1	1.2	426	1	1.2	400	1	1.1
26	444	1	1.2	444	1	1.2	394	1	1.1
27	440	1	1.2	438	1	1.2	392	1	1.1
28	439	1	1.2	444	2	2.4	393	1	1.1
29	435	1	1.2	453	2	2.4	391	1	1.1
30	437	1	1.2	447	2	2.4	394	1	1.1
31	---	---	---	429	1	1.2	---	---	---
TOTAL	13828	---	48.9	13951	---	67.60	12436	---	51.3

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	461	4	5.0	551	2	3.0	477	1	1.3
2	557	8	12	551	2	3.0	450	1	1.2
3	570	6	9.2	550	2	3.0	445	1	1.2
4	567	5	7.7	545	2	2.9	435	1	1.2
5	571	4	6.2	545	2	2.9	434	1	1.2
6	572	3	4.6	548	2	3.0	430	1	1.2
7	565	3	4.6	551	2	3.0	429	1	1.2
8	562	3	4.6	549	2	3.0	425	1	1.1
9	565	3	4.6	546	2	2.9	423	1	1.1
10	567	3	4.6	545	2	2.9	387	1	1.0
11	567	3	4.6	545	2	2.9	335	0	.00
12	560	3	4.5	545	2	2.9	331	0	.00
13	557	3	4.5	545	2	2.9	330	0	.00
14	554	3	4.5	545	2	2.9	343	1	.93
15	545	2	2.9	544	1	1.5	321	1	.87
16	550	2	3.0	540	1	1.5	318	1	.86
17	551	2	3.0	540	1	1.5	318	1	.86
18	551	2	3.0	540	1	1.5	318	1	.86
19	554	2	3.0	540	1	1.5	298	1	.80
20	554	2	3.0	540	1	1.5	314	2	1.7
21	540	2	2.9	540	1	1.5	327	4	3.5
22	540	2	2.9	542	1	1.5	327	5	4.4
23	536	2	2.9	545	1	1.5	327	5	4.4
24	528	2	2.9	545	1	1.5	327	4	3.5
25	529	1	1.4	545	1	1.5	327	4	3.5
26	534	1	1.4	544	1	1.5	327	3	2.6
27	539	1	1.5	544	1	1.5	327	3	2.6
28	540	2	2.9	545	1	1.5	327	4	3.5
29	543	2	2.9	544	1	1.5	327	4	3.5
30	545	2	2.9	540	1	1.5	323	4	3.5
31	548	2	3.0	541	1	1.5	---	---	---
TOTAL	17022	---	126.7	16880	---	66.7	10827	---	53.58
YEAR	333413		26337.68						

## KLAMATH RIVER BASIN

11525655 TRINITY RIVER BELOW LIMEKILN GULCH, NEAR DOUGLAS CITY, CA--Continued

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
OCTOBER 1983	11287.00	127.20	0	127
NOVEMBER ...	30053.00	1089.80	3	1090
DECEMBER ...	82760.00	11970.00	1800	13800
JANUARY 1984	93027.00	12302.60	7320	19600
FEBRUARY ...	14877.00	225.40	0	225
MARCH .....	16465.00	207.90	0	208
APRIL .....	13828.00	48.90	0	49
MAY .....	13951.00	67.60	0	68
JUNE .....	12436.00	51.30	0	51
JULY .....	17022.00	126.70	0	127
AUGUST .....	16880.00	66.70	0	67
SEPTEMBER ..	10827.00	53.58	0	54
TOTAL .....	333413.00	26337.68	9123	35466

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	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											
10...	0910	5370	7.5	57	826	19	26	35	46	67	80
13...	1045	6190	8.0	34	568	26	36	51	67	87	100

11525655 TRINITY RIVER BELOW LIMEKILN GULCH, NEAR DOUGLAS CITY, CA--Continued

## PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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
MAR							
15...	1145	9.0	1	556	--	--	--
15...	1150	9.0	1	556	--	1	3
15...	1155	9.0	1	556	1	2	4
15...	1200	9.0	1	556	--	2	5
15...	1205	9.0	1	556	1	2	5

DATE	TIME	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
MAR								
15...	--	1	2	4	10	47	100	
15...	5	7	8	12	20	75	100	
15...	8	10	12	15	25	52	100	
15...	9	15	18	25	43	100	--	
15...	9	14	19	28	47	100	--	

## PARTICLE-SIZE DISTRIBUTION OF SEDIMENT BEDLOAD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPER- ATURE (DEG C)	NUMBER OF SAM- PLING POINTS	STREAM- FLOW, INSTAN- TANEOUS (CFS)	STREAM WIDTH (FT)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM
DEC								
15...	1400	9.0	21	3110	152	26	11	49
JAN								
10...	0940	7.5	13	5370	224	1050	1	4
10...	1230	8.0	13	5840	229	482	2	8
13...	1100	8.0	13	6190	240	442	2	8

DATE	TIME	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM
DEC								
15...	69	87	98	100	--	--	--	
JAN								
10...	11	33	77	92	98	100	--	
10...	22	45	69	77	81	89	100	
13...	18	40	69	81	85	100	--	

## KLAMATH RIVER BASIN

## 11527000 TRINITY RIVER NEAR BURNT RANCH, CA

LOCATION.--Lat 40°47'20", long 123°26'20", in S 1/2 sec.19, T.5 N., R.7 E., Trinity County, Hydrologic Unit 18010211, Trinity National Forest, on left bank 500 ft upstream from Cedar Flat Creek, 700 ft upstream from highway bridge at Cedar Flat, and 2.3 mi southeast of town of Burnt Ranch.

DRAINAGE AREA.--1,439 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1931 to September 1940, October 1956 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WDR CA-78-2: 1975 (M).

GAGE.--Water-stage recorder. Datum of gage is 944.05 ft National Geodetic Vertical Datum of 1929. Oct. 1, 1931, to Jan. 19, 1940, at site 2 mi upstream at different datum.

REMARKS.--Records good. Flow regulated since November 1960 by Clair Engle Lake (station 11525400), 64 mi upstream, and by transbasin diversion to Judge Francis Carr powerplant (station 11525430) since April 1963. Small diversions above station for irrigation.

AVERAGE DISCHARGE.--13 years (water years 1932-40, 1957-60), 2,785 ft<sup>3</sup>/s, 2,016,000 acre-ft/yr; 21 years (water years 1964-84), 1,822 ft<sup>3</sup>/s, 1,320,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81,500 ft<sup>3</sup>/s Feb. 25, 1958, gage height, 30.50 ft, from rating curve extended above 40,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 43.2 ft; minimum, 82 ft<sup>3</sup>/s Aug. 31, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1955, reached a stage of 43.2 ft, from floodmarks, discharge, 172,000 ft<sup>3</sup>/s, on basis of slope-area measurement of maximum flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,300 ft<sup>3</sup>/s Dec. 30, gage height, 13.64 ft; minimum daily, 423 ft<sup>3</sup>/s Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	665	1310	2290	10300	1290	2100	2000	1520	1330	898	710	649
2	637	1300	2370	9250	1270	2150	1900	1630	1310	1060	706	561
3	608	1140	2600	8640	1250	2050	1750	1820	1310	1150	706	541
4	589	1270	2630	8720	1230	1900	1840	1960	1310	1110	701	531
5	586	1050	2470	8710	1220	1840	1700	1780	1340	1130	695	523
6	583	1050	2920	8480	1200	1790	1600	1640	1300	1110	689	521
7	572	1290	7660	8450	1180	1750	1540	1560	1430	1100	686	521
8	568	946	7430	8070	1170	1700	1770	1630	1220	1040	679	521
9	570	952	9680	7730	1210	1660	1740	1790	1130	959	671	519
10	617	3250	12000	7970	1190	1620	1870	1690	1090	936	663	516
11	627	5200	10300	8660	1200	1600	1930	2600	1070	951	661	468
12	598	3570	10600	8470	1340	1590	1880	3240	1080	954	656	433
13	579	4240	10900	8320	3090	2000	1920	2410	1170	925	656	430
14	564	3610	13800	5940	3550	3100	1960	2210	1190	914	651	439
15	560	2740	13100	5830	2860	3200	2160	1840	1220	915	646	445
16	557	3010	10700	4790	3130	3300	2200	1610	1290	928	639	430
17	551	6170	9600	4010	2720	3400	2070	1550	1230	941	638	426
18	546	4620	8310	3380	2450	3220	2010	1560	1190	923	637	423
19	544	5450	7380	2550	2280	3100	1970	1600	1220	902	637	448
20	542	8160	6660	2240	2350	2950	1800	1770	1180	901	635	443
21	538	4830	5980	2140	3040	2800	1730	1620	1050	851	632	449
22	537	3510	4230	1990	2820	2600	1740	1520	992	810	631	451
23	556	3080	5350	1930	2520	2500	1790	1730	983	780	632	446
24	603	5250	6310	1670	2400	2420	1780	1600	1060	761	630	445
25	585	6060	10000	1500	2330	2500	1670	1470	1120	750	632	442
26	567	4200	12300	1430	2210	2530	1580	1620	1130	747	631	439
27	554	3600	11200	1390	2140	2600	1500	1500	1090	733	624	436
28	548	3400	10800	1360	2100	2400	1440	1590	1120	729	624	434
29	546	3050	11000	1350	2090	2250	1400	1880	1100	727	621	425
30	611	2550	14500	1330	---	2120	1410	1840	927	725	622	426
31	980	---	12400	1300	---	2080	---	1530	---	717	647	---
TOTAL	18288	99858	257470	157900	58830	72820	53650	55310	35182	28077	20288	14181
MEAN	590	3329	8305	5094	2029	2349	1788	1784	1173	906	654	473
MAX	980	8160	14500	10300	3550	3400	2200	3240	1430	1150	710	649
MIN	537	946	2290	1300	1170	1590	1400	1470	927	717	621	423
AC-FT	36270	198100	510700	313200	116700	144400	106400	109700	69780	55690	40240	28130
CAL YR 1983	TOTAL	1959792	MEAN	5369	MAX	29200	MIN	537	AC-FT	3887000		
WTR YR 1984	TOTAL	871854	MEAN	2382	MAX	14500	MIN	423	AC-FT	1729000		

11528700 SOUTH FORK TRINITY RIVER BELOW HYAMPOM, CA

LOCATION.--Lat 40°39'00", long 123°29'35", in NW 1/4 SW 1/4 sec.10, T.3 N., R.6 E., Trinity County, Hydrologic Unit 18010212, Trinity National Forest, on left bank 0.3 mi downstream from Big Creek, 3.0 mi northeast of Hyampom, and 3.5 mi downstream from Hayfork Creek.

DRAINAGE AREA.--764 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,211.37 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--19 years, 1,547 ft<sup>3</sup>/s, 1,121,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 73,300 ft<sup>3</sup>/s Jan. 26, 1983, gage height, 28.00 ft, from rating curve extended above 23,000 ft<sup>3</sup>/s on basis of flood-routing study at gage height 30.45 ft; minimum daily, 14 ft<sup>3</sup>/s Aug. 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 30.45 ft, from floodmarks, discharge, 88,000 ft<sup>3</sup>/s, on basis of flood-routing study.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 8,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 10	2015	9,800	11.13	Dec. 25	2230	13,600	12.89
Nov. 24	1730	11,500	11.94	Dec. 30	0945	13,900	13.02
Dec. 9	2015	*14,900	13.44				

Minimum daily, 83 ft<sup>3</sup>/s Sept. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	258	1960	6460	1040	2240	1550	1210	473	245	134	95
2	158	293	1950	5410	1010	2240	1490	1250	457	240	132	95
3	153	249	2150	4760	987	2090	1430	1230	447	232	130	94
4	148	266	2080	4450	964	1930	1440	1150	465	224	130	92
5	144	244	1870	4150	945	1810	1390	1090	471	218	130	90
6	143	250	2900	3810	926	1720	1340	1050	516	211	130	88
7	141	307	7210	3480	912	1640	1290	1020	546	207	127	88
8	140	275	6370	3200	908	1580	1640	991	483	202	124	88
9	141	551	11400	2920	973	1520	1530	968	447	198	120	87
10	149	5290	11000	2700	978	1460	1910	938	426	196	115	86
11	151	4930	10200	2450	990	1410	1960	1080	412	192	111	85
12	147	2860	8530	2240	1440	1370	1810	1090	404	189	107	84
13	143	3790	7900	2090	4330	2140	1740	1010	391	184	106	83
14	141	3130	7190	1930	4380	3600	1670	959	394	178	105	85
15	140	2120	6260	1830	3840	3670	1600	913	377	171	103	90
16	140	2400	5570	1740	4560	3690	1530	879	355	169	102	90
17	139	5020	5410	1640	3760	3800	1450	850	341	165	101	89
18	138	3810	4720	1550	3300	3560	1490	817	332	169	99	88
19	138	4670	4350	1490	3080	3470	1600	785	319	170	97	93
20	138	6600	3980	1450	3050	3430	1510	757	314	169	97	132
21	138	4030	3670	1490	3390	3240	1450	730	312	160	95	128
22	137	2980	3350	1440	3110	2930	1410	698	310	157	94	122
23	139	2710	3230	1380	2840	2660	1350	674	300	155	93	108
24	141	7150	7140	1330	2890	2430	1280	650	290	155	93	100
25	140	6610	11000	1290	2880	2200	1230	635	281	153	93	96
26	141	4140	11100	1260	2650	2090	1200	618	272	151	93	96
27	136	3180	9870	1210	2480	1920	1160	588	267	147	93	95
28	136	2680	7400	1170	2400	1800	1120	554	261	143	93	95
29	136	2350	6820	1140	2320	1700	1070	519	253	142	92	94
30	171	2100	11800	1110	---	1630	1050	501	249	139	92	93
31	211	---	8620	1080	---	1610	---	487	---	136	93	---
TOTAL	4512	85243	197000	73650	67333	72580	43690	26691	11165	5567	3324	2849
MEAN	146	2841	6355	2376	2322	2341	1456	861	372	180	107	95.0
MAX	211	7150	11800	6460	4560	3800	1960	1250	546	245	134	132
MIN	136	244	1870	1080	908	1370	1050	487	249	136	92	83
AC-FT	8950	169100	390700	146100	133600	144000	86660	52940	22150	11040	6590	5650
CAL YR 1983	TOTAL	1245765	MEAN	3413	MAX	42400	MIN	136	AC-FT	2471000		
WTR YR 1984	TOTAL	593604	MEAN	1622	MAX	11800	MIN	83	AC-FT	1177000		

## KLAMATH RIVER BASIN

11530000 TRINITY RIVER AT HOOPA, CA

LOCATION.--Lat 41°03'00", long 123°40'15", in SE 1/4 NW 1/4 sec.25, T.8 N., R.4 E., Humboldt County, Hydrologic Unit 18010211, in Hoopa Valley Indian Reservation, on left bank at Hoopa, 0.4 mi upstream from Supply Creek.

DRAINAGE AREA.--2,853 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1911 to January 1914, October 1916 to September 1918, October 1931 to current year.  
Monthly discharge only for some periods, published in WSP 1315-B. Published as "near Hoopa" 1931-60.

REVISED RECORDS.--WSP 1565: 1913. WDR CA-77-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 274.82 ft National Geodetic Vertical Datum of 1929. Prior to October 1931, nonrecording gage at site 0.4 mi upstream at different datum. October 1931 to Dec. 22, 1964, water-stage recorder at site 2.5 mi upstream at datum 31.67 ft higher.

REMARKS.--Records good. Flow regulated since November 1960 by Clair Engle Lake (station 11525400) 84 mi upstream, and by transbasin diversion to Judge Francis Carr Powerplant (station 11525430) since April 1963. Small diversions above station for irrigation.

AVERAGE DISCHARGE.--33 years (water years 1912-13, 1917-18, 1932-60), 5,619 ft<sup>3</sup>/s, 4,071,000 acre-ft/yr; 21 years (water years 1964-84), 5,195 ft<sup>3</sup>/s, 3,764,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 231,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 57.0 ft present site and datum, from floodmarks; minimum, 162 ft<sup>3</sup>/s Oct. 4, 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 22,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 11	0215	26,900	24.44	Dec. 10	0645	*42,000	28.23
Nov. 20	0700	28,400	24.87	Dec. 26	0645	38,300	27.36
Nov. 25	0015	32,100	25.83				

Minimum daily, 666 ft<sup>3</sup>/s Sept. 13, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	1770	6660	27700	3780	8750	5900	6050	3150	1640	1100	954
2	1060	2480	6760	22800	3690	8880	5400	6100	2950	1690	1090	897
3	1030	1910	7290	19500	3590	8120	5000	6710	2910	1810	1090	830
4	1010	2060	7530	17600	3520	7280	5300	6140	2980	1770	1080	809
5	988	2070	7000	16600	3450	6900	5200	5600	3080	1740	1070	788
6	979	1850	10400	15600	3380	6710	5000	5240	3220	1710	1060	777
7	968	2570	28200	14500	3300	6580	4900	4990	3710	1690	1050	773
8	954	1980	26600	13700	3260	6490	7000	4890	3120	1630	1040	779
9	954	2530	29200	12800	3460	6320	6800	4940	2770	1560	1020	778
10	975	9220	38800	12700	3640	6090	8400	4780	2610	1500	1010	761
11	1030	18600	34500	13100	3660	5830	8200	6620	2490	1480	998	749
12	1000	9050	35200	12700	5360	5640	7700	8630	2450	1490	992	679
13	977	11300	35800	10900	16000	7060	7400	6740	2460	1460	988	666
14	953	10700	40000	8510	14500	12700	7000	6040	2480	1430	989	666
15	938	7420	37600	10000	13200	12800	6700	5380	2460	1410	976	697
16	935	7540	30200	8600	12000	13100	6300	4890	2480	1400	966	683
17	931	16700	26400	7640	12300	13600	6000	4580	2400	1400	952	674
18	925	14900	21300	7190	10400	12200	6200	4380	2300	1400	948	670
19	920	14800	17500	6190	9290	11500	6800	4310	2280	1370	945	681
20	916	25500	14700	5570	9210	11500	8100	4360	2220	1350	947	739
21	912	15700	10600	5800	11600	11400	7300	4240	2090	1320	935	749
22	910	10900	10200	5490	10900	10000	6400	4030	1960	1270	924	741
23	926	9610	9800	5310	9580	9200	5690	4060	1910	1230	922	727
24	961	18000	16400	4990	9520	8400	5280	4010	1920	1200	919	713
25	973	24900	29300	4670	10200	7700	4660	3700	1970	1180	921	704
26	942	14900	36200	4460	9300	8200	4660	3770	1960	1180	924	697
27	927	11100	34000	4310	8730	7800	4710	3670	1920	1160	917	689
28	915	9260	28700	4190	8460	7200	4580	3630	1900	1150	910	683
29	907	7920	26800	4080	8540	6600	4440	3830	1890	1140	905	678
30	944	7090	36600	3980	---	6000	5070	3800	1750	1120	903	669
31	1340	---	34600	3870	---	6200	---	3530	---	1110	924	---
TOTAL	30150	293810	725890	315050	227820	266750	182090	153640	73790	43990	30415	22100
MEAN	973	9794	23420	10160	7856	8605	6070	4956	2460	1419	981	737
MAX	1340	25500	40000	27700	16000	13600	8400	8630	3710	1810	1100	954
MIN	907	1770	980	3870	3260	5640	4440	3530	1750	1110	903	666
AC-FT	59800	582800	1440000	624900	451900	529100	361200	304700	146400	87250	60330	43840
CAL YR 1983	TOTAL	4620210	MEAN	12660	MAX	92700	MIN	907	AC-FT	9164200		
WTR YR 1984	TOTAL	2369875	MEAN	6475	MAX	40000	MIN	666	AC-FT	4701000		

## 11530020 SUPPLY CREEK AT HOOPA, CA

LOCATION.--Lat 41°03'06", long 123°40'47", in NW 1/4 sec.25, T.8 N., R.4 E., Hoopa Valley Indian Reservation, Humboldt County, Hydrologic Unit 18010211, on left bank side at upstream side of bridge on Loop Road, 1,800 ft upstream from mouth and 1.0 mi downstream from Rock Creek.

DRAINAGE AREA.--15.8 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

\*GAGE.--Water-stage recorder. Altitude of gage is 350 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,060 ft<sup>3</sup>/s Dec. 16, 1982, gage height, 4.62 ft; minimum daily, 4.6 ft<sup>3</sup>/s Oct. 5, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 862 ft<sup>3</sup>/s Dec. 6, gage height, 3.43 ft, no other peak above base of 750 ft<sup>3</sup>/s; minimum daily, 5.10 ft<sup>3</sup>/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	27	84	185	40	123	67	93	31	18	9.5	7.8
2	7.1	18	85	156	38	128	62	114	30	17	9.3	7.5
3	7.1	18	103	135	37	114	58	125	29	17	9.1	7.2
4	7.4	32	97	117	36	100	66	111	36	16	8.9	7.0
5	7.7	21	133	105	35	94	61	92	32	15	8.5	6.6
6	7.2	52	491	94	34	88	57	80	45	16	8.4	6.6
7	7.1	39	612	85	33	87	57	72	51	15	8.4	6.5
8	7.1	26	428	78	33	83	116	65	40	14	8.3	6.4
9	7.1	64	393	72	49	80	112	60	37	14	8.3	6.2
10	7.1	128	439	71	46	77	180	57	34	14	8.2	6.1
11	7.4	174	428	67	65	75	170	130	32	14	7.9	6.1
12	7.4	124	420	62	117	70	149	119	32	14	7.9	6.0
13	7.4	194	603	58	321	118	128	99	30	14	7.7	5.8
14	7.5	159	602	55	250	200	114	85	29	13	7.5	5.7
15	7.7	100	434	54	232	238	100	75	28	12	7.6	5.8
16	7.7	141	292	52	266	267	87	68	27	12	7.6	5.8
17	7.7	312	241	51	204	237	79	63	26	11	7.4	5.8
18	8.0	232	200	48	154	197	83	58	25	12	7.1	5.7
19	7.8	322	171	47	132	167	84	54	24	12	7.1	6.0
20	7.4	333	145	46	134	150	86	51	23	11	7.2	6.1
21	7.4	207	123	57	151	138	81	49	23	11	7.0	6.0
22	7.4	153	106	54	128	123	75	47	23	11	7.1	5.9
23	8.3	146	99	54	116	110	69	45	22	11	7.7	5.7
24	8.5	328	170	56	153	98	63	43	21	11	7.5	5.7
25	8.6	294	250	54	222	90	58	41	21	11	7.7	5.7
26	8.6	197	320	51	172	101	55	40	20	11	7.7	5.7
27	8.6	150	290	49	141	94	52	38	20	10	7.5	5.5
28	8.6	123	260	47	126	84	50	37	19	9.8	7.5	5.3
29	8.6	105	226	45	117	78	48	35	18	9.7	7.3	5.1
30	10	92	295	44	---	71	50	34	18	10	7.5	5.3
31	15	---	226	42	---	72	---	32	---	9.9	7.8	---
TOTAL	247.7	4311	8766	2191	3582	3752	2517	2112	846	396.4	244.2	182.6
MEAN	7.99	144	283	70.7	124	121	83.9	68.1	28.2	12.8	7.88	6.09
MAX	15	333	612	185	321	267	180	130	51	18	9.5	7.8
MIN	7.1	18	84	42	33	70	48	32	18	9.7	7.0	5.1
AC-FT	491	8550	17390	4350	7100	7440	4990	4190	1680	786	484	362
CAL YR 1983	TOTAL	39715.4	MEAN	109	MAX	898	MIN	6.5	AC-FT	78780		
WTR YR 1984	TOTAL	29249.0	MEAN	79.9	MAX	612	MIN	5.1	AC-FT	58020		

## TRINITY RIVER BASIN

11530020 SUPPLY CREEK AT HOOPA, CA--Continued

## WATER-QUALITY RECORDS

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

WATER TEMPERATURES: November 1981 to current year.

SEDIMENT RECORDS: November 1981 to current year.

REMARKS.--zero bedload discharge observed for flows less than 146 ft<sup>3</sup>/s. Water quality data collected only during the storm season (normally November thru April). Sediment discharge values were estimated from a daily sediment transport curve for those days with no concentration data listed.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: November 1981 to current year.

SEDIMENT RECORDS: November 1981 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum observed, 18.0°C May 4, 20, 1982; minimum observed, 4.5°C Dec. 23, 1983.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 2,490 mg/L Dec. 19, 1981; minimum daily mean, 0 mg/L on many days in 1983.

SEDIMENT DISCHARGE: Maximum daily, 9,950 tons Dec. 19, 1981; minimum daily, 0 tons on many days in 1983.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURES: Maximum observed, 13.5°C Nov. 4; minimum observed 4.5°C Dec. 23.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 354 mg/L Dec. 6; minimum daily mean, 1 mg/L Feb. 4-8.

SEDIMENT DISCHARGE: Maximum daily, 643 tons Dec. 6; minimum daily, .09 tons Feb. 5-8.

 TEMPERATURE (DEG. C) OF WATER, OCTOBER 1983 TO APRIL 1984  
 ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	9.0	9.5	7.0	---	10.0					
2	---	---	---	---	6.0	---	---					
3	---	---	---	9.5	6.0	---	---					
4	---	13.5	9.5	---	---	10.0	---					
5	---	---	---	---	8.0	---	---					
6	---	12.5	9.5	---	---	---	---					
7	---	---	9.5	---	---	---	---					
8	---	10.5	10.5	11.0	---	12.0	9.0					
9	---	10.0	10.0	---	7.0	---	---					
10	---	11.0	---	9.5	---	---	9.5					
11	---	11.0	8.0	---	---	10.5	---					
12	---	---	8.5	8.0	8.5	---	---					
13	---	9.0	9.0	9.0	9.0	10.0	---					
14	---	---	11.0	---	---	---	---					
15	---	10.0	---	---	---	---	---					
16	---	---	---	---	7.5	8.5	---					
17	---	10.5	---	7.0	9.0	---	---					
18	---	---	10.0	---	---	10.5	---					
19	---	---	---	7.5	---	---	---					
20	---	---	8.0	---	---	10.5	12.0					
21	---	10.0	---	---	---	---	---					
22	---	---	5.5	8.0	---	11.0	12.5					
23	---	9.0	4.5	---	---	---	---					
24	---	9.5	---	---	---	---	---					
25	---	9.5	---	10.0	---	---	---					
26	---	---	---	---	10.0	---	---					
27	---	9.5	---	---	10.0	11.0	---					
28	12.5	---	---	---	9.5	---	---					
29	---	8.0	9.0	---	---	10.0	---					
30	---	9.0	8.0	6.0	---	---	---					
31	---	---	---	---	---	---	---					
MONTH	---	---	---	---	---	---	---					

11530020 SUPPLY CREEK AT HOOPA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), NOVEMBER 1983 TO APRIL 1984

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				27	8	.58	84	4	.91
2				18	4	.19	85	4	.92
3				18	2	.10	103	40	11
4				32	7	.60	97	3	.79
5				21	2	.11	133	20	8.9
6				52	16	2.7	491	354	643
7				39	8	.84	612	335	600
8				26	4	.28	428	67	77
9				64	16	3.0	395	49	56
10				128	70	37	439	46	55
11				174	24	11	428	47	55
12				124	15	5.1	420	52	63
13				194	42	25	603	223	364
14				159	30	13	602	162	.268
15				100	5	1.4	435	82	96
16				141	5	37	295	60	48
17				312	0	151	244	45	30
18				232	0	28	203	30	16
19				322	0	143	174	18	8.5
20				333	0	72	148	10	4.0
21				207	30	17	125	9	3.0
22				153	16	6.6	108	7	2.0
23				146	20	7.9	101	5	1.4
24				328	133	129	170	20	9.2
25				294	25	20	250	30	20
26				197	11	5.9	320	50	43
27				150	8	3.2	290	35	27
28				123	7	2.3	260	26	18
29				105	5	1.4	229	25	15
30				92	10	2.5	298	48	39
31				---	---	---	229	28	17
TOTAL				4311	---	727.70	8799	---	2600.62

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	188	20	10	40	3	.32	123	10	3.3
2	159	14	6.0	38	2	.21	128	8	2.8
3	137	12	4.4	37	2	.20	114	7	2.2
4	118	10	3.2	36	1	.10	100	7	1.9
5	106	9	2.6	35	1	.09	94	6	1.5
6	95	8	2.1	34	1	.09	88	6	1.4
7	87	6	1.4	33	1	.09	87	5	1.2
8	81	8	1.7	33	1	.09	83	5	1.1
9	75	7	1.4	49	12	1.6	80	5	1.1
10	75	6	1.2	46	5	.62	77	5	1.0
11	71	6	1.2	65	12	2.1	75	5	1.0
12	67	4	.72	117	19	6.0	70	5	.95
13	63	3	.51	321	92	97	118	20	19
14	60	2	.32	250	45	30	200	19	10
15	58	2	.31	232	43	29	238	33	23
16	56	2	.30	266	22	16	267	36	26
17	54	2	.29	204	14	7.7	237	19	12
18	51	2	.28	154	12	5.0	197	14	7.4
19	49	2	.26	132	10	3.6	167	13	5.9
20	48	2	.26	134	10	3.6	150	13	5.3
21	60	7	1.1	151	15	6.1	138	10	3.7
22	57	4	.62	128	10	3.5	123	7	2.3
23	57	3	.46	116	8	2.5	110	6	1.8
24	56	2	.30	153	28	14	98	5	1.3
25	54	2	.29	222	25	15	90	5	1.2
26	51	2	.28	172	14	6.5	101	6	1.6
27	49	2	.26	141	9	3.4	94	5	1.3
28	47	2	.25	126	7	2.4	84	5	1.1
29	45	2	.24	117	6	1.9	78	5	1.1
30	44	2	.24	---	---	---	71	4	.77
31	42	2	.23	---	---	---	72	3	.58
TOTAL	2260	---	42.72	3582	---	258.71	3752	---	144.80

## TRINITY RIVER BASIN

11530020 SUPPLY CREEK AT HOOPA, CA--Continued

SUSPENDED-SEDIMENT DISCHARGE (TONS/DAY), NOVEMBER 1983 TO APRIL 1984

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	67	3	.54						
2	62	3	.50						
3	58	3	.47						
4	66	6	1.1						
5	61	4	.66						
6	57	3	.46						
7	57	5	.84						
8	116	18	5.6						
9	112	9	2.9						
10	180	24	12						
11	170	12	5.5						
12	149	12	4.8						
13	128	9	3.1						
14	114	8	2.5						
15	100	7	1.9						
16	87	6	1.4						
17	79	5	1.1						
18	83	7	1.6						
19	84	7	1.6						
20	86	4	.93						
21	81	4	.87						
22	75	3	.61						
23	69	3	.56						
24	63	3	.51						
25	58	3	.47						
26	55	2	.30						
27	52	2	.28						
28	50	2	.27						
29	48	2	.26						
30	50	3	.41						
31	---	---	---						
TOTAL	2517	---	54.04						

## SUMMARY OF WATER AND SEDIMENT DISCHARGE, WATER YEAR NOVEMBER 1983 TO APRIL 1984

MONTH	WATER DISCHARGE CFS-DAYS	SUSPENDED SEDIMENT DISCHARGE TONS	BEDLOAD DISCHARGE TONS	TOTAL SEDIMENT DISCHARGE TONS
NOVEMBER ...	4311.00	727.70	238	966
DECEMBER ...	8799.00	2600.62	1600	4200
JANUARY 1984	2260.00	42.72	3	46
FEBRUARY ...	3582.00	258.71	118	377
MARCH .....	3752.00	144.80	51	196
APRIL .....	2517.00	54.04	3	57
TOTAL .....	25221.00	3828.59	2013	5842

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		BED MAT. STREAM- FLOW, DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.	BED MAT. SIEVE DIAM.
		% FINER	% FINER	% FINER	% FINER	% FINER	% FINER
DATE	TIME	INSTAN- TANEOUS (CFS)	THAN 2.00 MM	THAN 4.00 MM	THAN 8.00 MM	THAN 16.0 MM	THAN 32.0 MM
SEP 05...	1430	6.5	5	6	9	17	33
							52

## KLAMATH RIVER BASIN

11530500 KLAMATH RIVER NEAR KLAMATH, CA  
(National stream-quality accounting network station)

LOCATION.--Lat 41°30'52", long 123°59'57", in SW 1/4, sec.13, T.13 N., R.2 E., Del Norte County, Hydrologic Unit 18010209, on right bank 0.2 mi upstream from Turwar Creek, and 2.2 mi southeast of Klamath.

DRAINAGE AREA.--12,100 mi<sup>2</sup>, approximately (not including Lost River or Lower Klamath Lake basins).

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to December 1926 (published as "near Regua"), October 1950 to current year.  
Monthly discharge only for some periods, published in WSP 1315-B.

REVISED RECORDS.--WSP 1285: 1951(P). WSP 1445: 1918-20. WDR CA-81-2: 1980.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to June 1926, nonrecording gage at site 2.6 mi upstream at different datum. June 1926 to Oct. 2, 1975, at site 2.6 mi upstream at datum 5.60 ft higher.

REMARKS.--Records fair. Flow considerably regulated by reservoirs and powerplants above station. Large diversions for irrigation above station.

AVERAGE DISCHARGE.--50 years, 18,110 ft<sup>3</sup>/s, 13,121,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 557,000 ft<sup>3</sup>/s Dec. 23, 1964, gage height, 55.3 ft former datum, from floodmarks, from rating curve extended above 230,000 ft<sup>3</sup>/s on basis of flood-routing study; minimum daily, 1,310 ft<sup>3</sup>/s Sept. 4, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 25	0500	94,700	19.84
Dec. 14	2145	*172,000	24.92
Dec. 30	1830	122,000	21.82

Minimum daily, 3,370 ft<sup>3</sup>/s Sept. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5110	9860	28900	82400	15600	33300	32100	24900	18100	7330	4000	3620
2	5200	12100	28400	69100	15500	34700	30700	32100	16100	7020	3970	3930
3	5150	10900	29500	60100	15200	32800	29200	34600	15600	7030	4180	4470
4	5100	14300	30600	54900	15000	30000	29400	35000	16200	6920	4150	4280
5	5070	13300	30600	52900	14900	28500	28500	31200	17000	6700	4060	4100
6	5040	15200	47800	51100	14500	27900	27500	28800	19100	6580	3990	4180
7	5300	19400	102000	48400	14300	28500	26900	26800	24400	6500	3980	3970
8	6040	14300	97500	45000	13700	28400	32800	25900	19500	6470	3930	3870
9	5970	14700	83700	42300	15100	28000	34600	26500	17500	6100	3860	3850
10	6000	24300	118000	40100	16500	27900	38000	26100	16500	5890	3820	3870
11	6140	59400	103000	39100	16600	28300	40700	34000	15400	5760	3770	3880
12	6270	38000	99100	37200	24300	27300	38200	44300	14700	5670	3680	3870
13	6220	41000	113000	35000	49100	30700	36700	38200	14400	5420	3660	3560
14	6170	37000	156000	32600	69600	50800	35800	34200	14200	5260	3610	3410
15	6230	35000	158000	29400	51200	55200	37100	31000	14100	5150	3620	3370
16	6280	33800	121000	27400	59000	60800	36800	27600	14100	5010	3520	3450
17	6090	58100	101000	26000	52300	60300	35200	25400	13600	4970	3460	3580
18	6080	63700	84100	23800	44100	56000	32800	24900	13000	4960	3400	3630
19	6070	55800	69100	21400	39100	50700	33500	24400	12700	4960	3460	3460
20	6090	83800	60400	20100	37800	51000	31900	24900	12100	4900	3550	3750
21	6020	62400	53400	20900	43300	54500	29700	24800	10800	4750	3530	3950
22	6040	45600	47600	20800	42600	49300	28600	23400	10100	4650	3470	3830
23	6040	40200	42900	20400	38900	45200	28100	22700	9710	4440	3400	3970
24	6300	59900	49400	19300	39900	40800	27500	23400	9220	4340	3390	4040
25	6280	85100	71300	18700	45700	38300	26800	21500	9100	4220	3430	3800
26	6170	59700	91000	18200	40400	40800	25500	21000	8880	4210	3440	3900
27	6140	46300	82700	17800	37400	44300	23400	21100	8540	4180	3440	4070
28	6080	39500	72000	17100	35200	39700	21800	20500	8500	4170	3420	4030
29	6090	35000	71400	16800	33300	36900	20800	22000	8370	4050	3400	3940
30	6250	31300	105000	16500	---	35000	20600	22800	8000	3990	3480	3810
31	7640	---	105000	16200	---	33500	---	21200	---	4010	3500	---
TOTAL	184670	1158960	2453400	1041000	950100	1229400	921200	845200	409520	165610	113570	115440
MEAN	5957	38630	79140	33580	32760	39660	30710	27260	13650	5342	3664	3848
MAX	7640	85100	158000	82400	69600	60800	40700	44300	24400	7330	4180	4470
MIN	5040	9860	28400	16200	13700	27300	20600	20500	8000	3990	3390	3370
AC-FT	366300	2299000	4866000	2065000	1885000	2439000	1827000	1676000	812300	328500	225300	229000
CAL YR 1983	TOTAL	14537480	MEAN	39830	MAX	252000	MIN	4730	AC-FT	28840000		
WTR YR 1984	TOTAL	9588070	MEAN	26200	MAX	158000	MIN	3370	AC-FT	19020000		

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951 to current year.

CHEMICAL ANALYSES: Water years 1951 to current year.

BIOLOGICAL DATA: Water years 1975-81.

SPECIFIC CONDUCTANCE: Water years 1975-81.

WATER TEMPERATURES: Water years 1966-81.

SEDIMENT RECORDS: Water years 1955-56, 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1981.

WATER TEMPERATURES: November 1965 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum recorded, 27.0°C Sept. 12, 1979; minimum recorded, 2.5°C Feb. 2, 1972.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, UM-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
NOV , 1983											
09...	1215	13300	143	7.8	10.5	755	4.0	10.5	95	36	56
JAN , 1984											
10...	1330	39700	132	7.5	8.0	765	34	11.7	98	K21	K53
MAR											
19...	1400	50500	141	7.9	10.0	765	27	11.0	97	K16	K8
MAY											
09...	1240	26300	126	7.4	13.0	765	8.9	9.9	94	K2	K1
JUL											
05...	1245	6580	144	7.9	21.5	755	1.4	8.1	93	K2	K1
SEP											
13...	1300	3380	186	8.6	18.5	760	1.3	9.0	96	<1	75

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
NOV , 1983											
09...	59	0	13	6.5	6.1	18	.4	1.2	65	7.7	3.1
JAN , 1984											
10...	61	0	14	6.4	4.5	14	.3	.90	62	6.2	1.9
MAR											
19...	58	0	13	6.1	5.6	17	.3	1.1	62	8.8	2.0
MAY											
09...	52	0	12	5.4	4.5	16	.3	.80	56	6.3	1.8
JUL											
05...	63	0	15	6.1	4.6	14	.3	.90	63	6.0	2.2
SEP											
13...	75	0	17	7.8	9.6	21	.5	1.7	80	10	4.1

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV , 1983											
09...	<.1	19	88	96	.12	.26	.02	.90	.06	.06	.03
JAN , 1984											
10...	<.1	17	85	88	.12	.12	.02	<.20	.08	.02	.02
MAR											
19...	<.1	16	85	90	.12	<.10	.03	<.20	.06	<.01	.01
MAY											
09...	<.1	15	75	80	.10	<.10	<.01	.20	.04	.02	.03
JUL											
05...	<.1	14	80	87	.11	<.10	<.01	<.20	.02	.02	.02
SEP											
13...	<.1	21	129	120	.18	<.10	<.01	<.20	.06	.05	.04

See footnotes at end of table.

## KLAMATH RIVER BASIN

11530500 KLAMATH RIVER NEAR KLAMATH, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV , 1983										
09...	1215	40	1	18	<.5	<1	<1	<3	3	48
JAN , 1984										
10...	1330	20	1	15	<.5	<1	<1	<3	1	16
MAY										
09...	1240	40	<1	16	.6	<1	1	<3	2	38
SEP										
13...	1300	20	2	21	<1	<1	3	<3	2	12

	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV , 1983											
09...	<1	10	4	<.1	<10	3	<1	<1	83	<6	17
JAN , 1984											
10...	<1	5	4	<.1	<10	1	<1	<1	69	<6	18
MAY											
09...	<1	<4	2	<.1	<10	5	<.1	<1	64	<6	8
SEP											
13...	<1	8	4	<.1	<10	2	<1	<1	110	<6	12

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	GROSS BETA, DIS- SOLVED (PCI/L AS YT-90)	RADIUM 226, DIS- SOLVED (PCI/L METHOD EXTRAC- TION (UG/L)	URANIUM DIS- SOLVED (UG/L)
MAR , 1984									
19...	1400	<1.5	<1.2	<1.0	1.5	<.9	1.0	.03	.15
SEP									
13...	1300	<2.0	<.4	2.1	<.4	1.8	<.4	.03	.13

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

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, DIS- SOLVED (MG/L)	SEDI- MENT, DIS- SOLVED (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
NOV										
09...	1215	13300	10.5	32	1150	--	--	--	--	--
JAN										
10...	1330	39700	8.0	160	17200	50	62	82	96	100
MAR										
19...	1400	50500	10.0	138	18800	52	60	75	96	100
MAY										
09...	1245	26300	13.0	64	4540	36	--	--	--	--
JUL										
05...	1245	6580	22.0	13	231	--	--	--	--	--
SEP										
13...	1300	3380	18.5	10	91	--	--	--	--	--

11532500 SMITH RIVER NEAR CRESCENT CITY, CA  
(National stream-quality accounting network station)

LOCATION.--Lat 41°47'22", long 124°03'14", in SW 1/4 SW 1/4 sec.10, T.16 N., R.1 E. (unsurveyed), Del Norte County, Hydrologic Unit 18010101, Six Rivers National Forest, on left bank 0.5 mi downstream from South Fork, and 8 mi east of Crescent City.

DRAINAGE AREA.--609 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for some periods, published in WSP 1315-B.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 89.61 ft National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--53 years, 3,891 ft<sup>3</sup>/s, 2,819,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 228,000 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 48.5 ft, from floodmarks, from rating curve extended above 110,000 ft<sup>3</sup>/s on basis of slope-area measurement at gage height 39.51 ft; minimum daily, 160 ft<sup>3</sup>/s Oct. 24, 25, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 36,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 24	1115	42,100	24.37	Dec. 14	0930	57,000	26.98
Dec. 6	2215	61,600	27.63	Dec. 30	0400	43,500	24.61
Dec. 10	0015	39,300	23.79	Feb. 13	1045	*72,500	29.36

Minimum daily, 262 ft<sup>3</sup>/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984  
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	335	2670	3620	9190	1690	6020	3700	7160	1460	911	470	343
2	334	2080	3460	7030	1610	6380	3390	11200	1400	876	470	345
3	328	3790	3380	5820	1540	5170	3100	12200	1350	841	470	342
4	323	9520	3080	5070	1480	4480	3030	8350	1770	818	462	314
5	319	4000	5450	4490	1440	4100	2860	5980	1970	793	452	341
6	316	12000	37000	4030	1410	3860	2650	4800	5570	772	446	330
7	310	6920	36800	3670	1360	3620	2780	4100	8430	750	432	334
8	309	4120	20600	3380	1350	3440	10700	3700	4590	729	423	324
9	321	4710	19600	3020	2450	3290	7710	3410	3410	720	416	314
10	439	14200	27600	3250	3220	3230	12300	3080	2760	708	407	309
11	409	19300	18800	3780	5190	3100	9780	9780	2380	694	406	301
12	348	14000	15300	3340	14000	3040	8760	8330	2130	681	402	296
13	334	16900	30400	2960	45100	7920	7670	5910	1950	660	402	296
14	324	12500	46300	2690	17800	20200	6460	4910	1810	637	395	296
15	317	8420	31100	2640	14600	19300	5900	4230	1690	623	386	296
16	316	10800	18000	2490	16400	22600	5070	3730	1590	609	383	296
17	313	21600	12800	2320	11300	17800	4410	3330	1510	595	383	290
18	309	16800	9530	2180	8320	12200	4440	2990	1440	582	377	286
19	306	17900	7600	2080	6980	9460	5680	2740	1380	570	370	297
20	303	19300	6140	2010	7230	9140	6100	2570	1320	556	363	305
21	300	12400	5370	3030	9400	10400	5360	2370	1290	546	352	297
22	299	8750	4630	3360	7620	8570	4740	2210	1230	545	350	282
23	318	10400	4160	3350	6160	6890	4240	2180	1180	540	350	277
24	326	28900	9540	2980	9140	5810	3780	2030	1130	534	350	277
25	308	17700	14200	2690	11800	5130	3390	1920	1090	530	350	273
26	296	10600	15200	2440	8120	8610	3040	1920	1050	524	348	271
27	291	7440	9830	2230	6400	7750	2750	1810	1030	517	337	269
28	285	5820	7470	2090	5630	5950	2520	1740	1000	511	334	265
29	285	4820	11500	1970	5120	4990	2350	1690	983	504	333	262
30	366	4120	28400	1860	---	4340	2370	1620	950	487	333	267
31	1300	---	13600	1770	---	4080	---	1530	---	475	343	---
TOTAL	10987	332480	480460	103210	233860	240870	151030	133520	60843	19838	12095	8935
MEAN	354	11080	15500	3329	8064	7770	5034	4307	2028	640	390	269
MAX	1300	28900	46300	9190	45100	22600	12300	12200	8430	911	470	343
MIN	285	2080	3080	1770	1350	3040	2350	1530	950	475	333	262
AC-FT	21790	659500	953000	204700	463900	477800	299600	264800	120700	39350	23990	17720
CAL YR 1983	TOTAL	2233569	MEAN	6119	MAX	66100	MIN	285	AC-FT	4430000		
WTR YR 1984	TOTAL	1788128	MEAN	4886	MAX	46300	MIN	262	AC-FT	3547000		

## SMITH RIVER BASIN

11532500 SMITH RIVER NEAR CRESCENT CITY, CA--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1952 to current year.

CHEMICAL ANALYSES: Water years 1952 to current year.

BIOLOGICAL DATA: Water year 1978-81.

SPECIFIC CONDUCTANCE: Water years 1979-81.

WATER TEMPERATURES: Water years 1966-81.

SEDIMENT RECORDS: Water years 1955-56, November 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1978 to September 1981.

WATER TEMPERATURES: October 1965 to September 1981.

SEDIMENT RECORDS: November 1977 to September 1979, October 1980 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 154 micromhos Sept. 24-26, 1981; minimum recorded, 62 micromhos Jan. 12, 1980.

WATER TEMPERATURES: Maximum recorded, 24.5°C July 15, 1972, July 26, 27, 1973; minimum recorded, 0.5°C Dec. 10, 11, 1972.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	COLI- FORM, FECAL, UM-HF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC , 1983											
16...	1130	17300	75	7.3	9.5	760	5.6	12.1	106	K18	72
MAR , 1984											
20...	1130	8590	74	7.3	10.0	755	1.5	11.5	103	K5	K4
JUN											
15...	1115	1710	100	7.6	15.0	760	.50	10.1	100	K3	K3
SEP											
14...	1100	296	144	8.3	16.5	755	.50	9.5	98	K3	25

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC , 1983											
16...	35	0	3.5	6.4	1.5	8	.1	.2	35	2.0	1.9
MAR , 1984											
20...	38	1	3.9	6.9	1.6	8	.1	.2	37	1.8	1.8
JUN											
15...	50	3	5.0	9.1	1.9	8	.1	.1	47	2.3	2.0
SEP											
14...	69	3	7.8	12	2.5	7	.1	.6	66	3.7	2.6

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC , 1983											
16...	<.1	13	42	50	.06	<.10	<.01	.50	.01	<.01	.03
MAR , 1984											
20...	<.1	13	47	52	.06	<.10	.03	<.20	.01	<.01	.02
JUN											
15...	<.1	14	53	63	.07	<.10	.01	.30	<.01	<.01	.02
SEP											
14...	<.1	13	85	82	.12	<.10	<.01	<.20	<.01	<.01	<.01

See footnotes at end of table.

11532500 SMITH RIVER NEAR CRESCENT CITY, CA--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
DEC , 1983										
16...	1130	50	<1	10	.7	1	2	<3	<1	34
MAR , 1984										
20...	1130	30	<1	8	<.5	<1	2	<3	1	23
JUN										
15...	1115	10	<1	11	<1	<1	<1	<3	2	7
SEP										
14...	1100	<10	<1	14	<1	<1	4	<3	1	5

DATE	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STROM- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC , 1983											
16...	3	<4	1	<.1	<10	8	<1	<1	19	<6	12
MAR , 1984											
20...	<1	<4	1	<.1	<10	6	<1	<1	22	<6	9
JUN											
15...	<1	<4	<1	<.1	<10	6	<1	<1	28	<6	7
SEP											
14...	<1	5	3	<.1	<10	4	<1	<1	41	<6	10

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

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC						
16...	1130	17300	9.5	33	1540	61
MAR						
20...	1130	8590	10.0	4	93	70
JUN						
15...	1115	1710	15.0	2	9.2	--
SEP						
14...	1100	296	16.5	3	2.4	--

## DISCHARGE AT PARTIAL-RECORD STATIONS

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low- or flood-flow analyses, depending on the type of data collected.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum discharge at crest-stage stations.

## Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same or practically the same site.

Discharge measurements made at low-flow partial-record stations during water year 1984

Station No.	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Measurements	
					Date	Discharge (ft <sup>3</sup> /s)
Alameda Creek basin						
111775 <sup>a</sup>	Valecitos Creek near Sunol, CA	Lat 37°35'42", long 121°52'51", in Valle de San Jose Grant, Alameda County, Hydrologic Unit 18050004, on right bank at culvert on Sunol Road, 700 ft upstream from mouth, and 0.3 mi east of Sunol.	7.48	1975-76b 1977-84	12-22-83	3.89
					1-26-84	0.95
					3-1-84	0.86
					4-19-84	0.80
					8-10-84	50.1
Klamath River basin						
11525 <sup>b</sup>	Deadwood Creek at Lewiston, CA	Lat 40°43'02", long 122°48'04", in SW¼NW¼ sec.17, T.33 N., R.8 W., Trinity County, Hydrologic Unit 18010211, 300 ft upstream from mouth and 0.7 mi northeast of Lewiston.	9.10	1965-75 1976-84	12-8-83	38.8

a Water-quality data for current year published in this report.

b Published as a miscellaneous measurement.

## PAJARO RIVER BASIN

11153500 LLAGAS CREEK NEAR MORGAN HILL, CA

LOCATION.--Lat 37°06'52", long 121°41'22", in Las Uvas Grant, Santa Clara County, Hydrologic Unit 18060002, 500 ft upstream from Llagas Avenue bridge, 0.3 mi downstream from Chesbro Dam, 0.3 mi upstream from small left bank tributary, and 2.3 mi west of Morgan Hill.

DRAINAGE AREA.--19.6 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
29...	1415	8.5	354	8.4	11.0	755	10	11.4	104
MAR									
16...	1330	1.4	398	8.3	13.5	755	5.7	11.1	108
JUN									
13...	1300	6.6	452	8.5	15.0	750	5.7	9.8	99
JUL									
11...	1430	1.6	380	8.2	19.0	750	7.6	8.5	93
AUG									
28...	1400	1.6	400	8.0	18.5	750	5.6	8.4	91

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB , 1984										
29...	180	13	34	24	9.8	10	.3	1.0	171	17
MAR										
16...	200	8	34	28	9.9	10	.3	.90	192	18
JUN										
13...	190	7	37	24	10	10	.3	.90	184	14
JUL										
11...	190	11	38	24	9.8	10	.3	1.0	183	13
AUG										
28...	200	0	39	25	10	10	.3	1.2	211	9.5

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, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984										
29...	9.2	.1	19	220	.29	5.0	.30	.28	.13	.03
MAR										
16...	9.8	.2	27	240	.33	.92	.30	.25	.03	.02
JUN										
13...	9.0	.1	19	220	.31	4.0	<.10	<.10	.12	.15
JUL										
11...	9.3	.2	19	220	.31	.97	<.10	<.10	.22	.19
AUG										
28...	9.0	.1	20	240	.33	1.0	.20	.13	.30	.38

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 + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE TOTAL (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984									
29...	.27	.17	.40	.20	.70	.02	<.01	3.2	.2
MAR									
16...	.37	.28	.40	.30	.70	.03	.04	3.3	.7
JUN									
13...	.78	.25	.90	.40	--	.06	.03	--	--
JUL									
11...	.78	.21	1.0	.40	--	.09	.04	--	--
AUG									
28...	.70	.32	1.0	.70	1.2	.14	.06	4.0	.5

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PAJARO RIVER BASIN--Continued

11153500 LLAGAS CREEK NEAR MORGAN HILL, CA--Continued

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
29...	1415	--	--	--	--	150	--	--
MAR								
16...	1330	--	--	--	--	140	--	--
JUN								
13...	1300	--	--	--	--	160	--	--
JUL								
11...	1430	--	--	<1	--	150	<1	--
AUG								
28...	1400	10	10000	<1	5	160	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
29...	--	--	--	--	--	10	--	--	--
MAR									
16...	--	--	--	--	--	5	--	--	--
JUN									
13...	--	--	--	--	--	32	--	--	--
JUL									
11...	<10	--	--	2	--	8	--	<1	--
AUG									
28...	<10	150	40	1	30	14	22000	<1	10

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
29...	--	--	--	--	--	--	--	--
MAR								
16...	--	--	--	--	--	--	--	--
JUN								
13...	--	--	--	--	--	--	--	--
JUL								
11...	--	--	<.1	--	--	--	--	--
AUG								
28...	440	1800	<.1	.65	<100	<1	17	40

See footnote at end of table.

## PAJARO RIVER BASIN--Continued

11153500 LLAGAS CREEK NEAR MORGAN HILL, CA--Continued

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. HEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOGOCOCCI (COLS. PER 100 ML)
OCT , 1983						
04...	1035	1.1	17.0	120	40	60
11...	1045	1.2	16.0	70	70	70
18...	1030	1.2	15.0	100	45	70
FEB , 1984						
21...	1215	7.4	12.0	650	10	10
28...	1015	8.5	12.0	70	10	15
MAR						
06...	0950	1.1	--	240	30	12
13...	1030	1.2	12.0	400	50	50
20...	1105	1.2	14.0	200	15	10
AUG						
28...	0940	1.8	15.0	160	120	60
SEP						
04...	0945	1.6	15.0	250	240	40
11...	0920	9.0	16.0	20	18	15
18...	0940	8.6	17.0	80	9	10
25...	0920	8.6	16.0	55	6	6

DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
AUG , 1984									
28...	1400	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010

DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
28...	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)
AUG , 1984									
28...	<.01	<.01	<.01	<.1	<1	<.01	.01	<.01	<.01

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

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PAJARO RIVER BASIN--Continued

11153530 LLAGAS CREEK AT MACHADO SCHOOL, NEAR MORGAN HILL, CA

LOCATION.--Lat 37°05'23", long 121°39'38", in San Francisco de Las Llagas Grant, Santa Clara County, Hydrologic Unit 18060002, on left bank at Machado School, 125 ft upstream from Sycamore Avenue bridge, 1,300 ft downstream from small right bank tributary, and 2.8 mi south of Morgan Hill.

DRAINAGE AREA.--24.1 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1980 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)
FEB , 1984									
29...	1245	6.8	400	8.0	12.5	755	2.0	12.8	121
MAR									
16...	1210	3.0	474	7.8	15.0	760	1.3	11.6	115
JUN									
13...	1130	8.3	464	8.1	15.0	750	3.6	10.2	103
JUL									
11...	1330	1.4	426	7.9	23.0	750	1.4	10.0	119
AUG									
28...	1200	2.5	432	8.1	20.5	755	1.9	9.1	102

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB , 1984										
29...	--	--	--	--	--	--	--	<.10	190	18
MAR										
16...	230	7	38	33	12	10	.4	.60	224	19
JUN										
13...	200	19	38	26	11	11	.3	.90	183	14
JUL										
11...	220	15	40	29	11	10	.3	.70	205	15
AUG										
28...	210	5	39	28	11	10	.3	.70	208	12

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, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984										
29...	12	.1	--	--	--	--	.60	.62	.02	.01
MAR										
16...	14	.2	26	280	.38	2.2	1.0	1.0	.01	.02
JUN										
13...	9.8	.1	21	230	.31	5.2	.30	.30	.03	.01
JUL										
11...	10	.2	25	250	.35	--	.50	.46	.04	<.01
AUG										
28...	11	.1	24	250	.34	1.7	.30	.28	<.01	<.01

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 + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984									
29...	.18	--	.20	<.20	.80	.01	.01	2.3	.1
MAR									
16...	.39	.48	.40	.50	1.4	.02	.03	2.2	.1
JUN									
13...	.57	--	.60	<.20	.90	.04	.02	--	--
JUL									
11...	.36	--	.40	.20	.90	.02	.03	--	--
AUG									
28...	--	--	.50	.30	.80	.04	.02	2.6	.2

See footnote at end of table.

## PAJARO RIVER BASIN--Continued

11153530 LLAGAS CREEK AT MACHADO SCHOOL, NEAR MORGAN HILL, CA--Continued

		ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)		
DATE	TIME								
FEB , 1984									
29...	1245	--	--	--	150	--	--		
MAR									
16...	1210	--	--	--	130	--	--		
JUN									
13...	1130	--	--	--	150	--	--		
JUL									
11...	1330	--	--	--	150	--	--		
AUG									
28...	1200	10	9700	<1	160	<1	<1		
DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
29...	--	--	--	--	--	--	--	--	--
MAR									
16...	--	--	--	--	--	3	--	--	--
JUN									
13...	--	--	--	--	--	10	--	--	--
JUL									
11...	--	--	--	--	--	4	--	--	--
AUG									
28...	<10	70	30	1	30	<3	22000	1	<10
DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	
FEB , 1984									
29...	--	--	--	--	--	--	--	--	
MAR									
16...	--	--	--	--	--	--	--	--	
JUN									
13...	--	--	--	--	--	--	--	--	
JUL									
11...	--	--	--	--	--	--	--	--	
AUG									
28...	2	670	<.1	.57	<100	<1	3	50	

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PAJARO RIVER BASIN--Continued

11153530 LLAGAS CREEK AT MACHADO SCHOOL, NEAR MORGAN HILL, CA--Continued

		TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, (COLS. PER 100 ML)
DATE	TIME				
OCT , 1983					
04...	1020	16.0	510	100	200
11...	1035	16.0	760	190	220
FEB , 1984					
21...	1200	13.0	350	180	80
28...	1000	11.0	70	50	65
MAR					
06...	0940	12.0	130	70	55
13...	1015	14.0	140	80	130
20...	1055	15.0	60	30	40
AUG					
28...	0930	17.0	950	340	20
SEP					
04...	0935	17.0	1300	1200	310
11...	0900	16.0	1500	210	270
18...	0930	17.0	3000	300	350
25...	0910	14.0	1400	200	200

DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
AUG , 1984									
28...	1200	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010

DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
28...	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)
AUG , 1984									
28...	<.01	<.01	<.01	<.1	<1	<.01	<.01	<.01	<.01

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

## PAJARO RIVER BASIN--Continued

11153555 LLAGAS CREEK AT SAN MARTIN, CA

LOCATION.--Lat 37°05'13", long 121°36'15", in San Francisco de Las Llagas Grant, Santa Clara County, Hydrologic Unit 18060002, at bridge on San Martin Avenue, 0.3 mi east of San Martin.  
DRAINAGE AREA.--28.2 mi<sup>2</sup>.

CHEMICAL ANALYSES: Water years 1979 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
29...	1115	6.9	437	8.2	14.0	760	2.1	13.2	129
MAR									
16...	1005	5.8	459	8.0	14.5	760	1.3	10.6	104
JUN									
13...	1000	18	421	8.3	17.0	755	1.4	9.2	96
JUL									
11...	1130	18	337	8.4	21.5	755	1.6	10.2	117
AUG									
28...	1000	12	375	8.2	22.0	755	2.0	8.9	103

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB , 1984										
29...	210	22	37	29	13	12	.4	1.0	190	21
MAR										
16...	220	25	39	29	14	12	.4	.90	192	23
JUN										
13...	170	16	35	21	11	12	.4	.90	158	22
JUL										
11...	160	8	36	17	10	12	.4	.90	152	25
AUG										
28...	170	17	37	20	12	13	.4	1.2	158	28

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, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 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)
FEB , 1984										
29...	16	.1	22	250	.34	4.7	1.9	1.9	<.01	.01
MAR										
16...	18	.1	21	260	.35	4.1	2.7	2.7	.02	.02
JUN										
13...	8.7	.2	17	210	.29	10	<.10	<.10	.01	<.01
JUL										
11...	7.5	.1	16	200	.28	9.9	<.10	<.10	.04	<.01
AUG										
28...	8.2	<.1	16	220	.30	6.9	<.10	<.10	.01	<.01

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 + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984									
29...	--	.29	.50	.30	2.4	.02	.02	2.1	.1
MAR									
16...	.68	.68	.70	.70	3.4	.03	.01	2.3	.4
JUN									
13...	.69	--	.70	.20	--	.03	.01	--	--
JUL									
11...	.26	--	.30	.30	--	.01	<.01	--	--
AUG									
28...	.29	--	.30	.30	--	.02	<.01	3.2	.1

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## PAJARO RIVER BASIN--Continued

11153555 LLAGAS CREEK AT SAN MARTIN, CA--Continued

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
29...	1115	--	--	--	--	140	--	--
MAR								
16...	1005	--	--	--	--	120	--	--
JUN								
13...	1000	--	--	--	--	100	--	--
JUL								
11...	1130	--	--	--	--	70	--	--
AUG								
28...	1000	10	9000	<1	1	80	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
29...	--	--	--	--	--	25	--	--	--
MAR									
16...	--	--	--	--	--	<3	--	--	--
JUN									
13...	--	--	--	--	--	3	--	--	--
JUL									
11...	--	--	--	--	--	5	--	--	--
AUG									
28...	<10	70	20	1	30	3	20000	2	<10

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
29...	--	--	--	--	--	--	--	--
MAR								
16...	--	--	--	--	--	--	--	--
JUN								
13...	--	--	--	--	--	--	--	--
JUL								
11...	--	--	--	--	--	--	--	--
AUG								
28...	6	720	<.1	.54	<100	<1	7	50

See footnote at end of table.

## PAJARO RIVER BASIN--Continued

11153555 LLAGAS CREEK AT SAN MARTIN, CA--Continued

		TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, (COLS. PER 100 ML)					
DATE	TIME									
OCT , 1983										
04...	1000	17.0	2200	470	250					
FEB , 1984										
21...	1145	14.0	3400	90	180					
28...	0945	12.0	1900	560	150					
MAR										
06...	0920	12.0	210	80	20					
13...	1000	15.0	710	180	200					
20...	1040	17.0	140	70	30					
AUG										
28...	0910	21.0	550	150	70					
SEP										
04...	0920	22.0	550	250	90					
11...	0900	20.0	370	150	70					
18...	0920	21.0	270	40	49					
25...	0855	15.0	850	70	120					
DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	
AUG , 1984										
28...	1000	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010	
DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
28...	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01
DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)	
AUG , 1984										
28...	<.01	<.01	<.01	<.1	<1	<.01	<.01	<.01	<.01	

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

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN

11167500 GUADALUPE CREEK AT GUADALUPE, CA

LOCATION.--Lat 37°13'02", long 121°54'35", in SW¼ sec.19, T.8 S, R.1 E., Santa Clara County, Hydrologic Unit 18050003, on left bank 0.1 mi downstream from small left-bank tributary, 0.5 mi northwest of Guadalupe.

DRAINAGE AREA.--12.8 mi².

REMARKS.--Multi-date sample was collected by automatic sampler and composited.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1980 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
DATE	TIME									
FEB , 1984										
27-28	1800	--	--	--	--	--	--	--	--	
29...	1145	2.5	476	8.8	10.0	755	--	14.0	125	
MAR										
17...	1030	2.9	456	9.2	11.0	765	4.3	11.8	107	
JUN										
11-12	1800	--	--	--	--	--	3.5	--	--	
12...	1145	26	489	8.4	16.5	750	--	9.4	98	
JUL										
10...	1200	13	477	8.5	23.0	755	4.4	8.5	100	
AUG										
27...	1100	.30	726	8.4	17.0	760	.60	9.1	95	
DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)
FEB , 1984										
27-28	--	230	24	41	32	14	11	.4	1.1	--
29...	11	--	--	--	--	--	--	--	--	157
MAR										
17...	11	230	29	42	31	14	12	.4	1.0	204
JUN										
11-12	28	200	19	37	25	14	13	.4	.9	--
12...	--	--	--	--	--	--	--	--	--	180
JUL										
10...	20	240	12	45	30	16	13	.5	1.2	224
AUG										
27...	<10	410	60	68	58	30	14	.7	1.5	349
DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
FEB , 1984										
27-28	43	14	.2	15	290	.39	--	<.10	<.10	.08
28...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	38	12	.2	16	280	.38	2.2	.10	<.10	.03
JUN										
11-12	21	9.6	.2	12	230	.31	--	<.10	<.10	<.01
12...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	28	11	.1	13	280	.38	--	<.10	<.10	.04
AUG										
27...	69	25	.2	17	480	.65	.39	<.10	<.10	<.01

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

## 11167500 GUADALUPE CREEK AT GUADALUPE, CA--Continued

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (HG/L AS N)	NITRO- GEN, ORGANIC TOTAL (HG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (HG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (HG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (HG/L AS N)	PHOS- PHORUS, TOTAL (HG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (HG/L AS P)	CARBON, ORGANIC DIS- SOLVED (HG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (HG/L AS C)
FEB , 1984									
27-28	.01	.82	.19	.90	.20	.28	.01	--	--
28...	--	--	--	--	--	--	--	1.8	.1
MAR									
17...	.03	--	--	<.20	<.20	.03	.02	2.2	.1
JUN									
11-12	.01	--	--	.50	<.20	.04	.01	--	--
12...	--	--	--	--	--	--	--	2.0	.2
JUL									
10...	<.01	.36	--	.40	.40	.01	.01	--	--
AUG									
27...	<.01	--	--	.30	.30	.02	.01	3.0	.1

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/G AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
27-28	1800	--	--	--	--	110	--	--
MAR								
17...	1030	--	--	--	--	100	--	--
JUN								
11-12	1800	--	--	--	--	220	--	--
JUL								
10...	1200	--	--	--	--	310	--	--
AUG								
27...	1100	<10	8800	4	6	560	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
27-28	--	--	--	--	--	11	--	--	--
MAR									
17...	--	--	--	--	--	49	--	--	--
JUN									
11-12	--	--	--	--	--	15	--	--	--
JUL									
10...	--	--	--	--	--	5	--	--	--
AUG									
27...	10	80	30	<1	30	17	20000	<1	20

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
27-28	--	--	--	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
JUN								
11-12	--	--	--	--	--	--	--	--
JUL								
10...	--	--	--	--	--	--	--	--
AUG								
27...	12	510	<.1	3.9	<100	<1	230	230

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

## 11167500 GUADALUPE CREEK AT GUADALUPE, CA--Continued

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCCHI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	1110	1.0	15.0	4200	190	850
11...	1120	7.9	17.0	2900	360	830
18...	1105	9.4	17.0	1200	50	180
FEB , 1984						
21...	1250	3.9	12.0	800	140	750
28...	1050	2.5	10.0	300	230	30
MAR						
06...	1030	2.1	10.0	190	50	25
13...	1105	2.5	13.0	1900	700	800
20...	1140	2.3	14.0	280	25	50
AUG						
28...	1015	.20	16.0	2100	470	180
SEP						
04...	1015	.10	16.0	2200	1900	250
11...	0955	.00	17.0	4400	1500	700
18...	1020	.10	19.0	2000	400	490
25...	0955	.10	14.0	1200	220	160

DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
AUG , 1984									
27...	1100	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010

DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
27...	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)
AUG , 1984									
27...	<.01	<.01	<.01	<.1	<1	<.01	.01	<.01	<.01

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

## GUADALUPE RIVER BASIN--Continued

11167572 GUADALUPE RIVER AT ALAMITOS RECHARGE FACILITY, AT SAN JOSE, CA

LOCATION.--Lat 37°14'51", long 121°52'08", in San Juan Bautista Grant, Santa Clara County, Hydrologic Unit 18050003, at south city limits of San Jose, 0.2 mi downstream from confluence at Alamitos and Guadalupe creeks.

DRAINAGE AREA.--53.0 mi<sup>2</sup>.

REMARKS.--Multi-date sample was collected by automatic sampler and composited.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
27-28	1800	--	--	--	--	--	--	--	--
28...	1305	15	565	8.2	14.5	760	--	12.0	118
MAR									
17...	1130	13	530	8.4	16.0	770	2.0	9.4	94
JUN									
11-12	1800	--	--	--	--	--	7.3	--	--
12...	1315	15	538	8.8	22.0	755	--	10.4	120
JUL									
10...	1345	17	495	8.6	26.0	755	4.4	10.1	126
AUG									
27...	1230	1.8	550	8.0	23.0	760	1.1	6.9	81

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS NONCAR- BONATE (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CaCO3)
FEB , 1984										
27-28	--	260	30	39	40	19	14	.5	1.1	--
28...	<10	--	--	--	--	--	--	--	--	223
MAR										
17...	14	250	34	38	38	19	14	.5	1.1	218
JUN										
11-12	18	250	34	40	37	19	14	.5	1.1	--
12...	--	--	--	--	--	--	--	--	--	199
JUL										
10...	14	250	32	38	37	18	14	.5	1.2	215
AUG										
27...	<10	260	27	40	39	19	14	.5	1.1	234

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
FEB , 1984										
27-28	34	29	.2	17	320	.43	--	1.7	1.8	.03
28...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	33	26	.1	15	300	.41	11	1.7	1.7	.04
JUN										
11-12	34	21	.1	14	300	.40	--	.60	.60	.03
12...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	29	21	.2	15	290	.39	--	.50	.51	.05
AUG										
27...	32	25	.1	16	310	.43	1.5	.30	.25	.02

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

11167572 GUADALUPE RIVER AT ALAMITOS RECHARGE FACILITY, AT SAN JOSE, CA--Continued

DATE	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, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984										
27-28	.04	1.4	.26	1.4	.30	3.1	.15	<.01	--	--
28...	--	--	--	--	--	--	--	--	2.4	.2
MAR										
17...	.08	.36	.32	.40	.40	2.1	.02	.05	3.0	.2
JUN										
11-12	.04	.77	.36	.80	.40	1.4	.04	.01	--	--
12...	--	--	--	--	--	--	--	--	2.3	.2
JUL										
10...	.01	.45	.49	.50	.50	1.0	.01	.02	--	--
AUG										
27...	<.01	.38	--	.40	.30	.70	.01	<.01	3.9	.2

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
27-28	1800	--	--	1	--	130	<1	--
MAR								
17...	1130	--	--	--	--	110	--	--
JUN								
11-12	1800	--	--	--	--	180	--	--
JUL								
10...	1345	--	--	--	--	160	--	--
AUG								
27...	1230	<10	9000	1	<1	130	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
27-28	<10	--	--	2	--	<3	--	<1	--
MAR									
17...	--	--	--	--	--	<3	--	--	--
JUN									
11-12	--	--	--	--	--	13	--	--	--
JUL									
10...	--	--	--	--	--	4	--	--	--
AUG									
27...	10	80	20	1	30	7	19000	<1	10

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
27-28	--	--	<.1	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
JUN								
11-12	--	--	--	--	--	--	--	--
JUL								
10...	--	--	--	--	--	--	--	--
AUG								
27...	8	360	<.1	2.1	<100	<1	30	50

See footnote at end of table.

## GUADALUPE RIVER BASIN--Continued

11167572 GUADALUPE RIVER AT ALAMITOS RECHARGE FACILITY, AT SAN JOSE, CA--Continued

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-HF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	0830	11	18.0	1200	80	30
11...	0900	14	18.0	18000	730	20
18...	0840	14	18.0	450	40	25
FEB , 1984						
21...	1010	18	12.0	200	50	45
28...	0815	15	12.0	110	60	14
MAR						
06...	0800	14	13.0	130	20	13
13...	0835	10	15.0	480	230	55
20...	0920	9.7	16.0	280	35	20
AUG						
28...	0740	1.8	21.0	400	280	380
SEP						
04...	0800	2.0	21.0	600	570	170
11...	0755	1.7	22.0	580	350	220
18...	0815	3.8	22.0	1400	430	760
25...	0810	11	20.0	250	85	130

DATE	MEDIUM	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)
AUG , 1984										
27...	9	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010	.01

DATE	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984									
27...	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)
AUG , 1984									
27...	<.01	<.01	<.01	<.1	<1	<.01	.03	<.01	<.01

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

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

11168000 LOS GATOS CREEK AT LOS GATOS, CA

LOCATION.--Lat 37°13'03", long 121°59'11", in SE¼ sec.20, T.8 S., R.1 W., Santa Clara County, Hydrologic Unit 18050003, on right bank 0.4 mi upstream from Main Street bridge, 0.7 mi southwest of Los Gatos Post Office, and 1.1 mi downstream from Lexington Dam.

DRAINAGE AREA.--39.1 mi<sup>2</sup>.

REMARKS.--Multi-date samples were collected by automatic sampler and composited.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1980 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
27-28	1800	--	343	--	--	--	16	--	--
28...	1015	24	335	8.4	11.0	755	--	11.2	103
MAR									
17...	0940	22	340	8.1	11.0	765	7.6	10.9	99
JUN									
11-12	1800	--	--	--	--	--	5.1	--	--
12...	1030	22	--	8.3	13.0	750	--	--	--
JUL									
10...	1030	23	355	8.3	14.0	750	2.2	10.7	106
AUG									
27...	0945	46	365	8.1	20.0	755	2.1	9.3	103

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS NONCAR- BONATE (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CaCO3)
FEB , 1984										
27-28	--	150	16	35	14	13	16	.5	1.5	--
28...	11	--	--	--	--	--	--	--	--	121
MAR										
17...	12	150	24	37	14	12	15	.4	1.4	126
JUN										
11-12	18	160	34	39	14	13	15	.5	1.4	--
12...	--	--	--	--	--	--	--	--	--	125
JUL										
10...	19	160	33	40	14	12	14	.4	1.5	125
AUG										
27...	<10	170	32	43	15	14	15	.5	1.7	137

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984										
27-28	41	9.3	.2	14	210	.28	--	.10	<.10	.02
28...	--	--	--	--	--	--	--	--	--	--
MAR										
17...	38	9.1	.2	14	200	.27	12	.20	.18	.03
JUN										
11-12	41	9.2	.2	14	200	.28	--	.20	.20	.02
12...	--	--	--	--	--	--	--	--	--	--
JUL										
10...	42	9.1	.2	15	210	.28	13	.10	.13	.03
AUG										
27...	42	9.3	.2	14	220	.30	28	<.10	<.10	.06

See footnote at end of table.

## GUADALUPE RIVER BASIN--Continued

11168000 LOS GATOS CREEK AT LOS GATOS, CA--Continued

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984										
27-28	.03	.78	.27	.80	.30	.90	.06	.02	--	--
28...	--	--	--	--	--	--	--	--	2.6	.1
MAR										
17...	.02	.27	.28	.30	.30	.50	.03	.03	2.9	.2
JUN										
11-12	.01	.28	--	.30	<.20	.50	.04	.02	--	--
12...	--	--	--	--	--	--	--	--	2.5	.1
JUL										
10...	<.01	.27	--	.30	.30	.40	.01	.02	--	--
AUG										
27...	<.01	.24	--	.30	.30	--	.04	.03	3.0	.1

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
27-28	1800	--	--	--	--	50	--	--
MAR								
17...	0940	--	--	--	--	50	--	--
JUN								
11-12	1800	--	--	--	--	50	--	--
JUL								
10...	1030	--	--	--	--	50	--	--
AUG								
27...	0945	10	9300	1	<1	50	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
27-28	--	--	--	--	--	14	--	--	--
MAR									
17...	--	--	--	--	--	12	--	--	--
JUN									
11-12	--	--	--	--	--	10	--	--	--
JUL									
10...	--	--	--	--	--	5	--	--	--
AUG									
27...	10	50	10	<1	30	31	13000	<1	50

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
27-28	--	--	--	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
JUN								
11-12	--	--	--	--	--	--	--	--
JUL								
10...	--	--	--	--	--	--	--	--
AUG								
27...	280	640	<.1	.69	<100	<1		40

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

11168000 LOS GATOS CREEK AT LOS GATOS, CA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	0705	27	15.0	210	35	65
11...	0745	26	16.0	80	13	230
18...	0710	25	18.0	450	5	40
FEB , 1984						
21...	0745	25	11.0	130	15	35
28...	1120	23	12.0	120	15	4
MAR						
06...	1115	24	11.0	130	10	7
13...	0705	22	12.0	350	10	30
20...	0745	22	12.0	240	15	6
AUG						
28...	1040	47	17.0	350	23	21
SEP						
04...	1050	46	19.0	550	70	15
11...	1015	46	20.0	230	80	150
18...	1045	58	21.0	280	14	43
25...	1025	60	20.0	200	9	12

DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)
AUG , 1984								
27...	0945	<.10	<.1	<.010	<.1	<.010	<.010	<.010

DATE	DI- ELDRIN TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984									
27...	<.010	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01

DATE	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)
AUG , 1984								
27...	<.01	<.01	<.01	<.01	<.01	<.1	<.1	<.01

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

## GUADALUPE RIVER BASIN--Continued

11168660 LOS GATOS CREEK AT LARK AVENUE, AT LOS GATOS, CA

LOCATION.--Lat 37°15'07", long 121°57'48", in Rinconada de Los Gatos Grant, Santa Clara County, Hydrologic Unit 18050003, at bridge on Lark Avenue, 1,800 ft downstream from Vasona Dam, and 2 mi northeast of Los Gatos Post Office.

DRAINAGE AREA.--43.3 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
28...	0830	24	355	8.5	12.0	760	3.2	10.6	99
MAR									
17...	0830	29	346	8.3	13.5	765	8.0	9.0	86
JUN									
12...	0830	21	353	8.3	19.0	755	1.5	8.2	89
JUL									
10...	0845	23	366	8.3	21.5	755	3.9	7.7	88
AUG									
27...	0800	43	363	7.7	19.5	760	5.0	8.3	91

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)
FEB , 1984										
28...	14	160	30	39	16	14	16	.5	1.5	133
MAR										
17...	16	160	28	38	15	13	15	.5	1.4	129
JUN										
12...	14	160	31	41	15	14	16	.5	1.5	133
JUL										
10...	19	160	33	41	15	13	15	.5	1.6	131
AUG										
27...	<10	170	39	43	15	14	15	.5	1.6	130

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984										
28...	38	13	.2	13	210	.29	14	<.10	<.10	.05
MAR										
17...	36	11	.2	14	210	.28	16	.20	.18	.03
JUN										
12...	39	11	.2	12	210	.29	12	<.10	<.10	.04
JUL										
10...	41	10	.2	12	210	.29	13	<.10	<.10	.04
AUG										
27...	40	10	.2	13	210	.29	25	<.10	<.10	.03

DATE	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,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
FEB , 1984										
28...	.03	.25	.17	.30	.20	--	.04	<.01	2.9	.4
MAR										
17...	.05	.67	.35	.70	.40	.90	.05	.02	5.6	.6
JUN										
12...	.03	.36	.37	.40	.40	--	.01	.01	2.8	.3
JUL										
10...	<.01	.26	--	.30	.20	--	.01	.01	2.8	.4
AUG										
27...	.03	.27	.17	.30	.20	--	.02	<.01	3.3	.1

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

11168660 LOS GATOS CREEK AT LARK AVENUE, AT LOS GATOS, CA--Continued

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
28...	0830	--	--	--	--	50	--	--
MAR								
17...	0830	--	--	--	--	50	--	--
JUN								
12...	0830	--	--	--	--	50	--	--
JUL								
10...	0845	--	--	--	--	50	--	--
AUG								
27...	0800	<10	9300	1	1	50	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
28 ..	--	--	--	--	--	33	--	--	--
MAR									
17...	--	--	--	--	--	--	--	--	--
JUN									
12...	--	--	--	--	--	--	--	--	--
JUL									
10...	--	--	--	--	--	3	--	--	--
AUG									
27...	<10	40	10	1	30	4	18000	<1	20

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
28...	--	--	--	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
JUN								
12...	--	--	--	--	--	--	--	--
JUL								
10...	--	--	--	--	--	--	--	--
AUG								
27...	75	860	<.1	1.1	<100	<1	17	80

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	0720		33	18.0	3400	150
11...	0800		29	18.0	850	60
18...	0730		29	18.0	500	50
FEB , 1984						
21...	0900		24	12.0	1200	130
28...	0650		25	12.0	650	180
MAR						
06...	0655		27	13.0	190	50
13...	0720		21	15.0	750	220
20...	0800		29	15.0	680	240
AUG						
28...	1100		43	20.0	2400	1000
SEP						
04...	0710		44	19.0	750	500
11...	1030		41	22.0	2300	430
18...	0710		56	22.0	210	60
25...	0705		50	20.0	1300	130

## GUADALUPE RIVER BASIN--Continued

11168660 LOS GATOS CREEK AT LARK AVENUE, AT LOS GATOS, CA--Continued

		NAPH- THA- LENES, POLY- CHLOR.		PCB, TOTAL	ALDRIN, TOTAL	CHLOR- DANE, TOTAL	DDD, TOTAL	DDE, TOTAL	DDT, TOTAL	DI- ELDRIN TOTAL
DATE	TIME	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
AUG , 1984										
27...	0800	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010	<.010
DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
27...	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01
DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)	
AUG , 1984										
27...	<.01	<.01	<.01	<.1	<.1	<.01	.01	<.01	<.01	<.01

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

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

11168800 LOS GATOS CREEK AT LINCOLN AVENUE, AT SAN JOSE, CA

LOCATION.--Lat 37°18'45", long 121°54'12", in San Juan Bautista Grant, Santa Clara County, Hydrologic Unit 18050003, on right bank 100 ft upstream from Lincoln Avenue bridge, 0.6 mi downstream from Dry Creek.

DRAINAGE AREA.--48.4 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1980 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
28...	1420	5.0	359	9.1	14.0	760	1.9	12.6	123
MAR									
17...	1230	3.4	307	8.6	14.0	770	3.0	12.1	116

DATE	TIME	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)
FEB , 1984											
28...	13	150	29	35	16	16	18	.6	1.6	124	
MAR											
17...	18	140	23	33	13	13	17	.5	1.4	113	

DATE	TIME	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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984											
28...	33	16	.2	7.6	200	.27	2.7	<.10	<.10	.05	
MAR											
17...	32	12	.1	8.8	180	.25	1.7	.20	.14	.04	

DATE	TIME	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,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984											
28...	.04	.35	.16	.40	.20	--	.01	.01	2.5	.1	
MAR											
17...	.02	.26	.28	.30	.30	.50	.04	.04	4.1	.3	

DATE	TIME	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
FEB , 1984			
28...	1420	70	33
MAR			
17...	1230	50	14

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. HEM. FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	0750	9.7	17.0	3600	170	500
18...	0755	.60	14.0	55000	2000	2700
FEB , 1984						
21...	0920	14	13.0	75000	2300	5800
28...	0720	5.0	9.0	3500	70	80
MAR						
06...	0715	6.6	10.0	2700	1900	200
13...	0750	4.5	15.0	3100	350	240
20...	0830	2.7	14.0	3400	120	350

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

## GUADALUPE RIVER BASIN--Continued

11169000 GUADALUPE RIVER AT SAN JOSE, CA

LOCATION.--Lat 37°20'04", long 121°53'54", Santa Clara County, Hydrologic Unit 18050003, on right bank at San Jose, 100 ft downstream from Los Gatos Creek.

DRAINAGE AREA.--144 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1979 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
28...	1615	28	695	8.6	15.0	760	5.7	12.0	120
MAR									
17...	1310	29	350	7.9	15.0	770	55	8.8	86
JUN									
12...	1445	24	817	8.5	20.0	755	1.1	11.8	131
JUL									
10...	1530	25	614	8.5	21.5	760	6.4	12.0	137
AUG									
27...	1430	22	721	8.3	21.0	760	16	9.7	109

DATE	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)
FEB , 1984										
28...	12	310	29	53	42	30	18	.8	1.0	277
MAR										
17...	37	140	16	28	18	17	20	.6	1.1	128
JUN										
12...	12	340	49	61	45	35	18	.8	1.2	289
JUL										
10...	12	320	40	60	42	31	17	.8	1.2	283
AUG										
27...	<10	330	44	60	43	32	18	.8	1.2	283

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984										
28...	60	26	.2	21	400	.54	30	3.1	3.2	.03
MAR										
17...	29	16	.1	10	200	.27	15	1.4	1.4	.05
JUN										
12...	71	29	.2	20	440	.59	28	3.2	3.3	.02
JUL										
10...	66	27	.2	22	420	.57	28	3.2	3.2	.06
AUG										
27...	70	27	.2	22	430	.58	25	3.3	3.3	.02

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE TOTAL (MG/L AS C)
FEB , 1984										
28...	.01	.47	.39	.50	.40	3.6	.03	.02	.90	--
MAR										
17...	.02	.55	.48	.60	.50	2.0	.14	.05	7.3	.8
JUN										
12...	<.01	.98	--	1.0	<.20	4.2	.02	.01	--	--
JUL										
10...	<.01	.74	--	.80	.50	4.0	.04	.02	--	--
AUG										
27...	<.01	.58	--	.60	.60	3.9	.04	.01	1.5	.9

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

11169000 GUADALUPE RIVER AT SAN JOSE, CA--Continued

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
FEB , 1984								
28...	1615	--	--	--	--	160	--	--
MAR								
17...	1310	--	--	--	--	80	--	--
JUN								
12...	1445	--	--	--	--	160	--	--
JUL								
10...	1530	--	--	--	--	150	--	--
AUG								
27...	1430	10	9300	<1	<1	150	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
28...	--	--	--	--	--	11	--	--	--
MAR									
17...	--	--	--	--	--	18	--	--	--
JUN									
12...	--	--	--	--	--	<3	--	--	--
JUL									
10...	--	--	--	--	--	5	--	--	--
AUG									
27...	<10	80	20	1	60	<3	22000	1	50

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
28...	--	--	--	--	--	--	--	--
MAR								
17...	--	--	--	--	--	--	--	--
JUN								
12...	--	--	--	--	--	--	--	--
JUL								
10...	--	--	--	--	--	--	--	--
AUG								
27...	10	390	<.1	.90	<100	<1	6	120

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## GUADALUPE RIVER BASIN--Continued

## 11169000 GUADALUPE RIVER AT SAN JOSE, CA--Continued

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, INMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCCI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	0805	23	16.0	24000	1100	2600
11...	0830	14	16.0	90000	1800	2300
18...	0810	22	17.0	55000	7000	2500
FEB , 1984						
21...	0940	163	14.0	430000	4400	11000
28...	0745	28	14.0	4800	230	1100
MAR						
06...	0730	31	14.0	8100	340	400
13...	0805	27	17.0	23000	1400	700
20...	0840	29	18.0	1200	580	750
AUG						
28...	0710	20	20.0	15000	3600	440
SEP						
04...	0740	24	20.0	14000	8500	630
11...	0730	21	20.0	21000	7600	700
18...	0745	20	21.0	6800	1300	1300
25...	0740	22	17.0	9500	1400	450

DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
AUG , 1984									
27...	1430	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010

DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
27...	.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)
AUG , 1984									
27...	<.01	<.01	<.01	<.1	<1	<.01	.04	<.01	<.01

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

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## COYOTE CREEK BASIN

11169970 COYOTE CREEK BELOW LEROY ANDERSON DAM, NEAR MADRONE, CA

LOCATION.--Lat 37°09'54", long 121°37'56", in southeast corner of La Laguna Seca Grant, Santa Clara County, Hydrologic Unit 18050003, on left bank 500 ft downstream from release at Leroy Anderson Dam, 2.3 mi northeast of Madrone.

DRAINAGE AREA.--195 mi<sup>2</sup>.

PERIOD OF RECORD.--

CHEMICAL ANALYSES: Water years 1980 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB , 1984									
29...	0945	14	422	8.4	11.5	755	23	11.0	102
MAR									
16...	0900	24	428	8.2	11.5	760	12	11.2	103
JUN									
13...	0845	64	439*	8.3	13.5	750	2.5	10.2	100
JUL									
11...	0930	70	423	8.2	15.0	750	7.1	10.5	106
AUG									
28...	0830	71	435	8.0	15.0	755	8.3	9.8	98

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINIT FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB , 1984										
29...	190	25	42	20	21	19	.7	1.5	162	48
MAR										
16...	180	17	41	19	20	19	.7	1.5	164	45
JUN										
13...	190	0	44	20	21	19	.7	1.6	157*	46
JUL										
11...	190	30	44	20	20	18	.6	1.6	162	49
AUG										
28...	190	29	45	20	20	18	.6	1.7	166	49

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, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 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)
FEB , 1984										
29...	15	.2	14	260	.35	9.8	.20	.15	.01	.02
MAR										
16...	14	.2	13	250	.34	16	.30	.23	.02	.05
JUN										
13...	13	.2	14	280	.37	48	.20	.20	.02	<.01
JUL										
11...	12	.2	13	260	.35	49	.20	.19	.03	<.01
AUG										
28...	14	.2	13	260	.36	50	.20	.20	.01	<.01

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 DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDED TOTAL (MG/L AS C)
FEB , 1984									
29...	.29	.28	.30	.30	.50	.02	.01	2.8	.2
MAR									
16...	.38	.35	.40	.40	.70	.02	.02	2.7	.1
JUN									
13...	.98	--	1.0	1.0	1.2	<.01	.01	--	--
JUL									
11...	.17	--	.20	<.20	.40	.01	.02	--	--
AUG									
28...	.59	--	.60	.20	.80	.05	<.01	3.8	.2

See footnote at end of table.

## COYOTE CREEK BASIN--Continued

11169970 COYOTE CREEK BELOW LEROY ANDERSON DAM, NEAR MADRONE, CA--Continued

		ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ALUM- INUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)
DATE	TIME						
FEB , 1984							
29...	0945	--	--	--	90	--	--
MAR							
16...	0900	--	--	--	80	--	--
JUN							
13...	0845	--	--	--	80	--	--
JUL							
11...	0930	--	--	--	80	--	--
AUG							
28...	0830	10	9800	<1	80	<1	<1

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CU)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)
FEB , 1984									
29...	--	--	--	--	--	11	--	--	--
MAR									
16...	--	--	--	--	--	5	--	--	--
JUN									
13...	--	--	--	--	--	7	--	--	--
JUL									
11...	--	--	--	--	--	<3	--	--	--
AUG									
28...	<10	70	30	1	30	<3	23000	1	10

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
FEB , 1984								
29...	--	--	--	--	--	--	--	--
MAR								
16...	--	--	--	--	--	--	--	--
JUN								
13...	--	--	--	--	--	--	--	--
JUL								
11...	--	--	--	--	--	--	--	--
AUG								
28...	9	1100	<.1	.65	<100	<1	6	60

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## COYOTE CREEK BASIN--Continued

11169970 COYOTE CREEK BELOW LEROY ANDERSON DAN, NEAR MADRONE, CA--Continued

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 ML)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 ML)	STREP- TOCOCOCI FECAL, (COLS. PER 100 ML)
OCT , 1983						
04...	0950	56	14.0	40	3	5
11...	1010	56	14.0	20	2	14
18...	0950	56,	14.0	20	5	10
FEB , 1984						
21...	1125	14	12.0	150	10	20
28...	0930	14	12.0	20	5	5
MAR						
06...	0910	22	12.0	20	5	1
13...	0945	24	12.0	600	10	20
20...	1020	24	12.0	100	3	2
AUG						
28...	0855	71	15.0	45	20	11
SEP						
04...	0900	46	15.0	40	15	3

DATE	TIME	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
AUG , 1984									
28...	0830	<.10	<.1	<.010	<.1	<.010	<.010	<.010	<.010

DATE	DI- AZINON, TOTAL (UG/L)	ENDO- SULFAN, TOTAL (UG/L)	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)
AUG , 1984										
28...	<.01	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.01	<.01

DATE	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	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)	SILVEX, TOTAL (UG/L)
AUG , 1984									
28...	<.01	<.01	<.01	<.1	<1	<.01	<.01	<.01	<.01

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

## COYOTE CREEK BASIN--Continued

11171500 COYOTE CREEK NEAR EDENVALE, CA

LOCATION.--Lat 38°16'15", long 121°47'47", at east boundary of Santa Teresa Grant, Santa Clara County, Hydrologic Unit 18050003, at "The Narrows," 1.5 mi northeast of Edenvale, and 7 mi south of San Jose.  
 DRAINAGE AREA.--229 mi<sup>2</sup>.  
 REMARKS.--Multi-date sample was collected by automatic sampler and composited.  
 PERIOD OF RECORD.--  
 CHEMICAL ANALYSES: Water years 1979 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
DATE	TIME										
FEB , 1984											
28-29	1800	--	--	--	--	--	--	--	--		
29...	0830	6.2	628	8.5	13.0	760	--	10.1	96		
JUL											
11...	0800	4.6	488	8.2	22.0	755	1.6	6.0	69		
DATE	TIME	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY FIELD (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
FEB , 1984											
28-29	300	51	55	39	30	18	.8	1.2	--	--	66
29...	--	--	--	--	--	--	--	--	--	227	--
JUL											
11...	230	47	46	27	24	19	.7	1.4	179	56	
DATE	TIME	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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)
FEB , 1984											
28-29	29	.20	16	380	.52	--	5.8	5.9	.15	.03	--
29...	--	--	--	--	--	--	--	--	--	--	--
JUL											
11...	15	.20	12	290	.39	3.6	1.0	1.0	.05	<.01	
DATE	TIME	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 + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTH- DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUS- PENDE- TOTAL (MG/L AS C)	
FEB , 1984											
28-29	2.2	.47	2.3	.50	8.1	.26	<.01	--	--	--	
29...	--	--	--	--	--	--	--	--	1.8	.1	
JUL											
11...	.45	--	.50	.50	1.5	.01	.02	--	--	--	

See footnote at end of table.

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## COYOTE CREEK BASIN--Continued

11171500 COYOTE CREEK NEAR EDENVALE, CA--Continued

DATE	TIME		BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)		
FEB , 1984						
28-29	1800		130	37		
JUL						
11...	0800		110	<3		
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	COLI- FORM, TOTAL, IMMED. MEM.FIL (COLS./ 100 HL)	COLI- FORM, FECAL, 0.45 UM-MF (COLS./ 100 HL)	STREP- TOCOCCI FECAL, (COLS. PER 100 HL)
OCT , 1983						
04...	0915	13	17.0	2200	390	370
11...	0940	41	16.0	5200	1600	2000
18...	0920	18	15.0	1500	1000	600
FEB , 1984						
21...	1050	10	14.0	2400	400	1500
28...	0900	6.4	12.0	300	40	18

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

## REDWOOD CREEK BASIN

11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK, NEAR ORICK, CA

LOCATION.--Lat 41°11'50", long 123°59'30", unsurveyed, Humboldt County, Hydrologic Unit 18010102, Redwood National Park, on left bank 150 ft upstream from Harry Wier Creek, 7.2 mi southeast of Orick, and 14 mi upstream from mouth.

DRAINAGE AREA.--202 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1973-76, 1978-80, 1981 to April 1984 (discontinued).

CHEMICAL ANALYSES: Water years 1973-76, 1978.

SEDIMENT RECORDS: Water years 1974-76, 1978-80, 1981 to April 1984 (discontinued).

REMARKS.--Prior to October 1975, published in Geological Survey open-file report, "Redwood National Park Studies," Data Release Numbers 1 and 2.

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC								
06...	1240	6500	9.5	1450	25400	11	15	23
10...	1230	5530	10.0	808	12100	--	--	--
10...	1415	5380	10.0	711	10300	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .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
DEC								
06...	32	41	51	63	80	93	99	100
10...	--	--	58	66	77	90	98	100
10...	--	--	59	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

REDWOOD CREEK BASIN  
11482261 REDWOOD CREEK NEAR ORICK, CA

LOCATION.--Lat 41°13'46", long 124°00'38", in NE 1/4 sec. 25, T.10 N., R.1 E., Humboldt County, Hydrologic Unit 18010102, Redwood National Park, on right bank 80 ft downstream from Miller Creek, 4.7 mi southeast of Orick, and 10.1 mi upstream from mouth.

DRAINAGE AREA.--218 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1978 to April 1984 (discontinued).

SEDIMENT RECORDS: Water years 1978 to April 1984 (discontinued).

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM
DEC								
06...	1300	6700	10.0	1530	27700	10	15	23
06...	1500	7550	10.0	1530	31200	12	18	26
10...	1040	6600	10.5	854	15200	--	--	--
10...	1325	6150	10.5	710	11800	--	--	--
10...	1445	5950	11.0	695	11200	--	--	--

DATE	SED. SUSP. FALL DIAM. % FINER THAN .031 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
DEC							
06...	42	53	66	82	94	97	98
06...	48	59	73	89	99	100	--
10...	--	65	--	--	--	--	--
10...	--	67	71	86	96	100	--
10...	--	65	--	--	--	--	--

## LAKE MERRITT BASIN

## OAKLAND HARBOR ESTUARY

LOCATION.--Lat 37°47'22", long 122°15'55", in Oakland, Alameda County, Hydrologic Unit 18050004.

PERIOD OF RECORD.--April 1980 to current year.

COOPERATION.--Water-quality samples were collected by Alameda County Flood Control and Water Conservation District.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
JAN , 1982											
12...	1530	6.00	16600	8.0	9.5	--	16	.66	.28	.82	1.1
FEB											
18...	1230	4.00	20800	8.0	13.0	--	27	.60	.41	.52	.93
MAR											
23...	1500	4.00	27800	--	14.5	--	25	.12	.07	.65	.72
APR											
06...	1400	5.50	21100	8.0	12.5	--	24	.49	.17	.41	.58
20...	1300	5.50	30000	8.2	17.0	--	12	.15	.10	.47	.57
MAY											
04...	1400	7.00	23800	7.2	20.5	--	29	<.10	<.06	--	.63
18...	1300	5.50	28700	8.0	18.0	--	42	<.10	.07	1.5	1.6
JUN											
02...	1130	6.00	33400	8.1	17.0	--	68	<.10	.18	.22	.40
17...	1400	6.00	35900	8.1	18.5	--	274	<.10	.13	1.3	1.4
29...	1500	5.00	37900	8.0	20.0	--	43	<.10	<.07	--	.40
JUL											
13...	1315	4.50	35100	8.2	24.5	--	67	<.10	<.06	--	.30
27...	1530	5.75	35700	8.5	25.0	--	50	.31	.17	.43	.60
AUG											
11...	1515	6.00	39800	7.6	21.0	--	48	.24	.25	.65	.90
24...	1500	6.50	43100	7.8	21.0	--	62	.64	.18	.82	1.0
SEP											
10...	1420	5.50	42100	7.9	21.0	--	50	.30	.13	.27	.40
OCT											
05...	1430	7.00	39700	7.8	18.5	--	66	.20	.10	1.4	1.5
NOV											
03...	1200	8.00	37700	7.6	16.5	--	15	.50	.18	.72	.90
DEC											
20...	--	6.50	33000	7.3	11.0	--	49	.40	.14	.46	.60
JAN , 1983											
05...	1300	5.50	27000	7.7	9.0	--	19	.50	.17	.73	.90
FEB											
15...	1300	7.00	19500	7.3	13.0	--	34	.60	.19	.71	.90
MAR											
15...	--	7.00	12900	7.3	15.0	--	7	.50	.13	.67	.80
APR											
07...	1330	4.50	16900	8.4	14.5	--	55	.10	.19	.91	1.1
21...	1300	4.00	27	7.8	15.0	--	62	<.10	.100	1.0	1.1
MAY											
05...	1300	4.50	25800	7.9	16.0	--	34	<.10	.18	.42	.60
19...	1300	4.00	27600	7.8	21.0	7.8	25	<.10	.08	.22	.30
JUN											
02...	1130	4.00	30900	7.5	18.5	7.8	40	<.10	.06	.34	.40
21...	1100	7.00	32900	7.3	20.5	6.8	31	.30	.16	.34	.50
30...	1400	5.00	33500	7.3	20.0	7.6	8	.20	.09	.31	.40
JUL											
13...	1300	5.00	35700	7.8	22.0	--	55	.10	.06	.64	.70
28...	1400	5.00	36800	7.6	20.5	8.8	57	.20	.10	.60	.70
AUG											
11...	1230	5.00	38800	7.5	21.5	--	--	.10	.11	.59	.70
SEP											
14...	1330	6.00	35000	7.5	23.5	--	7	<.10	.13	.37	.50
OCT											
13...	1300	4.00	39100	7.9	21.0	--	46	.20	.12	.78	.90
NOV											
29...	1230	5.00	31900	7.2	12.5	--	15	.50	.16	.94	1.1
JAN , 1984											
24...	1230	--	--	--	--	--	14	.40	.09	--	<.20
FEB											
22...	1230	4.50	32000	7.8	12.0	9.4	63	.20	.07	.43	.50
MAR											
22...	1230	4.00	34700	7.9	16.0	10.0	16	.10	.06	--	<.20
APR											
19...	1200	--	39100	7.4	15.5	8.8	138	<.10	.11	.39	.50
MAY											
01...	1230	5.50	41900	7.9	16.0	9.7	37	2.1	.06	.34	.40
15...	1445	5.90	43100	7.7	18.5	8.0	47	.10	.06	.14	.20
30...	1245	5.50	45000	7.8	20.0	8.8	57	<.10	.07	.43	.50
JUN											
11...	1200	6.00	45400	7.7	19.5	7.6	52	.10	.10	.90	1.0
28...	1030	5.00	45500	8.0	21.5	5.6	59	<.10	.36	.14	.50
JUL											
12...	1340	6.50	47000	7.6	21.5	6.6	31	.10	.27	--	.20
26...	1300	6.00	48500	7.5	21.5	6.7	71	<.10	.04	.36	.40
AUG											
09...	1000	5.00	47500	7.5	23.0	5.6	46	<.10	.36	.14	.50
23...	1000	6.00	47100	7.4	22.0	5.6	57	.10	.23	.17	.60
SEP											
13...	1430	7.00	47400	--	22.0	6.2	66	.20	.35	.05	.40

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

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

## LAKE MERRITT BASIN--Continued

## LAKE MERRITT AT LAKE CENTER

LOCATION.--Lat 37°48'07", long 122°15'27", in San Antonio (V and D Peralta) Grant, Alameda County, Hydrologic Unit 18050002.  
 PERIOD OF RECORD.--Water years 1981 to current year.  
 COOPERATION.--Water-quality samples were collected by Alameda County Flood Control and Water Conservation District.

## WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (UMHOS)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS- PENDED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
JAN , 1982											
12...	1330	4.00	4750	7.4	9.5	--	15	2.1	.65	1.2	1.8
FEB											
18...	1500	3.00	24100	10.6	14.0	--	74	.13	.55	.45	1.0
MAR											
23...	1400	4.00	27300	8.4	14.0	--	17	<.10	.10	.58	.68
APR											
06...	1100	4.00	2010	7.4	13.0	--	20	.95	.33	1.2	1.5
20...	1100	4.50	13900	8.9	18.5	--	25	<.10	.12	.55	.67
MAY											
04...	1115	4.50	25600	8.3	18.5	--	74	<.10	<.06	--	.85
18...	1100	5.00	25800	8.5	20.0	--	35	.20	<.06	--	1.1
JUN											
02...	1300	5.00	28700	8.7	19.0	--	84	<.10	.14	.26	.40
17...	1200	5.00	31400	8.5	21.0	--	38	<.10	.08	1.1	1.2
29...	1300	4.00	34400	8.4	20.5	--	34	<.10	<.07	--	.50
JUL											
13...	1130	4.50	34700	8.3	25.5	--	117	<.10	.06	1.1	1.2
27...	1230	4.50	37500	8.6	20.0	--	42	<.10	.14	.96	1.1
AUG											
11...	1200	4.00	36200	8.1	21.5	--	53	<.10	.09	1.2	1.3
24...	1145	3.50	38600	8.9	22.0	--	56	1.1	<.06	--	1.2
SEP											
10...	1115	4.50	41800	8.3	21.5	--	30	.30	.06	1.4	1.5
OCT											
05...	1200	4.00	38300	8.1	19.0	--	43	<.10	<.06	--	1.4
NOV											
03...	1100	4.50	34400	7.1	17.5	--	44	.10	1.0	.90	1.9
DEC											
20...	1030	4.50	29300	8.6	12.5	--	45	<.10	.10	.80	.90
JAN , 1983											
05...	1100	4.50	23300	8.0	9.5	--	22	.30	.16	1.2	1.4
FEB											
15...	1100	4.00	12600	6.7	13.5	--	36	<.10	2.0	-.10	1.9
APR											
07...	1130	4.50	15600	8.4	15.0	--	50	<.10	.11	1.3	1.4
21...	1100	4.50	20500	7.9	17.5	--	27	<.10	.30	.90	1.2
MAY											
05...	1100	4.50	18500	7.1	18.0	--	11	.80	.26	1.0	1.3
19...	1100	5.00	27800	7.8	20.5	6.6	37	<.10	<.06	--	.50
JUN											
02...	1600	5.00	30600	8.0	21.0	11.8	46	<.10	<.06	--	.80
21...	1530	4.00	32100	--	23.5	10.7	26	<.10	<.06	--	.60
30...	1200	3.00	33300	7.7	21.5	10.1	64	<.10	<.06	--	1.6
JUL											
13...	1100	4.50	34800	8.1	23.5	--	37	<.10	.04	.76	.80
AUG											
11...	1100	--	36600	8.4	23.0	--	14	<.10	.04	1.5	1.5
OCT											
12...	1130	6.00	39300	7.4	20.0	--	42	<.10	.04	1.1	1.1
NOV											
29...	1100	4.00	13600	7.1	13.5	--	28	.20	1.1	1.3	2.4
JAN , 1984											
24...	1000	--	--	--	--	--	4	.40	.26	.14	.40
FEB											
22...	1100	4.50	30300	8.6	12.5	13.1	12	<.10	.03	.67	.70
MAR											
22...	1100	4.00	33500	8.1	16.5	10.6	14	<.10	.02	.38	.40
APR											
19...	1100	--	36900	8.2	16.0	11.0	40	<.10	.07	.23	.30
MAY											
01...	1100	4.00	40300	8.1	16.5	10.3	46	<.10	.03	.37	.40
15...	1130	4.60	41700	8.0	21.0	9.9	41	<.10	.02	.28	.30
JUN											
11...	1045	4.70	43400	8.6	21.0	13.4	39	<.10	.05	.55	.60
28...	1230	4.00	46000	8.1	22.5	6.8	44	<.10	.22	.48	.70
JUL											
12...	1130	46.0	47000	7.9	23.0	7.3	37	<.10	.24	.06	.30
26...	1115	4.00	47500	7.7	22.5	7.2	--	<.10	.04	.56	.60
AUG											
09...	1140	4.00	47400	7.8	23.5	8.7	59	<.10	.32	.68	1.0
23...	1120	4.50	47000	7.4	22.0	5.2	43	<.10	.36	.24	.60
SEP											
13...	1130	4.70	46800	7.7	23.0	7.5	64	<.10	.21	.19	.40

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

TRINITY RIVER BASIN  
SOCTISH CREEK AT HOOPA, CA

LOCATION.--Lat 41°05'13", long 123°42'28", in SE 1/4 SW 1/4 sec. 10, T.8 N., R.4 E., Hoopa Valley Indian Reservation, Humboldt County, Hydrologic Unit 18010211, on left bank downstream side of bridge on Pine Creek Road, 1,600 ft upstream from mouth.

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

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SED- 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	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV											
10...	1455	180	--	1580	768	--	--	--	--	--	--
10...	2130	104	10.0	259	73	--	--	--	--	--	--
11...	1045	51	12.0	42	5.8	--	--	--	--	--	--
11...	2300	34	10.0	19	1.7	--	--	--	--	--	--
13...	1100	113	10.0	206	63	--	--	--	--	--	--
23...	1605	71	9.0	118	23	--	--	--	--	--	--
DEC											
06...	1130	246	9.0	613	407	--	--	--	--	--	--
06...	1600	448	10.0	1420	1720	--	--	--	--	--	--
06...	2330	404	10.0	969	1060	--	--	--	--	--	--
07...	0800	280	10.0	368	278	--	--	--	--	--	--
07...	2100	264	9.0	277	197	--	--	--	--	--	--
11...	0745	246	7.0	417	277	--	--	--	--	--	--
11...	1045	314	7.5	800	678	--	--	--	--	--	--
11...	1345	336	8.5	800	726	--	--	--	--	--	--
11...	2245	246	8.0	215	143	--	--	--	--	--	--
12...	1500	246	9.0	175	116	--	--	--	--	--	--
13...	2345	367	9.0	252	250	--	--	--	--	--	--
30...	1415	262	11.0	167	118	--	--	--	--	--	--
JAN											
10...	1500	45	10.0	42	5.1	96	--	--	--	--	--
FEB											
02...	1415	20	8.0	5	.27	--	--	--	--	--	--
16...	1710	205	8.5	109	60	62	69	77	84	95	100
24...	2045	240	7.0	656	425	--	--	--	--	--	--
MAR											
23...	1235	51	10.0	27	3.7	--	--	--	--	--	--
APR											
11...	1145	87	9.0	48	11	83	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

TRINITY RIVER BASIN  
MILL CREEK AT HOOPA, CA

LOCATION.--Lat 41°05'24", long 123°42'00", in NE 1/4 SE 1/4 sec 10, T.8 N., R.4 E., Hoopa Valley Indian Reservation, Humboldt County, Hydrologic Unit 18010211, on right bank downstream side of bridge on State Highway 96, 800 ft upstream from mouth.

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

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	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											
23...	1555	335	8.0	63	57	--	--	--	--	--	--
24...	0800	627	9.0	502	850	--	--	--	--	--	--
24...	1030	870	8.5	807	1900	--	--	--	--	--	--
24...	2015	755	7.5	239	487	--	--	--	--	--	--
25...	1145	565	8.0	131	200	--	--	--	--	--	--
25...	1545	565	9.0	90	137	--	--	--	--	--	--
DEC											
06...	1120	628	9.0	318	539	--	--	--	--	--	--
06...	1445	755	9.0	654	1330	--	--	--	--	--	--
07...	0015	1170	9.0	1420	4490	--	--	--	--	--	--
07...	0715	1050	8.5	667	1890	--	--	--	--	--	--
08...	0915	755	8.5	204	416	44	51	61	86	97	100
13...	2330	1400	8.0	1140	4310	--	--	--	--	--	--
JAN											
04...	0940	444	9.0	35	42	67	--	--	--	--	--
FEB											
01...	1525	131	8.0	11	3.9	--	--	--	--	--	--
17...	1100	405	8.0	60	66	65	--	--	--	--	--
APR											
11...	0930	427	8.0	63	73	69	--	--	--	--	--

## WATER-QUALITY DATA, WATER YEARS OCTOBER 1983 TO SEPTEMBER 1984

TRINITY RIVER BASIN  
PINE CREEK NEAR WEITCHPEC, CA

LOCATION.--Lat 41°08'50", long 123°47'05", in NW 1/4 SE 1/4 sec. 24, T.9 N., R.3 E., Hoopa Valley Indian Reservation, Humboldt County, Hydrologic Unit 18010209, near center of span on downstream side of bridge on Pine Creek Road, 100 ft downstream from Little Pine Creek and 4.9 mi southwest of Weitchpec.

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

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM
NOV											
10...	2030	1080	10.0	391	1140	--	--	--	--	--	--
11...	1000	880	11.5	108	257	--	--	--	--	--	--
11...	2215	790	10.0	65	139	--	--	--	--	--	--
13...	1030	835	9.0	82	185	--	--	--	--	--	--
23...	1200	775	8.0	64	134	--	--	--	--	--	--
DEC											
07...	1355	1390	10.0	432	1620	35	41	49	58	71	100
11...	1015	1000	6.5	165	445	--	--	--	--	--	--
11...	1330	1080	7.0	197	574	--	--	--	--	--	--
11...	2200	940	7.5	114	289	--	--	--	--	--	--
12...	1400	880	8.0	76	181	--	--	--	--	--	--
15...	1500	1000	12.0	150	405	50	--	--	--	--	--
JAN											
10...	1320	170	9.0	8	3.7	--	--	--	--	--	--
FEB											
02...	1320	85	6.0	5	1.1	--	--	--	--	--	--
13...	1400	1840	5.5	376	1870	--	--	--	--	--	--
15...	2100	950	6.5	97	249	--	--	--	--	--	--
15...	2150	950	6.5	90	231	--	--	--	--	--	--
16...	1500	660	8.5	38	68	65	--	--	--	--	--
16...	1630	800	6.0	56	121	59	--	--	--	--	--
MAR											
16...	1725	775	7.0	69	144	--	--	--	--	--	--
23...	1115	263	9.5	13	9.2	--	--	--	--	--	--

## ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL RECORDS STATION

WATER-QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

TRINITY RIVER BASIN  
MILL CREEK NEAR HOOPA, CA

LOCATION.--Lat 41°09'18", long 123°34'40", in NE 1/4 NW 1/4 sec.23, T.9 N., R.5 E., Hoopa Valley Indian Reservation, Humboldt County, Hydrologic Unit 18010211, on right bank downstream side of bridge on Long Ridge Road, 250 ft downstream from right-bank tributary, 0.5 mi downstream from North Fork and 8.5 mi northeast of Hoopa.

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

## PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	SEDI- MENT, DIS- SUS- PENDED (MG/L)	SEDI- MENT, DIS- SUS- PENDED (T/DAY)
NOV					
21...	1420	188	7.0	2	1.0
23...	1445	458	7.0	2	2.5
24...	0930	515	6.5	33	46
24...	2130	311	6.0	4	3.4
25...	1035	229	6.0	6	3.7
25...	1700	208	6.5	5	2.8
DEC					
06...	1005	229	6.0	11	6.8
06...	1445	311	7.0	34	29
07...	0200	590	7.0	44	70
07...	0545	550	7.0	36	53
07...	1945	515	7.0	11	15
08...	1215	295	8.0	18	14
13...	2130	1060	7.5	116	332
23...	2300	208	3.5	3	1.7
JAN					
03...	1415	217	9.0	4	2.3
FEB					
01...	1310	85	6.0	7	1.6
13...	1150	590	5.5	69	110
13...	1405	458	7.0	29	36
MAR					
07...	1230	133	7.0	3	1.1
22...	1300	184	7.0	14	7.0

CONTRA COSTA COUNTY

## Pittsburg Plain Basin (2-4)

WELL 002N001E18D01M

SITE NUMBER 380129121543901

1 MI SOUTHWEST OF PITTSBURG. DRILLED INDUSTRIAL WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 8 IN, DEPTH 125 FT. ALTITUDE OF LSD 25 FT. RECORDS AVAILABLE 1969 TO CURRENT YEAR.

HIGHEST WATER LEVEL 18.23 FEET BELOW LAND SURFACE DATUM APR 19, 1984.

LOWEST WATER LEVEL 28.4 FEET BELOW LAND SURFACE DATUM OCT 15, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1983	18.40	APR 19, 1984	18.23

## Clayton Valley Basin (2-5)

WELL 002N002H13P01M

SITE NUMBER 380049122015301

NEAR PORT CHICAGO. DRILLED INDUSTRIAL WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM UNKNOWN, DEPTH 139 FT. ALTITUDE OF LSD 45 FT. RECORDS AVAILABLE 1970 TO CURRENT YEAR.

HIGHEST WATER LEVEL 19.61 FEET BELOW LAND SURFACE DATUM APR 21, 1978.

LOWEST WATER LEVEL 32.28 FEET BELOW LAND SURFACE DATUM APR 18, 1979.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 19, 1983	22.66	APR 19, 1984	22.73

HUMBOLDT COUNTY

## Mattole River Valley Basin (1-28)

WELL 002S002W03E01H

SITE NUMBER 401843124170301

NEAR PETROLIA. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF THE COAST RANGE OF PLIOCENE-HOLOCENE AGE. DIAM 8 IN, DEPTH 50 FT. ALTITUDE OF LSD 100 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 13.80 FEET BELOW LAND SURFACE DATUM MAR 04, 1980.

LOWEST WATER LEVEL 16.93 FEET BELOW LAND SURFACE DATUM OCT 02, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1983	15.10	APR 05, 1984	13.60 R

WELL 002S002W09H01H

SITE NUMBER 401928124171801

NEAR PETROLIA. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF THE COAST RANGE OF PLIOCENE-HOLOCENE AGE. DIAM 8 IN, DEPTH 34 FT. ALTITUDE OF LSD 76 FT. RECORDS AVAILABLE 1978 TO CURRENT YEAR.

HIGHEST WATER LEVEL 5.04 FEET BELOW LAND SURFACE DATUM MAR 04, 1980.

LOWEST WATER LEVEL 13.62 FEET BELOW LAND SURFACE DATUM OCT 02, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03, 1983	12.80	APR 05, 1984	8.27 R

## GROUND WATER

MENDOCINO COUNTY

## Sanel Valley Basin (12-16)

WELL 013N011W18E01M

SITE NUMBER 385917123070401

1.2 MI NORTH OF HOPLAND. DRILLED IRRIGATION WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 12 IN, DEPTH 52 FT. ALTITUDE OF LSD 490 FT. RECORDS AVAILABLE 1953 TO CURRENT YEAR.

HIGHEST WATER LEVEL 3.7 FEET BELOW LAND SURFACE DATUM MAR 26, 1975.

LOWEST WATER LEVEL 13.6 FEET BELOW LAND SURFACE DATUM AUG 04, 1960.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1983	13.2	NOV 17, 1983	10.29	APR 30, 1984	12.72

MONTEREY COUNTY

## Caloma Valley Basin (3-5)

WELL 023S014E27H01M

SITE NUMBER 355405120263301

0.6 MI WEST OF PARKFIELD. DRILLED DOMESTIC WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 10 IN, DEPTH UNKNOWN. ALTITUDE OF LSD 1533 FT. RECORDS AVAILABLE 1979 TO CURRENT YEAR.

HIGHEST WATER LEVEL 16.18 FEET BELOW LAND SURFACE DATUM APR 19, 1983.

LOWEST WATER LEVEL 41.9 FEET BELOW LAND SURFACE DATUM SEP 21, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
OCT 04, 1983	25.35

SAN MATEO COUNTY

## Santa Clara Valley Basin (2-9.02)

WELL 005S003W34H01M

SITE NUMBER 372722122100501

IN MENLO PARK. DRILLED INDUSTRIAL WATER-TABLE WELL IN ALLUVIUM OF QUATERNARY AGE. DIAM 16-8 IN, DEPTH 290 FT, PERFORATED 180-200, 250-270 FT. ALTITUDE OF LSD 53 FT. RECORDS AVAILABLE 1977 TO CURRENT YEAR.

HIGHEST WATER LEVEL 29.88 FEET BELOW LAND SURFACE DATUM MAY 11, 1984.

LOWEST WATER LEVEL 53.90 FEET BELOW LAND SURFACE DATUM AUG 16, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1983	28.20 R	MAY 11, 1984	29.88

## Half Moon Bay Terrace Basin (2-22)

WELL 005S006W11E03M

SITE NUMBER 373045122292801

5 MI NORTHWEST OF HALF MOON BAY. DRILLED UNUSED WATER-TABLE WELL IN TERRACE DEPOSITS OF PLEISTOCENE AGE. DIAM 12 IN, DEPTH 97 FT, PERFORATED 12-88 FT. ALTITUDE OF LSD 49 FT. RECORDS AVAILABLE 1972 TO CURRENT YEAR.

HIGHEST WATER LEVEL 15.12 FEET BELOW LAND SURFACE DATUM APR 12, 1983.

LOWEST WATER LEVEL 29.54 FEET BELOW LAND SURFACE DATUM SEP 15, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL
OCT 13, 1983	25.04

SANTA CLARA COUNTY

Santa Clara Valley Basin (2-9.02)

WELL 006S001W23E01M

SITE NUMBER 372349121564701

IN SANTA CLARA. DRILLED OBSERVATION WATER-TABLE WELL IN SANTA CLARA FORMATION OF PLEISTOCENE AGE.  
DIAM 14 IN, DEPTH 425 FT, PERFORATED 170-425 FT. ALTITUDE OF LSD 21.0 FT. RECORDER INSTALLED  
1958-1981. RECORDS AVAILABLE 1958 TO CURRENT YEAR.

HIGHEST WATER LEVEL 1.20 FEET BELOW LAND SURFACE DATUM APR 11, 1975.

LOWEST WATER LEVEL 174.6 FEET BELOW LAND SURFACE DATUM JUL 18, 1962.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM.

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 18, 1983	12.84	JUN 01, 1984	10.21



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October 1, 1978

## FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	$2.54 \times 10^1$	millimeters (mm)
	$2.54 \times 10^{-2}$	meters (m)
feet (ft)	$3.048 \times 10^{-1}$	meters (m)
miles (mi)	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$	square meters (m <sup>2</sup> )
	$4.047 \times 10^{-1}$	square hectometers (hm <sup>2</sup> )
	$4.047 \times 10^{-3}$	square kilometers (km <sup>2</sup> )
square miles (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometers (km <sup>2</sup> )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$	liters (L)
	$3.785 \times 10^0$	cubic decimeters (dm <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic meters (m <sup>3</sup> )
million gallons	$3.785 \times 10^3$	cubic meters (m <sup>3</sup> )
	$3.785 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
cubic feet (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeters (dm <sup>3</sup> )
	$2.832 \times 10^{-2}$	cubic meters (m <sup>3</sup> )
cfs-days	$2.447 \times 10^3$	cubic meters (m <sup>3</sup> )
	$2.447 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
acre-feet (acre-ft)	$1.233 \times 10^3$	cubic meters (m <sup>3</sup> )
	$1.233 \times 10^{-3}$	cubic hectometers (hm <sup>3</sup> )
	$1.233 \times 10^{-6}$	cubic kilometers (km <sup>3</sup> )
<i>Flow</i>		
cubic feet per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liters per second (L/s)
	$2.832 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$2.832 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
gallons per minute (gal/min)	$6.309 \times 10^{-2}$	liters per second (L/s)
	$6.309 \times 10^{-2}$	cubic decimeters per second (dm <sup>3</sup> /s)
	$6.309 \times 10^{-5}$	cubic meters per second (m <sup>3</sup> /s)
million gallons per day	$4.381 \times 10^1$	cubic decimeters per second (dm <sup>3</sup> /s)
	$4.381 \times 10^{-2}$	cubic meters per second (m <sup>3</sup> /s)
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	megagrams (Mg) or metric tons

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